**Project Title:**

**Mobile Attendance Logger with Location Tagging**

**Project Overview:**

A simple mobile app or mobile-friendly web app where users can **log their attendance**. Each attendance entry will record:

* Student/employee name
* Date and time
* Location (GPS-based or typed)
* Status (Present/Late)

Backed by a simple **PHP + MySQL backend**.

**Objectives:**

* Understand the flow between a **mobile frontend and PHP backend**.
* Use **mobile device features** like date/time and optionally GPS.
* Store data in a **cloud/local server** using PHP/MySQL.
* Practice **form validation** and **data posting** via API.

**Tools:**

| **Area** | **Tool** |
| --- | --- |
| Frontend | HTML/CSS + JavaScript (or Flutter, optional) |
| Backend | PHP |
| Database | MySQL |
| API Tester | Postman (optional for testing PHP) |

**Basic Functionalities:**

1. **Login Screen** (optional for beginner)
2. **Attendance Form**
   * Input: Name / ID
   * Auto-filled: Date & Time
   * Optional: GPS Location or dropdown for location
   * Button: **Submit Attendance**
3. **Database Logging**
   * Store in tbl\_attendance with the fields:

id, name, datetime, location, status

1. **View Logs Page** (optional)
   * Show a simple table of records submitted.

**Process Flow:**

[User Input] --> [Form Submit] --> [PHP API] --> [MySQL DB]

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(HTML/JS or Flutter App) (Data Response: Success/Fail)

**Database Schema Example:**

CREATE TABLE tbl\_attendance (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

datetime DATETIME,

location VARCHAR(100),

status VARCHAR(50)

);

**PHP Endpoint Sample (save\_attendance.php)**

<?php

include 'db\_conn.php';

$name = $\_POST['name'];

$location = $\_POST['location'];

$datetime = date('Y-m-d H:i:s');

$status = "Present";

$sql = "INSERT INTO tbl\_attendance (name, datetime, location, status) VALUES (?, ?, ?, ?)";

$stmt = $conn->prepare($sql);

$stmt->bind\_param("ssss", $name, $datetime, $location, $status);

if ($stmt->execute()) {

echo "Success";

} else {

echo "Error";

}

?>

**Testing Guidelines:**

* Use browser or mobile to test form input.
* Use localhost or **hosted server** like 000webhost for PHP.
* Optionally test via **Postman** or simulate location input.

**What to Submit (as student output):**

1. System overview (2–3 pages)
2. Screenshot of working system
3. Source code (HTML/JS and PHP)
4. Database schema (.sql file)
5. Short video demo (optional)
6. Reflection/learning journal

**Tips:**

* Don’t overcomplicate

**Report Format**

**1. Title Page**

* Project Title
* Your Name
* Subject: Mobile Computing
* Platform Used: Flutter / Android Studio
* Date of Submission

**2. Chapter 1: Introduction**

* Background of the study
* Problem Statement
* Objectives (General and Specific)
* Scope and Limitations
* Significance of the Project

**3. Chapter 2: Review of Related Systems / Literature**

* Brief discussion of existing attendance systems
* Comparison with your project
* What makes yours simpler or unique for beginners?

**4. Chapter 3: Methodology**

* Tools and technologies used (Flutter or Android Studio, PHP, MySQL)
* System architecture diagram
* System flowchart (input → PHP → DB → response)
* Development process (Agile, Waterfall, etc.)

**5. Chapter 4: System Design and Implementation**

* Screenshots of your app UI
* Code snippets (Flutter widgets or Java layout)
* Backend PHP script sample
* Database schema / ERD

**6. Chapter 5: Results and Testing**

* Test cases (with sample inputs and outputs)
* Screenshot of submitted entries
* Common bugs and how you fixed them
* Summary of what worked

**7. Chapter 6: Conclusion and Recommendations**

* Summary of learnings
* What can be improved? (e.g., add login, GPS auto-detect, export to Excel)
* Recommendation for future developers

**8. References**

* Flutter.dev / developer.android.com
* W3Schools (for PHP examples)
* GitHub projects you referenced (if any)

**9. Appendices**

* Full source code (or link to repo/zip)
* SQL Dump file
* Test data