**Test Plan – Pulse App**

**1. General Project Information**

**Project Name: HPL Pulse App  
Project Description:**

The Pulse App is a mobile-based field force management application designed for pharmaceutical teams. It supports two types of users: MIO/SMIO (field users) and AM/RM (supervisors). Field users perform activities such as attendance marking with geofence validation, tour planning, and submitting requests for doctors, chemists, and geofences. Supervisors approve and monitor these requests, manage submarkets, and track attendance and activity logs. The app ensures secure role-based access, real-time notifications, and accurate field activity tracking.

**2. QA Team**

* **Project Manager:**
* **Team Member**: Jakia Rahman,

- Intern (MIS)

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**3. Testing Purpose**

The purpose of testing the Pulse App is to ensure that the application meets all functional, technical, and business requirements before release. Testing will validate that all core features such as attendance, tour planning, doctor and chemist requests, geofence validation, and approval workflows work as intended.

It will confirm that role-based access is properly implemented, data captured is accurate and consistent, and the app is stable and reliable under expected conditions.

The ultimate goal of testing is to deliver a secure, user-friendly application that enables field force teams and managers to efficiently manage attendance, activities, and approvals.

**4. Test Objectives**

* Validate all functional requirements of the Pulse App.
* Verify role-based access for MIO/SMIO and AM/RM.
* Ensure the accuracy of attendance, geofence validations, and approval workflows.
* Identify, log, and track defects for resolution.
* Evaluate app stability and performance under normal usage conditions.

**5. Test Scope**

**In Scope:**

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| **Functional testing of all modules:** |
| 1. Authentication (Login, OTP, Reset) |
| 1. Attendance Management (Geofence check-in/out) |
| 1. Tour Plan (create, submit, approve/reject) |
| 1. Doctor/Chemist Requests (submit, approve/reject) |
| 1. Geofence Requests (submit, approve/reject, radius validation) |
| 1. Notifications & Activity Logs |
| 1. Submarket Management (create, activate/inactivate, prevent duplicates) |
| 1. Role-based feature access (MIO/SMIO vs. AM/RM) |
| 1. Validation across mobile devices (Android) |

**Out of Scope:**

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| 1. Backend server infrastructure testing. |
| 1. Third-party integration testing (e.g., SMS gateway for OTP) |

**6. Test Approach**

Manual testing will be carried out to validate functional, regression, and role-based scenarios. In the future, automation will be introduced for critical workflows such as Login, Attendance, Tour Plan, and Approvals. Basic performance and load testing will be executed on the non-production hosted environment. All defects will be logged and tracked until closure.

**7. Test Items**

The items to be tested include:

* HPL Pulse App (Android).

**8. Features to be Tested**

1. Authentication
2. Attendance Management
3. Tour Plan Management
4. Doctor Management
5. Chemist Management
6. Geofence Creation and Validation
7. Notifications
8. Submarket Management
9. Approval Workflows, and Monitoring and Reports

**9. Features Not to be Tested**

1. Server scalability under extreme load conditions will not be tested.
2. API services for authentication, attendance, tour, doctor, chemist, and geofence.

**10. Test Environment**

* **Mobile Devices:** Android v10+
* **Network:** 4G/5G and Wi-Fi
* **Location Services:** GPS must be enabled for geofence validation

**11. Test Deliverables**

The following deliverables will be produced:

1. Test Scenarios Document
2. Test Cases Execution Document
3. Defect Log Report
4. Requirement Traceability Matrix
5. Final Test Closure Report

**12. Entry and Exit Criteria**

**Entry Criteria:**

Requirements must be finalized and approved, the test environment must be ready, and test data must be prepared.

**Exit Criteria:**

All planned test cases must be executed, critical defects must be fixed and re-tested, and the test summary and closure report must be prepared.

**13. Roles and Responsibilities**

* Test Lead / SQA will plan, review, and report test activities.
* Testers will execute test cases and log defects.
* Developers will fix defects and provide support during testing.
* The Project Manager or Business Analyst will approve the final test results.

**14. Risks and Mitigation**

* GPS accuracy issues will be mitigated by testing in multiple locations.
* OTP delays from the SMS gateway will be mitigated by using a test OTP service.
* Device and OS compatibility issues will be mitigated by testing on a variety of devices and operating system versions.

**15. Schedule**

* Test Planning:
* Test Case Preparation:
* Test Execution (Cycle 1):
* Defect Retesting / Cycle 2:
* Test Closure:

**16. Approval**

* Test Lead: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Project Manager: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Client Representative: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_