php

<?php

session\_start();

// Sample role from session

$role = $\_SESSION['role'] ?? 'guest';

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Main Menu</title>

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

</head>

<body>

<h2>Main Menu</h2>

<nav>

<ul>

<?php if ($role === 'Admin'): ?>

<li><a href="manage\_users.php">Manage Users</a></li>

<li><a href="generate\_reports.php">Generate Reports</a></li>

<li><a href="settings.php">System Settings</a></li>

<?php elseif ($role === 'Lecturer'): ?>

<li><a href="generate\_qr.php">Generate QR Code</a></li>

<li><a href="view\_attendance.php">View Attendance</a></li>

<li><a href="reports.php">Reports</a></li>

<?php elseif ($role === 'Student'): ?>

<li><a href="scan\_qr.php">Scan QR Code</a></li>

<li><a href="my\_attendance.php">View Attendance</a></li>

<?php else: ?>

<li><a href="login.php">Login</a></li>

<?php endif; ?>

</ul>

</nav>

</body>

</html>

javascript

// Highlight active menu item

document.addEventListener("DOMContentLoaded", function() {

const links = document.querySelectorAll("nav ul li a");

links.forEach(link => {

if (link.href === window.location.href) {

link.classList.add("active");

}

});

});

Control Center

php

<?php

// Simulated data - in real system this comes from DB

$total\_students = 1200;

$today\_attendance = 875;

$active\_courses = 25;

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Control Center</title>

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

</head>

<body>

<h2>Control Center</h2>

<section class="stats">

<div class="card">Total Students: <?php echo $total\_students; ?></div>

<div class="card">Attendance Today: <?php echo $today\_attendance; ?></div>

<div class="card">Active Courses: <?php echo $active\_courses; ?></div>

</section>

<section class="quick-links">

<h3>Quick Access</h3>

<ul>

<li><a href="manage\_users.php">Manage Users</a></li>

<li><a href="generate\_qr.php">Generate QR</a></li>

<li><a href="reports.php">View Reports</a></li>

</ul>

</section>

</body>

</html>

javascript

// Example: dynamic refresh for attendance count

function refreshAttendance() {

fetch("get\_attendance.php")

.then(response => response.json())

.then(data => {

document.querySelector(".stats .card:nth-child(2)").innerText =

"Attendance Today: " + data.attendance;

})

.catch(error => console.error("Error:", error));

}

// Auto refresh every 60 seconds

setInterval(refreshAttendance, 60000);

**Submenu**

php

<!-- student\_management.php -->

<?php

// Fetch student list

include("db\_connect.php");

$result = $conn->query("SELECT \* FROM students");

?>

<h2>Student Management</h2>

<button onclick="showAddStudentForm()">Add Student</button>

<table border="1">

<tr><th>ID</th><th>Name</th><th>Matric No</th><th>Action</th></tr>

<?php while($row = $result->fetch\_assoc()): ?>

<tr>

<td><?= $row['id']; ?></td>

<td><?= $row['name']; ?></td>

<td><?= $row['matric\_no']; ?></td>

<td>

<button onclick="editStudent(<?= $row['id']; ?>)">Edit</button>

<button onclick="deleteStudent(<?= $row['id']; ?>)">Delete</button>

</td>

</tr>

<?php endwhile; ?>

</table>

javascript

// student.js

function showAddStudentForm(){

alert("Open form to add new student");

}

function editStudent(id){

alert("Edit student with ID: " + id);

}

function deleteStudent(id){

if(confirm("Are you sure to delete this student?")){

// AJAX call to backend

}

}

**Attendance Tracking Subsystem**

php

<?php

include("phpqrcode/qrlib.php");

$course\_id = 101;

QRcode::png("course:$course\_id:".time(), "attendance\_qr.png");

echo "<img src='attendance\_qr.png' />";

?>

**Reporting Subsystem**

javascript

function generateReport(type){

alert("Generating " + type + " report...");

// call PHP backend to fetch and format data

}

## **Security**

**PHP (password hashing on registration)**

php

<?php

$hashedPassword = password\_hash($\_POST['password'], PASSWORD\_BCRYPT);

$sql = "INSERT INTO users(username, password) VALUES('$username', '$hashedPassword')";

mysqli\_query($conn, $sql);

?>

**JavaScript (prevent multiple submissions)**

javascript

document.getElementById("loginForm").addEventListener("submit", function() {

document.getElementById("loginBtn").disabled = true;

});

## **SQL Implementation – Database Design**

sql

-- Create the database

CREATE DATABASE attendance\_system;

USE attendance\_system;

-- ===============================

-- 1. USERS TABLE

-- ===============================

CREATE TABLE users (

user\_id INT AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(50) NOT NULL UNIQUE,

password VARCHAR(255) NOT NULL,

role ENUM('Admin', 'Lecturer', 'Student') NOT NULL

);

-- ===============================

-- 2. STUDENTS TABLE

-- ===============================

CREATE TABLE students (

student\_id INT AUTO\_INCREMENT PRIMARY KEY,

matric\_number VARCHAR(20) NOT NULL UNIQUE,

name VARCHAR(100) NOT NULL,

department VARCHAR(100) NOT NULL,

level VARCHAR(10) NOT NULL,

user\_id INT,

FOREIGN KEY (user\_id) REFERENCES users(user\_id) ON DELETE CASCADE

);

-- ===============================

-- 3. LECTURERS TABLE

-- ===============================

CREATE TABLE lecturers (

lecturer\_id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100) NOT NULL,

department VARCHAR(100) NOT NULL,

email VARCHAR(100) UNIQUE,

user\_id INT,

FOREIGN KEY (user\_id) REFERENCES users(user\_id) ON DELETE CASCADE

);

-- ===============================

-- 4. COURSES TABLE

-- ===============================

CREATE TABLE courses (

course\_id INT AUTO\_INCREMENT PRIMARY KEY,

course\_code VARCHAR(20) NOT NULL UNIQUE,

course\_title VARCHAR(100) NOT NULL,

lecturer\_id INT,

FOREIGN KEY (lecturer\_id) REFERENCES lecturers(lecturer\_id) ON DELETE SET NULL

);

-- ===============================

-- 5. ATTENDANCE TABLE

-- ===============================

CREATE TABLE attendance (

attendance\_id INT AUTO\_INCREMENT PRIMARY KEY,

student\_id INT,

course\_id INT,

date\_time TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

status ENUM('Present', 'Absent') DEFAULT 'Present',

FOREIGN KEY (student\_id) REFERENCES students(student\_id) ON DELETE CASCADE,

FOREIGN KEY (course\_id) REFERENCES courses(course\_id) ON DELETE CASCADE

);

-- ===============================

-- 6. QR CODES TABLE

-- ===============================

CREATE TABLE qr\_codes (

qr\_id INT AUTO\_INCREMENT PRIMARY KEY,

course\_id INT,

qr\_code\_data VARCHAR(255) NOT NULL,

generated\_time TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

expiry\_time TIMESTAMP,

FOREIGN KEY (course\_id) REFERENCES courses(course\_id) ON DELETE CASCADE

);

# **SQL with Sample Records**

sql

-- Insert sample users

INSERT INTO users (username, password, role) VALUES

('admin1', 'admin\_pass', 'Admin'),

('lecturer1', 'lecturer\_pass', 'Lecturer'),

('student1', 'student\_pass', 'Student'),

('student2', 'student\_pass', 'Student');

-- Insert sample lecturers

INSERT INTO lecturers (name, department, email, user\_id) VALUES

('Dr. John Smith', 'Computer Science', 'jsmith@tsuniversity.edu', 2);

-- Insert sample students

INSERT INTO students (matric\_number, name, department, level, user\_id) VALUES

('CS2025001', 'Alice Johnson', 'Computer Science', '400', 3),

('CS2025002', 'Michael Brown', 'Computer Science', '400', 4);

-- Insert sample courses

INSERT INTO courses (course\_code, course\_title, lecturer\_id) VALUES

('CSC401', 'Database Systems', 1),

('CSC402', 'Artificial Intelligence', 1);

-- Insert sample QR codes

INSERT INTO qr\_codes (course\_id, qr\_code\_data, expiry\_time) VALUES

(1, 'QR123ABC', '2025-09-15 23:59:59'),

(2, 'QR456DEF', '2025-09-16 23:59:59');

-- Insert sample attendance

INSERT INTO attendance (student\_id, course\_id, status) VALUES

(1, 1, 'Present'),

(2, 1, 'Absent'),

(1, 2, 'Present'),

(2, 2, 'Present');