

LAMPIRAN

Lampiran -1 Kartu Monitoring

KARTU MONITORING BIMBINGAN MAHASISWA PROGRAM STUDI TEKNIK INFORMATIKA FAKULTAS TEKNIK UNIVERSITAS MUHAMMADIYAH PAREPARE			
PROPOSAL			
Mahasiswa : NURMIANA	Pembimbing I : Muh. Basri, ST.,MT	NIM : 220280145	Pembimbing II : Wahyuddin,S.Kom.,M.Kom
Judul Skripsi : APLIKASI PANDUAN PENGUCAPAN HURUF HIJIYAH DENGAN AUTO KOREKSI			
ARAHAN PEMBIMBING I	HARI/TGL & PARAF PEMBIMBING	ARAHAN PEMBIMBING II	HARI/TGL & PARAF PEMBIMBING
Konsultasi 1		Konsultasi 1 - Perbaiki dokumen ikuti Panduan - Teori pada BAB II di lengkapi	X
Konsultasi 2		Konsultasi 2 - Desain sistem diperbaiki - Tambahkan interface	X
Konsultasi 3		Konsultasi 3 - Daftar pustaka di lengkapi pada BAB II	X
Konsultasi 4	X	Konsultasi 4 X	X
Konsultasi 5		Konsultasi 5	

Lanjut ke halaman sebelah...

Perhatian :

1. Mahasiswa wajib konsultasi minimal 5 kali
2. Kartu ini wajib dibawa oleh mahasiswa disetiap konsultasi dan disi oleh Pembimbing
3. Kartu ini wajib dilampirkan pada laporan skripsi dan menjadi salah satu persyaratan untuk ikut seminar proposal/ujian skripsi
4. Kartu ini dicetak di atas kertas karton berwarna hijau muda dan dicetak timbal balik

KARTU MONITORING BIMBINGAN
MAHASISWA PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS TEKNIK
UNIVERSITAS MUHAMMADIYAH PAREPARE

SKRIPSI

Mahasiswa : NURMIANA	Pembimbing I : Muh. Basri, ST., MT
NIM : 220280145	Pembimbing II : Wahyuddin, S.Kom., M.Kom
Judul Skripsi : APLIKASI PANDUAN PENGUCAPAN HURUF HIJAIYAH DENGAN FITUR KOREKSI	

ARAHAN PEMBIMBING I	HARI/TGL & PARAF PEMBIMBING	ARAHAN PEMBIMBING II	HARI/TGL & PARAF PEMBIMBING
Konsultasi 1		Konsultasi 1 - Marukkan proses detali	/
Konsultasi 2		Konsultasi 2 - proses	/
Konsultasi 3	Acc Hal -	Acc	/
Konsultasi 4	Acc Juga	Acc ujian tutu	/
Konsultasi 5		Konsultasi 5	

Lanjut ke halaman sebelah.....

Perhatian :

1. Mahasiswa wajib konsultasi minimal 5 kali
2. Kartu ini wajib dibawa oleh mahasiswa disetiap konsultasi dan dilihi oleh Pembimbing
3. Kartu ini wajib dilampirkan pada laporan skripsi dan menjadi salah satu persyaratan untuk ikut seminar proposal/ujian skripsi
4. Kartu ini dicetak di atas kertas karton A4 berwarna Hijau muda dan dicetak timbal balik

Lanjutan.....

Lampiran -2 Script Aplikasi

MainActivity.java

```
package  
com.example.koreksipenyebutanhijaiyah  
;  
  
import android.annotation.SuppressLint;  
import android.content.Intent;  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.ImageButton;  
import android.widget.Toast;  
import  
androidx.appcompat.app.AppCompatActivity;  
  
public class MainActivity extends  
AppCompatActivity {  
  
    // Deklarasi variabel Button  
    ImageButton mulai;  
    ImageButton keluar;  
  
    @SuppressLint("MissingInflatedId")  
    @Override  
    protected void onCreate(Bundle  
 savedInstanceState) {  
  
        super.onCreate(savedInstanceState);  
  
        setContentView(R.layout.activity_main)  
        ;  
  
        // Inisialisasi variabel Button  
        mulai = findViewById(R.id.mulai);  
        keluar =  
        findViewById(R.id.keluar);  
  
        // Set OnClickListener untuk Button  
        Mulai  
        mulai.setOnClickListener(v -> {  
            Intent intent = new  
Intent(MainActivity.this,  
ActivityMulai.class);  
            startActivity(intent);  
        });  
  
        // Set OnClickListener untuk Button  
        Keluar
```

```
        keluar.setOnClickListener(v -> {  
            finishAffinity(); // Menutup  
            semua activity dan keluar dari aplikasi  
        });  
  
    }  
}
```

ActivityMulai.java

```
package  
com.example.koreksipenyebutanhijaiyah  
;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.ImageButton;  
import  
androidx.appcompat.app.AppCompatActivity;  
  
public class ActivityMulai extends  
AppCompatActivity {  
    ImageButton mengenal;  
    ImageButton menyebut;  
    ImageButton kembali;  
  
    @Override  
    protected void onCreate(Bundle  
 savedInstanceState) {  
  
        super.onCreate(savedInstanceState);  
  
        setContentView(R.layout.activity_mulai)  
        ; // Pastikan nama file XML sesuai  
  
        // Inisialisasi tombol untuk  
        mengenal huruf hijaiyah  
        mengenal =  
        findViewById(R.id.mengenal);  
        menyebut =  
        findViewById(R.id.menyebut);  
        kembali =  
        findViewById(R.id.kembali);  
  
        // Tombol "Mengenal"  
        mengenal.setOnClickListener(new
```

```

View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // Memulai activity
MengenalHuruf
        Intent intent = new
Intent(ActivityMulai.this,
mengenal_huruf.class);
        startActivity(intent);
    }
});

// Tombol "Menyebut"
menyebut.setOnClickListener(new
View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // Memulai activity
MenyebutkanHuruf
        Intent intent = new
Intent(ActivityMulai.this,
menyebutkan_huruf.class);
        startActivity(intent);
    }
});

// Tombol "Kembali"
kembali.setOnClickListener(new
View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // Menutup activity ini dan
        // kembali ke activity sebelumnya
        finish();
    }
});
}
}

```

mengenal_huruf.java

```

package
com.example.koreksipenyebutanhijaiyah
;

import android.content.Intent;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageButton;

```

```

import
androidx.appcompat.app.AppCompatActivity;

public class mengenal_huruf extends
AppCompatActivity {

ImageButton kembali;
ImageButton lanjut;
MediaPlayer mediaPlayer;

@Override
protected void onCreate(Bundle
savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_meng
enal_huruf1); // Pastikan nama file XML
sesuai

// Inisialisasi tombol
kembali =
findViewById(R.id.kembali);
lanjut = findViewById(R.id.lanjut);

// Tombol "Kembali"
kembali.setOnClickListener(v -> {
    finish(); // Menutup activity ini
    dan kembali ke activity sebelumnya
});

// Tombol "Lanjut"
lanjut.setOnClickListener(v -> {
    Intent intent = new
Intent(mengenal_huruf.this,
mengenal_huruf_2.class);
    startActivity(intent); // Berpindah ke activity berikutnya
});

// Tombol huruf hijaiyah
setupLetterButtons();
}

private void setupLetterButtons() {
    // Contoh tombol Alif
    ImageButton alif =
findViewById(R.id.alif);
    alif.setOnClickListener(v ->

```

```

playSound(R.raw.alif)); // Pastikan file
alif.mp3 ada di res/raw

    // Contoh tombol Ba
    ImageButton ba =
findViewById(R.id.ba);
    ba.setOnClickListener(v ->
playSound(R.raw.ba)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Ta
    ImageButton ta =
findViewById(R.id.ta);
    ta.setOnClickListener(v ->
playSound(R.raw.ta)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Tsa
    ImageButton tsa =
findViewById(R.id.tsa);
    tsa.setOnClickListener(v ->
playSound(R.raw.tsa)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Jim
    ImageButton jim =
findViewById(R.id.jim);
    jim.setOnClickListener(v ->
playSound(R.raw.jim)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Haa
    ImageButton haa =
findViewById(R.id.haa);
    haa.setOnClickListener(v ->
playSound(R.raw.haa)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Kho
    ImageButton kho =
findViewById(R.id.kho);
    kho.setOnClickListener(v ->
playSound(R.raw.kho)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Dal
    ImageButton dal =
findViewById(R.id.dal);
    dal.setOnClickListener(v ->
playSound(R.raw.dal)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Dzal
    ImageButton dzal =
findViewById(R.id.dzal);
    dzal.setOnClickListener(v ->
playSound(R.raw.dzal)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Ro
    ImageButton ro =
findViewById(R.id.ro);
    ro.setOnClickListener(v ->
playSound(R.raw.ro)); // Pastikan file
ba.mp3 ada di res/raw

    // Tambahkan tombol lainnya
    sesuai dengan huruf hijaiyah yang ada
    // Contoh:
        // ImageButton buttonTa =
        findViewById(R.id.ta);
        // buttonTa.setOnClickListener(v ->
        playSound(R.raw.ta));
    }

    private void playSound(int
soundResource) {
        // Pastikan untuk menghentikan
        suara yang sedang diputar sebelum
        memutar yang baru
        if (mediaPlayer != null) {
            mediaPlayer.release(); //
Hentikan suara sebelumnya
            mediaPlayer = null; // Setel ke
        null untuk mencegah kebocoran memori
        }
        // Buat media player baru dengan
        sumber suara yang dipilih
        mediaPlayer =
        MediaPlayer.create(this,
        soundResource);
        mediaPlayer.start(); // Mulai
        memutar suara

        // Menghentikan dan melepaskan
        MediaPlayer setelah selesai memutar
        mediaPlayer.setOnCompletionListener(
        mp -> {

```

```

        mediaPlayer.release();
        mediaPlayer = null;
    });
}

@Override
protected void onDestroy() {
    // Hentikan dan lepaskan media
    // player jika masih aktif
    if (mediaPlayer != null) {
        mediaPlayer.release();
        mediaPlayer = null;
    }
    super.onDestroy();
}

```

mengenal_huruf_2.java

```

package
com.example.koreksipenyebutanhijaiyah
;

import android.content.Intent;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageButton;
import
androidx.appcompat.app.AppCompatActivity;

public class mengenal_huruf_2 extends
AppCompatActivity {

    ImageButton kembali;
    ImageButton lanjut;
    MediaPlayer mediaPlayer;

    @Override
    protected void onCreate(Bundle
savedInstanceState) {

    super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_meng
enal_huruf2); // Pastikan nama file XML
sesuai

    // Inisialisasi tombol

```

```

        kembali =
findViewById(R.id.kembali);
        lanjut = findViewById(R.id.lanjut);

        // Tombol "Kembali"
        kembali.setOnClickListener(v -> {
            finish(); // Menutup activity ini
            dan kembali ke activity sebelumnya
        });

        // Tombol "Lanjut"
        lanjut.setOnClickListener(v -> {
            Intent intent = new
Intent(mengenal_huruf_2.this,
mengenal_huruf_3.class);
            startActivity(intent); // Berpindah ke activity berikutnya
        });

        // Tombol huruf hijaiyah
        setupLetterButtons();
    }

    private void setupLetterButtons() {
        // Contoh tombol Zay
        ImageButton zay =
findViewById(R.id.zay);
        zay.setOnClickListener(v ->
playSound(R.raw.zay)); // Pastikan file
alif.mp3 ada di res/raw

        // Contoh tombol Sin
        ImageButton sin =
findViewById(R.id.sin);
        sin.setOnClickListener(v ->
playSound(R.raw.sin)); // Pastikan file
ba.mp3 ada di res/raw

        // Contoh tombol Syin
        ImageButton syin =
findViewById(R.id.syin);
        syin.setOnClickListener(v ->
playSound(R.raw.syin)); // Pastikan file
ba.mp3 ada di res/raw

        // Contoh tombol Shod
        ImageButton shod =
findViewById(R.id.shod);
        shod.setOnClickListener(v ->
playSound(R.raw.shod)); // Pastikan file

```

```

ba.mp3 ada di res/raw

    // Contoh tombol Dhod
    ImageButton dhod =
findViewById(R.id.dhod);
    dhod.setOnClickListener(v ->
playSound(R.raw.dhod)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Tho
    ImageButton tho =
findViewById(R.id.tho);
    tho.setOnClickListener(v ->
playSound(R.raw.tho)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Dzho
    ImageButton dzho =
findViewById(R.id.dzho);
    dzho.setOnClickListener(v ->
playSound(R.raw.dzho)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Ain
    ImageButton ain =
findViewById(R.id.ain);
    ain.setOnClickListener(v ->
playSound(R.raw.ain)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Ghoin
    ImageButton ghoin =
findViewById(R.id.ghoin);
    ghoin.setOnClickListener(v ->
playSound(R.raw.ghoin)); // Pastikan file
ba.mp3 ada di res/raw

    // Contoh tombol Fa
    ImageButton fa =
findViewById(R.id.fa);
    fa.setOnClickListener(v ->
playSound(R.raw.fa)); // Pastikan file
ba.mp3 ada di res/raw

    // Tambahkan tombol lainnya
    // sesuai dengan huruf hijaiyah yang ada
    // Contoh:
    // ImageButton buttonTa =
findViewById(R.id.ta);
    // buttonTa.setOnClickListener(v ->
playSound(R.raw.ta)); // Pastikan file
buttonTa.setSound(R.raw.ta));
    }

    private void playSound(int
soundResource) {
        // Pastikan untuk menghentikan
        // suara yang sedang diputar sebelum
        // memutar yang baru
        if (mediaPlayer != null) {
            mediaPlayer.release(); //
Hentikan suara sebelumnya
            mediaPlayer = null; // Setel ke
null untuk mencegah kebocoran memori
        }

        // Buat media player baru dengan
        // sumber suara yang dipilih
        mediaPlayer =
MediaPlayer.create(this,
soundResource);
        mediaPlayer.start(); // Mulai
memutar suara

        // Menghentikan dan melepaskan
        // MediaPlayer setelah selesai memutar
        mediaPlayer.setOnCompletionListener(
mp -> {
            mediaPlayer.release();
            mediaPlayer = null;
        });
    }

    @Override
    protected void onDestroy() {
        // Hentikan dan lepaskan media
        // player jika masih aktif
        if (mediaPlayer != null) {
            mediaPlayer.release();
            mediaPlayer = null;
        }
        super.onDestroy();
    }
}

```

mengenal_huruf_3.java

```

package
com.example.koreksipenyebutanhijaiyah
;

import android.content.Intent;
import android.media.MediaPlayer;
import android.os.Bundle;
//import android.view.View;
import android.widget.ImageButton;
import
androidx.appcompat.app.AppCompatActivity;

public class mengenal_huruf_3 extends
AppCompatActivity {

    ImageButton kembali;
    ImageButton home;
    MediaPlayer mediaPlayer;

    @Override
    protected void onCreate(Bundle
savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_meng
enal_huruf3); // Pastikan file XML
sesuai

        kembali =
findViewById(R.id.kembali);

        kembali.setOnClickListener(v -> {
            // Menutup activity ini dan
            kembali ke activity sebelumnya
            finish();
        });
        setupLetterButtons();
    }

    private void setupLetterButtons() {
        // Contoh tombol Qof
        ImageButton qof =
findViewById(R.id.qof);
        qof.setOnClickListener(v ->
playSound(R.raw.qof)); // Pastikan file
alif.mp3 ada di res/raw

        // Contoh tombol Kaf
        ImageButton kaf =
findViewById(R.id.kaf);
        kaf.setOnClickListener(v ->
playSound(R.raw.kaf)); // Pastikan file
ba.mp3 ada di res/raw

        // Contoh tombol Lam
        ImageButton lam =
findViewById(R.id.lam);
        lam.setOnClickListener(v ->
playSound(R.raw.lam)); // Pastikan file
ba.mp3 ada di res/raw

        // Contoh tombol Mim
        ImageButton mim =
findViewById(R.id.mim);
        mim.setOnClickListener(v ->
playSound(R.raw.mim)); // Pastikan file
ba.mp3 ada di res/raw

        // Contoh tombol Nun
        ImageButton nun =
findViewById(R.id.nun);
        nun.setOnClickListener(v ->
playSound(R.raw.nun)); // Pastikan file
ba.mp3 ada di res/raw

        // Contoh tombol Waw
        ImageButton waw =
findViewById(R.id.waw);
        waw.setOnClickListener(v ->
playSound(R.raw.waw)); // Pastikan file
ba.mp3 ada di res/raw

        // Contoh tombol Ha
        ImageButton ha =
findViewById(R.id.ha);
        ha.setOnClickListener(v ->
playSound(R.raw.ha)); // Pastikan file
ba.mp3 ada di res/raw

        // Contoh tombol Lam_alif
        ImageButton lam_alif =
findViewById(R.id.lamalif);
        lam_alif.setOnClickListener(v ->
playSound(R.raw.lam_alif)); // Pastikan
file ba.mp3 ada di res/raw

        // Contoh tombol Hamzah
        ImageButton hamzah =

```

```

findViewById(R.id.hamzah);
    hamzah.setOnClickListener(v ->
playSound(R.raw.hamzah)); // Pastikan
file ba.mp3 ada di res/raw

    // Contoh tombol Ya
    ImageButton ya =
findViewById(R.id.ya);
    ya.setOnClickListener(v ->
playSound(R.raw.ya)); // Pastikan file
ba.mp3 ada di res/raw

    // Tambahkan tombol lainnya
    // sesuai dengan huruf hijaiyah yang ada
    // Contoh:
    // ImageButton buttonTa =
findViewById(R.id.ta);
    // buttonTa.setOnClickListener(v ->
playSound(R.raw.ta));
}

private void playSound(int
soundResource) {
    // Pastikan untuk menghentikan
    // suara yang sedang diputar sebelum
    // memutar yang baru
    if (mediaPlayer != null) {
        mediaPlayer.release(); //
Hentikan suara sebelumnya
        mediaPlayer = null; // Setel ke
        null untuk mencegah kebocoran memori
    }

    // Buat media player baru dengan
    // sumber suara yang dipilih
    mediaPlayer =
MediaPlayer.create(this,
soundResource);
    mediaPlayer.start(); // Mulai
    // memutar suara

    // Menghentikan dan melepaskan
    // MediaPlayer setelah selesai memutar

mediaPlayer.setOnCompletionListener(
mp -> {
    mediaPlayer.release();
    mediaPlayer = null;
});
}

```

```

@Override
protected void onDestroy() {
    // Hentikan dan lepaskan media
    // player jika masih aktif
    if (mediaPlayer != null) {
        mediaPlayer.release();
        mediaPlayer = null;
    }
    super.onDestroy();
}

```

menyebutkan_huruf.java

```

package
com.example.koreksipenyebutanhijaiyah
;

import android.annotation.SuppressLint;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageButton;

import
androidx.appcompat.app.AppCompatActivity;

public class menyebutkan_huruf extends
AppCompatActivity {

    // Deklarasi variabel Button
    ImageButton mulai;
    ImageButton kembali;

    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle
 savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_meny
        ebukan_huruf);

        // Inisialisasi variabel Button
        mulai = findViewById(R.id.mulai);
        kembali =

```

```

findViewById(R.id.kembali);

    // Set OnClickListener untuk Button
Mulai
    mulai.setOnClickListener(v -> {
        Intent intent = new
Intent(menyebutkan_huruf.this,
menyebutkan_huruf_1.class);
        startActivity(intent);
    });

    // Tombol "Kembali"
    kembali.setOnClickListener(new
View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // Menutup activity ini dan
        // kembali ke activity sebelumnya
        finish();
    }
});
}
}

```

menyebutkan_huruf_1.java

```

package
com.example.koreksipenyebutanhijaiyah
;

import android.Manifest;
import android.annotation.SuppressLint;
import android.content.Intent;
import
android.content.pm.PackageManager;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.os.Handler;
import
android.speech.SpeechRecognizer;
import android.speech.RecognizerIntent;
import
android.speech.RecognitionListener;
import android.view.View;
import android.widget.ImageButton;
import android.widget.TextView;
import android.widget.Toast;

import androidx.annotation.NonNull;

```

```

import
androidx.appcompat.app.AppCompatActivity;
import
androidx.core.app.ActivityCompat;
import
androidx.core.content.ContextCompat;
import java.util.ArrayList;
import java.util.Locale;

public class menyebutkan_huruf_1
extends AppCompatActivity {

    private static final int
REQUEST_RECORD_AUDIO_PERMIS
SION = 1;
    private static final int
SPEECH_REQUEST_CODE = 2;

    private SpeechRecognizer
speechRecognizer;
    private TextView
tvResult,HasilUcapan;
    private ImageButton hurufA, hurufBa,
hurufTa, hurufTsa, hurufJa, hurufHaa,
hurufKho, hurufDa, hurufDza, hurufRo;
    private ImageButton kembali, lanjut;
    private MediaPlayer mediaPlayer;
    private String selectedLetter = ""; //
Variabel untuk menyimpan huruf yang
dipilih

    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle
 savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_men
y
ebutkan_huruf1);

        // Inisialisasi komponen UI
        tvResult =
findViewById(R.id.tv_result);
        HasilUcapan =
findViewById(R.id.hasil_ucapan);
        hurufA = findViewById(R.id.a);
        hurufBa = findViewById(R.id.ba);
    }
}

```

```

        hurufTa = findViewById(R.id.ta);
        hurufTsa =
        findViewById(R.id.tsa);
        hurufJa = findViewById(R.id.ja);
        hurufHaa =
        findViewById(R.id.haa);
        hurufKho =
        findViewById(R.id.kho);
        hurufDa = findViewById(R.id.da);
        hurufDza =
        findViewById(R.id.dza);
        hurufRo = findViewById(R.id.ro);
        kembali =
        findViewById(R.id.kembali);
        lanjut = findViewById(R.id.lanjut);

        // Tombol "Kembali"
        kembali.setOnClickListener(v -> {
            Intent intent = new
            Intent(menyebutkan_huruf_1.this,
            menyebutkan_huruf.class);
            startActivity(intent);
            finish();
        });

        // Tombol "Lanjut"
        lanjut.setOnClickListener(v -> {
            Intent intent = new
            Intent(menyebutkan_huruf_1.this,
            menyebutkan_huruf_2.class);
            startActivity(intent);
        });

        // Inisialisasi SpeechRecognizer
        speechRecognizer =
        SpeechRecognizer.createSpeechRecognizer(this);
        Intent speechIntent = new
        Intent(RecognizerIntent.ACTION_RECOGNIZE_SPEECH);

        speechIntent.putExtra(RecognizerIntent.EXTRA_LANGUAGE_MODEL,
        RecognizerIntent.LANGUAGE_MODEL_FREE_FORM);

        speechIntent.putExtra(RecognizerIntent.EXTRA_LANGUAGE,
        Locale.getDefault());
    }

    // Tombol huruf A
    hurufA.setOnClickListener(v -> {
        selectedLetter = "a";
        tvResult.setText("Mendengarkan... ");
        speechRecognizer.startListening(speechIntent);
    });

    // Tombol huruf Ba
    hurufBa.setOnClickListener(v -> {
        selectedLetter = "ba";
        tvResult.setText("Mendengarkan... ");
        speechRecognizer.startListening(speechIntent);
    });

    // Tombol huruf Ta
    hurufTa.setOnClickListener(v -> {
        selectedLetter = "ta";
        tvResult.setText("Mendengarkan... ");
        speechRecognizer.startListening(speechIntent);
    });

    // Tombol huruf Tsa
    hurufTsa.setOnClickListener(v -> {
        selectedLetter = "tsa";
        tvResult.setText("Mendengarkan... ");
        speechRecognizer.startListening(speechIntent);
    });

    // Tombol huruf Ja
    hurufJa.setOnClickListener(v -> {
        selectedLetter = "ja";
        tvResult.setText("Mendengarkan... ");
        speechRecognizer.startListening(speechIntent);
    });
}

```

```

    // Tombol huruf Haa
    hurufHaa.setOnClickListener(v ->
{
    selectedLetter = "haa";
    tvResult.setText("Mendengarkan...");
    speechRecognizer.startListening(speechIntent);
});

    // Tombol huruf Kho
    hurufKho.setOnClickListener(v ->
{
    selectedLetter = "kho";
    tvResult.setText("Mendengarkan...");
    speechRecognizer.startListening(speechIntent);
});

    // Tombol huruf Da
    hurufDa.setOnClickListener(v -> {
        selectedLetter = "da";
        tvResult.setText("Mendengarkan...");
        speechRecognizer.startListening(speechIntent);
    });

    // Tombol huruf Dza
    hurufDza.setOnClickListener(v ->
{
    selectedLetter = "dza";
    tvResult.setText("Mendengarkan...");
    speechRecognizer.startListening(speechIntent);
});

    // Tombol huruf Ro
    hurufRo.setOnClickListener(v -> {
        selectedLetter = "ro";
        tvResult.setText("Mendengarkan...");
        speechRecognizer.startListening(speechIntent);
    });
}

    ntent);
});

    // Menangani hasil pengucapan
speechRecognizer.setRecognitionListener(new RecognitionListener() {
    @Override
    public void onResults(Bundle results) {
        ArrayList<String> resultList =
results.getStringArrayList(SpeechRecognizer.RESULTS_RECOGNITION);
        if (resultList != null &&
!resultList.isEmpty()) {
            String spokenText =
resultList.get(0).toLowerCase().trim();
            HasilUcapan.setText("Anda
menyebutkan: " + spokenText);

            // Tunda evaluasi untuk
            memberi waktu menampilkan
            pengucapan
            new
            Handler().postDelayed(() -> {
                switch (selectedLetter) {
                    case "a":
                        handleAlif(spokenText);
                        break;
                    case "ba":
                        handleBa(spokenText);
                        break;
                    case "ta":
                        handleTa(spokenText);
                        break;
                    case "tsa":
                        handleTsa(spokenText);
                        break;
                    case "ja":
                        handleJim(spokenText);
                        break;
                    case "haa":
                        handleHaa(spokenText);
                        break;
                }
            }, 2000);
        }
    }
});

```

```

        case "kho":
            handleKho(spokenText);
            break;
        case "da":
            handleDal(spokenText);
            break;
        case "dza":
            handleDzal(spokenText);
            break;
        case "ro":
            handleRo(spokenText);
            break;
        default:
            tvResult.setText("Huruf yang terdeteksi
tidak dikenal.");
            break;
        }, 1000); // Tunda 1 detik
    }

    @Override
    public void onError(int error) {
        tvResult.setText("Gagal
mendeteksi suara. Coba lagi.");
    }

    @Override
    public void
onReadyForSpeech(Bundle params) {}
    @Override
    public void
onBeginningOfSpeech() {}
    @Override
    public void onRmsChanged(float
rmsdB) {}
    @Override
    public void
onBufferReceived(byte[] buffer) {}
    @Override
    public void onEndOfSpeech() {}
    @Override
    public void
onPartialResults(Bundle partialResults)
{



@Override
public void onEvent(int
eventType, Bundle params) {}}

// Meminta izin mikrofon jika belum
diberikan
if
(ContextCompat.checkSelfPermission(th
is,
Manifest.permission.RECORD_AUDIO)
!=
PackageManager.PERMISSION_GRANTED) {

ActivityCompat.requestPermissions(this
, new
String[]{Manifest.permission.RECORD
_AUDIO},
REQUEST_RECORD_AUDIO_PERMIS
SION);
}

// Fungsi untuk memutar suara
private void playSound(int
soundResource) {
    if (mediaPlayer != null) {
        mediaPlayer.release();
    }
    mediaPlayer =
MediaPlayer.create(this,
soundResource);
    mediaPlayer.start();
}

private void handleAlif(String
spokenText) {
    if (spokenText.equalsIgnoreCase("a
a")) {
        tvResult.setText("Huruf yang
terdeteksi: a 'ا'");
        playSound(R.raw.alif_benar);
    } else if (spokenText.contains("a"))
{
        tvResult.setText("Anda hanya
menyebutkan satu huruf: a.");
        playSound(R.raw.satu_alif_salah);
    } else {
}
}

```

```

        tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
        playSound(R.raw.alif_salah);
    }
}

private void handleBa(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("ba ba")
|| spokenText.equalsIgnoreCase("baa
baa") ||
spokenText.equalsIgnoreCase("baba"))
{
    tvResult.setText("Huruf yang
terdeteksi: ba 'ٻ'");
    playSound(R.raw.ba_benar);
} else if (spokenText.contains("ba")
|| spokenText.equalsIgnoreCase("baa"))
{
    tvResult.setText("Anda hanya
menyebutkan satu huruf: ba.");
playSound(R.raw.satu_ba_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.ba_salah);
}
}

private void handleTa(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("ta ta") ||
spokenText.equalsIgnoreCase("taa taa")
|| spokenText.equalsIgnoreCase("tata"))
{
    tvResult.setText("Huruf yang
terdeteksi: ta 'ٿ'");
    playSound(R.raw.ta_benar);
} else if (spokenText.contains("ta")
|| spokenText.equalsIgnoreCase("taa"))
{
    tvResult.setText("Anda hanya
menyebutkan satu huruf: ta.");
playSound(R.raw.satu_ta_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
}
}

private void handleTsa(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("tsa tsa")
|| spokenText.equalsIgnoreCase("sasa")
|| spokenText.equalsIgnoreCase("sa
sa")|| spokenText.equalsIgnoreCase("saa
saa")) {
    tvResult.setText("Huruf yang
terdeteksi: tsa 'ڦ'");
    playSound(R.raw.tsas_benar);
} else if
(spokenText.contains("tsa") ||
spokenText.equalsIgnoreCase("sa"))
{
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Tsa.");
playSound(R.raw.satu_tsa_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.tsas_salah);
}
}

private void handleJim(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("ja ja") ||
spokenText.equalsIgnoreCase("jaa jaa "))
{
    tvResult.setText("Huruf yang
terdeteksi: Ja 'ڇ'");
    playSound(R.raw.jim_benar);
} else if (spokenText.contains("ja")
|| spokenText.equalsIgnoreCase("jaa"))
{
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Ja.");
playSound(R.raw.satu_jim_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.jim_salah);
}
}

```

```

    private void handleHaa(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("haa
haa") ||
spokenText.equalsIgnoreCase("ha ha ")
|| spokenText.equalsIgnoreCase("ha
ha")) {
        tvResult.setText("Huruf yang
terdeteksi: haa 'ڇ'");
        playSound(R.raw.haa_benar);
    } else if
(spookenText.contains("haa") ||
spokenText.equalsIgnoreCase("ha") ||
spokenText.equalsIgnoreCase("ha")) {
        tvResult.setText("Anda hanya
menyebutkan satu huruf: haa'.");
        playSound(R.raw.satu_haa_salah);
    } else {
        tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
        playSound(R.raw.haa_salah);
    }
}

private void handleKho(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("kho
kho") ||
spokenText.equalsIgnoreCase("kh kh") ||
spokenText.equalsIgnoreCase("khoo
khoo") ||
spokenText.equalsIgnoreCase("hoo
hoo") ||
spokenText.equalsIgnoreCase("hoax
hoax") ||
spokenText.equalsIgnoreCase("ho ho") ||
spokenText.equalsIgnoreCase("h h")) {
        tvResult.setText("Huruf yang
terdeteksi: kho 'ڇ'");
        playSound(R.raw.kho_benar);
    } else if
(spookenText.contains("kho") ||
spokenText.equalsIgnoreCase("kh") ||
spokenText.equalsIgnoreCase("hoo") ||
spokenText.equalsIgnoreCase("ho") ||
spokenText.equalsIgnoreCase("hoax") ||

```

```

spokenText.equalsIgnoreCase("h")) {
        tvResult.setText("Anda hanya
menyebutkan satu huruf: kho.");
        playSound(R.raw.satu_kho_salah);
    } else {
        tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
        playSound(R.raw.kho_salah);
    }
}

private void handleDal(String
spokenText) {
    if
(spookenText.equalsIgnoreCase("da da")
|| spokenText.equalsIgnoreCase("daa
daa")) {
        tvResult.setText("Huruf yang
terdeteksi: Da 'ڏ'");
        playSound(R.raw.dal_benar);
    } else if (spookenText.contains("da")
|| spokenText.equalsIgnoreCase("daa"))
{
        tvResult.setText("Anda hanya
menyebutkan satu huruf: da.");
        playSound(R.raw.satu_dal_salah);
    } else {
        tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
        playSound(R.raw.dal_salah);
    }
}

private void handleDzal(String
spokenText) {
    if
(spookenText.equalsIgnoreCase("dza
dza") ||
spokenText.equalsIgnoreCase("za za"))
{
        tvResult.setText("Huruf yang
terdeteksi: dza 'ڏ'");
        playSound(R.raw.dzal_benar);
    } else if
(spookenText.contains("dza") ||
spokenText.equalsIgnoreCase("za"))
{
        tvResult.setText("Anda hanya
menyebutkan satu huruf: dza.");

```

```

        playSound(R.raw.saru_dzal_salah);
    } else {
        tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
        playSound(R.raw.dzal_salah);
    }
}

private void handleRo(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("ro ro") || spokenText.equalsIgnoreCase("ra ra")) {
        tvResult.setText("Huruf yang
terdeteksi: Ro 'و'");
        playSound(R.raw.ro_benar);
    } else if (spokenText.contains("ro")
|| spokenText.equalsIgnoreCase("ra")) {
        tvResult.setText("Anda hanya
menyebutkan satu huruf: Ro.");
}

playSound(R.raw.satu_ro_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.ro_salah);
}
}

@Override
protected void onDestroy() {
    super.onDestroy();
    if (speechRecognizer != null) {
        speechRecognizer.destroy();
    }
    if (mediaPlayer != null) {
        mediaPlayer.release();
    }
}

@Override
public void
onRequestPermissionsResult(int
requestCode, @NonNull String[]
permissions, @NonNull int[]
grantResults) {

super.onRequestPermissionsResult(requestCode, permissions, grantResults);

if (requestCode ==
REQUEST_RECORD_AUDIO_PERMIS
SION) {
    if (grantResults.length > 0 &&
grantResults[0] ==
PackageManager.PERMISSION_GRANTED) {
        // Permission granted, nothing
        to do here
    } else {
        Toast.makeText(this,
"Permission to record audio is required",
Toast.LENGTH_SHORT).show();
    }
}
}
}

if (requestCode ==
REQUEST_RECORD_AUDIO_PERMIS
SION) {
    if (grantResults.length > 0 &&
grantResults[0] ==
PackageManager.PERMISSION_GRANTED) {
        // Permission granted, nothing
        to do here
    } else {
        Toast.makeText(this,
"Permission to record audio is required",
Toast.LENGTH_SHORT).show();
    }
}
}
}
}

menyebutkan_huruf_2.java

package
com.example.koreksipenyebutanhajaiyah
;

import android.Manifest;
import android.annotation.SuppressLint;
import android.content.Intent;
import
android.content.pm.PackageManager;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.os.Handler;
import
android.speech.SpeechRecognizer;
import android.speech.RecognizerIntent;
import
android.speech.RecognitionListener;
import android.view.View;
import android.widget.ImageButton;
import android.widget.TextView;
import android.widget.Toast;

import androidx.annotation.NonNull;
import
 androidx.appcompat.app.AppCompatActivity;
import
 androidx.core.app.ActivityCompat;
import
 androidx.core.content.ContextCompat;

```

```

import java.util.ArrayList;
import java.util.Locale;

public class menyebutkan_huruf_2
extends AppCompatActivity {

    private static final int
REQUEST_RECORD_AUDIO_PERMIS
SION = 1;
    private static final int
SPEECH_REQUEST_CODE = 2;

    private SpeechRecognizer
speechRecognizer;
    private TextView
tvResult,HasilUcapan;
    private ImageButton hurufZa,
hurufSa, hurufSya, hurufShod,
hurufDhod, hurufTho, hurufDzho,
hurufAa, hurufGho, hurufFa;
    private ImageButton kembali, lanjut;
    private MediaPlayer mediaPlayer;
    private String selectedLetter = "";
// Variabel untuk menyimpan huruf yang
dipilih
    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle
 savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_men
yebutkan_huruf2);

        // Inisialisasi komponen UI
        tvResult =
findViewById(R.id.tv_result);
        HasilUcapan =
findViewById(R.id.hasil_ucapan);
        hurufZa = findViewById(R.id.za);
        hurufSa = findViewById(R.id.sa);
        hurufSya =
findViewById(R.id.sya);
        hurufShod =
findViewById(R.id.sho);
        hurufDhod =
findViewById(R.id.dho);
        hurufTho =

```

```

        findViewById(R.id.tho);
        hurufDzho =
findViewById(R.id.dzho);
        hurufAa = findViewById(R.id.aa);
        hurufGho =
findViewById(R.id.gho);
        hurufFa = findViewById(R.id.fa);
        kembali =
findViewById(R.id.kembali);
        lanjut = findViewById(R.id.lanjut);

        // Tombol "Kembali"
        kembali.setOnClickListener(v -> {
            Intent intent = new
Intent(menyebutkan_huruf_2.this,
menyebutkan_huruf_1.class);
            startActivity(intent);
            finish();
        });

        // Tombol "Lanjut"
        lanjut.setOnClickListener(v -> {
            Intent intent = new
Intent(menyebutkan_huruf_2.this,
menyebutkan_huruf_3.class);
            startActivity(intent);
        });

        // Inisialisasi SpeechRecognizer
        speechRecognizer =
SpeechRecognizer.createSpeechRecogni
zer(this);
        Intent speechIntent = new
Intent(RecognizerIntent.ACTION_REC
OGNIZE_SPEECH);

        speechIntent.putExtra(RecognizerIntent.
EXTRA_LANGUAGE_MODEL,
RecognizerIntent.LANGUAGE_MODEL
_FREE_FORM);

        speechIntent.putExtra(RecognizerIntent.
EXTRA_LANGUAGE,
Locale.getDefault());

        // Tombol huruf Za
        hurufZa.setOnClickListener(v -> {
            selectedLetter = "za";
            tvResult.setText("Mendengarkan... ");

```

```

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Sa
hurufSa.setOnClickListener(v -> {
    selectedLetter = "sa";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Sya
hurufSya.setOnClickListener(v -> {
    selectedLetter = "sya";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Shod
hurufShod.setOnClickListener(v ->
{
    selectedLetter = "sho";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Dhod
hurufDhod.setOnClickListener(v ->
{
    selectedLetter = "dho";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Tho
hurufTho.setOnClickListener(v ->
{
    selectedLetter = "tho";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Dzho
hurufDzho.setOnClickListener(v ->
{
    selectedLetter = "dzho";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Ain
hurufAa.setOnClickListener(v -> {
    selectedLetter = "aa";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Ghoin
hurufGho.setOnClickListener(v ->
{
    selectedLetter = "gho";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Fa
hurufFa.setOnClickListener(v -> {
    selectedLetter = "fa";
}

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

```

```

// Menangani hasil pengucapan

speechRecognizer.setRecognitionListener(new RecognitionListener() {
    @Override
    public void onResults(Bundle results) {
        ArrayList<String> resultList =
results.getStringArrayList(SpeechRecognizer.RESULTS_RECOGNITION);
        if (resultList != null &&
!resultList.isEmpty()) {
            String spokenText =
resultList.get(0).toLowerCase().trim();
            HasilUcapan.setText("Anda
menyebutkan: " + spokenText);
            // Tunda evaluasi untuk
memberi waktu menampilkan
pengucapan
            new
Handler().postDelayed(() -> {
                switch (selectedLetter) {
                    case "za":
handleZay(spokenText);
                    break;
                    case "sa":
handleSa(spokenText);
                    break;
                    case "sya":
handleSyin(spokenText);
                    break;
                    case "sho":
handleShod(spokenText);
                    break;
                    case "dho":
handleDhod(spokenText);
                    break;
                    case "tho":
handleTho(spokenText);
                    break;
                    case "dzho":
handleDzho(spokenText);
                    break;
                }
            }, 1000); // Tunda 1 detik
        }
    }
    @Override
    public void onError(int error) {
        tvResult.setText("Gagal
mendeteksi suara. Coba lagi.");
    }
    @Override
    public void onReadyForSpeech(Bundle params) {}
    @Override
    public void onBeginningOfSpeech() {}
    @Override
    public void onRmsChanged(float rmsdB) {}
    @Override
    public void onBufferReceived(byte[] buffer) {}
    @Override
    public void onEndOfSpeech() {}
    @Override
    public void onPartialResults(Bundle partialResults) {}
    @Override
    public void onEvent(int eventType, Bundle params) {}
});

```

```

// Meminta izin mikrofon jika belum
diberikan
    if
(ContextCompat.checkSelfPermission(th
is,
Manifest.permission.RECORD_AUDIO)
!=
PackageManager.PERMISSION_GRANTED) {

ActivityCompat.requestPermissions(this
, new
String[]{Manifest.permission.RECORD
_AUDIO,
REQUEST_RECORD_AUDIO_PERMISSION);
}
}

// Fungsi untuk memutar suara
private void playSound(int
soundResource) {
    if (mediaPlayer != null) {
        mediaPlayer.release();
    }
    mediaPlayer =
MediaPlayer.create(this,
soundResource);
    mediaPlayer.start();
}

private void handleZay(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("za za") ||
spokenText.equalsIgnoreCase("zaa
za")) ) {
    tvResult.setText("Huruf yang
terdeteksi: za 'j'");
    playSound(R.raw.zay_benar);
} else if (spokenText.contains("za")
|| spokenText.equalsIgnoreCase("zaa")) )
{
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Za.");
}

playSound(R.raw.satu_zay_salah);
} else {
    tvResult.setText("Huruf yang

```

```

terdeteksi tidak dikenal.");
    playSound(R.raw.zay_salah);
}
}

private void handleSa(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("sa sa") ||
spokenText.equalsIgnoreCase("sasa") ||
spokenText.equalsIgnoreCase("sha sha")
|| spokenText.equalsIgnoreCase("saa
saa")) {
    tvResult.setText("Huruf yang
terdeteksi: Sa 'س'");
    playSound(R.raw.sin_benar);
} else if (spokenText.contains("sa")
|| spokenText.equalsIgnoreCase("sha") ||
spokenText.equalsIgnoreCase("saa")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Sa.");
}

playSound(R.raw.satu_sin_benar);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.sin_salah);
}
}

private void handleSyin(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("sya
sya") ||
spokenText.equalsIgnoreCase("syha
syha") ||
spokenText.equalsIgnoreCase("sha sha"))
{
    tvResult.setText("Huruf yang
terdeteksi: Sya 'ش'");
    playSound(R.raw.syin_benar);
} else if
(spokenText.contains("sya") ||
spokenText.equalsIgnoreCase("syha") ||
spokenText.equalsIgnoreCase("sha")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Sya.");
}

playSound(R.raw.satu_syin_salah);
}
}
```

```

    } else {
        tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
        playSound(R.raw.syin_salah);
    }
}

private void handleShod(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("sho
sho") ||
spokenText.equalsIgnoreCase("shod
shod") ||
spokenText.equalsIgnoreCase("sod
sod") ||
spokenText.equalsIgnoreCase("so so") )
{
    tvResult.setText("Huruf yang
terdeteksi: Sho 'ص'");
    playSound(R.raw.shod_benar);
} else if
(spokenText.contains("sho") ||
spokenText.equalsIgnoreCase("shod") ||
spokenText.equalsIgnoreCase("sod") ||
spokenText.equalsIgnoreCase("so")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Sho.'");
    playSound(R.raw.satu_shod_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.shod_salah);
}
}

private void handleDhod(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("dho
dho") ||
spokenText.equalsIgnoreCase("dhod
dhod") ||
spokenText.equalsIgnoreCase("do do") ||
spokenText.equalsIgnoreCase("dod
dod") ) {
    tvResult.setText("Huruf yang
terdeteksi: Dho 'ض'");
    playSound(R.raw.dhod_benar);
} else if
(spokenText.contains("dho") ||
spokenText.equalsIgnoreCase("dhod") ||
spokenText.equalsIgnoreCase("do") ||
spokenText.equalsIgnoreCase("dod") ) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Dho.'");
    playSound(R.raw.satu_dhod_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.dhod_salah);
}
}

private void handleTho(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("tho
tho") ||
spokenText.equalsIgnoreCase("to to") ||
spokenText.equalsIgnoreCase("toh
toh")) {
    tvResult.setText("Huruf yang
terdeteksi: Tho 'ث'");
    playSound(R.raw.tho_benar);
} else if
(spokenText.contains("tho") ||
spokenText.equalsIgnoreCase("to") ||
spokenText.equalsIgnoreCase("toh")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Tho.'");
    playSound(R.raw.satu_tho_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.tho_salah);
}
}

private void handleDzho(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("dzho
dzho") ||
spokenText.equalsIgnoreCase("zo zo") ||
spokenText.equalsIgnoreCase("zho
zho") ||
```

```

spokenText.equalsIgnoreCase("zoz
zoz") ||
spokenText.equalsIgnoreCase("zoe
zoe") ||
spokenText.equalsIgnoreCase("zoh
zoh") ||
spokenText.equalsIgnoreCase("zoo
zoo") ||
spokenText.equalsIgnoreCase("za za"))
{
    tvResult.setText("Huruf yang
terdeteksi: Dzho 'ذ'");

    playSound(R.raw.dzho_benar_1);
}
else if
(spokenText.contains("dzho") ||
spokenText.equalsIgnoreCase("zo") ||
spokenText.equalsIgnoreCase("zho") ||
spokenText.equalsIgnoreCase("zoz") ||
spokenText.equalsIgnoreCase("zoe") ||
spokenText.equalsIgnoreCase("zoh") ||
spokenText.equalsIgnoreCase("zoo") ||
spokenText.equalsIgnoreCase("za ")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Dzho.");
}

playSound(R.raw.satu_dzho_salah_1);
}
else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
}

playSound(R.raw.dzho_salah_1);
}

private void handleAin(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("a' a'")) {
        tvResult.setText("Huruf yang
terdeteksi: A' 'ء'");
        playSound(R.raw.ain_benar);
    }
    else if (spokenText.contains("a'"))
{
        tvResult.setText("Anda hanya
menyebutkan satu huruf: A'.");

    playSound(R.raw.satu_ain_salah);
}
else {
    tvResult.setText("Huruf yang

```

```

terdeteksi tidak dikenal.");
        playSound(R.raw.ain_salah);
    }
}

private void handleGhoin(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("gho
gho") ||
spokenText.equalsIgnoreCase("go go") ||
spokenText.equalsIgnoreCase("goh
goh")) {
    tvResult.setText("Huruf yang
terdeteksi: Gho ئ");
        playSound(R.raw.ghoin_benar);
}
else if
(spokenText.contains("gho") ||
spokenText.equalsIgnoreCase("go") ||
spokenText.equalsIgnoreCase("goh")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Gho.");
}

playSound(R.raw.satu_ghoin_salah);
}
else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
        playSound(R.raw.ghoin_salah);
}
}

private void handleFa(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("fa fa") ||
spokenText.equalsIgnoreCase("va va") ||
spokenText.equalsIgnoreCase("faa faa") ||
spokenText.equalsIgnoreCase("fah
fah") ||
spokenText.equalsIgnoreCase("vava") ||
spokenText.equalsIgnoreCase("va fa") ||
spokenText.equalsIgnoreCase("fafa")) {
    tvResult.setText("Huruf yang
terdeteksi: Fa ؟");
        playSound(R.raw.fa_benar);
}
else if (spokenText.contains("fa") ||
spokenText.equalsIgnoreCase("va") ||
spokenText.equalsIgnoreCase("faa") ||
spokenText.equalsIgnoreCase("fah")) {
    tvResult.setText("Anda hanya

```

```

menyebutkan satu huruf: Fa.");

playSound(R.raw.satu_fa_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.fa_salah);
}
}

@Override
protected void onDestroy() {
    super.onDestroy();
    if (speechRecognizer != null) {
        speechRecognizer.destroy();
    }
    if (mediaPlayer != null) {
        mediaPlayer.release();
    }
}

@Override
public void
onRequestPermissionsResult(int[]
requestCode, @NonNull String[]
permissions, @NonNull int[]
grantResults) {

super.onRequestPermissionsResult(requ
estCode, permissions, grantResults);
    if (requestCode ==
REQUEST_RECORD_AUDIO_PERMIS
SION) {
        if (grantResults.length > 0 &&
grantResults[0] ==
PackageManager.PERMISSION_GRANTED) {
            // Izin diberikan, tidak perlu
apa-apa
        } else {
            Toast.makeText(this, "Izin
mikrofon diperlukan untuk mendeteksi
suara.",
Toast.LENGTH_SHORT).show();
            finish();
        }
    }
}
}

```

menyebutkan_huruf_2.java

```

package
com.example.koreksipenyebutanhijaiyah
;

import android.Manifest;
import android.annotation.SuppressLint;
import android.content.Intent;
import
android.content.pm.PackageManager;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.os.Handler;
import
android.speech.SpeechRecognizer;
import android.speech.RecognizerIntent;
import
android.speech.RecognitionListener;
import android.view.View;
import android.widget.ImageButton;
import android.widget.TextView;
import android.widget.Toast;

import androidx.annotation.NonNull;
import
 androidx.appcompat.app.AppCompatActivity;
import
 androidx.core.app.ActivityCompat;
import
 androidx.core.content.ContextCompat;
import java.util.ArrayList;
import java.util.Locale;

public class menyebutkan_huruf_3
extends AppCompatActivity {

    private static final int
REQUEST_RECORD_AUDIO_PERMIS
SION = 1;
    private static final int
SPEECH_REQUEST_CODE = 2;

    private SpeechRecognizer
speechRecognizer;
    private TextView
tvResult,HasilUcapan;
}

```

```

private ImageButton hurufQo,
hurufKa, hurufLa, hurufMa, hurufNa,
hurufWa, hurufHa, hurufYa;
private ImageButton kembali;
private MediaPlayer mediaPlayer;
private String selectedLetter = "";
// Variabel untuk menyimpan huruf yang dipilih

@SuppressLint("MissingInflatedId")
@Override
protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_menyebutkan_huruf3);

// Inisialisasi komponen UI
tvResult =
findViewById(R.id.tv_result);
HasilUcapan =
findViewById(R.id.hasil_ucapan);
hurufQo = findViewById(R.id.qo);
hurufKa = findViewById(R.id.ka);
hurufLa = findViewById(R.id.la);
hurufMa =
findViewById(R.id.ma);
hurufNa = findViewById(R.id.na);
hurufWa =
findViewById(R.id.wa);
hurufHa = findViewById(R.id.ha);
hurufYa = findViewById(R.id.ya);
kembali =
findViewById(R.id.kembali);

// Tombol "Kembali"
kembali.setOnClickListener(v -> {
Intent intent = new
Intent(menyebutkan_huruf_3.this,
menyebutkan_huruf_2.class);
startActivity(intent);
finish();
});

// Inisialisasi SpeechRecognizer
speechRecognizer =
SpeechRecognizer.createSpeechRecogni
zer(this);
Intent speechIntent = new
Intent(RecognizerIntent.ACTION_RECOGNIZE_SPEECH);

speechIntent.putExtra(RecognizerIntent.EXTRA_LANGUAGE_MODEL,
RecognizerIntent.LANGUAGE_MODE_FREE_FORM);

speechIntent.putExtra(RecognizerIntent.EXTRA_LANGUAGE,
Locale.getDefault());

// Tombol huruf Qo
hurufQo.setOnClickListener(v -> {
selectedLetter = "qo";
tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechIntent);
});

// Tombol huruf Ka
hurufKa.setOnClickListener(v -> {
selectedLetter = "kaf";
tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechIntent);
});

// Tombol huruf La
hurufLa.setOnClickListener(v -> {
selectedLetter = "la";
tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechIntent);
});

// Tombol huruf Ma
hurufMa.setOnClickListener(v -> {
selectedLetter = "ma";
tvResult.setText("Mendengarkan...");
```

```

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Na
hurufNa.setOnClickListener(v -> {
    selectedLetter = "na";

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Wa
hurufWa.setOnClickListener(v -> {
    selectedLetter = "wa";

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Ha
hurufHa.setOnClickListener(v -> {
    selectedLetter = "ha";

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Tombol huruf Ya
hurufYa.setOnClickListener(v -> {
    selectedLetter = "ya";

tvResult.setText("Mendengarkan...");

speechRecognizer.startListening(speechI
ntent);
});

// Menangani hasil pengucapan
speechRecognizer.setRecognitionListen
er(new RecognitionListener() {
    @Override
        public void onResults(Bundle
results) {
            ArrayList<String> result
List = results.getStringArrayList(Spe
echRecog
nizer.RESULTS_RECOGNITION);
            if (resultList != null &&
!resultList.isEmpty()) {
                String spokenText =
resultList.get(0).toLowerCase().trim();
                HasilUcapan.setText("Anda
menyebutkan: " + spokenText);
                // Tunda evaluasi untuk
                memberi waktu menampilkan
                pengucapan
                new
                Handler().postDelayed(() -> {
                    switch (selectedLetter) {
                        case "qo":
                            handleQof(spokenText);
                            break;
                        case "ka":
                            handleKaf(spokenText);
                            break;
                        case "la":
                            handleLam(spokenText);
                            break;
                        case "ma":
                            handleMim(spokenText);
                            break;
                        case "na":
                            handleNun(spokenText);
                            break;
                        case "wa":
                            handleWaw(spokenText);
                            break;
                        case "ha":
                            handleHa(spokenText);
                            break;
                        case "ya":
                            handleYa(spokenText);
                            break;
                        default:
                    }
                }, 1000);
            }
        }
    });
}

```

```

tvResult.setText("Huruf yang terdeteksi
tidak dikenal.");
        break;
    }
}, 1000); // Tunda 1 detik
}

@Override
public void onError(int error) {
    tvResult.setText("Gagal
mendeteksi suara. Coba lagi.");
}

@Override
public void
onReadyForSpeech(Bundle params) {}

@Override
public void
onBeginningOfSpeech() {}

@Override
public void onRmsChanged(float
rmsdB) {}

@Override
public void
onBufferReceived(byte[] buffer) {}

@Override
public void onEndOfSpeech() {}

@Override
public void
onPartialResults(Bundle partialResults)
{}

@Override
public void onEvent(int
eventType, Bundle params) {});

// Meminta izin mikrofon jika belum
diberikan
if
(ContextCompat.checkSelfPermission(this,
Manifest.permission.RECORD_AUDIO
) !=
PackageManager.PERMISSION_GRANTED) {

ActivityCompat.requestPermissions(this
, new
String[]{Manifest.permission.RECORD
_AUDIO},
REQUEST_RECORD_AUDIO_PERMI
SSION);
}
}

// Fungsi untuk memutar suara
private void playSound(int
soundResource) {
    if (mediaPlayer != null) {
        mediaPlayer.release();
    }
    mediaPlayer =
MediaPlayer.create(this,
soundResource);
    mediaPlayer.start();
}

private void handleQof(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("qo qo")
|| spokenText.equalsIgnoreCase("ko ko")
|| spokenText.equalsIgnoreCase("ka ka")
|| spokenText.equalsIgnoreCase("qa
qa")) {
        tvResult.setText("Huruf yang
terdeteksi: Qo 'ق'");
        playSound(R.raw.qof_benar);
    } else if
(spokenText.contains("qo") ||
spokenText.equalsIgnoreCase("ko") ||
spokenText.equalsIgnoreCase("ka") ||
spokenText.equalsIgnoreCase("qa")) {
        tvResult.setText("Anda hanya
menyebutkan satu huruf: Qo.");
        playSound(R.raw.satu_qof_salah);
    } else {
        tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
        playSound(R.raw.qof_salah);
    }
}

private void handleKaf(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("ka ka"))

```

```

|| spokenText.equalsIgnoreCase("kah
kah") ||
spokenText.equalsIgnoreCase("kha
kha") ||
spokenText.equalsIgnoreCase("kaa
kaa")) {
    tvResult.setText("Huruf yang
terdeteksi: Ka '݁'");
    playSound(R.raw.kaf_benar);
} else if
(spokenText.equalsIgnoreCase("ka") ||
spokenText.equalsIgnoreCase("kah") ||
spokenText.equalsIgnoreCase("kha") ||
spokenText.equalsIgnoreCase("kaa")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Ka.");
    playSound(R.raw.satu_kaf_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.kaf_salah);
}
}

private void handleLam(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("la la") ||
spokenText.equalsIgnoreCase("laa laa"))
{
    tvResult.setText("Huruf yang
terdeteksi: La '݂'");
    playSound(R.raw.lam_benar);
} else if
(spokenText.equalsIgnoreCase("la") ||
spokenText.equalsIgnoreCase("laa")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: La.");
    playSound(R.raw.satu_lam_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.lam_salah);
}
}

private void handleMim(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("ma
ma") ||
spokenText.equalsIgnoreCase("maa
maa")) {
        tvResult.setText("Huruf yang
terdeteksi: Ma '݃');
        playSound(R.raw.mim_benar);
    } else if
(spokenText.equalsIgnoreCase("ma") ||
spokenText.equalsIgnoreCase("maa")) {
        tvResult.setText("Anda hanya
menyebutkan satu huruf: Ma.");
        playSound(R.raw.satu_mim_salah);
    }
}

private void handleNun(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("na na") ||
spokenText.equalsIgnoreCase("naa
naa")) {
        tvResult.setText("Huruf yang
terdeteksi: Na '݄');
        playSound(R.raw.nun_benar);
    } else if
(spokenText.equalsIgnoreCase("na") ||
spokenText.equalsIgnoreCase("naa")) {
        tvResult.setText("Anda hanya
menyebutkan satu huruf: Na.");
        playSound(R.raw.satu_nun_salah);
    }
}

private void handleWaw(String
spokenText) {
    if

```

```

(spokenText.equalsIgnoreCase("wa wa") ||
spokenText.equalsIgnoreCase("wa
wa") ||
spokenText.equalsIgnoreCase("wau
wau") ||
spokenText.equalsIgnoreCase("woa
woa")) {
    tvResult.setText("Huruf yang
terdeteksi: Wa 'و'");
    playSound(R.raw.waw_benar);
} else if
(spokenText.equalsIgnoreCase("wa") ||
spokenText.equalsIgnoreCase("wa") ||
spokenText.equalsIgnoreCase("wau") ||
spokenText.equalsIgnoreCase("woa")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Wa.");
playSound(R.raw.satu_waw_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.waw_salah);
}
}

private void handleHa(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("ha ha") ||
spokenText.equalsIgnoreCase("hah
hah") ||
spokenText.equalsIgnoreCase("haa
haa") || spokenText.equalsIgnoreCase("h
h")) {
        tvResult.setText("Huruf yang
terdeteksi: Ha 'ه'");
        playSound(R.raw.ha_benar);
} else if
(spokenText.equalsIgnoreCase("ha") ||
spokenText.equalsIgnoreCase("hah") ||
spokenText.equalsIgnoreCase("haa") ||
spokenText.equalsIgnoreCase("h")) {
        tvResult.setText("Anda hanya
menyebutkan satu huruf: Ha.");
playSound(R.raw.satu_ha_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
}
}

    playSound(R.raw.ha_salah);
}
}

private void handleYa(String
spokenText) {
    if
(spokenText.equalsIgnoreCase("ya ya") ||
spokenText.equalsIgnoreCase("yaa
yaa") ||
spokenText.equalsIgnoreCase("iya
iya")) {
    tvResult.setText("Huruf yang
terdeteksi: Ya 'ي'");
    playSound(R.raw.ya_benar);
} else if
(spokenText.equalsIgnoreCase("ya") ||
spokenText.equalsIgnoreCase("yaa") ||
spokenText.equalsIgnoreCase("y")) {
    tvResult.setText("Anda hanya
menyebutkan satu huruf: Ya.");
playSound(R.raw.satu_ya_salah);
} else {
    tvResult.setText("Huruf yang
terdeteksi tidak dikenal.");
    playSound(R.raw.ya_salah);
}
}

@Override
protected void onDestroy() {
    super.onDestroy();
    if (speechRecognizer != null) {
        speechRecognizer.destroy();
    }
    if (mediaPlayer != null) {
        mediaPlayer.release();
    }
}

@Override
public void
onRequestPermissionsResult(int
requestCode, @NonNull String[]
permissions, @NonNull int[]
grantResults) {
    super.onRequestPermissionsResult(requestCode,
permissions, grantResults);
}

```

```
if (requestCode ==  
REQUEST_RECORD_AUDIO_PERMI  
SSION) {  
    if (grantResults.length > 0 &&  
    grantResults[0] ==  
PackageManager.PERMISSION_GRANTED) {  
        // Izin diberikan, tidak perlu  
        apa-apa  
    } else {  
        Toast.makeText(this, "Izin  
        mikrofon diperlukan untuk mendeteksi  
        suara.",  
        Toast.LENGTH_SHORT).show();  
        finish();  
    }  
}  
}
```

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"

        android:id="@+id/main"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="@drawable/background_1"
        tools:context=".MainActivity">

    <ImageView
        android:id="@+id/logo"
        android:layout_width="431dp"
        android:layout_height="267dp"
        ...>
```

```
        android:layout_marginTop="4dp"

        android:contentDescription="@string/logo"

        app:layout_constraintTop_toTopOf="parent"
            app:srcCompat="@drawable/logo"
            tools:ignore="MissingConstraints"
            tools:layout_editor_absoluteX="-1dp" />

    <ImageView
        android:id="@+id/oke"
        android:layout_width="234dp"
        android:layout_height="374dp"

        android:layout_marginTop="184dp"

        android:contentDescription="@string/oke"
        app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.434"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
                app:srcCompat="@drawable/oke_"
            />

    <ImageButton
        android:id="@+id/mulai"
        android:layout_width="261dp"
        android:layout_height="125dp"

        android:layout_marginTop="476dp"

        android:background="@drawable/mulai"
```

```
-"  
  
        android:contentDescription="Tombol  
        untuk mulai aplikasi"  
  
        app:layout_constraintEnd_toEndOf="pa  
        rent"  
  
        app:layout_constraintStart_toStartOf="p  
        arent"  
  
        app:layout_constraintTop_toTopOf="@+id/logo"  
            tools:ignore="MissingConstraints"  
    />  
  
    <ImageButton  
        android:id="@+id/keluar"  
        android:layout_width="92dp"  
        android:layout_height="101dp"  
  
        android:layout_marginBottom="4dp"  
  
        android:background="@drawable/keluar  
    -"  
  
        android:contentDescription="Tombol  
        untuk info aplikasi"  
  
        app:layout_constraintBottom_toBottom  
        Of="parent"  
  
        app:layout_constraintEnd_toEndOf="pa  
        rent"  
  
        app:layout_constraintHorizontal_bias="0.949"  
  
        app:layout_constraintStart_toStartOf="p  
        arent" />  
  
</androidx.constraintlayout.widget.Cons  
traintLayout>
```

activity_mulai.xml

```
<?xml version="1.0" encoding="utf-  
8"?>  
<androidx.constraintlayout.widget.Const  
raintLayout  
    xmlns:android="http://schemas.android.  
com/apk/res/android"  
  
    xmlns:app="http://schemas.android.com  
/apk/res-auto"  
  
    xmlns:tools="http://schemas.android.co  
m/tools"  
        android:id="@+id/main"  
        android:layout_width="match_parent"  
  
        android:layout_height="match_parent"  
  
        android:background="@drawable/backg  
round_1"  
  
        android:descendantFocusability="afterD  
escendants"  
        tools:context=".ActivityMulai">  
  
    <ImageButton  
        android:id="@+id/kembali"  
        android:layout_width="79dp"  
        android:layout_height="72dp"  
  
        android:layout_marginEnd="324dp"  
  
        android:background="@drawable/kemb  
ali_"  
  
        android:contentDescription="Tombol  
        untuk memulai fitur kembali"  
  
        app:layout_constraintEnd_toEndOf="pa  
        rent"  
            tools:ignore="MissingConstraints"  
  
            tools:layout_editor_absoluteY="16dp"  
        />  
  
    <ImageButton  
        android:id="@+id/mengenal"  
        android:layout_width="202dp"
```

```
        android:layout_height="219dp"
        android:layout_marginTop="120dp"
        android:background="@drawable/meng
        enal"
        android:contentDescription="Tombol
        untuk memulai fitur mengenal"
        app:layout_constraintEnd_toEndOf="pa
        rent"
        app:layout_constraintHorizontal_bias="
        0.401"
        app:layout_constraintStart_toStartOf="p
        arent"
        app:layout_constraintTop_toTopOf="pa
        rent" />
<ImageButton
    android:id="@+id/menyebut"
    android:layout_width="203dp"
    android:layout_height="222dp"
    android:background="@drawable/menyebut"
    android:contentDescription="Tombol
    untuk memulai fitur menyebut"
    app:layout_constraintBottom_toBottom
    Of="parent"
    app:layout_constraintEnd_toEndOf="pa
    rent"
    app:layout_constraintStart_toStartOf="p
    arent"
    app:layout_constraintTop_toTopOf="pa
    rent"
    app:layout_constraintVertical_bias="0.7
    4" />
</androidx.constraintlayout.widget.Cons
        tRAINTLayout>
```

activity_mengenal_huruf1.xml

```
<?xml version="1.0" encoding="utf-
8"?>
<androidx.constraintlayout.widget.Const
raintLayout
    xmlns:android="http://schemas.android.
    com/apk/res/android"
    xmlns:app="http://schemas.android.com
    /apk/res-auto"
    xmlns:tools="http://schemas.android.co
    m/tools"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="@drawable/backg
        round_2"
        tools:context=".mengenal_huruf">
    <!-- Tombol Kembali -->
    <ImageButton
        android:id="@+id/kembali"
        android:layout_width="48dp"
        android:layout_height="48dp"
        android:layout_margin="16dp"
        android:background="@drawable/kemb
        ali_"
        android:contentDescription="Tombol
        kembali"
        app:layout_constraintTop_toTopOf="pa
        rent"
        app:layout_constraintStart_toStartOf="p
        arent" />
    <!-- Tombol Lanjut -->
    <ImageButton
        android:id="@+id/lanjut"
        android:layout_width="48dp"
        android:layout_height="48dp"
        android:layout_margin="16dp"
        android:background="@drawable/lanjut"
```

```
-"  
        android:contentDescription="Tombol  
        lanjut"  
  
        app:layout_constraintTop_toTopOf="pa  
        rent"  
  
        app:layout_constraintEnd_toEndOf="pa  
        rent" />  
  
        <!-- Susunan huruf menggunakan  
        LinearLayout -->  
        <LinearLayout  
            android:id="@+id/container_huruf"  
            android:layout_width="0dp"  
  
            android:layout_height="wrap_content"  
            android:orientation="vertical"  
  
            app:layout_constraintStart_toStartOf="p  
            arent"  
  
            app:layout_constraintEnd_toEndOf="pa  
            rent"  
  
            app:layout_constraintTop_toBottomOf= "  
            "@+id/kembali"  
  
            android:layout_marginTop="100dp">  
  
        <!-- Baris 1 -->  
        <LinearLayout  
  
            android:layout_width="match_parent"  
  
            android:layout_height="wrap_content"  
            android:orientation="horizontal"  
  
            android:layout_marginBottom="16dp">  
  
        <!-- Huruf ta -->  
        <LinearLayout  
            android:layout_width="0dp"  
  
            android:layout_height="wrap_content"  
            android:layout_weight="1"  
            android:orientation="vertical"  
            android:gravity="center">  
  
                <ImageButton  
                    android:id="@+id/ta"  
  
                    android:layout_width="96dp"  
                    android:layout_height="100dp"  
                    android:background="@drawable/ta_"  
                    android:contentDescription="Huruf Ta"  
                />  
  
                <ImageButton  
                    android:id="@+id/huruf_ta"  
  
                    android:layout_width="94dp"  
                    android:layout_height="21dp"  
                    android:background="@drawable/huruf  
_ta_"  
                    android:contentDescription="Nama  
huruf Ta"  
                tools:ignore="TouchTargetSizeCheck"/>  
            </LinearLayout>  
  
        <!-- Huruf Ba -->  
        <LinearLayout  
            android:layout_width="0dp"  
  
            android:layout_height="wrap_content"  
            android:layout_weight="1"  
            android:orientation="vertical"  
            android:gravity="center">  
  
                <ImageButton  
                    android:id="@+id/ba"  
  
                    android:layout_width="96dp"  
                    android:layout_height="100dp"  
                    android:background="@drawable/ba_"  
                    android:contentDescription="Huruf Ba"  
                />  
                <ImageButton
```

```
        android:id="@+id/huruf_ba"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf
        _ba_"

        android:contentDescription="Nama
        huruf Ba"

    tools:ignore="TouchTargetSizeCheck"/
>
    </LinearLayout>
<!-- Huruf Alif -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/alif"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:scaleType="fitCenter"
        android:background="@drawable/alif_"

        android:contentDescription="Huruf_Alif
        " />

    <ImageButton
        android:id="@+id/huruf_alif"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:scaleType="fitCenter"
        android:background="@drawable/huruf

        android:id="@+id/_alif_"
        android:contentDescription="Nama
        huruf Alif"
        tools:ignore="TouchTargetSizeCheck"/
>
    </LinearLayout>
    </LinearLayout>

<!-- Baris 2 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginBottom="16dp">

    <!-- Huruf ha -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/haa"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:scaleType="fitCenter"
            android:background="@drawable/haa_"

            android:contentDescription="Huruf
            Haa" />

        <ImageButton
            android:id="@+id/huruf_haa"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf
```

```
_haa_"

    android:contentDescription="Nama
    huruf Haa"

    tools:ignore="TouchTargetSizeCheck"/
>
    </LinearLayout>

<!-- Huruf jim -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/jim"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/jim_"
            android:contentDescription="Huruf Jim"
/>

        <ImageButton
            android:id="@+id/huruf_jim"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf
            _jim_"
            android:contentDescription="Nama
            huruf jim"

            tools:ignore="TouchTargetSizeCheck"/
>
        </LinearLayout>

<!-- Huruf tsa -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/tsa"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:scaleType="fitCenter"
            android:background="@drawable/tsa_"
            android:contentDescription="Huruf_tsa"
/>

        <ImageButton
            android:id="@+id/huruf_tsa"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:scaleType="fitCenter"
            android:background="@drawable/huruf
            _tsa_"
            android:contentDescription="Nama
            huruf Tsa"

            tools:ignore="TouchTargetSizeCheck"/
>
        </LinearLayout>
    </LinearLayout>

<!-- Baris 3 -->
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_marginBottom="16dp">
```

```
<!-- Huruf dzal -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/dzal"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/dzal_"
        android:contentDescription="Huruf Dal"
        />

    <ImageButton
        android:id="@+id/huruf_dzal"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf_dzal_"
        android:contentDescription="Nama huruf dal"
        tools:ignore="TouchTargetSizeCheck"/>

```

```
</LinearLayout>
```

```
<!-- Huruf kho -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">
```

```
<ImageButton
    android:id="@+id/kho"
    android:layout_width="96dp"
    android:layout_height="100dp"
    android:background="@drawable/kho_"
    android:contentDescription="Huruf Kho" />
```

```

<ImageButton
    android:id="@+id/huruf_kho"
    android:layout_width="94dp"
    android:layout_height="21dp"
    android:background="@drawable/huruf_kho_"
    android:contentDescription="Nama
    huruf Kho"
    tools:ignore="TouchTargetSizeCheck"/>
</LinearLayout>
</LinearLayout>

<!-- Baris 4 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginBottom="16dp">

    <!-- Huruf ro -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/ro"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/ro_"
            android:contentDescription="Huruf ro"/>
    </LinearLayout>
    <LinearLayout
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf_ro_"
        android:contentDescription="Nama
        huruf ro"
        tools:ignore="TouchTargetSizeCheck"/>
    </LinearLayout>
    </LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>

```

activity_mengenal_huruf2.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools">

    <ImageButton
        android:id="@+id/kembali"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="@drawable/background_2"
        tools:context=".mengenal_huruf">
    <!-- Tombol Kembali -->
    <ImageButton
        android:id="@+id/kembali"

```

```
        android:layout_width="48dp"
        android:layout_height="48dp"
        android:layout_margin="16dp"

    android:background="@drawable/kembali_"

    android:contentDescription="Tombol kembali"

    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintStart_toStartOf="parent" />

    <!-- Tombol Lanjut -->
    <ImageButton
        android:id="@+id/lanjut"
        android:layout_width="48dp"
        android:layout_height="48dp"
        android:layout_margin="16dp"

    android:background="@drawable/lanjut_"
    android:contentDescription="Tombol lanjut"

    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintEnd_toEndOf="parent" />

    <!-- Susunan huruf menggunakan LinearLayout -->
    <LinearLayout
        android:id="@+id/container_huruf"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:orientation="vertical"

        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"

        android:background="@drawable/huruf_syin_"
        android:contentDescription="Huruf syin" />

        <ImageButton
            android:id="@+id/huruf_syin"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_syin_"
            android:contentDescription="Nama huruf syin" />

        <!-- Baris 1 -->
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal"

            android:layout_marginBottom="16dp" />

            <!-- Huruf syin -->
            <LinearLayout
                android:layout_width="0dp"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:orientation="vertical"
                android:gravity="center" />

                <ImageButton
                    android:id="@+id/syin"
                    android:layout_width="96dp"
                    android:layout_height="100dp"
                    android:background="@drawable/syin_"
                    android:contentDescription="Huruf syin" />

                    <ImageButton
                        android:id="@+id/kembali"
                        android:layout_width="48dp"
                        android:layout_height="48dp"
                        android:layout_margin="16dp"
                        android:background="@drawable/kembali_"
                        android:contentDescription="Tombol kembali" />
```

```

        tools:ignore="TouchTargetSizeCheck"/
    >
        </LinearLayout>

    <!-- Huruf sin -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/sin"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/sin_"
            android:contentDescription="Huruf sin"
        />

        <ImageButton
            android:id="@+id/huruf_sin"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_
            _sin_"
            android:contentDescription="Nama
            huruf sin"
        tools:ignore="TouchTargetSizeCheck"/
    >
        </LinearLayout>

    <!-- Huruf zay -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/zay"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/zay_"
            android:contentDescription="Huruf_zay
        " />

        <ImageButton
            android:id="@+id/huruf_zay"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_
            _zay_"
            android:contentDescription="Nama
            huruf zay"
        tools:ignore="TouchTargetSizeCheck"/
    >
        </LinearLayout>

    <!-- Baris 2 -->
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_marginBottom="16dp">

        <!-- Huruf tho -->
        <LinearLayout

```

```
        android:layout_width="0dp"
        android:layout_height="wrap_content"
            android:layout_weight="1"
            android:orientation="vertical"
            android:gravity="center">

            <ImageButton
                android:id="@+id/tho"
                android:layout_width="96dp"
                android:layout_height="100dp"
                android:background="@drawable/tho_"
                android:contentDescription="Huruf tho"/>

            <ImageButton
                android:id="@+id/huruf_tho"
                android:layout_width="94dp"
                android:layout_height="21dp"
                android:background="@drawable/huruf_tho_"
                android:contentDescription="Nama huruf Tho"
                tools:ignore="TouchTargetSizeCheck"/>
        </LinearLayout>

<!-- Huruf dhod -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/dhod"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/dhod_"
            android:contentDescription="Huruf dhod" />

            <ImageButton
                android:id="@+id/huruf_dhod"
                android:layout_width="94dp"
                android:layout_height="21dp"
                android:background="@drawable/huruf_dhod_"
                android:contentDescription="Nama huruf dhod"
                tools:ignore="TouchTargetSizeCheck"/>
        </LinearLayout>

<!-- Huruf shod -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/shod"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/shod_"
            android:contentDescription="Huruf_shod" />
```

```
<ImageButton
    android:id="@+id/huruf_shod"
    android:layout_width="94dp"
    android:layout_height="21dp"
    android:scaleType="fitCenter"
    android:background="@drawable/huruf_shod_"
    android:contentDescription="Nama
    huruf shod"
    tools:ignore="TouchTargetSizeCheck"/>
    </LinearLayout>
    </LinearLayout>

<!-- Baris 3 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginBottom="16dp">

<!-- Huruf ghoin -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/ghoin"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/ghoin_
        "
        android:contentDescription="Huruf
        ghoin" />

    <ImageButton
        android:id="@+id/huruf_ghoin"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf
        _ghoin_"
        android:contentDescription="Nama
        huruf ghoin"
        tools:ignore="TouchTargetSizeCheck"/>
        </LinearLayout>

<!-- Huruf ain -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/ain"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/ain_
        "
        android:contentDescription="Huruf ain"
        />

    <ImageButton
        android:id="@+id/huruf_ain"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/ain_
        "
        android:contentDescription="Huruf
        ain" />
```

```
        </LinearLayout>

    android:background="@drawable/huruf_ain_"

    android:contentDescription="Nama huruf ain"

    tools:ignore="TouchTargetSizeCheck"/>
        </LinearLayout>

<!-- Huruf dzho -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/dzho"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/dzho_"
            android:contentDescription="Huruf dzho" />

        <ImageButton
            android:id="@+id/huruf_dzho"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_dzho_"
            android:contentDescription="Nama huruf dzho"

        tools:ignore="TouchTargetSizeCheck"/>
            </LinearLayout>

        <!-- Baris 4 -->
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal"
            android:layout_marginBottom="16dp">

            <!-- Huruf fa -->
            <LinearLayout
                android:layout_width="0dp"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:orientation="vertical"
                android:gravity="center">

                <ImageButton
                    android:id="@+id/fa"
                    android:layout_width="96dp"
                    android:layout_height="100dp"
                    android:background="@drawable/fa_"
                    android:contentDescription="Huruf fa" />

                <ImageButton
                    android:id="@+id/huruf_fa"
                    android:layout_width="94dp"
                    android:layout_height="21dp"
                    android:background="@drawable/huruf_fa_"
                    android:contentDescription="Nama huruf fa"

                tools:ignore="TouchTargetSizeCheck"/>
                    </LinearLayout>
```

```

</LinearLayout>
</LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>

activity_mengenal_huruf3.xml

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools">
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/background_2"
    tools:context=".mengenal_huruf">

    <!-- Tombol Kembali -->
    <ImageButton
        android:id="@+id/kembali"
        android:layout_width="48dp"
        android:layout_height="48dp"
        android:layout_margin="16dp"
        android:background="@drawable/kembali"
        android:contentDescription="Tombol kembali"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintBottom_toBottomOf="@+id/kembali"
        android:layout_marginTop="100dp">
        <!-- Baris 1 -->
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal"
            android:layout_marginBottom="16dp">

```

```
<!-- Huruf lam-->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/lam"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/lam_"
        android:contentDescription="Huruf lam" />

    <ImageButton
        android:id="@+id/huruf_lam"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf_lam_"
        android:contentDescription="Nama huruf lam"
        tools:ignore="TouchTargetSizeCheck"/>

```

```
</LinearLayout>

<!-- Huruf kaf -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/kaf"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/kaf_"
        android:contentDescription="Huruf kaf" />

    <ImageButton
        android:id="@+id/huruf_kaf"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf_kaf_"
        android:contentDescription="Nama huruf kaf"
        tools:ignore="TouchTargetSizeCheck"/>

```

```
</LinearLayout>

<!-- Huruf qaf -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/qof"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:scaleType="fitCenter"
        android:background="@drawable/qof_"
        android:contentDescription="Huruf qof"
```

```
" />

    <ImageButton
        android:id="@+id/huruf_qof"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:scaleType="fitCenter"
        android:background="@drawable/huruf_qof_"
        android:contentDescription="Nama huruf qof"
        tools:ignore="TouchTargetSizeCheck"/>
    </LinearLayout>
</LinearLayout>

<!-- Baris 2 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginBottom="16dp">

    <!-- Huruf waw -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/waw"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/waw_"
            android:contentDescription="Huruf waw" />

        <ImageButton
            android:id="@+id/huruf_waw"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_waw_"
            android:contentDescription="Nama huruf waw"
            tools:ignore="TouchTargetSizeCheck"/>
    </LinearLayout>

    <!-- Huruf nun -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/nun"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/nun_"
            android:contentDescription="Huruf nun" />

        <ImageButton
            android:id="@+id/huruf_nun"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/nun_"
            android:contentDescription="Nama huruf nun" />
    </LinearLayout>

```

```
        android:layout_height="21dp"
        android:background="@drawable/huruf_nun_"
        android:contentDescription="Nama huruf nun"
        tools:ignore="TouchTargetSizeCheck"/>
    >
    </LinearLayout>

    <!-- Huruf min -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/mim"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:scaleType="fitCenter"
            android:background="@drawable/mim_"
            android:contentDescription="Huruf mim" />

        <ImageButton
            android:id="@+id/huruf_mim"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:scaleType="fitCenter"
            android:background="@drawable/huruf_mim_"
            android:contentDescription="Nama huruf mim" tools:ignore="TouchTargetSizeCheck"/>
    >
    </LinearLayout>
    </LinearLayout>

    <!-- Baris 3 -->
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_marginBottom="16dp">

        <!-- Huruf hamzah -->
        <LinearLayout
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:orientation="vertical"
            android:gravity="center">

            <ImageButton
                android:id="@+id/hamzah"
                android:layout_width="96dp"
                android:layout_height="100dp"
                android:background="@drawable/hamzah_"
                android:contentDescription="Huruf hamzah" />

            <ImageButton
                android:id="@+id/huruf_hamzah"
                android:layout_width="94dp"
                android:layout_height="21dp"
                android:background="@drawable/huruf_hamzah_"
                android:contentDescription="Nama huruf hamzah" />
        >
        </LinearLayout>
    </LinearLayout>

```

```
        android:contentDescription="Nama  
        huruf hamzah"  
  
    tools:ignore="TouchTargetSizeCheck"/>  
    </LinearLayout>  
  
<!-- Huruf lam alif -->  
    <LinearLayout  
        android:layout_width="0dp"  
  
        android:layout_height="wrap_content"  
        android:layout_weight="1"  
        android:orientation="vertical"  
        android:gravity="center">  
  
        <ImageButton  
            android:id="@+id/lamalif"  
  
        android:layout_width="96dp"  
  
        android:layout_height="100dp"  
  
        android:background="@drawable/lam_a  
        lif_"  
  
        android:contentDescription="Huruf  
        lam_alif" />  
  
        <ImageButton  
  
            android:id="@+id/huruf_lamalif"  
  
            android:layout_width="94dp"  
  
            android:layout_height="21dp"  
  
            android:background="@drawable/huruf  
            _lamalif_"  
  
            android:contentDescription="Nama  
            huruf lamalif"  
  
    tools:ignore="TouchTargetSizeCheck"/>  
    </LinearLayout>  
  
<!-- Huruf ha-->  
    <LinearLayout  
        android:layout_width="0dp"  
  
        android:layout_height="wrap_content"  
        android:layout_weight="1"  
        android:orientation="vertical"  
        android:gravity="center">  
  
        <ImageButton  
            android:id="@+id/ha"  
  
        android:layout_width="96dp"  
  
        android:layout_height="100dp"  
  
        android:background="@drawable/ha_"  
  
        android:contentDescription="Huruf ha"  
        />  
  
        <ImageButton  
  
            android:id="@+id/huruf_ha"  
  
            android:layout_width="94dp"  
  
            android:layout_height="21dp"  
  
            android:background="@drawable/huruf  
            _ha_"  
  
            android:contentDescription="Nama  
            huruf ha"  
  
    tools:ignore="TouchTargetSizeCheck"/>  
    </LinearLayout>  
  
<!-- Baris 4 -->  
    <LinearLayout  
  
        android:layout_width="match_parent"  
  
        android:layout_height="wrap_content"  
        android:orientation="horizontal"  
  
        android:layout_marginBottom="16dp">  
  
<!-- Huruf ya -->  
    <LinearLayout  
        android:layout_width="0dp"
```

```

        android:layout_height="wrap_content"
            android:layout_weight="1"
            android:orientation="vertical"
            android:gravity="center">

            <ImageButton
                android:id="@+id/ya"
                android:layout_width="96dp"
                android:layout_height="100dp"
                android:background="@drawable/ya_"
                android:contentDescription="Huruf ya"
            />

            <ImageButton
                android:id="@+id/huruf_ya"
                android:layout_width="94dp"
                android:layout_height="21dp"
                android:background="@drawable/huruf_ya_"
                android:contentDescription="Nama huruf ya"
                tools:ignore="TouchTargetSizeCheck"
            >
                </LinearLayout>
            </LinearLayout>
        </LinearLayout>
    </androidx.constraintlayout.widget.ConstraintLayout>

activity_menyebutkan_huruf.xml

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/
com/apk/res/android"
    xmlns:app="http://schemas.android.com/
apk/res-auto"
    xmlns:tools="http://schemas.android.co
m/tools"
        android:id="@+id/main"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="@drawable/backg
round_1"
        tools:context=".menyebutkan_huruf">
    <ImageButton
        android:id="@+id/kembali"
        android:layout_width="76dp"
        android:layout_height="75dp"
        android:layout_marginEnd="336dp"
        android:background="@drawable/kemb
ali_"
        android:contentDescription="Tombol
untuk memulai fitur kembali"
        app:layout_constraintEnd_toEndOf="pa
rent"
        tools:ignore="MissingConstraints"
        tools:layout_editor_absoluteY="30dp"
    />
    <ImageView
        android:id="@+id/imageView"
        android:layout_width="273dp"
        android:layout_height="451dp"
        app:layout_constraintBottom_toBottom
        Of="parent"
        app:layout_constraintEnd_toEndOf="pa
rent"
        app:layout_constraintHorizontal_bias="
0.326"
        app:layout_constraintStart_toStartOf="p
arent"
    >

```

```

    app:layout_constraintTop_toTopOf="parent"

    app:layout_constraintVertical_bias="0.3
59"
        app:srcCompat="@drawable/oke"
/>
<ImageButton
    android:id="@+id/mulai"
    android:layout_width="261dp"
    android:layout_height="125dp"

    android:layout_marginBottom="260dp"

    android:background="@drawable/mulai
-"

    android:contentDescription="Tombol
untuk mulai aplikasi"

    app:layout_constraintBottom_toBottom
Of="parent"

    app:layout_constraintEnd_toEndOf="pa
rent"

    app:layout_constraintStart_toStartOf="p
arent"
        tools:ignore="MissingConstraints"
/>

</androidx.constraintlayout.widget.Cons
traintLayout>

activity_menyebutkan_huruf1.xml

<?xml version="1.0" encoding="utf-
8"?>
<androidx.constraintlayout.widget.Const
raintLayout
    xmlns:android="http://schemas.android.
com/apk/res/android"

    xmlns:app="http://schemas.android.com
/apk/res-auto"

    xmlns:tools="http://schemas.android.co
m/tools"
        android:layout_width="match_parent"

        android:layout_height="match_parent"

        android:background="@drawable/backg
round_2"

        tools:context=".menyebutkan_huruf_1">

<TextView
    android:id="@+id/tv_result"
    android:layout_width="366dp"
    android:layout_height="75dp"
    android:gravity="center"
    android:text="Silakan sebutkan
huruf sebanyak 2 kali"
        android:textColor="#000000"
        android:textSize="24sp"

    app:layout_constraintBottom_toBottom
Of="parent"

    app:layout_constraintEnd_toEndOf="pa
rent"

    app:layout_constraintHorizontal_bias="
0.488"

    app:layout_constraintStart_toStartOf="p
arent"

    app:layout_constraintTop_toTopOf="pa
rent"

    app:layout_constraintVertical_bias="0.1
25" />

<!-- Tombol Kembali -->
<ImageButton
    android:id="@+id/kembali"
    android:layout_width="48dp"
    android:layout_height="48dp"
    android:layout_margin="16dp"

    android:background="@drawable/kemb
ali_"

    android:contentDescription="Tombol
kembali"

    app:layout_constraintStart_toStartOf="p

```

```
arent"

    app:layout_constraintTop_toTopOf="parent" />

    <!-- Tombol Lanjut -->
    <ImageButton
        android:id="@+id/lanjut"
        android:layout_width="48dp"
        android:layout_height="48dp"
        android:layout_margin="16dp"

        android:background="@drawable/lanjut_"

        android:contentDescription="Tombol lanjut"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintTop_toTopOf="parent" />

    <!-- Susunan huruf menggunakan LinearLayout -->
    <LinearLayout
        android:id="@+id/container_huruf"
        android:layout_width="0dp"

        android:layout_height="wrap_content"
        android:layout_marginTop="100dp"
        android:orientation="vertical"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/kembali">
        <!-- Baris 1 -->
        <LinearLayout
            android:layout_width="match_parent"

            android:layout_height="wrap_content"

            android:layout_marginBottom="16dp"

            android:orientation="horizontal">
            <!-- Huruf ta -->
            <LinearLayout
                android:layout_width="0dp"

                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:gravity="center"

            android:orientation="vertical">
                <ImageButton
                    android:id="@+id/ta_"

                    android:layout_width="96dp"

                    android:layout_height="100dp"

                    android:background="@drawable/ta_"

                    android:contentDescription="Huruf Ta"

                    />
                <ImageButton
                    android:id="@+id/huruf_ta_"

                    android:layout_width="94dp"

                    android:layout_height="21dp"

                    android:background="@drawable/huruf_ta_"

                    android:contentDescription="Nama huruf Ta"

                    tools:ignore="TouchTargetSizeCheck"
                    />
                </LinearLayout>
            <!-- Huruf Ba -->
            <LinearLayout
                android:layout_width="0dp"

                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:gravity="center"

            android:orientation="vertical">
```

```
<ImageButton
    android:id="@+id/ba"
    android:layout_width="96dp"
    android:layout_height="100dp"
    android:background="@drawable/ba_"
    android:contentDescription="Huruf Ba"
/>

<ImageButton
    android:id="@+id/huruf_ba"
    android:layout_width="94dp"
    android:layout_height="21dp"
    android:background="@drawable/huruf
    _ba_"
    android:contentDescription="Nama
    huruf Ba"
    tools:ignore="TouchTargetSizeCheck"
/>
</LinearLayout>

<!-- Huruf Alif -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:gravity="center"
    android:orientation="vertical">

    <ImageButton
        android:id="@+id/alif"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/alif_"
        android:contentDescription="Huruf_Alif"
        android:scaleType="fitCenter" />

    <ImageButton
        android:id="@+id/huruf_alif"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf
        _alif_"
        android:contentDescription="Nama
        huruf Alif"
        android:scaleType="fitCenter"
        tools:ignore="TouchTargetSizeCheck"
    />
    </LinearLayout>
    <!-- Baris 2 -->
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginBottom="16dp"
        android:orientation="horizontal">

        <!-- Huruf ha -->
        <LinearLayout
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:gravity="center"
            android:orientation="vertical">

                <ImageButton
                    android:id="@+id/haa"
                    android:layout_width="96dp"
```

```
        android:layout_height="100dp"
        android:background="@drawable/haa_"
        android:contentDescription="Huruf
        Haa" />

        <ImageButton
            android:id="@+id/huruf_haa"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf
            _haa_"
            android:contentDescription="Nama
            huruf Haa"
            tools:ignore="TouchTargetSizeCheck"
        />
    </LinearLayout>

<!-- Huruf jim -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:gravity="center"
    android:orientation="vertical">

    <ImageButton
        android:id="@+id/jim"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/jim_"
        android:contentDescription="Huruf Jim"
        />

    <ImageButton
        android:id="@+id/huruf_jim"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf
        _jim_"
        android:contentDescription="Nama
        huruf Jim"
        tools:ignore="TouchTargetSizeCheck"
    />
</LinearLayout>

<!-- Huruf tsa -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:gravity="center"
    android:orientation="vertical">

    <ImageButton
        android:id="@+id/tsa"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/tsa_"
        android:contentDescription="Huruf_tsa"
        android:scaleType="fitCenter" />

    <ImageButton
        android:id="@+id/huruf_tsa"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf
        _tsa_"
    />
</LinearLayout>
```

```
        android:contentDescription="Nama  
        huruf Tsa"  
  
        android:scaleType="fitCenter"  
  
        tools:ignore="TouchTargetSizeCheck"  
    />  
        </LinearLayout>  
        </LinearLayout>  
  
        <!-- Baris 3 -->  
        <LinearLayout  
            android:layout_width="match_parent"  
            android:layout_height="wrap_content"  
            android:layout_marginBottom="16dp"  
            android:orientation="horizontal">  
  
            <!-- Huruf dzal -->  
            <LinearLayout  
                android:layout_width="0dp"  
  
                android:layout_height="wrap_content"  
                android:layout_weight="1"  
                android:gravity="center"  
  
                android:orientation="vertical">  
  
                <ImageButton  
                    android:id="@+id/dzal"  
  
                    android:layout_width="96dp"  
                    android:layout_height="100dp"  
                    android:background="@drawable/dzal_"  
  
                    android:contentDescription="Huruf  
                    dzal" />  
  
                <ImageButton  
                    android:id="@+id/huruf_dzal"  
  
                    android:layout_width="94dp"  
                    android:layout_height="21dp"  
                    android:background="@drawable/huruf  
                    _dzal_"  
  
                    android:contentDescription="Nama  
                    huruf dzal"  
  
                    tools:ignore="TouchTargetSizeCheck"  
    />
```

```
</LinearLayout>

<!-- Huruf kho -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:gravity="center"
    android:orientation="vertical">

    <ImageButton
        android:id="@+id/kho"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/kho_"
        android:contentDescription="Huruf
        Kho" />

    <ImageButton
        android:id="@+id/huruf_kho"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf_
        _kho_"
        android:contentDescription="Nama
        huruf Kho"
        tools:ignore="TouchTargetSizeCheck"
        />
    </LinearLayout>
</LinearLayout>

<!-- Baris 4 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"

    android:layout_marginBottom="16dp"
    android:orientation="horizontal">

    <!-- Huruf ro -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:gravity="center"
        android:orientation="vertical">

        <ImageButton
            android:id="@+id/ro"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/ro_"
            android:contentDescription="Huruf ro"
            />

        <ImageButton
            android:id="@+id/huruf_ro"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_
            _ro_"
            android:contentDescription="Nama
            huruf ro"
            tools:ignore="TouchTargetSizeCheck"
            />
        </LinearLayout>
    </LinearLayout>

    </LinearLayout>

    <TextView
        android:id="@+id/hasil_ucapan"
        android:layout_width="400dp"
```

```

        android:layout_height="50dp"
        android:layout_marginTop="720dp"
            android:fontFamily="sans-serif-
black"
            android:gravity="center"
            android:text="Hasil ucapan akan
muncul di sini"
            android:textColor="#000000"
            android:textSize="18sp"

        app:layout_constraintEnd_toEndOf="pa
rent"

        app:layout_constraintStart_toStartOf="p
arent"

        app:layout_constraintTop_toTopOf="pa
rent" />

    </androidx.constraintlayout.widget.Cons
traintLayout>

activity_menyebutkan_huruf2.xml

<?xml version="1.0" encoding="utf-
8"?>
<androidx.constraintlayout.widget.Con
straintLayout
    xmlns:android="http://schemas.android.
    com/apk/res/android"
    xmlns:app="http://schemas.android.com/
apk/res-auto"
    xmlns:tools="http://schemas.android.co
m/tools"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="@drawable/backg
round_2"
        tools:context=".menyebutkan_huruf_2">

    <TextView
        android:id="@+id/tv_result"
        android:layout_width="366dp"
        android:layout_height="75dp"
        android:gravity="center"
        android:text="Silakan sebutkan
huruf sebanyak 2 kali"
        android:textColor="#000000"
        android:textSize="24sp"

        app:layout_constraintBottom_toBottom
        Of="parent"
        app:layout_constraintEnd_toEndOf="pa
rent"
        app:layout_constraintHorizontal_bias="
0.488"
        app:layout_constraintStart_toStartOf="p
arent"
        app:layout_constraintTop_toTopOf="pa
rent"
        app:layout_constraintVertical_bias="0.1
25" />

    <!-- Tombol Kembali -->
    <ImageButton
        android:id="@+id/kembali"
        android:layout_width="48dp"
        android:layout_height="48dp"
        android:layout_margin="16dp"
        android:background="@drawable/kemb
ali_"
        android:contentDescription="Tombol
kembali"
        app:layout_constraintTop_toTopOf="pa
rent"
        app:layout_constraintStart_toStartOf="p
arent" />

    <!-- Tombol Lanjut -->
    <ImageButton
        android:id="@+id/lanjut"
        android:layout_width="48dp"
        android:layout_height="48dp"
        android:layout_margin="16dp"

```

```
        android:background="@drawable/lanjut
        -
        android:contentDescription="Tombol lanjut"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintEnd_toEndOf="parent" />

        <!-- Susunan huruf menggunakan LinearLayout -->
        <LinearLayout
            android:id="@+id/container_huruf"
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:orientation="vertical"

            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintTop_toBottomOf="@+id/kembali"
            android:layout_marginTop="100dp">

            <!-- Baris 1 -->
            <LinearLayout
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:orientation="horizontal"
                android:layout_marginBottom="16dp">

                <!-- Huruf syin -->
                <LinearLayout
                    android:layout_width="0dp"
                    android:layout_height="wrap_content"
                    android:layout_weight="1"
                    android:orientation="vertical"
                    android:gravity="center">

                    android:background="@drawable/syin_"
                    android:contentDescription="Huruf syin" />

                    <ImageButton
                        android:id="@+id/syin"
                        android:layout_width="96dp"
                        android:layout_height="100dp"
                        android:background="@drawable/syin_"
                        android:contentDescription="Huruf syin" />

                    <!-- Huruf sin -->
                    <LinearLayout
                        android:layout_width="0dp"
                        android:layout_height="wrap_content"
                        android:layout_weight="1"
                        android:orientation="vertical"
                        android:gravity="center">

                        android:background="@drawable/sin_"
                        android:contentDescription="Nama huruf sin"
                        tools:ignore="TouchTargetSizeCheck"/>
                    </LinearLayout>

                </LinearLayout>
            </LinearLayout>
        </LinearLayout>
    
```

```
        android:contentDescription="Huruf sin"
        />

        <ImageButton
            android:id="@+id/huruf_sin"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf
            _sin_"

            android:contentDescription="Nama
            huruf sin"
            tools:ignore="TouchTargetSizeCheck"/
        >
        </LinearLayout>

<!-- Huruf zay -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/zay"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:scaleType="fitCenter"
        android:background="@drawable/zay_"

        android:contentDescription="Huruf_zay_
        " />

    <ImageButton
        android:id="@+id/huruf_zay"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:scaleType="fitCenter"
        android:background="@drawable/huruf_zay_"

        android:contentDescription="Nama
        huruf zay"
        tools:ignore="TouchTargetSizeCheck"/
    >
    </LinearLayout>

<!-- Baris 2 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginBottom="16dp">

<!-- Huruf tho -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/tho"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:scaleType="fitCenter"
        android:background="@drawable/tho_"

        android:contentDescription="Huruf tho"
        />

    <ImageButton
        android:id="@+id/huruf_tho"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:scaleType="fitCenter"
        android:background="@drawable/huruf_tho_"

        android:contentDescription="Nama
        huruf tho"
        tools:ignore="TouchTargetSizeCheck"/
    >
    </LinearLayout>
```

```
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf
        _tho_"
        android:contentDescription="Nama
        huruf Tho"
        tools:ignore="TouchTargetSizeCheck"/
    >
    </LinearLayout>

<!-- Huruf shod -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/shod"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/shod_
        "
        android:contentDescription="Huruf_sho
        d" />

    <ImageButton
        android:id="@+id/huruf_shod"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:background="@drawable/huruf
        _shod_"
        android:contentDescription="Nama
        huruf shod"
        tools:ignore="TouchTargetSizeCheck"/
    >
    </LinearLayout>

```

```

<!-- Baris 3 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginBottom="16dp">

    <!-- Huruf ghoin -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/ghoin"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/ghoin_"
            android:contentDescription="Huruf ghoin" />

        <ImageButton
            android:id="@+id/huruf_ghoin"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_ghoin_"
            android:contentDescription="Nama huruf ghoin" />

        <!-- Huruf dzho -->
        <LinearLayout
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:orientation="vertical"
            android:gravity="center">

            <ImageButton
                android:id="@+id/dzho"
                android:layout_width="96dp"
                android:layout_height="100dp"
                android:background="@drawable/dzho_"
                android:contentDescription="Huruf dzho" />

```

```
        android:id="@+id/fa"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:background="@drawable/dzho_"
        android:contentDescription="Huruf
        dzho" />

        <ImageButton
            android:id="@+id/huruf_dzho"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf
            _dzho_"
            android:contentDescription="Nama
            huruf dzho"

            tools:ignore="TouchTargetSizeCheck"/>
        </LinearLayout>
    </LinearLayout>

<!-- Baris 4 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginBottom="16dp">

    <!-- Huruffa -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/hasil_ucapan"
            android:layout_width="400dp"
            android:layout_height="50dp"
            android:layout_marginTop="720dp"
            android:fontFamily="sans-serif-
            black"
            android:gravity="center"
            android:text="Hasil ucapan akan
            muncul di sini"
            android:textColor="#000000"
            android:textSize="18sp"

            app:layout_constraintEnd_toEndOf="pa
            rent"
            app:layout_constraintStart_toStartOf="p
            arent"
```

```
        app:layout_constraintTop_toTopOf="parent" />

    </androidx.constraintlayout.widget.ConstraintLayout>

activity_menyebutkan_huruf3.xml

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/background_2"
    tools:context=".menyebutkan_huruf_3">

    <TextView
        android:id="@+id/tv_result"
        android:layout_width="366dp"
        android:layout_height="75dp"
        android:gravity="center"
        android:text="Silakan sebutkan huruf sebanyak 2 kali"
        android:textColor="#000000"
        android:textSize="24sp"

        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.488"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.125" />


```

```
        aren't"

        <!-- Tombol Kembali -->
        <ImageButton
            android:id="@+id/kembali"
            android:layout_width="48dp"
            android:layout_height="48dp"
            android:layout_margin="16dp"
            android:background="@drawable/kembali_"
            android:contentDescription="Tombol kembali"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintStart_toStartOf="parent" />

        <!-- Susunan huruf menggunakan LinearLayout -->
        <LinearLayout
            android:id="@+id/container_huruf"
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:orientation="vertical"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintTop_toBottomOf="@+id/kembali"
            android:layout_marginTop="100dp" />

        <!-- Baris 1 -->
        <LinearLayout
```

```
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
            android:orientation="horizontal"

        android:layout_marginBottom="16dp">
<!-- Huruf lam-->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
            android:layout_weight="1"
            android:orientation="vertical"
            android:gravity="center">

        <ImageButton
            android:id="@+id/lam"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/lam_"
            android:contentDescription="Huruf lam"
            android:width="96dp" />

        <ImageButton
            android:id="@+id/huruf_lam"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_lam_"
            android:contentDescription="Nama huruf lam"
            tools:ignore="TouchTargetSizeCheck"/>
    </LinearLayout>
<!-- Huruf kaf -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
            android:layout_weight="1"
            android:orientation="vertical"
            android:gravity="center">

        <ImageButton
            android:id="@+id/qof"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/qof_"
            android:contentDescription="Huruf kaf"
            android:width="96dp" />

        <ImageButton
            android:id="@+id/huruf_kaf"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_kaf_"
            android:contentDescription="Nama huruf kaf"
            tools:ignore="TouchTargetSizeCheck"/>
    </LinearLayout>
```

```
        android:scaleType="fitCenter"

        android:background="@drawable/qof_"

        android:contentDescription="Huruf_qof_
" />

        <ImageButton
            android:id="@+id/huruf_qof"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:scaleType="fitCenter"
            android:background="@drawable/huruf_
_qof_"

            android:contentDescription="Nama
            huruf qof"

            tools:ignore="TouchTargetSizeCheck"/>
        </LinearLayout>
    </LinearLayout>

<!-- Baris 2 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
        android:orientation="horizontal"

    android:layout_marginBottom="16dp">

<!-- Huruf waw -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/waw"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/waw_"

            android:contentDescription="Huruf
            waw" />

        <ImageButton
            android:id="@+id/huruf_waw"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_
_waw_"

            android:contentDescription="Nama
            huruf waw"

            tools:ignore="TouchTargetSizeCheck"/>
        </LinearLayout>

<!-- Huruf nun -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/nun"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/nun_"

            android:contentDescription="Huruf
            nun" />
```

```
<ImageButton
    android:id="@+id/huruf_nun"
    android:layout_width="94dp"
    android:layout_height="21dp"
    android:background="@drawable/huruf_nun_"
    android:contentDescription="Nama huruf nun"
    tools:ignore="TouchTargetSizeCheck"/>
</LinearLayout>

<!-- Huruf min -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="vertical"
    android:gravity="center">
    <ImageButton
        android:id="@+id/mim"
        android:layout_width="96dp"
        android:layout_height="100dp"
        android:scaleType="fitCenter"
        android:background="@drawable/mim_"
        android:contentDescription="Huruf_mim" />
    <ImageButton
        android:id="@+id/huruf_mim"
        android:layout_width="94dp"
        android:layout_height="21dp"
        android:scaleType="fitCenter"
        android:background="@drawable/huruf_mim_"
        android:contentDescription="Nama huruf mim"
        tools:ignore="TouchTargetSizeCheck"/>
</LinearLayout>

<!-- Baris 3 -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginBottom="16dp">
    <!-- Huruf hamzah -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">
        <ImageButton
            android:id="@+id/hamzah"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/hamzah_"
            android:contentDescription="Huruf hamzah" />
        <ImageButton
            android:id="@+id/huruf_hamzah"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:scaleType="fitCenter"
            android:background="@drawable/huruf_hamzah_"
            android:contentDescription="Nama huruf hamzah" />
    </LinearLayout>
</LinearLayout>
```

```
        android:layout_width="94dp"
        android:layout_height="21dp"

        android:background="@drawable/huruf
        _hamzah_"

        android:contentDescription="Nama
        huruf hamzah"

        tools:ignore="TouchTargetSizeCheck"/
    >
        </LinearLayout>

    <!-- Huruf lam alif -->
    <LinearLayout
        android:layout_width="0dp"

        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/lamalif"

        android:layout_width="96dp"

        android:layout_height="100dp"

        android:background="@drawable/lam_a
        lif_"

        android:contentDescription="Huruf
        lam_alif" />

        <ImageButton

            android:id="@+id/huruf_lamalif"

        android:layout_width="94dp"

        android:layout_height="21dp"

        android:background="@drawable/huruf
        _lamalif_"

        android:contentDescription="Nama
        huruf lamalif"

        tools:ignore="TouchTargetSizeCheck"/
    >
        </LinearLayout>
        </LinearLayout>

    <!-- Baris 4 -->
    <LinearLayout

        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

```
        android:orientation="horizontal"
        android:layout_marginBottom="16dp">

    <!-- Huruf ya -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/ya"
            android:layout_width="96dp"
            android:layout_height="100dp"
            android:background="@drawable/ya_"
            android:contentDescription="Huruf ya"
            />

        <ImageButton
            android:id="@+id/huruf_ya"
            android:layout_width="94dp"
            android:layout_height="21dp"
            android:background="@drawable/huruf_ya_"
            android:contentDescription="Nama
            huruf ya"

        tools:ignore="TouchTargetSizeCheck"/>
        </LinearLayout>
        </LinearLayout>

    </LinearLayout>
    <TextView
        android:id="@+id/hasil_ucapan"
        android:layout_width="400dp"
        android:layout_height="50dp"
        android:layout_marginTop="720dp"
        android:fontFamily="sans-serif-black"
        android:gravity="center"
        android:text="Hasil ucapan akan
        muncul di sini"
        android:textColor="#000000"
        android:textSize="18sp"

        app:layout_constraintEnd_toEndOf="pa
        rent"
        app:layout_constraintStart_toStartOf="p
        arent"
        app:layout_constraintTop_toTopOf="pa
        rent" />

    </androidx.constraintlayout.widget.Cons
    traintLayout>
```