



# Different Type of Hooks In Selenium Java

## TestNG Hooks

Hook Name	Purpose	Real-Time Usage	Code Snippet
@BeforeSuite	Runs once before entire test suite	Initialize reports, DB connections, environment setup	<pre>@BeforeSuite public void initSuite() { ExtentReportsManager.init(); }</pre>
@AfterSuite	Runs once after suite execution	Flush reports, close DB connections	<pre>@AfterSuite public void tearDownSuite() { ExtentReportsManager.flush(); }</pre>
@BeforeClass	Runs once before a test class	Launch browser, login once for all tests	<pre>@BeforeClass public void setupClass() { driver = new ChromeDriver(); login(); }</pre>
@AfterClass	Runs once after test class	Logout, close browser	<pre>@AfterClass public void cleanupClass() { driver.quit(); }</pre>
@BeforeMethod	Runs before every test method	Fresh browser state, test data reset	<pre>@BeforeMethod public void setupTest() { driver.manage().deleteAllCookies(); }</pre>
@AfterMethod	Runs after every test method	Screenshot on failure, cleanup	<pre>@AfterMethod public void tearDownTest(ITestResult result) { if(result.getStatus()!=ITestResult.FAILURE ) { takeScreenshot(); }</pre>

## Cucumber Hooks

Hook Name	Purpose	Real-Time Usage	Code Snippet
@Before	Runs before each scenario	Browser launch, test setup	<pre>@Before public void setup() { driver = new ChromeDriver(); }</pre>
@After	Runs after each scenario	Screenshot on failure, browser close	<pre>@After public void tearDown(Scenario scenario) { if(scenario.isFailed()) { takeScreenshot(); } driver.quit(); }</pre>
@Before("@tag")	Runs before tagged scenarios	Custom setup for smoke/regression	<pre>@Before("@smoke") public void smokeSetup() { loadMinimalTestData(); }</pre>
@After("@tag")	Runs after tagged scenarios	Cleanup specific to tag	<pre>@After("@regression") public void regressionCleanup() { clearTestData(); }</pre>

## Real Time

Scenario	Hook Used
Launch browser once per class	@BeforeClass
Take screenshot on failure	@AfterMethod / @After
Login once, reuse session	@BeforeClass
Smoke vs Regression setup	Tag-based Cucumber hooks
Jenkins / CI execution	@BeforeSuite, @AfterSuite

