# Software Test Plan (STP)

Project: TravelDemo – Manual UI & API Testing

Version: 1.0 | Date: 14-Aug-2025 | Prepared by: Amjad Mahagna

## 1. Introduction

This test plan describes testing activities for TravelDemo to ensure it meets requirements and behaves as expected.

### 1.1 Scope

In Scope: UI & API testing for Flights, Hotels, Cars, Holidays, Buses; Authentication.  
Out of Scope: Real payments, live supplier integrations, deep security and load testing.

### 1.2 References

FRD: TravelDemo\_FRD.docx

## 2. Test Items

|  |  |
| --- | --- |
| Module | Features to Test |
| Flights | Search, filters, booking (UI + API) |
| Hotels | Search, filters, booking (UI + API) |
| Cars | Search & booking (UI) |
| Buses | Search & booking (UI) |
| Auth | B2C/B2B login, role restrictions |

## 3. Testing Strategy

### 3.1 Test Levels

|  |  |
| --- | --- |
| Level | Goal |
| Unit (Dev) | Verified by developers |
| Integration | Validate module-to-module and API flows |
| System | Validate end-to-end scenarios on demo |
| Acceptance | Stakeholder verification of key flows |

### 3.2 Test Types & Techniques

|  |  |  |
| --- | --- | --- |
| Test Type | Description | Technique |
| Manual Functional (UI) | Forms, searches, filters, booking confirmation | Black Box; Equivalence Partitioning; Decision Tables |
| API Functional | Booking CRUD and search endpoints | Black Box; Contract Testing; Boundary Value Analysis |
| Usability | Clarity, navigation, responsiveness | Heuristic Evaluation |
| Compatibility | Major browsers & viewport sizes | Cross-browser checks |
| Regression | Re-run core suites after fixes/changes | Smoke & Sanity; Re-execution |
| Error Handling | Invalid inputs and edge cases | Negative Testing; Error Guessing |
| Data Validation | Verify payloads and displayed data | CRUD checks; Idempotency for GET |
| Security (basic) | Auth/session/access control (non-intrusive) | Role-based tests; session expiry |
| Performance (basic) | Spot-check response times | Single-user sampling; page timing APIs |

### 3.3 Test Design Techniques Examples

- Equivalence classes for traveller counts (0, 1, max).

- Boundary tests for date pickers (today, past date, far future).

- Decision table for trip type vs. date field requirements.

## 4. Test Environment

Hardware: ≥8GB RAM, SSD machines.

Software: Windows 10/11, Chrome/Firefox/Edge latest, Postman, JIRA (or similar).

Test Data: Demo users; seeded catalog for flights/hotels/cars; Postman environment for base URL and tokens.

## 5. Roles & Responsibilities

|  |  |
| --- | --- |
| Role | Responsibilities |
| Test Manager | Plan, track, risk management, sign-off |
| QA Engineers | Test design, execution, defect reporting, retest |
| Developers | Fix defects, support environments/data |
| Product Owner | Approve scope, clarify requirements |

## 6. Schedule

|  |  |  |  |
| --- | --- | --- | --- |
| Activity | Start | End | Owner |
| Test Plan Preparation | YYYY-MM-DD | YYYY-MM-DD | Test Manager |
| Test Case Development (UI & API) | YYYY-MM-DD | YYYY-MM-DD | QA Team |
| Environment Setup | YYYY-MM-DD | YYYY-MM-DD | QA/DevOps |
| Execution Cycle 1 | YYYY-MM-DD | YYYY-MM-DD | QA Team |
| Regression & Re-test | YYYY-MM-DD | YYYY-MM-DD | QA Team |

## 7. Deliverables

FRD, STP, UI Test Cases, API Test Cases (Postman collection), Defect reports, Test Summary Report.

## 8. Entry & Exit Criteria

Entry: FRD approved; environment ready; test data prepared; smoke suite green.

Exit: 0 Critical/High open defects; ≥95% test execution; key flows pass; summary report delivered.

## 9. Risks & Mitigation

|  |  |
| --- | --- |
| Risk | Mitigation |
| Demo data changes unexpectedly | Snapshot/seed data; re-run setup scripts |
| 3rd-party services down | Mock/stub responses; schedule buffer |
| Limited access to B2B features | Use shared demo credentials; coordinate windows |

## 10. Approvals

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Role | Signature | Date |
| John Doe | Project Manager |  |  |
| Jane Smith | QA Lead |  |  |