

# TEST PLAN DOCUMENT

## Hospital Management System

### Introduction

This Test Plan document describes the scope, objectives, testing approach, resources, schedule, and deliverables for the Hospital Management System.

The purpose of this document is to ensure that the application meets functional requirements and is free from critical defects before deployment.

### Objective

The objective of testing is to:

- Validate all functional modules of the system.
- Ensure business workflows function correctly.
- Identify and report defects.
- Verify role-based access control.
- Ensure billing and payment processes work accurately.
- Confirm email notification and report generation features.

### Project Overview

The Hospital Management System is a web-based application designed to manage hospital operations including:

- Patient registration and login
- Employee management
- Appointment booking
- Test report upload and viewing
- Billing
- online payment
- Email notifications

- Admin dashboard and reports

## Scope of Testing

### In-Scope Modules

- Admin Login
- Patient Registration & Login
- Employee Management
- Appointment Scheduling
- Test Report Upload
- Billing & Invoice Generation (Without Online Payment)
- Role-Based Access Control

## Scope of Testing

### Out-Scope Modules

- Online Payment Gateway (Not Implemented)
- Email Notification (Not Implemented)
- Employee Module (Not Developed)

## Testing Strategy

The testing approach includes:

- **Functional Testing**  
Verify all features work according to requirements.
- **Regression Testing**  
Re-test application after bug fixes.
- **Boundary Value Analysis**  
Validate input fields with minimum and maximum values.
- **Negative Testing**  
Test system behaviour with invalid inputs.

- **Integration Testing**

Verify interaction between modules.

## Test Environment

Component	Details
OS	Windows 10
Browser	Google Chrome
Server	WAMP Server
Database	MySQL/MariaDB
Backend	PHP
Frontend	HTML, CSS

## Entry Criteria

Testing will start when:

- Development is completed
- Requirements are finalized
- Test cases prepared and reviewed
- Test environment ready

## Exit Criteria

Testing will be completed when:

- 80% high-priority test cases executed
- All critical and major defects fixed
- No open critical defects
- Test Summary Report prepared
- Stakeholder approval received

**Risk Analysis**

Risk	Impact	Mitigation
Payment gateway failure	Billing issues	Integration retesting
Email notification failure	Communication breakdown	Mail server validation

**Test Deliverables**

The following documents are delivered:

- Test Plan
- Test Scenarios
- Test Cases
- RTM (Requirement Traceability Matrix)