LAMPIRAN

Lampiran - 1 *Listing* Program PHP (Dashboard.php)

```
<?php
session_start();
if (!isset($_SESSION['username'])) {
    header("Location: login.php");
    exit();
}
include 'koneksi.php';
if (!isset($_SESSION['user_logged_in'])) {
    header("Location: login.php");
    exit();
}
// Cek apakah role adalah admin
if (!isset($_SESSION['role']) || $_SESSION['role'] !== 'admin') {
    // Redirect ke halaman lain jika bukan admin
    header("Location: login.php");
    exit();
}
// Ambil total dari masing-masing tabel
$users_total = mysqli_fetch_assoc(mysqli_query($con, "SELECT COUNT(*) AS total FROM users"))['total'];
$siswa_total = mysqli_fetch_assoc(mysqli_query($con, "SELECT COUNT(*) AS total FROM siswa"))['total'];
$absensi_total = mysqli_fetch_assoc(mysqli_query($con, "SELECT COUNT(*) AS total FROM absensi"))['total'];
$pinjam_total = mysqli_fetch_assoc(mysqli_query($con, "SELECT COUNT(*) AS total FROM peminjaman"))['total'];
$praktikum_total = mysqli_fetch_assoc(mysqli_query($con, "SELECT COUNT(*) AS total FROM praktikum"))['total'];
$jadwal_total = mysqli_fetch_assoc(mysqli_query($con, "SELECT COUNT(*) AS total FROM jadwal_lab"))['total'];
$alat_total = mysqli_fetch_assoc(mysqli_query($con, "SELECT COUNT(*) AS total FROM alat_lab"))['total'];
$alat_praktikum_total = mysqli_fetch_assoc(mysqli_query($con, "SELECT COUNT(*) AS total FROM praktikum_alat"))['total'];
?>
<!DOCTYPE html>
<html lang="id">
<head>
    <meta charset="utf-8">
```

```
    <meta name="viewport"
content="width=device-width, initial-
scale=1">

    <title>Dashboard Web Lab</title>

    <link
href="https://cdn.jsdelivr.net/npm/bootst
rap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet">

    <link
href="https://cdnjs.cloudflare.com/ajax/l
ibs/font-awesome/6.4.2/css/all.min.css"
rel="stylesheet">

    <link href="css/sb-admin-2.min.css"
rel="stylesheet">

    <script
src="https://cdn.jsdelivr.net/npm/bootstr
ap@5.3.0/dist/js/bootstrap.bundle.min.js
"></script>

</head>

<body id="page-top">

    <div id="wrapper">

        <!-- Sidebar -->

        <ul class="navbar-nav bg-primary
sidebar sidebar-dark accordion"
id="accordionSidebar">

            <a class="sidebar-brand d-flex
align-items-center justify-content-
center" href="dashboard.php">

                <div class="sidebar-brand-
icon">

                    <i class="fas fa-flask"></i>

                </div>

                <div class="sidebar-brand-text
mx-3">Web Lab</div>

            </a>

            <hr class="sidebar-divider">

            <li class="nav-item active">

                <a class="nav-link"
href="dashboard.php">

                    <i class="fas fa-tachometer-
alt"></i>

                    <span>Dashboard</span>

                </a>

            </li>

            <li class="nav-item">

                <a class="nav-link"
href="crudusers.php">

                    <i class="fas fa-users"></i>

                    <span>Pengguna</span>

                </a>

            </li>

            <li class="nav-item">

                <a class="nav-link"
href="crudsiswa.php">

                    <i class="fas fa-user-
graduate"></i>

                    <span>Siswa</span>

                </a>

            </li>

            <li class="nav-item">

                <a class="nav-link"
href="crudabsensi.php">

                    <i class="fas fa-clipboard-
check"></i>

                    <span>Absensi</span>

                </a>

            </li>

            <li class="nav-item">
```

```
            <a class="nav-link"
href="crudpinjam.php">
                <i class="fas fa-box-
open"></i>
                <span>Pinjam</span>
            </a>
        </li>
        <li class="nav-item">
            <a class="nav-link"
href="crudjadwal.php">
                <i class="fas fa-
calendar"></i>
                <span>Jadwal</span>
            </a>
        </li>
        <li class="nav-item">
            <a class="nav-link"
href="crudalatpraktikum.php">
                <i class="fas fa-
microscope"></i>
                <span>Alat
Praktikum</span>
            </a>
        </li>
        <li class="nav-item">
            <a class="nav-link"
href="crudpraktikum.php">
                <i class="fas fa-book"></i>
                <span>Praktikum</span>
            </a>
        </li>
        <li class="nav-item">
            <a class="nav-link"
href="crudalat.php">
                <i class="fas fa-tools"></i>
                <span>Alat</span>
            </a>
        </li>
    </ul>
    <!-- End Sidebar -->
    <!-- Content Wrapper -->
    <div id="content-wrapper"
class="d-flex flex-column">
        <div id="content">
            <nav class="navbar navbar-
expand navbar-light bg-white topbar
mb-4 static-top shadow">
                <ul class="navbar-nav ms-
auto">
                    <li class="nav-item">
                        <a class="nav-link
text-danger" href="logout.php">
                            <i class="fas fa-
sign-out-alt"></i> Logout
                        </a>
                    </li>
                </ul>
            </nav>
            <div class="container-fluid">
                <h1 class="h3 mb-4 text-
gray-800">Dashboard</h1>
                <div class="row">
                    <!-- Total Users -->
                    <div class="col-xl-3 col-
md-6 mb-4">
```

```
                    <div class="card
border-left-primary shadow h-100 py-
2">

                        <div class="card-
body">

                            <div class="text-
xs font-weight-bold text-primary text-
uppercase mb-1">Total Pengguna</div>

                            <div class="h5
mb-0 font-weight-bold text-gray-
800"><?= $users_total ?></div>

                        </div>

                    </div>

                </div>

                <!-- Total Siswa -->

                <div class="col-xl-3 col-
md-6 mb-4">

                    <div class="card
border-left-success shadow h-100 py-
2">

                        <div class="card-
body">

                            <div class="text-
xs font-weight-bold text-success text-
uppercase mb-1">Total Siswa</div>

                            <div class="h5
mb-0 font-weight-bold text-gray-
800"><?= $siswa_total ?></div>

                        </div>

                    </div>

                </div>


                <!-- Total Absensi -->

                <div class="col-xl-3 col-
md-6 mb-4">

                    <div class="card
border-left-warning shadow h-100 py-
2">

                        <div class="card-
body">

                            <div class="text-
xs font-weight-bold text-warning text-
uppercase mb-1">Total Absensi</div>

                            <div class="h5
mb-0 font-weight-bold text-gray-
800"><?= $absensi_total ?></div>

                        </div>

                    </div>

                </div>


                <!-- Total Pinjam -->

                <div class="col-xl-3 col-
md-6 mb-4">

                    <div class="card
border-left-info shadow h-100 py-2">

                        <div class="card-
body">

                            <div class="text-
xs font-weight-bold text-info text-
uppercase mb-1">Total
Peminjaman</div>

                            <div class="h5
mb-0 font-weight-bold text-gray-
800"><?= $pinjam_total ?></div>

                        </div>

                    </div>

                </div>


                <!-- Total Praktikum -->
```

```
                <div class="col-xl-3 col-md-6 mb-4">
                    <div class="card border-left-light shadow h-100 py-2">
                        <div class="card-body">
                            <div class="text-xs font-weight-bold text-dark text-uppercase mb-1">Total Praktikum</div>
                            <div class="h5 mb-0 font-weight-bold text-gray-800"><?= $praktikum_total ?></div>
                        </div>
                    </div>
                </div>

                <!-- Total Praktikum -->
                <div class="col-xl-3 col-md-6 mb-4">
                    <div class="card border-left-dark shadow h-100 py-2">
                        <div class="card-body">
                            <div class="text-xs font-weight-bold text-dark text-uppercase mb-1">Total Alat Praktikum</div>
                            <div class="h5 mb-0 font-weight-bold text-gray-800"><?= $alat_praktikum_total ?></div>
                        </div>
                    </div>
                </div>

                <!-- Total Jadwal -->
                <div class="col-xl-3 col-md-6 mb-4">
                    <div class="card border-left-secondary shadow h-100 py-2">
                        <div class="card-body">
                            <div class="text-xs font-weight-bold text-secondary text-uppercase mb-1">Total Jadwal</div>
                            <div class="h5 mb-0 font-weight-bold text-gray-800"><?= $jadwal_total ?></div>
                        </div>
                    </div>
                </div>

                <!-- Total Alat -->
                <div class="col-xl-3 col-md-6 mb-4">
                    <div class="card border-left-danger shadow h-100 py-2">
                        <div class="card-body">
                            <div class="text-xs font-weight-bold text-danger text-uppercase mb-1">Total Alat Lab</div>
                            <div class="h5 mb-0 font-weight-bold text-gray-800"><?= $alat_total ?></div>
                        </div>
                    </div>
                </div>
            </div>
```

```
            </div>
        </div>
        <!-- Footer -->
        <footer class="bg-white py-4 mt-auto">
            <div class="container px-5 text-center">
                <div class="small">Copyright &amp;copy; 2025 Laboratorium SMA Negeri 4 Enrekang</div>
            </div>
        </footer>
        <!-- End Footer -->
    </div>
</div>
</body>
</html>
```

Lampiran - 2 *Listing* program PHP (Login.php)

```
<?php
session_start();
include 'koneksi.php';

// Proses login
if
($_SERVER["REQUEST_METHO
D"] == "POST") {
   $username =
mysqli_real_escape_string($conn,
$_POST['username']);
   $password =
mysqli_real_escape_string($conn,
$_POST['password']);

   $query = "SELECT * FROM
users WHERE
```

```
username='$username' AND
password='$password'";
    $result = mysqli_query($conn,
$query);
    $row =
mysqli_fetch_assoc($result);


    if ($row) {
        $_SESSION['user_logged_in']
= true;
        $_SESSION['username'] =
$row['username'];
        $_SESSION['user_id'] =
$row['id'];
        $_SESSION['role'] =
$row['role'];


        if ($row['role'] === 'admin') {
            header("Location:
dashboard.php");
        } else {
            header("Location:
home/index.php");
        }
        exit();
    } else {
        $error = "Username atau
password salah";
    }
}
?><!DOCTYPE html>
```

```
<html lang="id">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Login | Web Lab</title>
    <link href="css/sb-admin-2.min.css" rel="stylesheet">
    <link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.5.0/css/all.min.css" rel="stylesheet">
</head>
<body class="bg-gradient-primary">
    <div class="container d-flex justify-content-center align-items-center min-vh-100">
        <div class="col-lg-5">
            <div class="card shadow-lg border-0">
                <div class="card-body p-5">
                    <div class="text-center mb-4">
                        <i class="fas fa-flask fa-3x text-primary mb-3"></i>
                        <h1 class="h4 text-gray-900">Login Web Lab</h1>
                    </div>
                    <form method="POST" class="user">
                        <div class="form-group mb-3">
                            <input type="text" name="username" class="form-control form-control-user" placeholder="Username" required>
                        </div>
                        <div class="form-group mb-4">
                            <input type="password" name="password" class="form-control form-control-
```

```
user" placeholder="Password"
required>
                    </div>
                    <button
type="submit" class="btn btn-
primary btn-user btn-block">
                        <i class="fas fa-
sign-in-alt me-2"></i> Login
                    </button>
                </form>
                <?php if (isset($error)) {
?>
                    <div class="text-
danger text-center mt-3"><?= $error
?></div>
                <?php } ?>
            </div>
        </div>
    </div>
</body>
</html>
```

Lampiran - 3 *Listing* Program PHP (index.php)

```
<?php

session_start();

include '../koneksi.php'; // Koneksi ke
database


// Cek apakah user sudah login

if
(!isset($_SESSION['user_logged_in']))
{

    header("Location: ../login.php");

    exit();

}

?>


<!DOCTYPE html>

<html lang="en">


<head>

    <meta charset="utf-8" />

    <meta name="viewport"
content="width=device-width, initial-
scale=1, shrink-to-fit=no" />

    <meta name="description" content=""
/>

    <meta name="author" content="" />

    <title>Laboratorium</title>

    <!-- Favicon-->

    <link rel="icon" type="image/x-icon"
href="assets/favicon.ico" />

    <!-- Custom Google font-->

    <link rel="preconnect"
href="https://fonts.googleapis.com" />

    <link rel="preconnect"
href="https://fonts.gstatic.com"
crossorigin />

    <link
href="https://fonts.googleapis.com/css2?
family=Plus+Jakarta+Sans:wght@100;2
00;300;400;500;600;700;800;900&amp;
display=swap" rel="stylesheet" />

    <!-- Bootstrap icons-->

    <link
href="https://cdn.jsdelivr.net/npm/bootst
rap-icons@1.8.1/font/bootstrap-
icons.css" rel="stylesheet" />

    <!-- Core theme CSS (includes
Bootstrap)-->

    <link href="css/styles.css"
rel="stylesheet" />

    <!-- Bootstrap core JS-->

    <script
src="https://cdn.jsdelivr.net/npm/bootstr
ap@5.2.3/dist/js/bootstrap.bundle.min.js
"></script>

    <!-- Core theme JS-->

    <script src="js/scripts.js"></script>


</head>


<body class="d-flex flex-column h-100
bg-light" style="padding-top: 60px;">

    <main class="flex-shrink-0">
```

```
        <!-- Navigation-->

        <nav class="navbar navbar-expand-lg navbar-light bg-white py-3 fixed-top">

            <div class="container px-5">

                <a class="navbar-brand" href="index.php"><span class="fw-bolder text-primary">Laboratorium</span></a>

                <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation"><span class="navbar-toggler-icon"></span></button>

                <div class="collapse navbar-collapse" id="navbarSupportedContent">

                    <ul class="navbar-nav ms-auto mb-2 mb-lg-0 small fw-bolder">

                        <li class="nav-item"><a class="nav-link" href="daftarkelas.php">Kelas</a></li>

                        <li class="nav-item"><a class="nav-link" href="jadwal.php">Jadwal</a></li>

                        <li class="nav-item"><a class="nav-link" href="alat.php">Alat</a></li>

                        <li class="nav-item"><a class="nav-link" href="absensi.php">Absensi</a></li>

                        <li class="nav-item"><a class="nav-link" href="pinjam.php">Pinjam</a></li>

                        <li class="nav-item"><a class="nav-link" href="../logout.php">Logout</a></li>

                    </ul>

                </div>

            </div>

        </nav>



        <!-- Header-->

        <header class="py-5" style="background: url('assets/bg.jpeg') center/cover no-repeat; position: relative;">

            <div class="container px-5 pb-5" style="position: relative; z-index: 2;">

                <div class="row gx-5 align-items-center">

                    <div class="col text-center">

                        <!-- Header text content-->

                        <div class="text-xxl-start">

                            <div class="d-flex justify-content-center mb-4">

                                <div class="badge bg-gradient-primary-to-secondary text-white">

                                    <div class="text-uppercase text-center">Fisika</div>

                                </div>

                            </div>

                            <div class="fs-3 fw-light text-white text-center">Selamat Datang Di Laboratorium</div>
```

```
                    <h1 class="display-3 fw-bolder mb-5 text-white text-center">

                        <span class="text-gradient d-inline">SMA NEGERI 4 ENREKANG</span>

                    </h1>

                    <div class="d-grid gap-3 justify-content-center mb-3">

                        <a class="btn btn-outline-light btn-lg px-5 py-3 fs-6 fw-bolder text-center" href="daftarkelas.php">Mulai</a>

                    </div>

                </div>

            </div>

        </div>

        <!-- Overlay -->

        <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: rgba(0, 0, 0, 0.5);"></div>

    </header>

</main>


<!-- Footer-->

<footer class="bg-white py-4 mt-auto">

    <div class="container px-5 text-center">

        <div class="small">Copyright &amp;copy; 2025 Laboratorium SMA Negeri 4 Enrekang</div>

    </div>

    </footer>


</body>


</html>
```

Lampiran - 4 *Listing* Program PHP (Absensi.php)

```
<?php

session_start();

include '../koneksi.php'; // Koneksi ke database


// Cek apakah user sudah login

if (!isset($_SESSION['user_logged_in']))
{

    header("Location: ../login.php");

    exit();

}


?>


<!DOCTYPE html>

<html lang="en">


<head>

    <meta charset="utf-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no" />

    <meta name="description" content="" />

    <meta name="author" content="" />

    <title>Absensi</title>

    <link rel="icon" type="image/x-icon" href="assets/favicon.ico" />

    <link rel="preconnect" href="https://fonts.googleapis.com" />

    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />

    <link href="https://fonts.googleapis.com/css2?family=Plus+Jakarta+Sans:wght@100;200;300;400;500;600;700;800;900&amp;display=swap" rel="stylesheet" />

    <link href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.8.1/font/bootstrap-icons.css" rel="stylesheet" />

    <link href="css/styles.css" rel="stylesheet" />

    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/js/bootstrap.bundle.min.js"></script>

    <script src="js/scripts.js"></script>

</head>


<body class="d-flex flex-column h-100 bg-light" style="padding-top: 90px;">

    <main class="flex-shrink-0">

        <nav class="navbar navbar-expand-lg navbar-light bg-white py-3 fixed-top">

            <div class="container px-5">

                <a class="navbar-brand" href="index.php"><span class="fw-bolder text-primary">Laboratorium</span></a>

                <button class="navbar-toggler" type="button" data-bs-
```

```
toggle="collapse" data-bs-target="#navbarSupportedContent"><span class="navbar-toggler-icon"></span></button>

            <div class="collapse navbar-collapse" id="navbarSupportedContent">

                <ul class="navbar-nav ms-auto mb-2 mb-lg-0 small fw-bolder">

                    <li class="nav-item"><a class="nav-link" href="daftarkelas.php">Kelas</a></li>

                    <li class="nav-item"><a class="nav-link" href="jadwal.php">Jadwal</a></li>

                    <li class="nav-item"><a class="nav-link" href="alat.php">Alat</a></li>

                    <li class="nav-item"><a class="nav-link" href="absensi.php">Absensi</a></li>

                    <li class="nav-item"><a class="nav-link" href="pinjam.php">Pinjam</a></li>

                    <li class="nav-item"><a class="nav-link" href="../logout.php">Logout</a></li>

                </ul>

            </div>

        </div>

    </nav>

    <div class="container px-5 my-5">

        <div class="text-center mb-5">

            <h1 class="display-5 fw-bolder mb-0"><span class="text-gradient d-inline">Daftar Absensi</span></h1>

        </div>

        <div class="row gx-5 justify-content-center">

            <div class="col-lg-11 col-xl-9 col-xxl-8">

                <section>

                    <div class="container py-4">

                        <div class="row justify-content-center">

                            <?php

// Ambil semua guru unik dari tabel absensi

                            $guru_result = mysqli_query($conn, "SELECT DISTINCT guru FROM absensi ORDER BY guru ASC");



                            while ($g = mysqli_fetch_assoc($guru_result)) {

                                $guru = $g['guru'];

 // Ambil daftar kelas yang diajar oleh guru ini

                                $kelas_result = mysqli_query($conn, "

                                    SELECT DISTINCT s.kelas

                                    FROM absensi a

                                    JOIN siswa s ON a.siswa_id = s.id

                                    WHERE a.guru = '$guru'

                                    ORDER BY s.kelas ASC
```

```
                    ");

                ?>

                    <div class="card shadow-lg border-0 rounded-4 mx-auto mt-4 p-4" style="max-width: 1100px;">

                        <div class="d-flex align-items-center mb-4">

                            <div class="feature bg-primary bg-gradient-primary-to-secondary text-white rounded-3 me-3">

                                <i class="bi bi-person-badge-fill"></i>

                            </div>

                            <h3 class="fw-bolder mb-0">Absensi <?= htmlspecialchars($guru) ?></h3>

                        </div>

                        <div class="row row-cols-1 row-cols-sm-2 row-cols-md-5 g-3">

                            <?php while ($k = mysqli_fetch_assoc($kelas_result)) {

                                $kelas = $k['kelas'];

                            ?>

                                <div class="col">

                                    <a href="detailabsensi.php?kelas=<?= urlencode($kelas) ?>&guru=<?= urlencode($guru) ?>" class="text-decoration-none">

                                        <div class="d-flex align-items-center bg-light rounded-4 p-3 h-100 shadow-sm justify-content-center">

                                            <span class="fw-bold text-dark">Kelas <?= htmlspecialchars($kelas) ?></span>

                                        </div>

                                    </a>

                                </div>

                            <?php } ?>

                        </div>

                    <?php } ?>

                </div>

            </section>

        </div>

    </div>

</main>

<footer class="bg-white py-4 mt-auto">

    <div class="container px-5 text-center">

        <div class="small">Copyright &copy; 2025 Laboratorium SMA Negeri 4 Enrekang</div>

    </div>

</footer>

</body>


</html>
```

Lampiran - 5 *Listing* Program PHP (detail_pratikum.php)

```
<?php
session_start();
include '../koneksi.php';

// Cek apakah user sudah login
if (!isset($_SESSION['user_logged_in'])) {
    header("Location: ../login.php");
    exit();
}
// Periksa apakah ID praktikum tersedia di URL
if (!isset($_GET['id']) || empty($_GET['id'])) {
    die("ID praktikum tidak ditemukan!");
}
$id = intval($_GET['id']); // Konversi ID ke integer

// Ambil data praktikum berdasarkan ID
$query = "SELECT * FROM praktikum WHERE id = ?";
$stmt = $conn->prepare($query);
$stmt->bind_param("i", $id);
$stmt->execute();
$result = $stmt->get_result();
$praktikum = $result->fetch_assoc();
$stmt->close();

// Ambil daftar alat yang dibutuhkan untuk praktikum ini
$query_alat = "
    SELECT alat_lab.id, alat_lab.nama_alat
    FROM praktikum_alat
    JOIN alat_lab ON praktikum_alat.id_alat = alat_lab.id
    WHERE praktikum_alat.id_praktikum = ?
";
$stmt_alat = $conn->prepare($query_alat);
$stmt_alat->bind_param("i", $id);
$stmt_alat->execute();
$result_alat = $stmt_alat->get_result();
?>

<!DOCTYPE html>
<html lang="id">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Detail Praktikum - <?= htmlspecialchars($praktikum['judul']) ?></title>
```

```
    <!-- Bootstrap 5 -->
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css">
    <!-- Favicon-->
    <link rel="icon" type="image/x-icon"
href="assets/favicon.ico" />
    <!-- Custom Google font-->
    <link rel="preconnect"
href="https://fonts.googleapis.com" />
    <link rel="preconnect"
href="https://fonts.gstatic.com"
crossorigin />
    <link
href="https://fonts.googleapis.com/css2?family=Plus+Jakarta+Sans:wght@100;200;300;400;500;600;700;800;900&amp;display=swap" rel="stylesheet" />
    <!-- Bootstrap icons-->
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.8.1/font/bootstrap-icons.css" rel="stylesheet" />
    <!-- Core theme CSS (includes
Bootstrap)-->
    <link href="css/styles.css"
rel="stylesheet" />
    <!-- Bootstrap JS -->
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.bundle.min.js"></script>


</head>

<body class="d-flex flex-column h-100
bg-light" style="padding-top: 90px;">
    <main class="flex-shrink-0">
        <!-- Navigation-->
        <nav class="navbar navbar-expand-
lg navbar-light bg-white py-3 fixed-
top">
            <div class="container px-5">
                <a class="navbar-brand"
href="index.php"><span class="fw-
bolder text-
primary">Laboratorium</span></a>
                <button class="navbar-
toggler" type="button" data-bs-
toggle="collapse" data-bs-
target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"
aria-expanded="false" aria-
label="Toggle navigation"><span
class="navbar-toggler-
icon"></span></button>
                <div class="collapse navbar-
collapse"
id="navbarSupportedContent">
                    <ul class="navbar-nav ms-
auto mb-2 mb-lg-0 small fw-bolder">
                        <li class="nav-item"><a
class="nav-link"
href="daftarkelas.php">Kelas</a></li>
                        <li class="nav-item"><a
class="nav-link"
href="jadwal.php">Jadwal</a></li>
                        <li class="nav-item"><a
class="nav-link"
href="alat.php">Alat</a></li>
                        <li class="nav-item"><a
class="nav-link"
href="absensi.php">Absensi</a></li>
                        <li class="nav-item"><a
class="nav-link"
href="pinjam.php">Pinjam</a></li>
```

```
                <li class="nav-item"><a
class="nav-link"
href="../logout.php">Logout</a></li>
            </ul>
        </div>
    </div>
</nav>

<div class="container py-5">
    <!-- Card Praktikum -->
    <div class="card shadow-lg
border-0 rounded-4 mx-auto p-4"
style="max-width: 900px;">
        <h1 class="text-center"><?=
htmlspecialchars($praktikum['judul'])
?></h1>

        <!-- Gambar Praktikum -->
        <div class="text-center mt-3">
            <img src="../img/<?=
htmlspecialchars($praktikum['gambar'])
?>"
                alt="Gambar Praktikum"
                class="img-fluid
rounded">
        </div>

        <!-- Penjelasan Praktikum -->
        <p class="mt-3" style="text-
align: justify;"><?=
nl2br(htmlspecialchars($praktikum['penj
elasan'])) ?></p>
    </div>
</div>

<!-- Card Alat yang Digunakan -->
<div class="card shadow-lg border-
0 rounded-4 mx-auto mt-4 p-4"
style="max-width: 900px;">
    <div class="d-flex align-items-
center mb-4">
        <div class="feature bg-
primary bg-gradient-primary-to-
secondary text-white rounded-3 me-3">
            <i class="bi bi-tools"></i>
        </div>
        <h3 class="fw-bolder mb-
0">Alat yang Digunakan</h3>
    </div>

    <div class="row row-cols-1 row-
cols-md-3 g-3">
        <?php while ($alat =
$result_alat->fetch_assoc()) { ?>
            <div class="col">
                <a
href="detailalat.php?id=<?= $alat['id']
?>" class="text-decoration-none">
                    <div class="d-flex
align-items-center bg-light rounded-4 p-
3 h-100 shadow-sm">
                        <?=
htmlspecialchars($alat['nama_alat']) ?>
                    </div>
                </a>
            </div>
        <?php } ?>
    </div>
```

```
        </div>
    </main>

    <footer class="bg-white py-4 mt-auto">
        <div class="container px-5 text-center">
            <div class="small">Copyright &copy; 2025 Laboratorium SMA Negeri 4 Enrekang</div>
        </div>
    </footer>

</body>

</html>

<?php
$stmt_alat->close();
$conn->close();
?>
```

Lampiran - 6 *Listing* Program PHP (alat.php)

```
<?php
session_start();
include '../koneksi.php'; // Koneksi ke database

// Cek apakah user sudah login
if (!isset($_SESSION['user_logged_in'])) {
    header("Location: ../login.php");
    exit();
}

// Ambil data alat dari database
$query = "SELECT * FROM alat_lab";
$result = mysqli_query($conn, $query);
?>

<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no" />
    <meta name="description" content="" />
    <meta name="author" content="" />
    <title>Alat</title>
    <link rel="icon" type="image/x-icon" href="assets/favicon.ico" />
    <link rel="preconnect" href="https://fonts.googleapis.com" />
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />
    <link href="https://fonts.googleapis.com/css2?family=Plus+Jakarta+Sans:wght@100;200;300;400;500;600;700;800;900&amp;display=swap" rel="stylesheet" />
    <link href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.8.1/font/bootstrap-icons.css" rel="stylesheet" />
    <link href="css/styles.css" rel="stylesheet" />
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/js/bootstrap.bundle.min.js"></script>
    <script src="js/scripts.js"></script>
</head>

<body class="d-flex flex-column h-100 bg-light" style="padding-top: 90px;">
    <main class="flex-shrink-0">
        <!-- Navigation-->
        <nav class="navbar navbar-expand-lg navbar-light bg-white py-3 fixed-top">
            <div class="container px-5">
```

```
            <a class="navbar-brand"
href="index.php"><span class="fw-
bolder text-
primary">Laboratorium</span></a>

            <button class="navbar-
toggler" type="button" data-bs-
toggle="collapse" data-bs-
target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"
aria-expanded="false" aria-
label="Toggle navigation"><span
class="navbar-toggler-
icon"></span></button>

            <div class="collapse navbar-
collapse"
id="navbarSupportedContent">

                <ul class="navbar-nav ms-
auto mb-2 mb-lg-0 small fw-bolder">

                    <li class="nav-item"><a
class="nav-link"
href="daftarkelas.php">Kelas</a></li>

                    <li class="nav-item"><a
class="nav-link"
href="jadwal.php">Jadwal</a></li>

                    <li class="nav-item"><a
class="nav-link"
href="alat.php">Alat</a></li>

                    <li class="nav-item"><a
class="nav-link"
href="absensi.php">Absensi</a></li>

                    <li class="nav-item"><a
class="nav-link"
href="pinjam.php">Pinjam</a></li>

                    <li class="nav-item"><a
class="nav-link"
href="../logout.php">Logout</a></li>

                </ul>

            </div>

        </div>

    </nav>

    <!-- Page Content-->

    <div class="container px-5 my-5">

        <div class="text-center mb-5">

            <h1 class="display-5 fw-
bolder mb-0"><span class="text-
gradient d-inline">Alat
Lab</span></h1>

        </div>



        <div class="row gx-5 justify-
content-center">

            <div class="col-lg-11 col-xl-9
col-xxl-8">

                <div class="mb-5">

                    <div class="input-
group">

                        <span class="input-
group-text bg-white"><i class="bi bi-
search"></i></span>

                        <input type="text"
id="searchInput" class="form-control
shadow-sm" placeholder="Cari nama
alat" oninput="toggleClearButton()"
onkeyup="liveSearch()" />

                        <button class="btn
btn-outline-danger" type="button"
id="clearSearchBtn"
onclick="clearSearch()" style="display:
none;">

                            <i class="bi bi-x-
lg"></i>

                        </button>

                    </div>

                </div>
```

```
            <section>

                <div
id="noResultMessage" class="alert
alert-warning text-center fw-bold"
style="display: none;">

                    Alat tidak ditemukan.

                </div>

                <?php while ($row =
$result->fetch_assoc()) { ?>

                    <div class="card
shadow border-0 rounded-4 mb-5 alat-
card" data-nama="<?=
strtolower(htmlspecialchars($row['nama
_alat'])) ?>">

                        <div class="card-
body p-4">

                            <div class="row
align-items-center gx-4">

                                <!--
Menampilkan Gambar -->

                                <div
class="col-md-4 text-center">

                                    <div
class="bg-light p-3 rounded-4 d-flex
justify-content-center align-items-
center" style="width: 200px; height:
200px; overflow: hidden;">

                                        <?php

                                        //
Tentukan folder penyimpanan gambar

                                        $folder_ga
mbar = "../img/";


                                        // Periksa
apakah gambar ada

                                        $gambar_
path = $folder_gambar .
htmlspecialchars($row['gambar']);

                                        if
(!empty($row['gambar']) &&
file_exists($gambar_path)) { ?>

                                            <img
class="img-fluid" src="<?=
$gambar_path ?>"

                                            alt="
<?= htmlspecialchars($row['nama_alat'])
?>"

                                            style
="max-width: 100%; max-height:
100%;" loading="lazy" />

                                        <?php }
else { ?>

                                            <img
class="img-fluid" src="../img/default-
image.jpg"

                                            alt="
Gambar Tidak Tersedia"

                                            style
="max-width: 100%; max-height:
100%;" loading="lazy" />

                                        <?php }
?>

                                    </div>

                                </div>

                                <!-- Deskripsi
Alat -->

                                <div
class="col-md-8">

                                    <div
class="text-start mb-3">

                                        <h2
class="fw-bolder"><?=
```

```
htmlspecialchars($row['nama_alat']) ?></h2>

                                    <p><?= nl2br(htmlspecialchars(mb_strimwidth($row['penjelasan'], 0, 100, "..."))) ?></p>

                                </div>

                                <div class="text-end">

                                    <a href="detailalat.php?id=<?= htmlspecialchars($row['id']) ?>" class="btn btn-primary">Lihat Selengkapnya</a>

                                </div>

                            </div>

                        </div>

                    </div>

                </div>

                <?php } ?>

            </section>

        </div>

    </div>

</main>


<!-- Footer-->

<footer class="bg-white py-4 mt-auto">

    <div class="container px-5 text-center">

        <div class="small">Copyright &copy; 2025 Laboratorium SMA Negeri 4 Enrekang</div>

    </div>

</footer>


<script>

    function liveSearch() {

        var input = document.getElementById('searchInput').value.toLowerCase();

        var alatCards = document.querySelectorAll('.alat-card');

        var noResultMessage = document.getElementById('noResultMessage');


        var found = false;


        alatCards.forEach(function(card) {

            var namaAlat = card.getAttribute('data-nama');

            if (namaAlat.includes(input)) {

                card.style.display = 'block';

                found = true;

            } else {

                card.style.display = 'none';

            }

        });


        // Tampilkan pesan jika tidak ada hasil
```

```
            noResultMessage.style.display = found ? 'none' : 'block';
        }

        function toggleClearButton() {
            const input = document.getElementById('searchInput');
            const clearBtn = document.getElementById('clearSearchBtn');
            clearBtn.style.display = input.value ? 'block' : 'none';
        }

        function clearSearch() {
            const input = document.getElementById('searchInput');
            input.value = '';
            toggleClearButton();
            liveSearch();
            input.focus(); // Arahkan fokus kembali ke input
        }
    </script>

</body>

</html>

<?php
$conn->close();
?>
```

Lampiran - 7 *Listing* Program PHP (pinjam.php)

```
<?php

session_start();

include '../koneksi.php'; // Koneksi ke database


// Cek apakah user sudah login

if (!isset($_SESSION['user_logged_in'])) {

    header("Location: ../login.php");

    exit();

}

// Ambil daftar siswa dan alat dari database

$query_siswa = "SELECT * FROM siswa";

$result_siswa = mysqli_query($conn, $query_siswa) or die("Error: " . mysqli_error($conn));


$query_alat = "SELECT * FROM alat_lab";

$result_alat = mysqli_query($conn, $query_alat) or die("Error: " . mysqli_error($conn));


// Handle form peminjaman

if ($_SERVER['REQUEST_METHOD'] == 'POST') {

    $siswa_id = $_POST['siswa_id'] ?? '';

    $alat_id = $_POST['alat_id'] ?? '';

    $tanggal_pinjam = $_POST['tanggal_pinjam'];

    $tanggal_kembali = $_POST['tanggal_kembali'];


    if (!empty($siswa_id) && !empty($alat_id)) {

        $query_pinjam = "INSERT INTO peminjaman (siswa_id, alat_id, tanggal_pinjam, tanggal_kembali, status)

                        VALUES ('$siswa_id', '$alat_id', '$tanggal_pinjam', '$tanggal_kembali', 'Menunggu')";

        if (mysqli_query($conn, $query_pinjam)) {

            $_SESSION['message'] = "Peminjaman berhasil! Menunggu konfirmasi admin.";

            header("Location: pinjam.php"); // Redirect

            exit();

        } else {

            $_SESSION['message'] = "Terjadi kesalahan: " . mysqli_error($conn);

        }

    } else {

        $_SESSION['message'] = "Harap pilih siswa dan alat sebelum mengajukan peminjaman.";

    }

}
```

```
$query_peminjaman = "SELECT
peminjaman.id, siswa.nama AS
nama_siswa, siswa.kelas,

                    alat_lab.nama_alat,
peminjaman.tanggal_pinjam,
peminjaman.tanggal_kembali,
peminjaman.status

                FROM peminjaman

                JOIN siswa ON
peminjaman.siswa_id = siswa.id

                JOIN alat_lab ON
peminjaman.alat_id = alat_lab.id

                ORDER BY
tanggal_pinjam DESC";

$result_peminjaman =
mysqli_query($conn,
$query_peminjaman) or die("Error: " .
mysqli_error($conn));

?>

<!DOCTYPE html>

<html lang="id">



<head>

    <meta charset="utf-8" />

    <meta name="viewport"
content="width=device-width, initial-
scale=1, shrink-to-fit=no" />

    <title>Pinjam</title>

    <link rel="icon" type="image/x-icon"
href="assets/favicon.ico" />

    <link rel="preconnect"
href="https://fonts.googleapis.com" />

    <link rel="preconnect"
href="https://fonts.gstatic.com"
crossorigin />

    <link
href="https://fonts.googleapis.com/css2?
family=Plus+Jakarta+Sans:wght@100;2
00;300;400;500;600;700;800;900&amp;
display=swap" rel="stylesheet" />

    <link
href="https://cdn.jsdelivr.net/npm/bootst
rap-icons@1.8.1/font/bootstrap-
icons.css" rel="stylesheet" />

    <link href="css/styles.css"
rel="stylesheet" />

    <script
src="https://cdn.jsdelivr.net/npm/bootstr
ap@5.3.0/dist/js/bootstrap.bundle.min.js
"></script>

</head>

<body class="d-flex flex-column h-100
bg-light" style="padding-top: 90px;">

    <main class="flex-shrink-0">

        <nav class="navbar navbar-expand-
lg navbar-light bg-white py-3 fixed-
top">

            <div class="container px-5">

                <a class="navbar-brand"
href="index.php"><span class="fw-
bolder text-
primary">Laboratorium</span></a>

                <button class="navbar-
toggler" type="button" data-bs-
toggle="collapse" data-bs-
target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"
aria-expanded="false" aria-
label="Toggle navigation"><span
class="navbar-toggler-
icon"></span></button>

                <div class="collapse navbar-
collapse"
id="navbarSupportedContent">
```

```
                <ul class="navbar-nav ms-auto mb-2 mb-lg-0 small fw-bolder">

                    <li class="nav-item"><a class="nav-link" href="daftarkelas.php">Kelas</a></li>

                    <li class="nav-item"><a class="nav-link" href="jadwal.php">Jadwal</a></li>

                    <li class="nav-item"><a class="nav-link" href="alat.php">Alat</a></li>

                    <li class="nav-item"><a class="nav-link" href="absensi.php">Absensi</a></li>

                    <li class="nav-item"><a class="nav-link" href="pinjam.php">Pinjam</a></li>

                    <li class="nav-item"><a class="nav-link" href="../logout.php">Logout</a></li>

                </ul>

            </div>

        </div>

    </nav>

</main>

<div class="container mt-4">

    <div class="text-center mb-5">

        <h1 class="display-5 fw-bolder mb-0 text-gradient d-inline">Pinjam Alat</h1>

    </div>

    <?php if (isset($_SESSION['message'])) : ?>

        <div class="alert alert-info alert-dismissible fade show" role="alert">
            <?= $_SESSION['message'] ?>

            <button type="button" class="btn-close" data-bs-dismiss="alert"></button>

        </div>

        <?php unset($_SESSION['message']); ?>

    <?php endif; ?>



    <div class="card p-3 mx-auto" style="max-width: 820px;">

        <form method="POST">

            <div class="mb-3">

                <label class="form-label">Nama Siswa</label>

                <select name="siswa_id" class="form-select" required>

                    <option value="">-- Pilih Nama Siswa --</option>

                    <?php while ($siswa = mysqli_fetch_assoc($result_siswa)) : ?>

                        <option value="<?= $siswa['id'] ?>"><?= $siswa['nama'] ?> (<?= $siswa['kelas'] ?>)</option>

                    <?php endwhile; ?>

                    <?php mysqli_free_result($result_siswa); ?>

                </select>

            </div>

            <div class="mb-3">

                <label class="form-label">Pilih Alat</label>
```

```
            <select name="alat_id"
class="form-select" required>

                <option value="">-- Pilih
Alat --</option>

                <?php while ($alat =
mysqli_fetch_assoc($result_alat)) : ?>

                    <option value="<?=
$alat['id'] ?>"><?= $alat['nama_alat']
?></option>

                <?php endwhile; ?>

                <?php
mysqli_free_result($result_alat); ?>

            </select>

        </div>

        <div class="mb-3">

            <label class="form-
label">Tanggal Pinjam</label>

            <input type="date"
name="tanggal_pinjam"
id="tanggal_pinjam" class="form-
control" required>

        </div>

        <div class="mb-3">

            <label class="form-
label">Tanggal Kembali</label>

            <input type="date"
name="tanggal_kembali"
id="tanggal_kembali" class="form-
control" required>

        </div>

        <button type="submit"
class="btn btn-primary w-100">Ajukan
Peminjaman</button>

    </form>

</div>
```

```
<h2 class="text-center mt-4">Daftar
Peminjaman</h2>

<div class="card p-3 mx-auto"
style="max-width: 820px;">

    <div class="table-responsive">

        <table class="table table-
striped w-auto mx-auto table-bordered">

            <thead>

                <tr>

                    <th class="text-
nowrap">No</th>

                    <th class="text-
nowrap">Nama Siswa</th>

                    <th class="text-
nowrap">Kelas</th>

                    <th class="text-
nowrap">Nama Alat</th>

                    <th class="text-
nowrap">Tanggal Pinjam</th>

                    <th class="text-
nowrap">Tanggal Kembali</th>

                    <th class="text-
nowrap">Status</th>

                </tr>

            </thead>

            <tbody>

                <?php $no = 1;

                while ($peminjaman =
mysqli_fetch_assoc($result_peminjaman
)) : ?>

                    <tr>

                        <td class="text-
nowrap"><?= $no++ ?></td>
```

```
                        <td class="text-
nowrap"><?=
$peminjaman['nama_siswa'] ?></td>

                        <td class="text-
nowrap"><?= $peminjaman['kelas']
?></td>

                        <td class="text-
nowrap"><?= $peminjaman['nama_alat']
?></td>

                        <td><?= date('d-m-
Y',
strtotime($peminjaman['tanggal_pinjam'
])) ?></td>

                        <td><?= date('d-m-
Y',
strtotime($peminjaman['tanggal_kembal
i'])) ?></td>

                        <td class="text-
nowrap">

                            <span
class="badge bg-
<?                                      $p
eminjaman['status'] == 'Menunggu' ?
'warning' : ($peminjaman['status'] ==
'Disetujui' ? 'success' :
($peminjaman['status'] ==
'Dikembalikan' ? 'primary' : 'danger'))
?>">

                                <?=
$peminjaman['status'] ?>

                            </span>

                        </td>

                    </tr>

                <?php endwhile; ?>

                <?php
mysqli_free_result($result_peminjaman)
; ?>

            </tbody>

        </table>
    </div>

  </div>

 </div>

 </div>

 <script>

    const pinjamInput =
document.getElementById('tanggal_pinj
am');

    const kembaliInput =
document.getElementById('tanggal_ke
mbali');

    pinjamInput.addEventListener('cha
nge', function() {

        const pinjamDate = new
Date(this.value);

        if
(!isNaN(pinjamDate.getTime())) {

            // Tambah 1 hari dari tanggal
pinjam

            pinjamDate.setDate(pinjamDa
te.getDate() + 1);

            const minDate =
pinjamDate.toISOString().split('T')[0];

            kembaliInput.min = minDate;

            kembaliInput.value = ''; // reset
pilihan tanggal kembali agar user pilih
ulang

        }

    });

 </script>

</body>


</html>
```

Lampiran - 8 *Listing* Program PHP (koneksi.php)

```
<?php

$host = "localhost";

$user = "root"; // Sesuaikan dengan
username database Anda

$pass = ""; // Sesuaikan dengan
password database Anda

$db = "weblab"; // Sesuaikan dengan
nama database Anda

$conn = mysqli_connect($host, $user,
$pass, $db);


if (!$conn) {

   die("Koneksi gagal: " .
mysqli_connect_error());

}

?
```

Lampiran - 9 *Listing* Program PHP (logout.php)

```
<?php

session_start();

session_unset(); // Hapus semua variabel
session

session_destroy(); // Hancurkan session


header("Location: login.php"); //
Arahkan ke halaman login

exit();

?>
```