**Software Test Plan (STP)**

**Project Name:** Horilla Human Resources Management System  
**Version:** 1.0  
**Document Date:** 06/08/2025  
**Prepared By:** QA Team  
**Test Lead:** Hamdallah  
**Testers:** Huthayfa, Waed

### **1. Introduction**

**1.1 Objective**

This plan defines the scope, strategy, resources, schedule, and responsibilities for the QA activities of the Horilla HR Management System. The aim is to ensure that the system meets the functional and non-functional requirements with no critical defects.

**1.2 Scope of Testing**

**In-Scope:**

* Manual testing of major HR modules:
  + Employee Management
  + Shift Requests
  + Work Type Requests
  + Attendance
  + Leave Requests
  + Payroll
  + Performance Review
* API Testing via Postman
* Performance and Load Testing via JMeter

**Out of Scope:**

* Mobile compatibility (not in current release)
* Integration with third-party external tools

**2. Types of Testing**

**2.1 Functional Testing**

| **Type** | **Description** |
| --- | --- |
| UI Testing | Ensure consistent design, clarity, and direction |
| CRUD Testing | Create, Read, Update, Delete operations for all modules |
| Business Logic | Verifying calculations and business rules (e.g., salary, leave balance) |
| Role-based Access | Ensure users access only permitted modules |

**2.2 Non-Functional Testing**

|  |  |
| --- | --- |
| Performance Testing: | Test the system response time under load using JMeter |
| Load Testing: | Simulate multiple concurrent users submitting requests |
| Stability Testing: | Ensure the system remains stable during prolonged use |
| Usability Testing: | Evaluate UI/UX friendliness and navigation flow |
| Security Testing: | Verify restricted access to sensitive data |
| Compatibility Testing: | Validate proper functionality on Chrome, Firefox, Edge |
| **3. Testing Strategy****3.1 Test Levels**  * System Testing * Acceptance Testing  **3.2 Test Design Techniques**  * Use Case Testing * Boundary Value Analysis * State Transition Testing |  |

**4. Test Environment**

#### **4.1 Hardware Requirements**

Tested on machine with the following specifications:

CPU: intel core i5 14400

GPU: RTX 4060ti 8gp

Memory: 32mb RAM

Storage: 1 TB SSD, 2 TB HDD, 2TB external HDD

#### **4.2 Software Requirements**

WINDOWS 10, Brave browser, JIRA, Testrail, Microsoft excel, Postman, jmeter.

#### **4.3 Test Data**

* **Platform:** Web application
* **Supported Browsers:** Chrome, Firefox, Edge
* **Database:** Firebase (test instance)

**5. Roles and Responsibilities**

| **Name** | **Role** | **Responsibilities** |
| --- | --- | --- |
| Hamdallah | Test Lead | Planning, coordination, final QA approval |
| Huthayfa | QA Engineer | Manual testing, bug reporting, Postman |
| Waed | QA Engineer | JMeter scripting, UI review, reporting |

**6. Deliverables**

* Functional Requirements Document (FRD)
* Test Cases (Excel or TestRail)
* Postman API collection (JSON)
* JMeter test reports
* Bug reports (Jira or Excel)
* Final QA summary report

**7. Risks and Mitigation**

| **Risk** | **Mitigation** |
| --- | --- |
| Requirement changes | Maintain regular communication with the product team |
| Limited time for performance tests | Prioritize core flows in JMeter |
| Unstable test environment | Coordinate with DevOps for support |

**8. Testing Schedule**

| **Activity** | **Start Date** | **End Date** |
| --- | --- | --- |
| Test case preparation | 06/08/2025 | 08/08/2025 |
| Manual functional testing | 08/08/2025 | 11/08/2025 |
| Postman + JMeter testing | 09/08/2025 | 12/08/2025 |
| Final QA review | 13/08/2025 | 14/08/2025 |

**9. Entry & Exit Criteria**

**Entry Criteria:**

* Test environment is ready
* FRD is approved
* Test cases are written

**Exit Criteria:**

* All critical and high-severity bugs resolved
* ≥ 95% test case pass rate
* Final report submitted