

Test Plan Document for Cura HealthCare

1. Introduction This document outlines the test plan for the Appointment Booking API. It is designed to verify the API's functionality, reliability, and performance to ensure it meets the specified requirements.

2. Objectives

- To validate the functional requirements of the Appointment Booking API.
- This is to ensure the API endpoints are working as intended.
- To identify and fix defects in the early stages of development.
- To ensure system reliability, usability, and performance.

3. Scope In Scope:

- API endpoints related to appointment creation, retrieval, updating, and deletion.
- Validations related to booking availability.
- Authentication and authorization mechanisms.

Out of Scope:

- UI testing.
- Database performance tuning.

4. Test Strategy

- **Unit Testing:** Performed by developers to test individual functions/methods.
- **Integration Testing:** Test interactions between modules.
- **System Testing:** Validate the end-to-end flow.
- **Regression Testing:** Ensure new changes don't affect existing functionality.

- **Performance Testing:** Measure response time and stability under load.

5. Test Environment

- **Backend:** Java Spring Boot
- **Database:** PostgreSQL
- **Tools:** Postman, JMeter, Rest Assured, Jenkins (CI/CD)
- **Servers:** Deployed on AWS EC2

6. Test Cases Each test case will include:

- Test Case ID
- Description
- Pre-conditions
- Test Steps
- Expected Results
- Actual Results
- Status (Pass/Fail)

Examples:

- TC_001: Create appointment with valid data – Should return 201 Created.
- TC_002: Fetch appointment with invalid ID – Should return 404 Not Found.

7. Test Schedule

Phase	Start Date	End Date
Unit Testing	01-May-2025	05-May-2025
Integration Testing	06-May-2025	08-May-2025

System Testing	09-May-2025	12-May-2025
Regression Testing	13-May-2025	14-May-2025

8. Resources

- QA Engineers: 2
- Developers: 3
- DevOps: 1

9. Risk Management

- Delay in backend readiness – Mitigation: Early coordination with the development team.
- Change in API spec – Mitigation: Freeze requirements before test case creation.

10. Approvals

- QA Lead: