

Booking Website Automation Framework

Airbnb/Booking flow automated with Selenium, TestNG, Cucumber BDD, POM, Allure Reports, Log4j2 on Java + Maven.



Objective

End-to-end Flow

Automate
search, date
selection, price
filter, and results
validation.

Framework Quality

Readable tests,
reusable
components,
screenshots, and
logs.

Professional Tooling

Cucumber BDD,
POM, TestNG,
Allure, Log4j2
integrated.



Tools & Technologies



Java & Maven

Language and build system for the framework.



ChromeDriver

Browser driver used for UI automation.



Thread waits & XPath

Synchronization and locators.



Selenium WebDriver

UI automation core.



Cucumber BDD

Gherkin scenarios and readable tests.



Allure & Log4j2

Reports, screenshots, and logs.



Framework Architecture

Final_Project_01 with src/main (base, pageObject), src/test (cucumberoption, hooks, stepdefinition), resources (features, log4j2.xml, data.properties) and logs directory.

Cucumber BDD – Feature Flow



Open Page

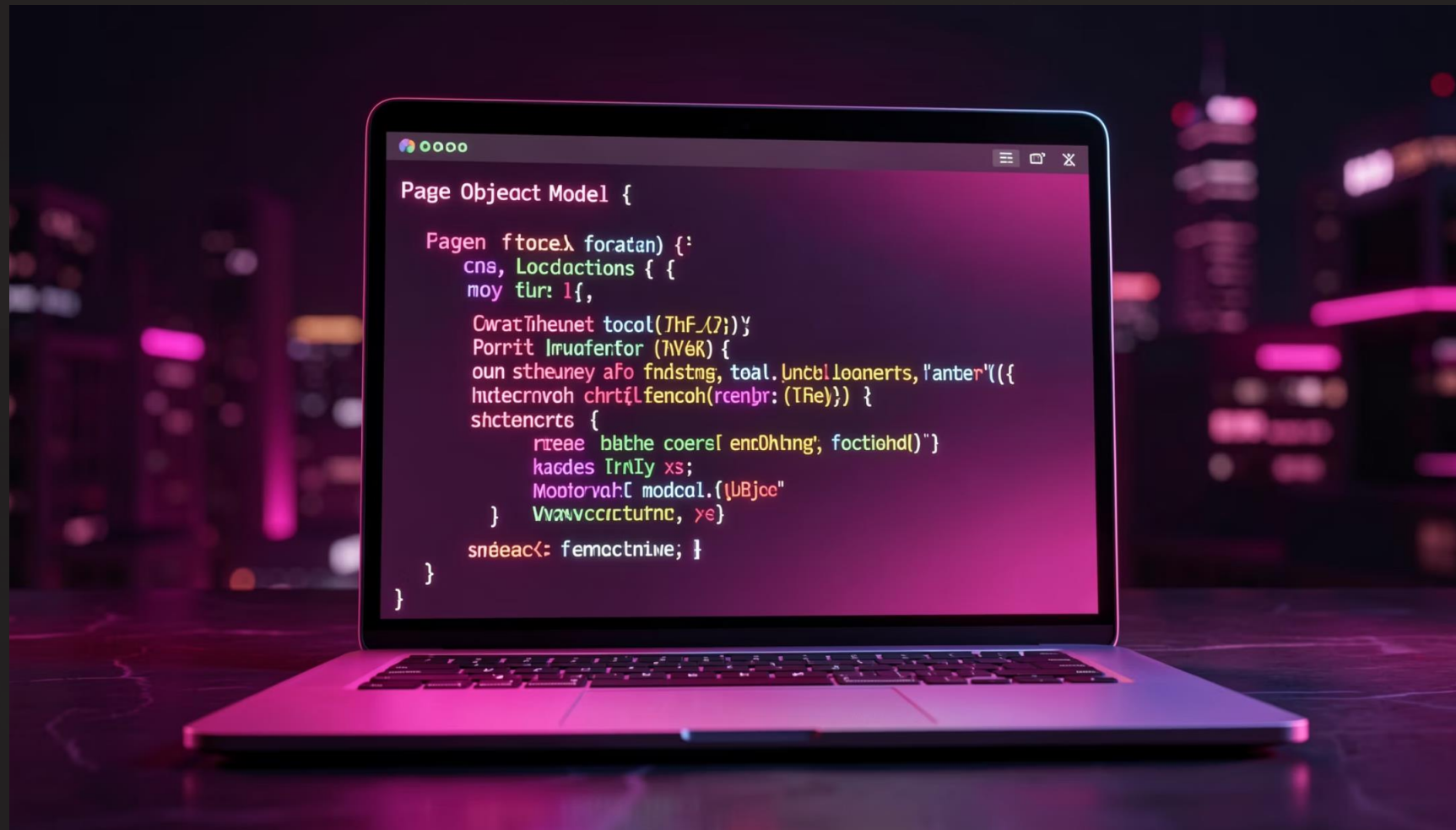
Enter Destination

Select Dates

Apply Price Filter

Gherkin scenario implements an end-to-end, business-friendly test that verifies results are within the applied price range.

Page Object Model (POM)



HomePage.java

Encapsulates XPaths and reusable methods: openCalendar(), clickByXPath(), selectDates(), enterDestination(), applyFilters().

Benefits

Reusability, reduced duplication, easier maintenance, better readability.

Step Definitions & Hooks



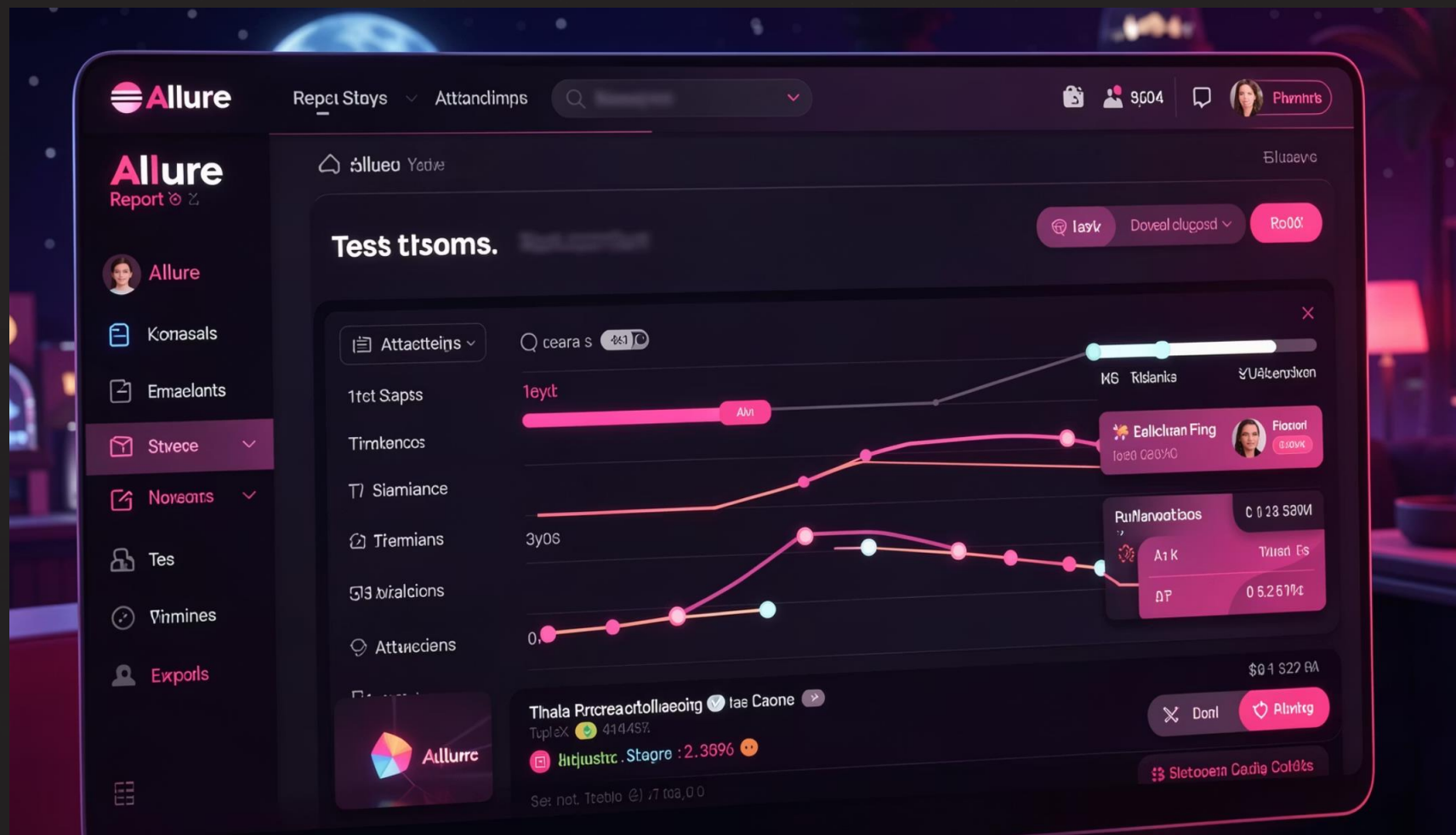
BookingSteps.java

Handles search, date selection, price filter and validation using POM methods.

TestHooks

Manages WebDriver start/quit, screenshots on pass/fail, and attaches logs to Allure.

Allure Reporting



- Added allure-cucumber7-jvm
- Attached screenshots on pass & fail
- Attached automation logs
- Use: allure serve target/allure-results

Allure provides detailed steps, timeline, history, attachments and rich UI for analysis.

Logging (Log4j2) & Evidence



Test Evidence

Success screenshot (547 KB) attached to the scenario; timeline shows 45s total run.



Structured Logs

automation.log (INFO/WARN/ERROR) and error.log for failures; logs attached to Allure for debugging.



Achievements & Outcome

Complete Framework

Built from scratch with BDD, POM, TestNG, Allure, and Log4j2.

Automated Workflow

Search → Dates → Price filter → Validation with screenshots and logs.

Professional Deliverables

Readable tests, reusable components, attachments, and clean folder structure.

Skills Gained

XPath, POM architecture, Cucumber glue, TestNG, Allure reporting, logging, and Maven dependency management.