Selenium WebDriver Cheatsheet (Java)

Basic Setup

```
System.setProperty("webdriver.chrome.driver", "path/to/chromedriver");
WebDriver driver = new ChromeDriver();
driver.get("https://example.com");
```

Waits - Implicit Wait (Global)

```
driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);
```

Waits - Explicit Wait

```
WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(10));
wait.until(ExpectedConditions.visibilityOfElementLocated(By.id("elementId")));
```

Locators

```
By.id("id")
By.name("name")
By.className("className")
By.tagName("tag")
By.linkText("full link text")
By.partialLinkText("partial")
By.cssSelector("css")
By.xpath("//tag[@attr='value']")
```

Find Elements

```
driver.findElement(By.id("id"));
driver.findElements(By.className("classname"));
```

Actions - Input Text / Click / Clear

```
driver.findElement(By.id("inputId")).sendKeys("text");
driver.findElement(By.id("btnId")).click();
driver.findElement(By.id("inputId")).clear();
```

Navigation

```
driver.navigate().to("https://example.com");
driver.navigate().back();
driver.navigate().forward();
driver.navigate().refresh();
```

Get Info

```
driver.getTitle();
driver.getCurrentUrl();
driver.getPageSource();
```

Check Element

```
element.isDisplayed();
element.isEnabled();
element.isSelected();
```

Handle Dropdown

```
Select dropdown = new Select(driver.findElement(By.id("dropdownId")));
dropdown.selectByVisibleText("Option 1");
```

```
dropdown.selectByValue("val");
dropdown.selectByIndex(2);
```

Handle Alerts

```
Alert alert = driver.switchTo().alert();
alert.accept();
alert.dismiss();
alert.getText();
alert.sendKeys("text");
```

Mouse and Keyboard (Actions Class)

```
Actions actions = new Actions(driver);
actions.moveToElement(element).click().build().perform();
actions.doubleClick(element).perform();
actions.contextClick(element).perform();
```

Windows and Tabs

```
String mainWindow = driver.getWindowHandle();
Set<String> allWindows = driver.getWindowHandles();
driver.switchTo().window(windowHandle);
```

Frames

```
driver.switchTo().frame("frameName");
driver.switchTo().frame(0);
driver.switchTo().defaultContent();
```

Take Screenshot

```
File screenshot = ((TakesScreenshot) driver).getScreenshotAs(OutputType.FILE);
FileUtils.copyFile(screenshot, new File("screenshot.png"));
```

Close & Quit

```
driver.close();  // Close current window
driver.quit();   // Close all windows and end session
```