Flipkart Web Automation Framework - Interview Questions & Answers

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1️⃣Framework Understanding

Q: Can you explain the architecture of this framework? **A:** It is a hybrid framework using Page Object Model (POM) + Cucumber BDD + TestNG + Gradle + BrowserStack. POM organizes web pages into classes, Cucumber allows writing tests in plain English, TestNG manages execution and grouping, Gradle handles dependencies, and BrowserStack enables cross-browser testing.

Q: Why use POM + Cucumber? **A:** POM improves maintainability and reduces code duplication. Cucumber allows scenarios to be readable by non-technical stakeholders. Together, they make the framework scalable and understandable.

2️⃣Selenium and Automation

Q: How do you locate web elements? **A:** Using `@FindBy` annotations in POM classes or `driver.findElement(By...)` directly.

Q: How is the browser handled? **A:** The DriverFactory initializes WebDriver for local or remote execution. Browser choice is controlled through configuration and Gradle parameters.

Q: How do you handle waits? **A:** Using explicit waits (`WebDriverWait`) for element visibility or clickability, and implicit waits as a fallback.

3️⃣Test Execution

Q: How do you run tests? **A:** - Locally: `gradle clean SanityTests -DdriverEnvironment=local -Dgroups=SMOKE -Denv=production -Ddriver=chrome` - BrowserStack: `gradle clean SanityTests -DdriverEnvironment=browserStack -Dgroups=SMOKE -Denv=production -Ddriver=chrome` - IntelliJ: Right-click on TestRunner class → Run.

Q: How are tests organized? **A:** Using TestNG annotations: `@BeforeTest`, `@Test`, `@AfterTest`, and groups like SMOKE, REGRESSION, SANITY.

4️⃣Data and Reporting

Q: How do you manage test data? **A:** Using Excel sheets with Apache POI; allows data-driven testing without changing code.

Q: How are reports generated? **A:** Reports are saved in the `report/` folder, typically in HTML. Screenshots are captured on failure for easier debugging.

5️⃣Gradle and Dependencies

Q: What is Gradle's role? **A:** Manages project dependencies, builds, and compiles code. Also helps run tests via command line.

Q: Why might the code show red in IntelliJ? **A:** Possible reasons: JDK not configured, Gradle dependencies not imported/refreshed, Lombok plugin missing, or annotation processing disabled.

6️⃣BrowserStack

Q: How does BrowserStack integration work? **A:** Uses a remote WebDriver URL with credentials. Allows cross-browser and cross-device execution.

Q: How do you switch between local and remote testing? **A:** Set `-DdriverEnvironment=local` for local and `-DdriverEnvironment=browserStack` for remote in Gradle commands.

7️⃣Bonus Tips

- Know the directory structure: `pages/`, `stepDefinitions/`, `testRunners/`, `utils/`, `features/`.
- Be ready with example test scenarios: login, search product.
- Be able to explain advantages of POM + BDD + TestNG.
- Be able to explain running tests locally vs on BrowserStack, and how reports and test data are handled.