**Test Plan**

**Project:- FlightSure QA Sprint (48 Hours)**

**Team Name:- The Debugging Knights**

**Approved By:- Pooja Yadav**

**Date:- 18 May 2025**

**Version:** 1.0  
**Author:** Atul Pal  
**Date:** May 2025

**1. 📌 Introduction**

This test plan outlines the comprehensive QA strategy for **FlightSure**, a flight + hotel booking platform modeled after PHP Travels. The objective is to validate the MVP within **48 hours** using **Manual, Automation, API, and Performance Testing**, ensuring high coverage and fast turnaround.

**2. 🎯 Objectives**

* Rapidly identify and report critical bugs.
* Validate all user journeys (flight + hotel booking).
* Automate key UI and API workflows.
* Assess platform’s responsiveness under load.
* Ensure compatibility, usability, and business readiness.

**3. 🔍 Scope of Testing**

**✅ In-Scope:**

* End-to-end flight and hotel booking flows
* Form validations (passenger, payment, dates)
* Search filters and sorting
* API testing (search, book, cancel)
* Cross-browser, responsive testing
* Load testing: 200 concurrent users (search), 50 (booking)
* UX and business logic feedback

**❌ Out-of-Scope:**

* Backend DB testing
* Third-party API reliability
* Localization and internationalization

**4. 🧪 Testing Types**

|  |  |
| --- | --- |
| Testing Type | Tools/Approach |
| Manual Testing | Google Sheets, Exploratory Testing |
| UI Automation | Selenium WebDriver + TestNG (Java) |
| API Testing | Postman (Positive/Negative/Schema) |
| Performance Testing | JMeter (Concurrent Users Testing) |
| UX + Business Testing | Heuristic Review, Usability Heuristics |

**5. 🛠️ Tools & Technologies**

* **Selenium (Java) + TestNG** – UI Automation
* **Postman** – REST API testing & validation
* **JMeter** – Load and stress testing
* **Extent Reports** – Automation Reporting
* **Google Sheets** – Test Cases, Bug Reports
* **Xmind / Draw.io** – Mind Maps (Exploratory Testing)
* **GitHub** – Automation script repository

**6. 🧾 Test Deliverables**

|  |  |
| --- | --- |
| Deliverable | Format |
| ✅ Test Scenarios & Cases | Google Sheets |
| ✅ Bug Report (Evidence + Severity) | Google Sheets / Excel |
| ✅ Exploratory Mind Map | Xmind / Image |
| ✅ Automation Scripts | GitHub Repo |
| ✅ Postman Collection | JSON Export |
| ✅ JMeter Script + Report | JMX + HTML |
| ✅ Impact & Fix Report (Live Change) | Google Doc |
| ✅ Demo Video + Executive Summary | MP4 + PDF |

**7. ⏳ Test Schedule (Compressed – 48 Hours)**

|  |  |
| --- | --- |
| Phase | Time Allocation |
| Requirement Analysis | 2 Hours |
| Test Planning | 2 Hours |
| Manual + Exploratory Testing | 12 Hours |
| Bug Reporting | Concurrent |
| UI Automation (Priority Flows) | 12 Hours |
| API Testing (Search, Booking) | 6 Hours |
| Performance Testing | 4 Hours |
| Re-Testing (After Change) | 3 Hours |
| Reporting + Documentation | 4 Hours |
| Demo Preparation | 3 Hours |

**8. 👥 Roles & Responsibilities**

|  |  |  |
| --- | --- | --- |
| Name | Role | Responsibility |
| Atul Pal | QA Lead / Manual Tester | Planning, Testing, Reporting, UX Review |
| Sanjay Jatav | Automation + API Tester | UI & API Script Development + Execution |

**9. 📌 Entry & Exit Criteria**

**✅ Entry Criteria:**

* Staging environment live
* API endpoints accessible
* UI flow implemented end-to-end

**✅ Exit Criteria:**

* All planned test cases executed
* Major/critical bugs fixed or documented
* Scripts updated post live change
* All deliverables submitted and reviewed

**10. 🧠 Risk & Mitigation**

|  |  |
| --- | --- |
| Risk | Mitigation Strategy |
| Incomplete / buggy MVP | Prioritize critical flows, report blockers |
| Midway product changes | Re-test affected areas, maintain modular scripts |
| Time constraint (48 hrs) | Parallel execution, clear role division |
| Test data availability | Use dummy data or coordinate with devs |

**✅ Success Criteria**

* 95%+ Critical Test Coverage
* Zero blocker bugs in final report
* Complete bug documentation with severity levels
* Executable UI/API scripts on GitHub
* Performance report with analysis
* Impact Report for mid-sprint changes
* Demo video with clear narration
* UX feedback with business justification

**📅 Version:** 1.0  
**✍️ Author:** Atul Pal  
**📆 Date:** 18 May 2025