**Test Plan for HRS Online Booking Portal**

**Objective**

The objective of this test plan is to ensure the quality and reliability of the HRS Online Booking Portal. The plan outlines the test scope, test scenarios, test environment, and test execution strategy using Selenium with Java in Eclipse IDE.

**Scope**

The testing will cover the key functionalities of the HRS Online Booking Portal:

* User authentication and registration
* Hotel search and booking
* Search filters (location, date, Rooms & Persons)
* Error handling and validations
* Responsive design

**Target Environment**

* **Application**: HRS Online Booking Portal
* **Automation** Tool: Selenium WebDriver with Java
* **IDE**: Eclipse
* **Browser Compatibility**: Chrome, Firefox, Safari

**Test Scenarios**

**User Registration and Login**

**Scenario 1:** Verify successful user registration

**Scenario 2:** Verify successful user login

**Scenario 3:** Verify unsuccessful login with invalid credentials

**Hotel Search and Booking**

**Scenario 4:** Verify hotel search functionality

**Scenario 5:** Verify filtering by location and dates

**Scenario 6:** Verify booking a hotel for specific dates

**Scenario 7:** Verify booking confirmation and details

**Search Filters and Sorting**

**Scenario 8:** Verify filtering by amenities (e.g., Wi-Fi, parking)

**Scenario 9:** Verify sorting by price and rating

**Error Handling**

**Scenario 10:** Verify error message for invalid search criteria

**Scenario 11:** Verify error message for unavailable dates

**Responsive Design**

**Scenario 12:** Verify portal layout and functionality on different screen resolutions

**Scenario 13:** Verify portal behavior on various browsers (Chrome, Firefox, Safari)

**Test Data**

Pre-defined test data will include:

* Valid and invalid user credentials
* Sample hotels with different amenities and availability
* Test dates for booking scenarios
* Expected error messages for validation checks

**Test Execution Plan**

**Test Case Design:** Create detailed test cases for each scenario.

**Environment Setup:** Ensure necessary drivers (chrome driver, gecko driver, safari driver) are configured.

**Automation Script Development**: Develop Selenium WebDriver scripts in Java for each test case.

**Test Data Preparation:** Prepare required test data sets.

**Test Execution:** Execute the automation scripts on Chrome, Firefox, and Safari browsers.

**Test Result Analysis:** Review test results, log defects for failures.

**Test Report Generation:** Generate test reports including pass/fail status, screenshots, and logs.

**Risks and Mitigation**

**Dynamic UI Elements:** Changes in UI structure may impact scripts.

* **Mitigation:** Use stable locators, update scripts as needed.

**Cross-Browser Compatibility:** Variations in browser behaviour.

* **Mitigation:** Test on multiple browsers, update scripts for compatibility.

**Data Integrity:** Incorrect or missing test data.

* **Mitigation:** Validate test data before execution, use reliable data sources.

**Test Environment Stability:** Unstable test environment.

* **Mitigation:** Monitor environment health, re-run failed tests.

**Conclusion**

This test plan aims to thoroughly test the HRS Online Booking Portal using Selenium WebDriver with Java in Eclipse IDE. By executing these test scenarios, we aim to ensure the functionality, usability, and responsiveness of the portal across different browsers. Any issues discovered during testing will be reported for resolution, ensuring a high-quality user experience.