Master Test Plan (Updated for Sprint 3)

Objectives

The primary goals of this test plan are to:

- Validate the functionality and performance of the REST APIs through manual testing using Postman.

- Ensure all API endpoints for Authentication and Passenger Service are functional and return the correct status codes and response bodies.

- Confirm that the API test cases are executed, and their results are documented.

Scope of Testing

In-Scope:

- **API Testing** for the Authentication and Passenger Service APIs.

    o POST /token

    o POST /addPassenger

    o GET /viewPassengerById

    o GET /viewPassengerList

    o GET /viewPassengerByNameMobile

    o DELETE /deletePassengerById

- **Testing Type:** Manual API Test Execution using Postman.

- **API Validations:** Status codes (200, 400, 401, 404), response body correctness, and negative testing.

Out of Scope:

- UI Testing of the Flight Ticket Booking System.

- Automated Test Execution (Selenium, Rest Assured).

Roles and Responsibilities

- **Test Lead:** Aman Garg (Product Owner & QA Tester for API Authentication).

- **QA Team:**

    o Arghyadip Santra (QA Tester for POST /addPassenger and DELETE /deletePassengerById).

    o Chirag Guruswamy (QA Tester for GET /viewPassengerById and GET /viewPassengerList).

    o Sakshi (QA Tester for GET /viewPassengerByNameMobile).

Test Environment

- **Authentication API URL:** https://keycloak.tekstac.com/realms/soapdemo/protocol/openid-connect

- **Passenger Service API URL:** https://webapps.tekstac.com/TrainAPI/PassengerService

- **Access:** All QA members have access to the necessary client credentials (client_id, client_secret) for authentication.

Tools

- Jira

- **Postman** (primary tool for API testing)

Schedules

- **Phase:** API Test Planning & Design

  - **Start Date:** July 7, 2025

  - **End Date:** July 9, 2025

  - **Key Activities:** Create Postman Collection, write test cases and validation scripts in Postman's "Tests" tab, create test data for API payloads.

- **Phase:** API Test Execution Cycle 1

  - **Start Date:** July 10, 2025

  - **End Date:** July 12, 2025

  - **Key Activities:** Execute all API requests in Postman, validate responses, log defects in Jira.

- **Phase:** Regression & Retesting

  - **Start Date:** July 13, 2025

  - **End Date:** July 15, 2025

  - **Key Activities:** Retest fixed API defects, run regression tests on impacted APIs.

- **Phase:** Final Reporting

  - **Start Date:** July 16, 2025

  - **End Date:** July 18, 2025

  - **Key Activities:** Prepare the final Bug Report and Test Execution Report for API testing.

- **Phase:** Sign-off

  - **Start Date:** July 19, 2025

  - **End Date:** July 21, 2025

  - **Key Activities:** Final review and stakeholder sign-off.

Entry and Exit Criteria

Entry Criteria:

- All API endpoints are accessible and stable on the test environment.

- The required API credentials and client details are available to the QA team.

- The Postman Collection and test cases have been created and internally reviewed.

- The development team has provided API documentation.

Exit Criteria (Conditions to END testing):

- 100% of all planned API test cases have been executed.

- There are no open "Blocker" or "Critical" severity defects related to the APIs.

- All high-severity defects have a documented resolution plan.

- All required test deliverables (Bug Report, Test Execution Report, Traceability Matrix) have been completed and delivered.

Deliverables

The following documents and artifacts will be delivered upon completion of the Sprint 3 testing phase:

- **Product Backlog (Updated)**

- **Sprint Backlog (Updated)**

- **Postman Collection JSON** (Containing all API requests and tests)

- **Test Execution Report**

- **Defect Report**

- **Sprint Retrospective Notes**