**Test Plan – Restful Booker API**

**1. Objective**

To ensure the functionality, reliability, and correctness of the Restful Booker API endpoints using both manual and automated tests.

**2. Scope**

* CRUD operations for /booking
* Auth token creation /auth
* Input validation and error handling
* Positive and negative test coverage

**3. Out of Scope**

* Security or performance testing
* UI layer (if any)

**4. Test Strategy**

* Manual test cases via **Postman**
* Automated tests using:
  + **JavaScript + Axios + Chai**
* Validate both response codes and payload structure

**5. Test Environment**

* Base URL: https://restful-booker.herokuapp.com/
* Tools: Postman, JavaScript, Axios, Mocha and Chai
* Auth credentials (as provided or created during tests)

**6. Types of Testing**

* Functional Testing
* Positive & Negative Testing
* Data-driven testing (if applicable)
* JSON schema validation (optional)

**7. Test Data**

* Sample bookings with different payloads
* Invalid data: missing fields, invalid types
* Expired or invalid token scenarios

**8. Tools**

* Postman (manual)
* JavaScript
* Mocha, Axios and Chai (if deeper automation required)
* JSON Validator

**9. Risks & Mitigations**

| **Risk** | **Mitigation** |
| --- | --- |
| API downtime | Use local mocks or test with cached data |
| Rate limiting or throttling | Pace automated calls |
| Missing data validation | Cover corner cases explicitly in test data |