Test Plan: CURA Healthcare – API Testing

# Test Plan ID

CURA-API-TP-001

# Project Name

CURA Healthcare Service – API Test Plan

# Author

Rupa Rani

# Objective

To validate the core API functionalities: Login, Appointment Booking, and Logout, ensuring the system works as expected in various scenarios with valid/invalid data.

# Tools & Technologies

- Postman  
- Rest Assured  
- TestNG  
- Maven  
- Java  
- Jenkins  
- Git

# Test Scope

In Scope:  
- Login API (Authentication with Token)  
- Appointment Booking API (with Auth)  
- Logout API  
  
Out of Scope:  
- UI Testing  
- Payment integration (if any)

# API Flow Overview

1. Login API  
 - POST /api/login  
 - Request: { "username": "JohnDoe", "password": "ThisIsNotAPassword" }  
 - Response: Access token  
  
2. Make Appointment API  
 - POST /api/appointment  
 - Headers: Authorization: Bearer <token>  
 - Request Body: Appointment details  
  
3. Logout API  
 - POST /api/logout  
 - Headers: Authorization: Bearer <token>

# Entry & Exit Criteria

Entry Criteria:  
- API endpoints are accessible.  
- Credentials and token handling are functional.  
  
Exit Criteria:  
- All test cases executed.  
- Critical defects are resolved or documented.

# Risks & Assumptions

- Token expiration may interrupt test flow if not handled.  
- API structure remains stable during testing.

# Reporting

- Test execution summary via TestNG Reports  
- Defects logged in JIRA or shared Excel  
- Automation status updated in Jenkins

# Test Scenarios

|  |  |  |  |
| --- | --- | --- | --- |
| Scenario ID | Title | Description | Expected Result |
| TC-001 | Valid Login | Login with correct credentials | Status 200 + Token returned |
| TC-002 | Invalid Login | Login with incorrect password | Status 401 + Error message |
| TC-003 | Empty Login Request | Login with empty payload | Status 400 + Validation error |
| TC-004 | Valid Appointment | Book appointment using valid token and data | Status 200 + Appointment created |
| TC-005 | Appointment with Invalid Token | Token expired or tampered | Status 401 + Unauthorized |
| TC-006 | Missing Auth Header | Hit appointment API without token | Status 403 or 401 |
| TC-007 | Logout Successfully | Logout with valid token | Status 200 + Success message |
| TC-008 | Logout with Invalid Token | Logout with wrong/expired token | Status 401 + Error |

# Test Data

|  |  |
| --- | --- |
| Field | Example Value |
| Username | JohnDoe |
| Password | ThisIsNotAPassword |
| Date | 2025-05-20 |
| Comment | Routine checkup |
| Facility | Tokyo CURA Healthcare Center |