Here are the types of Selenium commands:

- Browser Commands
- Navigation Commands
- Window Management Commands
- Frame and IFrame Commands
- Alert Commands
- Element Interaction Commands
- Element Action Commands
- Wait Commands
- Keyboard and Mouse Action Commands (Advanced User Interactions)
- Cookies Management Commands
- Screen Capture Commands
- Session Management Commands
- Browser Options and Capabilities Commands
- Logs Management Commands
- JavaScript Execution Commands
- File Upload and Download Commands
- Proxy Management Commands
- Mobile Web Testing Commands (Specific to Appium)
- Remote WebDriver Commands
- WebDriver Timeout Commands

Browser Commands

- 1. driver.get(URL): Navigates to the specified URL in the current browser window.
- 2. driver.navigate().to(URL): Navigates to the specified URL.
- 3. driver.navigate().back(): Moves the browser backward by one page.
- 4. driver.navigate().forward(): Moves the browser forward by one page.
- 5. driver.navigate().refresh(): Refreshes the current page.
- 6. driver.manage().window().maximize(): Maximizes the current browser window.
- 7. driver.manage().window().minimize(): Minimizes the current browser window.
- 8. driver.manage().window().fullscreen(): Sets the browser window to full screen.
- 9. driver.manage().window().getSize(): Retrieves the size (width and height) of the current browser window.
- 10. driver.manage().window().setSize(new Dimension(width, height)): Sets the size of the browser window.
- 11. driver.manage().window().getPosition(): Retrieves the current position of the browser window.
- 12. driver.manage().window().setPosition(new Point(x, y)): Sets the position of the browser window.
- 13. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the implicit wait time for finding elements.
- 14. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for a page to load.

- 15. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for a script to execute.
- 16. driver.switchTo().frame(frame): Switches focus to a frame using its name or ID.
- 17. driver.switchTo().frame(int index): Switches focus to a frame using its index number.
- 18. driver.switchTo().frame(webElement): Switches focus to a frame using a WebElement.
- 19. driver.switchTo().defaultContent(): Switches back to the main document after working within a frame.
- 20. driver.switchTo().parentFrame(): Switches to the parent frame of the current frame.
- 21. driver.switchTo().alert(): Switches to an alert box.
- 22. driver.switchTo().alert().accept(): Accepts the currently displayed alert.
- 23. driver.switchTo().alert().dismiss(): Dismisses the currently displayed alert.
- 24. driver.switchTo().alert().getText(): Retrieves the text from the alert box.
- 25. driver.switchTo().activeElement(): Switches to the currently focused element.
- 26. driver.switchTo().window(windowHandle): Switches focus to the specified window handle.
- 27. driver.getWindowHandle(): Retrieves the handle of the current window.
- 28. driver.getWindowHandles(): Retrieves all window handles.
- 29. driver.manage().addCookie(new Cookie("name", "value")): Adds a cookie to the current browser session.
- 30. driver.manage().deleteCookieNamed("cookieName"): Deletes the cookie with the specified name.
- 31. driver.manage().deleteAllCookies(): Deletes all cookies.
- 32. driver.manage().getCookies(): Retrieves all cookies.
- 33. driver.manage().getCookieNamed("cookieName"): Retrieves a specific cookie by name.
- 34. driver.getCurrentUrl(): Retrieves the URL of the current page.
- 35. driver.getTitle(): Retrieves the title of the current page.
- 36. driver.executeScript(script, arguments): Executes JavaScript code in the context of the current page.
- 37. driver.executeAsyncScript(script, arguments): Executes asynchronous JavaScript code in the context of the current page.
- 38. driver.findElement(By.id("id")): Locates an element by its unique ID.
- 39. driver.findElement(By.name("name")): Locates an element by its name attribute.
- 40. driver.findElement(By.className("className")): Locates an element by its class name.
- 41. driver.findElement(By.tagName("tagName")): Locates an element by its tag name.
- 42. driver.findElement(By.linkText("text")): Locates a hyperlink element by its exact text.
- 43. driver.findElement(By.partialLinkText("partialText")): Locates a hyperlink element by partial text.
- 44. driver.findElement(By.cssSelector("selector")): Locates an element using a CSS selector.
- 45. driver.findElement(By.xpath("xpath")): Locates an element using an XPath expression.
- 46. driver.findElements(By.id("id")): Locates all elements matching the ID.
- 47. driver.findElements(By.name("name")): Locates all elements matching the name attribute.
- 48. driver.findElements(By.className("className")): Locates all elements matching the class name
- 49. driver.findElements(By.tagName("tagName")): Locates all elements matching the tag name.
- 50. driver.findElements(By.linkText("text")): Locates all hyperlink elements matching the exact text.
- 51. driver.findElements(By.partialLinkText("partialText")): Locates all hyperlink elements matching partial text.

- 52. driver.findElements(By.cssSelector("selector")): Locates all elements matching the CSS selector.
- 53. driver.findElements(By.xpath("xpath")): Locates all elements matching the XPath expression.
- 54. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): An updated way to set the implicit wait time using the Duration class.
- 55. driver.manage().window().getRect(): Retrieves the position and size of the browser window as a Rectangle object.
- 56. driver.manage().window().setRect(new Rectangle(x, y, width, height)): Sets the position and size of the browser window.
- 57. driver.switchTo().frame(WebElement): Switches focus to a frame using a WebElement reference.
- 58. driver.navigate().to("URL"): Opens a new URL in the browser.
- 59. driver.navigate().back(): Moves backward in the browser's history.
- 60. driver.navigate().forward(): Moves forward in the browser's history.
- 61. driver.navigate().refresh(): Refreshes the current page.

Navigation Commands

- 1. driver.get(URL): Navigates to the specified URL in the current browser window.
- 2. driver.navigate().to(URL): Navigates to the specified URL.
- 3. driver.navigate().back(): Moves the browser backward by one page in the browser's history.
- 4. driver.navigate().forward(): Moves the browser forward by one page in the browser's history.
- 5. driver.navigate().refresh(): Refreshes the current page.
- 6. driver.manage().window().maximize(): Maximizes the current browser window.
- 7. driver.manage().window().minimize(): Minimizes the current browser window.
- 8. driver.manage().window().fullscreen(): Sets the browser window to full screen.
- 9. driver.manage().window().getSize(): Retrieves the size (width and height) of the current browser window.
- 10. driver.manage().window().setSize(new Dimension(width, height)): Sets the size of the browser window.
- 11. driver.manage().window().getPosition(): Retrieves the current position of the browser window.
- 12. driver.manage().window().setPosition(new Point(x, y)): Sets the position of the browser window
- 13. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the implicit wait time for finding elements.
- 14. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for a page to load.
- 15. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for a script to execute.
- 16. driver.switchTo().frame(frame): Switches focus to a frame using its name or ID.
- 17. driver.switchTo().frame(int index): Switches focus to a frame using its index number.
- 18. driver.switchTo().frame(webElement): Switches focus to a frame using a WebElement.
- 19. driver.switchTo().defaultContent(): Switches back to the main document after working within a frame.

- 20. driver.switchTo().parentFrame(): Switches to the parent frame of the current frame.
- 21. driver.switchTo().alert(): Switches to an alert box.
- 22. driver.switchTo().alert().accept(): Accepts the currently displayed alert.
- 23. driver.switchTo().alert().dismiss(): Dismisses the currently displayed alert.
- 24. driver.switchTo().alert().getText(): Retrieves the text from the alert box.
- 25. driver.switchTo().activeElement(): Switches to the currently focused element.
- 26. driver.switchTo().window(windowHandle): Switches focus to the specified window handle.
- 27. driver.getWindowHandle(): Retrieves the handle of the current window.
- 28. driver.getWindowHandles(): Retrieves all window handles.
- 29. driver.manage().addCookie(new Cookie("name", "value")): Adds a cookie to the current browser session.
- 30. driver.manage().deleteCookieNamed("cookieName"): Deletes the cookie with the specified name.
- 31. driver.manage().deleteAllCookies(): Deletes all cookies.
- 32. driver.manage().getCookies(): Retrieves all cookies.
- 33. driver.manage().getCookieNamed("cookieName"): Retrieves a specific cookie by name.
- 34. driver.getCurrentUrl(): Retrieves the URL of the current page.
- 35. driver.getTitle(): Retrieves the title of the current page.
- 36. driver.executeScript(script, arguments): Executes JavaScript code in the context of the current page.
- 37. driver.executeAsyncScript(script, arguments): Executes asynchronous JavaScript code in the context of the current page.
- 38. driver.findElement(By.id("id")): Locates an element by its unique ID.
- 39. driver.findElement(By.name("name")): Locates an element by its name attribute.
- 40. driver.findElement(By.className("className")): Locates an element by its class name.
- 41. driver.findElement(By.tagName("tagName")): Locates an element by its tag name.
- 42. driver.findElement(By.linkText("text")): Locates a hyperlink element by its exact text.
- 43. driver.findElement(By.partialLinkText("partialText")): Locates a hyperlink element by partial text.
- 44. driver.findElement(By.cssSelector("selector")): Locates an element using a CSS selector.
- 45. driver.findElement(By.xpath("xpath")): Locates an element using an XPath expression.
- 46. driver.findElements(By.id("id")): Locates all elements matching the ID.
- 47. driver.findElements(By.name("name")): Locates all elements matching the name attribute.
- 48. driver.findElements(By.className("className")): Locates all elements matching the class name.
- 49. driver.findElements(By.tagName("tagName")): Locates all elements matching the tag name.
- 50. driver.findElements(By.linkText("text")): Locates all hyperlink elements matching the exact text.
- 51. driver.findElements(By.partialLinkText("partialText")): Locates all hyperlink elements matching partial text.
- 52. driver.findElements(By.cssSelector("selector")): Locates all elements matching the CSS selector
- 53. driver.findElements(By.xpath("xpath")): Locates all elements matching the XPath expression.
- 54. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): An updated way to set the implicit wait time using the Duration class.

- 55. driver.manage().window().getRect(): Retrieves the position and size of the browser window as a Rectangle object.
- 56. driver.manage().window().setRect(new Rectangle(x, y, width, height)): Sets the position and size of the browser window.
- 57. driver.switchTo().frame(WebElement): Switches focus to a frame using a WebElement reference.
- 58. driver.navigate().to("URL"): Opens a new URL in the browser.
- 59. driver.navigate().back(): Moves backward in the browser's history.
- 60. driver.navigate().forward(): Moves forward in the browser's history.
- 61. driver.navigate().refresh(): Refreshes the current page.

Window Management Commands

- 1. driver.manage().window().maximize(): Maximizes the current browser window.
- 2. driver.manage().window().minimize(): Minimizes the current browser window.
- 3. driver.manage().window().fullscreen(): Sets the browser window to full screen.
- 4. driver.manage().window().getSize(): Retrieves the size (width and height) of the current browser window.
- 5. driver.manage().window().setSize(new Dimension(width, height)): Sets the size of the browser window.
- 6. driver.manage().window().getPosition(): Retrieves the current position of the browser window.
- 7. driver.manage().window().setPosition(new Point(x, y)): Sets the position of the browser window.
- 8. driver.manage().window().getRect(): Retrieves the position and size of the browser window as a Rectangle object.
- 9. driver.manage().window().setRect(new Rectangle(x, y, width, height)): Sets the position and size of the browser window.
- 10. driver.getWindowHandle(): Retrieves the handle of the current window.
- 11. driver.getWindowHandles(): Retrieves all window handles.
- 12. driver.switchTo().window(windowHandle): Switches focus to the specified window handle.
- 13. driver.close(): Closes the current window.
- 14. driver.quit(): Closes all windows and ends the WebDriver session.
- 15. driver.switchTo().newWindow(WindowType.TAB): Opens a new tab in the current browser window.
- 16. driver.switchTo().newWindow(WindowType.WINDOW): Opens a new browser window.
- 17. driver.switchTo().window(driver.getWindowHandles().iterator().next()): Switches to the first window in the list of window handles.
- 18. driver.switchTo().window(driver.getWindowHandles().toArray()[index]): Switches to a window using its index in the list of window handles.
- 19. driver.switchTo().window(driver.getWindowHandles().stream().filter(handle -> handle.equals(windowHandle)).findFirst().orElse(null)): Switches to a specific window handle using a stream filter.
- 20. driver.switchTo().window(driver.getWindowHandles().stream().reduce((first, second) -> second).orElse(null)): Switches to the last opened window handle.
- 21. driver.switchTo().window(driver.getWindowHandles().stream().findFirst().orElse(null)): Switches to the first opened window handle.

- 22. driver.getTitle(): Retrieves the title of the current page.
- 23. driver.getCurrentUrl(): Retrieves the URL of the current page.
- 24. driver.navigate().to(URL): Opens a new URL in the current window.
- 25. driver.manage().window().setSize(new Dimension(width, height)): Sets the browser window size to the specified width and height.
- 26. driver.manage().window().setPosition(new Point(x, y)): Moves the browser window to the specified position on the screen.
- 27. driver.manage().window().maximize(): Maximizes the browser window to fill the screen.
- 28. driver.manage().window().fullscreen(): Switches the browser to full-screen mode.
- 29. driver.manage().window().minimize(): Minimizes the browser window to the taskbar.
- 30. driver.manage().window().getRect(): Gets the current size and position of the browser window as a Rectangle object.
- 31. driver.manage().window().setRect(new Rectangle(x, y, width, height)): Sets the size and position of the browser window.
- 32. driver.manage().window().getSize().getWidth(): Retrieves the width of the browser window.
- 33. driver.manage().window().getSize().getHeight(): Retrieves the height of the browser window.
- 34. driver.manage().window().getPosition().getX(): Retrieves the X-coordinate of the browser window's position.
- 35. driver.manage().window().getPosition().getY(): Retrieves the Y-coordinate of the browser window's position.
- 36. driver.manage().window().setSize(new Dimension(1920, 1080)): Sets the browser window size to 1920x1080 pixels.
- 37. driver.manage().window().setPosition(new Point(100, 100)): Moves the browser window to the position (100, 100) on the screen.
- 38. driver.manage().window().maximize(): Expands the browser window to fill the entire screen.
- 39. driver.switchTo().window(driver.getWindowHandles().toArray()[1]): Switches to the second window handle in the list.
- 40. driver.switchTo().window(driver.getWindowHandles().stream().findAny().orElse(null)): Switches to any available window handle.
- 41. driver.switchTo().window(driver.getWindowHandles().stream().sorted().findFirst().orElse(null)): Switches to the first sorted window handle.
- 42. driver.manage().window().getSize().getWidth(): Gets the width of the current browser window
- 43. driver.manage().window().getSize().getHeight(): Gets the height of the current browser window.
- 44. driver.manage().window().getPosition().getX(): Gets the X position of the browser window.
- 45. driver.manage().window().getPosition().getY(): Gets the Y position of the browser window.
- 46. driver.manage().window().setRect(new Rectangle(0, 0, 1366, 768)): Sets the browser window size to 1366x768 pixels and position to (0, 0).
- 47. driver.manage().window().setRect(new Rectangle(200, 200, 1024, 768)): Sets the browser window size to 1024x768 pixels and position to (200, 200).
- 48. driver.manage().window().getRect().getWidth(): Gets the width of the current browser window rectangle.

- 49. driver.manage().window().getRect().getHeight(): Gets the height of the current browser window rectangle.
- 50. driver.manage().window().getRect().getX(): Gets the X position of the current browser window rectangle.
- 51. driver.manage().window().getRect().getY(): Gets the Y position of the current browser window rectangle.
- 52. driver.manage().window().setSize(new Dimension(800, 600)): Sets the browser window size to 800x600 pixels.
- 53. driver.manage().window().setPosition(new Point(50, 50)): Moves the browser window to the position (50, 50) on the screen.

Frames and iframes Commands

- 1. driver.switchTo().frame(frame): Switches focus to a frame using its name or ID.
- 2. driver.switchTo().frame(int index): Switches focus to a frame using its index number.
- 3. driver.switchTo().frame(webElement): Switches focus to a frame using a WebElement reference.
- 4. driver.switchTo().defaultContent(): Switches back to the main document from a frame.
- 5. driver.switchTo().parentFrame(): Switches to the parent frame of the currently focused frame.
- 6. driver.switchTo().frame("frameName"): Switches focus to a frame using its name.
- 7. driver.switchTo().frame("frameId"): Switches focus to a frame using its ID.
- 8. driver.switchTo().frame(0): Switches focus to the first frame on the page (index 0).
- 9. driver.switchTo().frame(1): Switches focus to the second frame on the page (index 1).
- 10. driver.switchTo().frame(driver.findElement(By.tagName("iframe"))): Switches focus to the first iframe found on the page.
- 11. driver.switchTo().frame(driver.findElement(By.name("frameName"))): Switches focus to a frame identified by its name.
- 12. driver.switchTo().frame(driver.findElement(By.id("frameId"))): Switches focus to a frame identified by its ID.
- 13. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@name='frameName']"))): Switches focus to a frame identified by an XPath expression.
- 14. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe#frameId"))): Switches focus to a frame identified by a CSS selector.
- 15. driver.switchTo().frame(driver.findElement(By.className("frameClassName"))): Switches focus to a frame identified by its class name.
- 16. driver.switchTo().defaultContent(): Returns to the main content from a nested frame.
- 17. driver.switchTo().parentFrame(): Returns to the immediate parent frame from a nested frame.
- 18. driver.switchTo().frame(driver.findElement(By.id("nestedFrameId")).findElement(By.tagNa me("iframe"))): Switches to an iframe inside another frame.
- 19. driver.switchTo().frame(driver.findElement(By.id("nestedFrameId")).findElement(By.name ("nestedIframe"))): Switches to an iframe inside another frame identified by name.
- 20. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@id='nestedFrameId']")).fi ndElement(By.cssSelector("iframe#nestedIframe"))): Switches to a nested iframe using XPath and CSS selector.

- 21. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[1]"))): Switches focus to the first iframe found on the page.
- 22. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[last()]"))): Switches focus to the last iframe found on the page.
- 23. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[position()=2]"))): Switches focus to the second iframe on the page using XPath.
- 24. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[contains(@src, 'frameName')]"))): Switches focus to a frame based on a partial match of the src attribute.
- 25. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[starts-with(@id, 'frameIdPrefix')]"))): Switches focus to a frame based on a prefix match of the ID attribute.
- 26. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[not(@id='excludedFrameI d')]"))): Switches focus to a frame excluding a specific ID.
- 27. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[class*='frameClassName']"))): Switches focus to a frame based on a partial class name match.
- 28. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[id^='frameIdPrefix']"))): Switches focus to a frame based on an ID prefix match using CSS selector.
- 29. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[id\$='frameIdSuffix']"))) : Switches focus to a frame based on an ID suffix match using CSS selector.
- 30. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[class~='frameClassNa me']"))): Switches focus to a frame based on a class name containing a specific value using CSS selector.
- 31. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@title='frameTitle']"))): Switches focus to a frame identified by its title attribute.
- 32. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@src='frameSrc']"))): Switches focus to a frame identified by its src attribute.
- 33. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[not(@src)]"))): Switches focus to a frame that does not have a src attribute.
- 34. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[title='frameTitle']"))): Switches focus to a frame identified by its title attribute using CSS selector.
- 35. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[src\$='frameSrcSuffix']"))): Switches focus to a frame based on an ending match of the src attribute using CSS selector.
- 36. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[src^='frameSrcPrefix']"))): Switches focus to a frame based on a beginning match of the src attribute using CSS selector.
- 37. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[src*='frameSrcSubstrin g']"))): Switches focus to a frame based on a substring match of the src attribute using CSS selector.
- 38. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@id='frameId'][@class='frameClass']"))): Switches focus to a frame based on both ID and class attributes using XPath.
- 39. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@name='frameName' and @title='frameTitle']"))): Switches focus to a frame based on both name and title attributes using XPath.
- 40. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@id='frameId' and @src='frameSrc']"))): Switches focus to a frame based on both ID and src attributes using XPath.

- 41. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[contains(@title, 'frameTitleSubstring')]"))): Switches focus to a frame based on a substring match of the title attribute using XPath.
- 42. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@id='frameId' or @src='frameSrc']"))): Switches focus to a frame based on either ID or src attribute using XPath.
- 43. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@id='frameId' and not(@src)]"))): Switches focus to a frame based on ID attribute and without src attribute using XPath.
- 44. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@class='frameClass' and contains(@src, 'frameSrcSubstring')]"))): Switches focus to a frame based on class and substring match of the src attribute using XPath.
- 45. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@class='frameClass' or @id='frameId']"))): Switches focus to a frame based on class or ID attribute using XPath.
- 46. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[not(contains(@src, 'excludedSrcSubstring'))]"))): Switches focus to a frame excluding a substring match of the src attribute using XPath.
- 47. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[contains(@title, 'titleSubstring') or @id='frameId']"))): Switches focus to a frame based on title substring or ID attribute using XPath.
- 48. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[id|='frameIdPrefix']"))) : Switches focus to a frame based on a hyphen-separated list of ID prefixes using CSS selector.
- 49. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[title\$='frameTitleSuffix']"))): Switches focus to a frame based on an ending match of the title attribute using CSS selector.
- 50. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[class*='frameClassSubs tring']"))): Switches focus to a frame based on a class name substring match using CSS selector.
- 51. driver.switchTo().frame(driver.findElement(By.cssSelector("iframe[title*='titleSubstring']"))): Switches focus to a frame based on a title substring match using CSS selector.
- 52. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@name='frameName'][con tains(@src, 'frameSrcSubstring')]"))): Switches focus to a frame based on name and src substring match using XPath.
- 53. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@id='frameId' and @title='frameTitle']"))): Switches focus to a frame based on both ID and title attributes using XPath.
- 54. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@name='frameName'][not (@src='excludedSrc')]"))): Switches focus to a frame based on name and excludes specific src using XPath.
- 55. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[@class='frameClass'][not(@title='excludedTitle')]"))): Switches focus to a frame based on class and excludes specific title using XPath.
- 56. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[contains(@id, 'frameIdSubstring')]"))): Switches focus to a frame based on an ID substring match using XPath.

- 57. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[contains(@class, 'frameClassSubstring')]"))): Switches focus to a frame based on a class substring match using XPath.
- 58. driver.switchTo().frame(driver.findElement(By.xpath("//iframe[starts-with(@id, 'frameIdPrefix')]"))): Switches focus to a frame based on a prefix match of the ID attribute using XPath.

Alert Commands

- 1. driver.switchTo().alert(): Switches to the currently displayed alert.
- 2. driver.switchTo().alert().accept(): Accepts the currently displayed alert.
- 3. driver.switchTo().alert().dismiss(): Dismisses the currently displayed alert.
- 4. driver.switchTo().alert().getText(): Retrieves the text from the currently displayed alert.
- 5. driver.switchTo().alert().sendKeys("text"): Sends the specified text to the currently displayed prompt alert.
- 6. driver.switchTo().alert().accept(): Accepts the alert or prompt.
- 7. driver.switchTo().alert().dismiss(): Dismisses the alert or prompt.
- 8. driver.switchTo().alert().getText(): Retrieves the text of the alert or prompt.
- 9. driver.switchTo().alert().sendKeys("input text"): Inputs text into a prompt alert.
- 10. driver.switchTo().alert().accept(): Accepts the confirmation dialog.
- 11. driver.switchTo().alert().dismiss(): Dismisses the confirmation dialog.
- 12. driver.switchTo().alert().getText(): Gets the text of the confirmation dialog.
- 13. driver.switchTo().alert().sendKeys("sample text"): Sends text to the prompt dialog.
- 14. driver.switchTo().alert().accept(): Accepts a prompt dialog with text.
- 15. driver.switchTo().alert().dismiss(): Dismisses a prompt dialog without text.
- 16. driver.switchTo().alert().getText(): Retrieves text from a prompt dialog.
- 17. driver.switchTo().alert().sendKeys("text input"): Inputs text into a prompt dialog.
- 18. driver.switchTo().alert().accept(): Confirms an alert dialog.
- 19. driver.switchTo().alert().dismiss(): Cancels an alert dialog.
- 20. driver.switchTo().alert().getText(): Retrieves the text from an alert dialog.
- 21. driver.switchTo().alert().sendKeys("input"): Types input into a prompt alert.
- 22. driver.switchTo().alert().accept(): Accepts an alert with a single button.
- 23. driver.switchTo().alert().dismiss(): Dismisses an alert with a single button.
- 24. driver.switchTo().alert().getText(): Gets the text content of an alert with a single button.
- 25. driver.switchTo().alert().sendKeys("text"): Sends a text string to a prompt alert.
- 26. driver.switchTo().alert().accept(): Accepts a prompt alert with text.
- 27. driver.switchTo().alert().dismiss(): Dismisses a prompt alert without entering text.
- 28. driver.switchTo().alert().getText(): Retrieves the text from a prompt alert.
- 29. driver.switchTo().alert().sendKeys("sample"): Inputs sample text into a prompt alert.
- 30. driver.switchTo().alert().accept(): Confirms a prompt alert with provided text.
- 31. driver.switchTo().alert().dismiss(): Cancels a prompt alert with provided text.
- 32. driver.switchTo().alert().getText(): Gets the prompt alert's message.
- 33. driver.switchTo().alert().sendKeys("example text"): Types example text into a prompt alert.
- 34. driver.switchTo().alert().accept(): Accepts a prompt dialog with example text.
- 35. driver.switchTo().alert().dismiss(): Dismisses a prompt dialog with example text.
- 36. driver.switchTo().alert().getText(): Gets the message from a prompt dialog with example text.

- 37. driver.switchTo().alert().sendKeys("input example"): Enters input example into a prompt dialog.
- 38. driver.switchTo().alert().accept(): Accepts an example prompt dialog.
- 39. driver.switchTo().alert().dismiss(): Dismisses an example prompt dialog.
- 40. driver.switchTo().alert().getText(): Retrieves text from an example prompt dialog.
- 41. driver.switchTo().alert().sendKeys("testing text"): Inputs testing text into a prompt dialog.
- 42. driver.switchTo().alert().accept(): Accepts a testing prompt dialog.
- 43. driver.switchTo().alert().dismiss(): Dismisses a testing prompt dialog.
- 44. driver.switchTo().alert().getText(): Gets the testing text from a prompt dialog.
- 45. driver.switchTo().alert().sendKeys("test input"): Sends test input to a prompt dialog.
- 46. driver.switchTo().alert().accept(): Confirms a test prompt dialog.
- 47. driver.switchTo().alert().dismiss(): Cancels a test prompt dialog.
- 48. driver.switchTo().alert().getText(): Retrieves the text from a test prompt dialog.
- 49. driver.switchTo().alert().sendKeys("text entry"): Types text entry into a prompt alert.
- 50. driver.switchTo().alert().accept(): Accepts a text entry prompt alert.
- 51. driver.switchTo().alert().dismiss(): Dismisses a text entry prompt alert.
- 52. driver.switchTo().alert().getText(): Gets the text from a text entry prompt alert.

Element Interaction Commands

- 1. driver.findElement(By.id("elementId")): Finds an element by its ID attribute.
- 2. driver.findElement(By.name("elementName")): Finds an element by its name attribute.
- 3. driver.findElement(By.className("className")): Finds an element by its class name.
- 4. driver.findElement(By.tagName("tagName")): Finds an element by its tag name.
- 5. driver.findElement(By.linkText("linkText")): Finds a link element by its visible text.
- 6. driver.findElement(By.partialLinkText("partialText")): Finds a link element by partial match of its visible text.
- 7. driver.findElement(By.xpath("xpathExpression")): Finds an element using an XPath expression.
- 8. driver.findElement(By.cssSelector("cssSelector")): Finds an element using a CSS selector.
- 9. driver.findElement(By.xpath("//input[@name='username']")): Finds an input element with the name attribute 'username'.
- 10. driver.findElement(By.cssSelector("input[name='username']")): Finds an input element with the name attribute 'username' using CSS selector.
- 11. driver.findElement(By.xpath("//button[text()='Submit']")): Finds a button element with the text 'Submit'.
- 12. driver.findElement(By.cssSelector("button.submitButton")): Finds a button element with the class 'submitButton'.
- 13. driver.findElement(By.xpath("//div[@class='container']//input")): Finds an input element inside a div with class 'container'.
- 14. driver.findElement(By.cssSelector("div.container input")): Finds an input element inside a div with class 'container' using CSS selector.
- 15. driver.findElement(By.xpath("//input[@type='text']")): Finds an input element with type 'text'.
- 16. driver.findElement(By.cssSelector("input[type='text']")): Finds an input element with type 'text' using CSS selector.

- 17. driver.findElement(By.xpath("//textarea[@id='comments']")): Finds a textarea element with the ID 'comments'.
- 18. driver.findElement(By.cssSelector("textarea#comments")): Finds a textarea element with the ID 'comments' using CSS selector.
- 19. driver.findElement(By.xpath("//input[contains(@name, 'user')]")): Finds an input element with a name containing 'user'.
- 20. driver.findElement(By.cssSelector("input[name*='user']")): Finds an input element with a name containing 'user' using CSS selector.
- 21. driver.findElement(By.xpath("//button[@class='btn btn-primary']")): Finds a button element with classes 'btn' and 'btn-primary'.
- 22. driver.findElement(By.cssSelector("button.btn.btn-primary")): Finds a button element with classes 'btn' and 'btn-primary' using CSS selector.
- 23. driver.findElement(By.xpath("//div[@id='main']//span[text()='Hello']")): Finds a span element with text 'Hello' inside a div with ID 'main'.
- 24. driver.findElement(By.cssSelector("div#main span.hello")): Finds a span element with class 'hello' inside a div with ID 'main' using CSS selector.
- 25. driver.findElement(By.xpath("//a[@href='/home']")): Finds an anchor element with href attribute '/home'.
- 26. driver.findElement(By.cssSelector("a[href='/home']")): Finds an anchor element with href attribute '/home' using CSS selector.
- 27. driver.findElement(By.xpath("//input[@type='checkbox' and @checked]")): Finds a checked checkbox input element.
- 28. driver.findElement(By.cssSelector("input[type='checkbox']:checked")): Finds a checked checkbox input element using CSS selector.
- 29. driver.findElement(By.xpath("//input[@type='radio' and @value='option1']")): Finds a radio button input element with value 'option1'.
- 30. driver.findElement(By.cssSelector("input[type='radio'][value='option1']")): Finds a radio button input element with value 'option1' using CSS selector.
- 31. driver.findElement(By.xpath("//select[@name='options']//option[text()='Option 1']")): Finds an option element with text 'Option 1' inside a select element with name 'options'.
- 32. driver.findElement(By.cssSelector("select[name='options'] option[value='1']")): Finds an option element with value '1' inside a select element with name 'options' using CSS selector.
- 33. driver.findElement(By.xpath("//form[@id='loginForm']//input[@name='password']")): Finds a password input element inside a form with ID 'loginForm'.
- 34. driver.findElement(By.cssSelector("form#loginForm input[name='password']")): Finds a password input element inside a form with ID 'loginForm' using CSS selector.
- 35. driver.findElement(By.xpath("//div[contains(@class, 'alert')]/button")): Finds a button element inside a div with class containing 'alert'.
- 36. driver.findElement(By.cssSelector("div.alert button")): Finds a button element inside a div with class 'alert' using CSS selector.
- 37. driver.findElement(By.xpath("//table[@id='data']//tr[1]/td[2]")): Finds a table cell in the first row and second column of a table with ID 'data'.
- 38. driver.findElement(By.cssSelector("table#data tr:nth-child(1) td:nth-child(2)")): Finds a table cell in the first row and second column using CSS selector.
- 39. driver.findElement(By.xpath("//div[@id='sidebar']//a[contains(text(), 'Home')]")): Finds an anchor element containing text 'Home' inside a div with ID 'sidebar'.

- 40. driver.findElement(By.cssSelector("div#sidebar a:contains('Home')")): Finds an anchor element containing text 'Home' inside a div with ID 'sidebar' using CSS selector.
- 41. driver.findElement(By.xpath("//input[@name='search']")): Finds a search input element by its name attribute.
- 42. driver.findElement(By.cssSelector("input[name='search']")): Finds a search input element by its name attribute using CSS selector.
- 43. driver.findElement(By.xpath("//button[contains(@class, 'submit')]")): Finds a button element with class containing 'submit'.
- 44. driver.findElement(By.cssSelector("button.submit")): Finds a button element with class 'submit' using CSS selector.
- 45. driver.findElement(By.xpath("//a[@class='nav-link'][text()='Contact']")): Finds a link with text 'Contact' and class 'nav-link'.
- 46. driver.findElement(By.cssSelector("a.nav-link:contains('Contact')")): Finds a link with text 'Contact' and class 'nav-link' using CSS selector.
- 47. driver.findElement(By.xpath("//input[@type='text' and @placeholder='Search']")): Finds a text input element with placeholder 'Search'.
- 48. driver.findElement(By.cssSelector("input[type='text'][placeholder='Search']")): Finds a text input element with placeholder 'Search' using CSS selector.
- 49. driver.findElement(By.xpath("//form[@id='searchForm']//input[@name='query']")): Finds an input element with name 'query' inside a form with ID 'searchForm'.
- 50. driver.findElement(By.cssSelector("form#searchForm input[name='query']")): Finds an input element with name 'query' inside a form with ID 'searchForm' using CSS selector.
- 51. driver.findElement(By.xpath("//span[@class='error-message']")): Finds a span element with class 'error-message'.
- 52. driver.findElement(By.cssSelector("span.error-message")): Finds a span element with class 'error-message' using CSS selector.
- 53. driver.findElement(By.xpath("//input[@type='submit']")): Finds a submit button input element.
- 54. driver.findElement(By.cssSelector("input[type='submit']")): Finds a submit button input element using CSS selector.
- 55. driver.findElement(By.xpath("//div[@id='content']//button[text()='Submit']")): Finds a submit button inside a div with ID 'content'.
- 56. driver.findElement(By.cssSelector("div#content button.submit")): Finds a submit button inside a div with ID 'content' using CSS selector.
- 57. driver.findElement(By.xpath("//input[@type='email' and @name='email']")): Finds an email input element with name 'email'.
- 58. driver.findElement(By.cssSelector("input[type='email'][name='email']")): Finds an email input element with name 'email' using CSS selector.
- 59. driver.findElement(By.xpath("//select[@id='dropdown']//option[text()='Option A']")): Finds an option with text 'Option A' inside a select element with ID 'dropdown'.
- 60. driver.findElement(By.cssSelector("select#dropdown option[value='A']")): Finds an option with value 'A' inside a select element with ID 'dropdown' using CSS selector.
- 61. driver.findElement(By.xpath("//input[@type='file']")): Finds a file input element.
- 62. driver.findElement(By.cssSelector("input[type='file']")): Finds a file input element using CSS selector.
- 63. driver.findElement(By.xpath("//textarea[@rows='4']")): Finds a textarea element with 4 rows.

- 64. driver.findElement(By.cssSelector("textarea[rows='4']")): Finds a textarea element with 4 rows using CSS selector.
- 65. driver.findElement(By.xpath("//button[@type='button' and text()='Cancel']")): Finds a button element with type 'button' and text 'Cancel'.
- 66. driver.findElement(By.cssSelector("button[type='button']:contains('Cancel')")): Finds a button element with type 'button' and text 'Cancel' using CSS selector.

Element Action Commands

- 1. driver.click(): Clicks on the specified element.
- 2. driver.sendKeys("text"): Sends the specified text to the element, simulating keyboard input.
- 3. driver.clear(): Clears the text input field.
- 4. driver.submit(): Submits the form containing the element.
- 5. driver.getAttribute("attributeName"): Retrieves the value of the specified attribute of the element.
- 6. driver.getText(): Gets the visible text of the element.
- 7. driver.isDisplayed(): Checks if the element is visible on the page.
- 8. driver.isEnabled(): Checks if the element is enabled.
- 9. driver.isSelected(): Checks if the element is selected, applicable for checkboxes and radio buttons.
- 10. driver.hover(): Hovers the mouse over the specified element (requires Actions class).
- 11. driver.doubleClick(): Double-clicks on the specified element (requires Actions class).
- 12. driver.rightClick(): Performs a right-click on the element (requires Actions class).
- 13. driver.dragAndDrop(source, target): Drags an element from source to target (requires Actions class).
- 14. driver.moveToElement(element): Moves the mouse to the center of the specified element (requires Actions class).
- 15. driver.clickAndHold(): Clicks and holds the specified element (requires Actions class).
- 16. driver.release(): Releases the held element (requires Actions class).
- 17. driver.perform(): Executes all actions in the Actions class (requires Actions class).
- 18. driver.sendKeys(Keys.ENTER): Sends the Enter key to the element.
- 19. driver.sendKeys(Keys.TAB): Sends the Tab key to the element.
- 20. driver.sendKeys(Keys.BACK_SPACE): Sends the Backspace key to the element.
- 21. driver.sendKeys(Keys.ESCAPE): Sends the Escape key to the element.
- 22. driver.sendKeys(Keys.CONTROL, "a"): Sends Ctrl+A key combination to the element.
- 23. driver.sendKeys(Keys.CONTROL, "c"): Sends Ctrl+C key combination to the element.
- 24. driver.sendKeys(Keys.CONTROL, "v"): Sends Ctrl+V key combination to the element.
- 25. driver.sendKeys(Keys.CONTROL, "x"): Sends Ctrl+X key combination to the element.
- 26. driver.executeScript("arguments[0].scrollIntoView(true);", element): Scrolls the element into view using JavaScript.
- 27. driver.executeScript("arguments[0].click();", element): Clicks on the element using JavaScript.
- 28. driver.executeScript("arguments[0].value='text';", element): Sets the value of an input field using JavaScript.
- 29. driver.executeScript("arguments[0].style.border='2px solid red';", element): Highlights the element by changing its border color using JavaScript.

- 30. driver.executeScript("return arguments[0].innerHTML;", element): Retrieves the HTML content of the element using JavaScript.
- 31. driver.executeScript("arguments[0].scrollBy(0, -100);", element): Scrolls the element up by 100 pixels using JavaScript.
- 32. driver.executeScript("arguments[0].focus();", element): Focuses on the element using JavaScript.
- 33. driver.executeScript("arguments[0].blur();", element): Removes focus from the element using JavaScript.
- 34. driver.executeScript("arguments[0].select();", element): Selects the content of a text input field using JavaScript.
- 35. driver.executeScript("arguments[0].setAttribute('attributeName', 'value');", element): Sets an attribute of the element using JavaScript.
- 36. driver.executeScript("arguments[0].click();", element): Clicks the element using JavaScript.
- 37. driver.sendKeys(Keys.PAGE_DOWN): Sends the Page Down key to scroll down the page.
- 38. driver.sendKeys(Keys.PAGE_UP): Sends the Page Up key to scroll up the page.
- 39. driver.sendKeys(Keys.HOME): Sends the Home key to move the cursor to the beginning of the line.
- 40. driver.sendKeys(Keys.END): Sends the End key to move the cursor to the end of the line.
- 41. driver.sendKeys(Keys.ARROW_DOWN): Sends the Down Arrow key to navigate down.
- 42. driver.sendKeys(Keys.ARROW_UP): Sends the Up Arrow key to navigate up.
- 43. driver.sendKeys(Keys.ARROW_LEFT): Sends the Left Arrow key to navigate left.
- 44. driver.sendKeys(Keys.ARROW_RIGHT): Sends the Right Arrow key to navigate right.
- 45. driver.findElement(By.xpath("xpath")).click(): Clicks on an element located by XPath.
- 46. driver.findElement(By.cssSelector("cssSelector")).sendKeys("text"): Sends text to an element located by CSS selector.
- 47. driver.findElement(By.id("elementId")).clear(): Clears the text input field of an element located by ID.
- 48. driver.findElement(By.name("elementName")).submit(): Submits the form containing the element located by name.
- 49. driver.findElement(By.className("className")).getAttribute("attributeName"): Retrieves the value of the specified attribute from an element located by class name.
- 50. driver.findElement(By.tagName("tagName")).getText(): Gets the visible text from an element located by tag name.
- 51. driver.findElement(By.linkText("linkText")).click(): Clicks on a link element located by visible text.
- 52. driver.findElement(By.partialLinkText("partialText")).click(): Clicks on a link element located by partial text.
- 53. driver.findElement(By.xpath("//input")).sendKeys("text"): Sends text to an input element located by XPath.
- 54. driver.findElement(By.cssSelector("input")).click(): Clicks on an input element located by CSS selector.
- 55. driver.findElement(By.xpath("//button")).click(): Clicks on a button element located by XPath.
- 56. driver.findElement(By.cssSelector("button")).click(): Clicks on a button element located by CSS selector.

Wait Commands

- 1. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10)): Sets an implicit wait of 10 seconds for the WebDriver to wait for elements to be available.
- 2. WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(10));: Creates a WebDriverWait instance with a timeout of 10 seconds.
- 3. wait.until(ExpectedConditions.visibilityOf(element)): Waits until the specified element is visible on the page.
- 4. wait.until(ExpectedConditions.elementToBeClickable(element)): Waits until the specified element is clickable.
- 5. wait.until(ExpectedConditions.titleIs("Page Title")): Waits until the page title matches the specified title.
- 6. wait.until(ExpectedConditions.urlContains("partOfUrl")): Waits until the current URL contains the specified substring.
- 7. wait.until(ExpectedConditions.textToBePresentInElement(element, "text")): Waits until the specified text is present in the given element.
- 8. wait.until(ExpectedConditions.elementToBeSelected(element)): Waits until the specified element is selected.
- 9. wait.until(ExpectedConditions.invisibilityOf(element)): Waits until the specified element is not visible.
- 10. wait.until(ExpectedConditions.stalenessOf(element)): Waits until the specified element is no longer attached to the DOM.
- 11. wait.until(ExpectedConditions.alertIsPresent()): Waits until an alert is present on the page.
- 12. wait.until(ExpectedConditions.frameToBeAvailableAndSwitchToIt(frameElement)): Waits until the specified frame is available and switches to it.
- 13. wait.until(ExpectedConditions.numberOfElementsToBeMoreThan(By.xpath("xpath"), 5)): Waits until the number of elements located by the XPath is greater than 5.
- 14. wait.until(ExpectedConditions.elementToBeClickable(By.id("elementId"))): Waits until the element located by ID is clickable.
- 15. wait.until(ExpectedConditions.visibilityOfElementLocated(By.className("className"))): Waits until the element located by class name is visible.
- 16. wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("//tagName"))): Waits until the element located by XPath is visible.
- 17. wait.until(ExpectedConditions.visibilityOfElementLocated(By.cssSelector("cssSelector"))): Waits until the element located by CSS selector is visible.
- 18. wait.until(ExpectedConditions.textToBePresentInElementLocated(By.name("elementName"), "text")): Waits until the specified text is present in the element located by name.
- 19. wait.until(ExpectedConditions.textToBePresentInElementLocated(By.xpath("//element")), "text"): Waits until the specified text is present in the element located by XPath.
- 20. wait.until(ExpectedConditions.attributeToBe(By.id("elementId"), "attributeName", "value")): Waits until the specified attribute of the element located by ID has the specified value.
- 21. wait.until(ExpectedConditions.attributeToBe(By.cssSelector("cssSelector"), "attributeName", "value")): Waits until the specified attribute of the element located by CSS selector has the specified value.
- 22. wait.until(ExpectedConditions.textToBe(By.className("className"), "text")): Waits until the text of the element located by class name matches the specified text.

- 23. wait.until(ExpectedConditions.titleContains("partialTitle")): Waits until the page title contains the specified partial title.
- 24. wait.until(ExpectedConditions.urlToBe("http://example.com")): Waits until the current URL matches the specified URL.
- 25. wait.until(ExpectedConditions.urlMatches("regexPattern")): Waits until the current URL matches the specified regex pattern.
- 26. wait.until(ExpectedConditions.frameToBeAvailableAndSwitchToIt(By.id("frameId"))): Waits until the frame located by ID is available and switches to it.
- 27. wait.until(ExpectedConditions.frameToBeAvailableAndSwitchToIt(By.xpath("//iframe"))): Waits until the frame located by XPath is available and switches to it.
- 28. wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//button"))): Waits until the button element located by XPath is clickable.
- 29. wait.until(ExpectedConditions.invisibilityOfElementLocated(By.id("elementId"))): Waits until the element located by ID is not visible.
- 30. wait.until(ExpectedConditions.stalenessOfElementLocated(By.name("elementName"))): Waits until the element located by name is no longer attached to the DOM.
- 31. wait.until(ExpectedConditions.alertIsPresent()): Waits until an alert is present on the page.
- 32. wait.until(ExpectedConditions.elementToBeClickable(By.cssSelector("button.submit"))): Waits until the button element located by CSS selector is clickable.
- 33. wait.until(ExpectedConditions.textToBePresentInElementLocated(By.className("message"), "Success")): Waits until the text 'Success' is present in the element located by class name.
- 34. wait.until(ExpectedConditions.elementToBeClickable(By.className("submitButton"))): Waits until the element located by class name is clickable.
- 35. wait.until(ExpectedConditions.titleContains("Dashboard")): Waits until the page title contains 'Dashboard'.
- 36. wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//input[@type='submit']"))): Waits until the submit button element located by XPath is clickable.
- 37. wait.until(ExpectedConditions.visibilityOfElementLocated(By.linkText("Login"))): Waits until the link with text 'Login' is visible.
- 38. wait.until(ExpectedConditions.textToBePresentInElementLocated(By.xpath("//div[@id='m essage']"), "Welcome")): Waits until the text 'Welcome' is present in the element located by XPath.
- 39. wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//a[@href='logout']"))): Waits until the link element with href 'logout' is clickable.
- 40. wait.until(ExpectedConditions.visibilityOfElementLocated(By.cssSelector("span.error"))): Waits until the span element with class 'error' is visible.
- 41. wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//button[@type='submit']"))): Waits until the submit button element located by XPath is clickable.
- 42. wait.until(ExpectedConditions.textToBePresentInElementLocated(By.cssSelector("div.alert"), "Error")): Waits until the text 'Error' is present in the element located by CSS selector.
- 43. wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("//h1[text()='Welcome ']"))): Waits until the h1 element with text 'Welcome' is visible.
- 44. wait.until(ExpectedConditions.urlToBe("https://example.com/home")): Waits until the current URL matches 'https://example.com/home'.
- 45. wait.until(ExpectedConditions.visibilityOfElementLocated(By.id("username"))): Waits until the element with ID 'username' is visible.

- 46. wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//a[text()='Help']"))): Waits until the link with text 'Help' is clickable.
- 47. wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//input[@type='text']"))): Waits until the text input field element located by XPath is clickable.
- 48. wait.until(ExpectedConditions.visibilityOfElementLocated(By.cssSelector("input[type='pass word']"))): Waits until the password input field is visible.
- 49. wait.until(ExpectedConditions.frameToBeAvailableAndSwitchToIt(By.xpath("//iframe[@na me='frame']"))): Waits until the iframe with name 'frame' is available and switches to it.
- 50. wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//button[@id='submit']"))): Waits until the button with ID 'submit' is clickable.
- 51. wait.until(ExpectedConditions.visibilityOfElementLocated(By.name("searchField"))): Waits until the search field element located by name is visible.

Keyboard and Mouse Action Commands (Advanced User Interactions)

- 1. Actions actions = new Actions(driver): Creates a new Actions instance for performing advanced user interactions.
- 2. actions.moveToElement(element).perform(): Moves the mouse to the center of the specified element and performs the action.
- 3. actions.click(element).perform(): Clicks on the specified element.
- 4. actions.doubleClick(element).perform(): Double-clicks on the specified element.
- 5. actions.contextClick(element).perform(): Performs a right-click on the specified element.
- 6. actions.clickAndHold(element).perform(): Clicks and holds the specified element.
- 7. actions.release(element).perform(): Releases the held element.
- 8. actions.dragAndDrop(source, target).perform(): Drags an element from the source to the target.
- 9. actions.sendKeys(Keys.ENTER).perform(): Sends the Enter key to the element.
- 10. actions.sendKeys(Keys.TAB).perform(): Sends the Tab key to the element.
- 11. actions.sendKeys(Keys.BACK_SPACE).perform(): Sends the Backspace key to the element.
- 12. actions.sendKeys(Keys.ESCAPE).perform(): Sends the Escape key to the element.
- 13. actions.sendKeys(Keys.CONTROL, "a").perform(): Sends Ctrl+A key combination to the element.
- 14. actions.sendKeys(Keys.CONTROL, "c").perform(): Sends Ctrl+C key combination to the element.
- 15. actions.sendKeys(Keys.CONTROL, "v").perform(): Sends Ctrl+V key combination to the element.
- 16. actions.sendKeys(Keys.CONTROL, "x").perform(): Sends Ctrl+X key combination to the element.
- 17. actions.moveToElement(element, offsetX, offsetY).perform(): Moves the mouse to the specified offset from the center of the element.
- 18. actions.keyDown(Keys.SHIFT).sendKeys("text").keyUp(Keys.SHIFT).perform(): Sends text with Shift key held down.
- 19. actions.keyDown(Keys.ALT).sendKeys("text").keyUp(Keys.ALT).perform(): Sends text with Alt key held down.
- 20. actions.keyDown(Keys.CONTROL).sendKeys("text").keyUp(Keys.CONTROL).perform(): Sends text with Ctrl key held down.
- 21. actions.pause(Duration.ofSeconds(2)).perform(): Pauses the execution for 2 seconds.

- 22. actions.moveByOffset(100, 200).perform(): Moves the mouse by an offset of 100 pixels horizontally and 200 pixels vertically.
- 23. actions.moveToElement(element).click().perform(): Moves to the element and clicks on it.
- 24. actions.doubleClick().perform(): Double-clicks at the current mouse position.
- 25. actions.contextClick().perform(): Right-clicks at the current mouse position.
- 26. actions.clickAndHold().perform(): Clicks and holds at the current mouse position.
- 27. actions.dragAndDropBy(source, 100, 200).perform(): Drags an element from the source to a position offset by 100 pixels horizontally and 200 pixels vertically.
- 28. actions.scrollByAmount(0, 100).perform(): Scrolls vertically by 100 pixels.
- 29. actions.scrollByAmount(100, 0).perform(): Scrolls horizontally by 100 pixels.
- 30. actions.sendKeys(Keys.PAGE_DOWN).perform(): Sends the Page Down key to scroll down the page.
- 31. actions.sendKeys(Keys.PAGE_UP).perform(): Sends the Page Up key to scroll up the page.
- 32. actions.sendKeys(Keys.HOME).perform(): Sends the Home key to move the cursor to the start of the line.
- 33. actions.sendKeys(Keys.END).perform(): Sends the End key to move the cursor to the end of the line.
- 34. actions.sendKeys(Keys.ARROW_DOWN).perform(): Sends the Down Arrow key to navigate down.
- 35. actions.sendKeys(Keys.ARROW_UP).perform(): Sends the Up Arrow key to navigate up.
- 36. actions.sendKeys(Keys.ARROW_LEFT).perform(): Sends the Left Arrow key to navigate left.
- 37. actions.sendKeys(Keys.ARROW_RIGHT).perform(): Sends the Right Arrow key to navigate right.
- 38. actions.moveToElement(element).keyDown(Keys.CONTROL).click().keyUp(Keys.CONTROL) .perform(): Moves to the element, holds Ctrl key, clicks on the element, and then releases Ctrl key.
- 39. actions.moveToElement(element).keyDown(Keys.SHIFT).click().keyUp(Keys.SHIFT).perfor m(): Moves to the element, holds Shift key, clicks on the element, and then releases Shift key.
- 40. actions.moveToElement(element).clickAndHold().moveByOffset(50, 50).release().perform(): Clicks and holds an element, moves by an offset, and then releases.
- 41. actions.sendKeys(Keys.F5).perform(): Sends the F5 key to refresh the page.
- 42. actions.keyDown(Keys.CONTROL).sendKeys("t").keyUp(Keys.CONTROL).perform(): Sends Ctrl+T key combination to open a new tab.
- 43. actions.keyDown(Keys.CONTROL).sendKeys("w").keyUp(Keys.CONTROL).perform(): Sends Ctrl+W key combination to close the current tab.
- 44. actions.keyDown(Keys.CONTROL).sendKeys("n").keyUp(Keys.CONTROL).perform(): Sends Ctrl+N key combination to open a new window.
- 45. actions.keyDown(Keys.CONTROL).sendKeys("p").keyUp(Keys.CONTROL).perform(): Sends Ctrl+P key combination to open the print dialog.
- 46. actions.keyDown(Keys.CONTROL).sendKeys("s").keyUp(Keys.CONTROL).perform(): Sends Ctrl+S key combination to open the save dialog.
- 47. actions.keyDown(Keys.ALT).sendKeys("f4").keyUp(Keys.ALT).perform(): Sends Alt+F4 key combination to close the current window.
- 48. actions.sendKeys(Keys.INSERT).perform(): Sends the Insert key to toggle between insert and overwrite mode.
- 49. actions.sendKeys(Keys.DELETE).perform(): Sends the Delete key to remove the next character.

- 50. actions.sendKeys(Keys.BACK_SPACE).perform(): Sends the Backspace key to remove the previous character.
- 51. actions.moveToElement(element).click().sendKeys("text").perform(): Moves to the element, clicks on it, and sends text.
- 52. actions.moveToElement(element).click().sendKeys(Keys.TAB).perform(): Moves to the element, clicks on it, and sends the Tab key to move focus.
- 53. actions.moveToElement(element).sendKeys(Keys.ENTER).perform(): Moves to the element and sends the Enter key.
- 54. actions.moveToElement(element).sendKeys(Keys.ESCAPE).perform(): Moves to the element and sends the Escape key.

Cookies Management Commands

- 1. driver.manage().getCookies(): Retrieves all cookies visible to the current page.
- 2. driver.manage().getCookieNamed("cookieName"): Retrieves a specific cookie by its name.
- 3. driver.manage().addCookie(new Cookie("name", "value")): Adds a new cookie with the specified name and value.
- 4. driver.manage().deleteCookieNamed("cookieName"): Deletes a specific cookie by its name.
- 5. driver.manage().deleteCookie(cookie): Deletes the specified cookie object.
- 6. driver.manage().deleteAllCookies(): Deletes all cookies associated with the current domain.
- 7. driver.manage().getCookieNamed("cookieName").getName(): Retrieves the name of a specific cookie.
- 8. driver.manage().getCookieNamed("cookieName").getValue(): Retrieves the value of a specific cookie.
- 9. driver.manage().getCookieNamed("cookieName").getDomain(): Retrieves the domain of a specific cookie.
- 10. driver.manage().getCookieNamed("cookieName").getPath(): Retrieves the path of a specific cookie.
- 11. driver.manage().getCookieNamed("cookieName").getExpiry(): Retrieves the expiry date of a specific cookie.
- 12. driver.manage().getCookies().size(): Retrieves the number of cookies visible to the current page.
- 13. driver.manage().getCookies().contains(new Cookie("name", "value")): Checks if a specific cookie exists.
- 14. driver.manage().getCookies().stream().filter(cookie -> "name".equals(cookie.getName())).findFirst(): Finds a specific cookie by name.
- 15. driver.manage().getCookies().forEach(cookie -> System.out.println(cookie.getName() + ": " + cookie.getValue())): Prints all cookies and their values.
- 16. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date())): Adds a new cookie with domain, path, and expiry date.
- 17. driver.manage().addCookie(new Cookie("name", "value", null, null, new Date())): Adds a new cookie with only name, value, and expiry date.
- 18. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path")): Adds a new cookie with domain and path.
- 19. driver.manage().addCookie(new Cookie("name", "value", null, "/path")): Adds a new cookie with path only.

- 20. driver.manage().addCookie(new Cookie("name", "value", "domain", null, new Date())): Adds a new cookie with domain and expiry date.
- 21. driver.manage().addCookie(new Cookie("name", "value", null, null, new Date())): Adds a new cookie with expiry date only.
- 22. driver.manage().addCookie(new Cookie("name", "value", "domain")): Adds a new cookie with domain only.
- 23. driver.manage().addCookie(new Cookie("name", "value", "/path")): Adds a new cookie with path only.
- 24. driver.manage().addCookie(new Cookie("name", "value")): Adds a new cookie with default domain and path.
- 25. driver.manage().getCookieNamed("cookieName").toString(): Converts a specific cookie to a string representation.
- 26. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), true, true)): Adds a secure and HTTP-only cookie.
- 27. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), false, false)): Adds a non-secure and non-HTTP-only cookie.
- 28. driver.manage().deleteCookie(new Cookie("name", "value")): Deletes a cookie based on its name and value.
- 29. driver.manage().deleteAllCookies(): Deletes all cookies for the current domain.
- 30. driver.manage().getCookies().stream().filter(cookie -> cookie.getExpiry() != null).collect(Collectors.toList()): Retrieves all cookies with expiry dates.
- 31. driver.manage().getCookies().stream().filter(cookie -> cookie.getDomain().equals("domain")).collect(Collectors.toList()): Retrieves all cookies for a specific domain.
- 32. driver.manage().getCookies().stream().filter(cookie -> cookie.getPath().equals("/path")).collect(Collectors.toList()): Retrieves all cookies for a specific path.
- 33. driver.manage().getCookieNamed("cookieName").isHttpOnly(): Checks if a specific cookie is HTTP-only.
- 34. driver.manage().getCookieNamed("cookieName").isSecure(): Checks if a specific cookie is secure.
- 35. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), true)): Adds a secure cookie with expiry date.
- 36. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", null, false)): Adds a non-secure cookie without expiry date.
- 37. driver.manage().getCookies().stream().filter(cookie ->
 "name".equals(cookie.getName())).forEach(cookie ->
 System.out.println(cookie.getValue())): Retrieves and prints the value of a specific cookie.
- 38. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), false, true)): Adds a non-secure, HTTP-only cookie.
- 39. driver.manage().getCookies().stream().filter(cookie -> cookie.getName().startsWith("prefix")).collect(Collectors.toList()): Retrieves all cookies with names starting with a specific prefix.
- 40. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), true, false)): Adds a secure, non-HTTP-only cookie.
- 41. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), false, true)): Adds a non-secure, HTTP-only cookie.

- 42. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", null, true, true)): Adds a secure, HTTP-only cookie with no expiry date.
- 43. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), true, false)): Adds a secure, non-HTTP-only cookie with expiry date.
- 44. driver.manage().getCookies().stream().map(cookie -> cookie.getName() + "=" + cookie.getValue()).collect(Collectors.joining("; ")): Creates a string representation of all cookies in a format suitable for sending in HTTP headers.

Screen Capture Commands

- 1. driver.getScreenshotAs(OutputType.FILE): Captures a screenshot and returns it as a File object.
- 2. File screenshot = driver.getScreenshotAs(OutputType.FILE): Captures a screenshot and stores it in a File variable.
- 3. FileUtils.copyFile(screenshot, new File("path/to/screenshot.png")): Copies the screenshot file to a specified location.
- 4. driver.getScreenshotAs(OutputType.BYTES): Captures a screenshot and returns it as a byte array.
- 5. byte[] screenshotBytes = driver.getScreenshotAs(OutputType.BYTES): Captures a screenshot and stores it as a byte array.
- 6. BufferedImage image = ImageIO.read(new File("path/to/screenshot.png")): Reads the screenshot file into a BufferedImage.
- 7. ImageIO.write(image, "png", new File("path/to/screenshot.png")): Writes the BufferedImage to a file in PNG format.
- 8. driver.manage().window().getSize(): Retrieves the size of the current window for use in custom screenshot implementations.
- 9. driver.manage().window().setSize(new Dimension(1024, 768)): Resizes the current window to the specified dimensions before taking a screenshot.
- 10. File screenshot = ((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE): Captures a screenshot from a WebDriver instance cast to TakesScreenshot.
- 11. ((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE): Directly captures a screenshot from a TakesScreenshot instance.
- 12. FileUtils.copyFile(((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE), new File("path/to/screenshot.png")): Copies the screenshot file to a specified location.
- 13. driver.getScreenshotAs(OutputType.FILE): Captures a screenshot of the current page and returns it as a File object.
- 14. File screenshot = driver.getScreenshotAs(OutputType.FILE): Captures a screenshot and stores it as a File object.
- 15. BufferedImage bufferedImage = ImageIO.read(screenshot): Converts the screenshot file to a BufferedImage.
- 16. ImageIO.write(bufferedImage, "png", new File("path/to/screenshot.png")): Saves the BufferedImage as a PNG file.
- 17. driver.getScreenshotAs(OutputType.BASE64): Captures a screenshot and returns it as a Base64-encoded string.
- 18. String screenshotBase64 = driver.getScreenshotAs(OutputType.BASE64): Captures a screenshot and stores it as a Base64-encoded string.

- 19. byte[] screenshotBytes = ((TakesScreenshot)driver).getScreenshotAs(OutputType.BYTES): Captures a screenshot and stores it as a byte array.
- 20. driver.getScreenshotAs(OutputType.BYTES): Retrieves the screenshot as a byte array for custom handling.
- 21. FileUtils.copyFile(((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE), new File("path/to/screenshot.png")): Saves the screenshot to a specified file.
- 22. BufferedImage image = ImageIO.read(new File("path/to/screenshot.png")): Reads the screenshot file into a BufferedImage for further processing.
- 23. ImageIO.write(image, "png", new File("path/to/screenshot.png")): Writes the BufferedImage to a PNG file for storage.
- 24. driver.getScreenshotAs(OutputType.FILE): Takes a screenshot and returns it as a file object for saving.
- 25. FileUtils.copyFile(screenshotFile, new File("path/to/screenshot.png")): Copies the screenshot file to a specific path.
- 26. BufferedImage screenshotImage = ImageIO.read(new File("path/to/screenshot.png")): Loads the screenshot image for manipulation or validation.
- 27. ImageIO.write(screenshotImage, "png", new File("path/to/screenshot.png")): Saves the loaded screenshot image to a PNG file.
- 28. driver.getScreenshotAs(OutputType.BYTES): Captures a screenshot as a byte array for further use in testing.
- 29. byte[] screenshotData = driver.getScreenshotAs(OutputType.BYTES): Retrieves the screenshot data as a byte array.
- 30. driver.getScreenshotAs(OutputType.BASE64): Gets the screenshot as a Base64-encoded string for web-based applications.
- 31. String screenshotBase64String = driver.getScreenshotAs(OutputType.BASE64): Captures and stores the screenshot as a Base64-encoded string.
- 32. driver.getScreenshotAs(OutputType.FILE): Takes a screenshot and stores it in a File object for saving or processing.
- 33. FileUtils.copyFile(((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE), new File("path/to/screenshot.png")): Saves the screenshot to a file location.
- 34. BufferedImage screenshotBufferedImage = ImageIO.read(new File("path/to/screenshot.png")): Converts the screenshot file to a BufferedImage for image processing.
- 35. ImageIO.write(screenshotBufferedImage, "png", new File("path/to/screenshot.png")): Saves the BufferedImage to a PNG file.
- 36. driver.getScreenshotAs(OutputType.FILE): Takes a screenshot and returns a File object containing the screenshot.
- 37. File screenshot = ((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE): Captures the screenshot as a File object for further use.
- 38. BufferedImage bufferedImage = ImageIO.read(new File("path/to/screenshot.png")): Reads the screenshot image into a BufferedImage object.
- 39. ImageIO.write(bufferedImage, "png", new File("path/to/screenshot.png")): Writes the BufferedImage to a file in PNG format.
- 40. driver.getScreenshotAs(OutputType.BYTES): Retrieves the screenshot in byte array format for custom handling.
- 41. byte[] screenshotBytes = ((TakesScreenshot)driver).getScreenshotAs(OutputType.BYTES): Gets the screenshot as a byte array.

- 42. driver.getScreenshotAs(OutputType.BASE64): Gets the screenshot as a Base64 string for transmission.
- 43. String screenshotBase64 = driver.getScreenshotAs(OutputType.BASE64): Retrieves the screenshot as a Base64-encoded string.
- 44. driver.getScreenshotAs(OutputType.FILE): Captures a screenshot and returns it as a File object.
- 45. FileUtils.copyFile(((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE), new File("path/to/screenshot.png")): Saves the screenshot to a specified file path.
- 46. BufferedImage bufferedImage = ImageIO.read(new File("path/to/screenshot.png")): Converts the screenshot file to a BufferedImage.
- 47. ImageIO.write(bufferedImage, "png", new File("path/to/screenshot.png")): Saves the BufferedImage as a PNG file.
- 48. driver.getScreenshotAs(OutputType.BYTES): Retrieves the screenshot as a byte array for processing.
- 49. byte[] screenshotByteArray = driver.getScreenshotAs(OutputType.BYTES): Gets the screenshot in byte array format.
- 50. driver.getScreenshotAs(OutputType.BASE64): Captures the screenshot as a Base64 string.
- 51. String screenshotBase64String = driver.getScreenshotAs(OutputType.BASE64): Retrieves the screenshot as a Base64-encoded string.
- 52. driver.getScreenshotAs(OutputType.FILE): Takes a screenshot and returns it as a File object for saving.
- 53. FileUtils.copyFile(((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE), new File("path/to/screenshot.png")): Copies and saves the screenshot file.
- 54. BufferedImage image = ImageIO.read(new File("path/to/screenshot.png")): Reads the screenshot image into a BufferedImage for manipulation.
- 55. ImageIO.write(image, "png", new File("path/to/screenshot.png")): Writes the BufferedImage to a PNG file.

Session Management Commands

- 1. driver.manage().getCookies(): Retrieves all cookies visible to the current page, which can be used for session management.
- 2. driver.manage().getCookieNamed("cookieName"): Retrieves a specific cookie by its name, useful for checking session data.
- 3. driver.manage().addCookie(new Cookie("name", "value")): Adds a new cookie, which can be used to manage session data.
- 4. driver.manage().deleteCookieNamed("cookieName"): Deletes a specific cookie, useful for ending a session.
- 5. driver.manage().deleteCookie(cookie): Deletes a specific cookie object from the session.
- 6. driver.manage().deleteAllCookies(): Deletes all cookies associated with the current domain, effectively ending the session.
- 7. driver.manage().getCookieNamed("cookieName").getName(): Retrieves the name of a specific cookie for session management.
- 8. driver.manage().getCookieNamed("cookieName").getValue(): Retrieves the value of a specific cookie, useful for session validation.
- 9. driver.manage().getCookieNamed("cookieName").getDomain(): Retrieves the domain of a specific cookie, important for session scope.

- 10. driver.manage().getCookieNamed("cookieName").getPath(): Retrieves the path of a specific cookie, affecting session management.
- 11. driver.manage().getCookieNamed("cookieName").getExpiry(): Retrieves the expiry date of a specific cookie, which can affect session duration.
- 12. driver.manage().getCookies().size(): Retrieves the number of cookies visible to the current page, which can indicate active sessions.
- 13. driver.manage().getCookies().contains(new Cookie("name", "value")): Checks if a specific cookie exists, useful for verifying active sessions.
- 14. driver.manage().getCookies().stream().filter(cookie -> "name".equals(cookie.getName())).findFirst(): Finds a specific cookie by name for session validation.
- 15. driver.manage().getCookies().forEach(cookie -> System.out.println(cookie.getName() + ": " + cookie.getValue())): Prints all cookies, useful for debugging sessions.
- 16. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date())): Adds a new cookie with domain, path, and expiry date, managing session attributes.
- 17. driver.manage().addCookie(new Cookie("name", "value", null, null, new Date())): Adds a new cookie with only name, value, and expiry date, affecting session duration.
- 18. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path")): Adds a new cookie with domain and path, which can be used for session management.
- 19. driver.manage().addCookie(new Cookie("name", "value", null, "/path")): Adds a new cookie with path only, affecting session scope.
- 20. driver.manage().addCookie(new Cookie("name", "value", "domain", null, new Date())): Adds a new cookie with domain and expiry date, which affects session management.
- 21. driver.manage().addCookie(new Cookie("name", "value", null, null, new Date())): Adds a new cookie with expiry date only, affecting session duration.
- 22. driver.manage().addCookie(new Cookie("name", "value", "domain")): Adds a new cookie with domain only, used for session management.
- 23. driver.manage().addCookie(new Cookie("name", "value", "/path")): Adds a new cookie with path only, affecting session scope.
- 24. driver.manage().addCookie(new Cookie("name", "value")): Adds a new cookie with default domain and path, which can affect the session.
- 25. driver.manage().getCookieNamed("cookieName").toString(): Converts a specific cookie to a string representation, useful for debugging sessions.
- 26. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), true, true)): Adds a secure and HTTP-only cookie for session management.
- 27. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), false, false)): Adds a non-secure and non-HTTP-only cookie, affecting session security.
- 28. driver.manage().deleteCookie(new Cookie("name", "value")): Deletes a cookie based on its name and value, ending a session.
- 29. driver.manage().deleteAllCookies(): Deletes all cookies for the current domain, effectively ending all sessions.
- 30. driver.manage().getCookies().stream().filter(cookie -> cookie.getExpiry() != null).collect(Collectors.toList()): Retrieves all cookies with expiry dates, affecting session duration.
- 31. driver.manage().getCookies().stream().filter(cookie -> cookie.getDomain().equals("domain")).collect(Collectors.toList()): Retrieves all cookies for a specific domain, useful for managing session scope.

- 32. driver.manage().getCookies().stream().filter(cookie -> cookie.getPath().equals("/path")).collect(Collectors.toList()): Retrieves all cookies for a specific path, useful for managing session scope.
- 33. driver.manage().getCookieNamed("cookieName").isHttpOnly(): Checks if a specific cookie is HTTP-only, affecting session security.
- 34. driver.manage().getCookieNamed("cookieName").isSecure(): Checks if a specific cookie is secure, important for session security.
- 35. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), true)): Adds a secure cookie with expiry date, managing session attributes.
- 36. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", null, false)): Adds a non-secure cookie without expiry date, affecting session management.
- 37. driver.manage().getCookies().stream().filter(cookie ->
 "name".equals(cookie.getName())).forEach(cookie ->
 System.out.println(cookie.getValue())): Retrieves and prints the value of a specific cookie for session validation.
- 38. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), false, true)): Adds a non-secure, HTTP-only cookie, managing session security.
- 39. driver.manage().getCookies().stream().filter(cookie -> cookie.getName().startsWith("prefix")).collect(Collectors.toList()): Retrieves all cookies with names starting with a specific prefix, useful for session management.
- 40. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), true, false)): Adds a secure, non-HTTP-only cookie with expiry date, managing session security.
- 41. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), false, true)): Adds a non-secure, HTTP-only cookie with expiry date, managing session attributes.
- 42. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", null, true, true)): Adds a secure, HTTP-only cookie with no expiry date, affecting session management.
- 43. driver.manage().addCookie(new Cookie("name", "value", "domain", "/path", new Date(), true, false)): Adds a secure, non-HTTP-only cookie with expiry date, managing session attributes.
- 44. driver.manage().getCookies().stream().map(cookie -> cookie.getName() + "=" + cookie.getValue()).collect(Collectors.joining("; ")): Creates a string representation of all cookies, useful for session management in HTTP headers.

Browser Options and Capabilities Commands

- 1. driver.manage().window().setSize(new Dimension(width, height)): Sets the browser window size, useful for testing different screen resolutions.
- 2. driver.manage().window().setPosition(new Point(x, y)): Sets the position of the browser window on the screen.
- 3. driver.manage().window().fullscreen(): Maximizes the browser window to full screen.
- 4. driver.manage().window().maximize(): Maximizes the browser window to fit the screen.
- 5. driver.manage().window().minimize(): Minimizes the browser window.
- 6. driver.manage().window().getSize(): Retrieves the current size of the browser window.
- 7. driver.manage().window().getPosition(): Retrieves the current position of the browser window.

- 8. driver.manage().window().getRect(): Retrieves the size and position of the browser window.
- 9. driver.manage().window().setRect(new Rectangle(x, y, width, height)): Sets the size and position of the browser window.
- 10. ChromeOptions options = new ChromeOptions(): Initializes ChromeOptions for configuring Chrome browser settings.
- 11. options.addArguments("start-maximized"): Adds an argument to start the Chrome browser maximized.
- 12. options.addArguments("disable-popup-blocking"): Disables popup blocking in the Chrome browser.
- 13. options.addArguments("incognito"): Launches Chrome in incognito mode.
- 14. options.addArguments("headless"): Runs Chrome in headless mode (without GUI).
- 15. options.addArguments("disable-extensions"): Disables all extensions in the Chrome browser.
- 16. options.addArguments("disable-gpu"): Disables GPU hardware acceleration in Chrome.
- 17. options.addArguments("no-sandbox"): Runs Chrome without sandboxing for testing purposes.
- 18. options.addArguments("remote-debugging-port=9222"): Enables remote debugging on port 9222 for Chrome.
- 19. options.setBinary("/path/to/chrome"): Sets the path to a specific Chrome binary.
- 20. FirefoxOptions options = new FirefoxOptions(): Initializes FirefoxOptions for configuring Firefox browser settings.
- 21. options.addArguments("-headless"): Runs Firefox in headless mode (without GUI).
- 22. options.addArguments("-private"): Launches Firefox in private browsing mode.
- 23. options.addArguments("-disable-popup-blocking"): Disables popup blocking in Firefox.
- 24. options.addArguments("-disable-extensions"): Disables all extensions in Firefox.
- 25. options.addArguments("-no-sandbox"): Runs Firefox without sandboxing for testing purposes.
- 26. options.setBinary("/path/to/firefox"): Sets the path to a specific Firefox binary.
- 27. DesiredCapabilities = new DesiredCapabilities(): Initializes DesiredCapabilities for configuring browser settings.
- 28. capabilities.setCapability("browserName", "chrome"): Sets the browser name to Chrome in DesiredCapabilities.
- 29. capabilities.setCapability("browserVersion", "89.0"): Sets the browser version in DesiredCapabilities.
- 30. capabilities.setCapability("platformName", "Windows 10"): Sets the platform (OS) in DesiredCapabilities.
- 31. capabilities.setCapability("acceptInsecureCerts", true): Accepts insecure SSL certificates in DesiredCapabilities.
- 32. capabilities.setCapability("javascriptEnabled", true): Enables JavaScript in the browser.
- 33. capabilities.setCapability("pageLoadStrategy", "eager"): Sets the page load strategy to eager (waits until the page is interactive).
- 34. capabilities.setCapability("timeouts", new HashMap<String, Object>() {{ put("implicit", 5000); put("pageLoad", 60000); }}): Configures timeouts for implicit waits and page loads.
- 35. options.setCapability(CapabilityType.ACCEPT_SSL_CERTS, true): Accepts SSL certificates in browser options.

- 36. options.setCapability(CapabilityType.UNEXPECTED_ALERT_BEHAVIOUR, UnexpectedAlertBehaviour.IGNORE): Ignores unexpected alerts in the browser.
- 37. options.setCapability("proxy", proxy): Configures a proxy server for browser options.
- 38. capabilities.setCapability("maxInstances", 5): Sets the maximum number of browser instances to be run concurrently.
- 39. capabilities.setCapability("browserName", "firefox"): Sets the browser name to Firefox in DesiredCapabilities.
- 40. capabilities.setCapability("browserVersion", "90.0"): Sets the browser version to Firefox 90.0 in DesiredCapabilities.
- 41. capabilities.setCapability("platformName", "macOS"): Sets the platform (OS) to macOS in DesiredCapabilities.
- 42. options.setCapability("browserName", "MicrosoftEdge"): Sets the browser name to Microsoft Edge.
- 43. options.setCapability("browserVersion", "latest"): Sets the browser version to the latest version available.
- 44. options.setCapability("platformName", "Linux"): Sets the platform (OS) to Linux in DesiredCapabilities.
- 45. options.addArguments("start-maximized"): Configures the browser to start maximized by default.
- 46. options.addArguments("disable-popup-blocking"): Disables the popup blocking feature in the browser.
- 47. options.addArguments("disable-gpu"): Disables GPU hardware acceleration in the browser.
- 48. options.addArguments("headless"): Runs the browser in headless mode for testing without a GUI.
- 49. options.setCapability("acceptInsecureCerts", true): Configures the browser to accept insecure SSL certificates.
- 50. options.setCapability("proxy", proxy): Sets up a proxy for the browser.
- 51. capabilities.setCapability("enableVNC", true): Enables VNC (Virtual Network Computing) for remote debugging.
- 52. capabilities.setCapability("enableVideo", true): Enables video recording of the test session.

Logs Management Commands

- 1. driver.manage().logs().get("browser"): Retrieves browser logs, which can help in debugging browser-related issues.
- 2. driver.manage().logs().get("driver"): Retrieves driver logs, useful for debugging issues related to the WebDriver.
- 3. driver.manage().logs().get("client"): Retrieves client logs, providing information about the client-side of the browser session.
- 4. driver.manage().logs().get("performance"): Retrieves performance logs, which can be used to analyze browser performance.
- 5. driver.manage().logs().get("server"): Retrieves server logs, useful for analyzing server-side interactions.
- 6. driver.manage().logs().get("logType"): Retrieves logs for a specific type, where "logType" can be "browser", "driver", "client", "performance", or "server".
- 7. driver.manage().logs().get("browser").getAll(): Retrieves all browser logs from the current session.

- 8. driver.manage().logs().get("browser").get(0): Retrieves the first entry from the browser logs.
- 9. driver.manage().logs().get("browser").get(1): Retrieves the second entry from the browser logs.
- 10. driver.manage().logs().get("browser").get(2): Retrieves the third entry from the browser logs.
- 11. driver.manage().logs().get("browser").get(3): Retrieves the fourth entry from the browser logs.
- 12. driver.manage().logs().get("browser").get(4): Retrieves the fifth entry from the browser logs.
- 13. driver.manage().logs().get("driver").getAll(): Retrieves all driver logs from the current session.
- 14. driver.manage().logs().get("driver").get(0): Retrieves the first entry from the driver logs.
- 15. driver.manage().logs().get("driver").get(1): Retrieves the second entry from the driver logs.
- 16. driver.manage().logs().get("driver").get(2): Retrieves the third entry from the driver logs.
- 17. driver.manage().logs().get("driver").get(3): Retrieves the fourth entry from the driver logs.
- 18. driver.manage().logs().get("driver").get(4): Retrieves the fifth entry from the driver logs.
- 19. driver.manage().logs().get("client").getAll(): Retrieves all client logs from the current session.
- 20. driver.manage().logs().get("client").get(0): Retrieves the first entry from the client logs.
- 21. driver.manage().logs().get("client").get(1): Retrieves the second entry from the client logs.
- 22. driver.manage().logs().get("client").get(2): Retrieves the third entry from the client logs.
- 23. driver.manage().logs().get("client").get(3): Retrieves the fourth entry from the client logs.
- 24. driver.manage().logs().get("client").get(4): Retrieves the fifth entry from the client logs.
- 25. driver.manage().logs().get("performance").getAll(): Retrieves all performance logs from the current session.
- 26. driver.manage().logs().get("performance").get(0): Retrieves the first entry from the performance logs.
- 27. driver.manage().logs().get("performance").get(1): Retrieves the second entry from the performance logs.
- 28. driver.manage().logs().get("performance").get(2): Retrieves the third entry from the performance logs.
- 29. driver.manage().logs().get("performance").get(3): Retrieves the fourth entry from the performance logs.
- 30. driver.manage().logs().get("performance").get(4): Retrieves the fifth entry from the performance logs.
- 31. driver.manage().logs().get("server").getAll(): Retrieves all server logs from the current session.
- 32. driver.manage().logs().get("server").get(0): Retrieves the first entry from the server logs.
- 33. driver.manage().logs().get("server").get(1): Retrieves the second entry from the server logs.
- 34. driver.manage().logs().get("server").get(2): Retrieves the third entry from the server logs.
- 35. driver.manage().logs().get("server").get(3): Retrieves the fourth entry from the server logs.
- 36. driver.manage().logs().get("server").get(4): Retrieves the fifth entry from the server logs.
- 37. driver.manage().logs().get("browser").get(0).getMessage(): Retrieves the message of the first browser log entry.
- 38. driver.manage().logs().get("browser").get(0).getTimestamp(): Retrieves the timestamp of the first browser log entry.

- 39. driver.manage().logs().get("browser").get(0).getLevel(): Retrieves the log level of the first browser log entry.
- 40. driver.manage().logs().get("driver").get(0).getMessage(): Retrieves the message of the first driver log entry.
- 41. driver.manage().logs().get("driver").get(0).getTimestamp(): Retrieves the timestamp of the first driver log entry.
- 42. driver.manage().logs().get("driver").get(0).getLevel(): Retrieves the log level of the first driver log entry.
- 43. driver.manage().logs().get("client").get(0).getMessage(): Retrieves the message of the first client log entry.
- 44. driver.manage().logs().get("client").get(0).getTimestamp(): Retrieves the timestamp of the first client log entry.
- 45. driver.manage().logs().get("client").get(0).getLevel(): Retrieves the log level of the first client log entry.
- 46. driver.manage().logs().get("performance").get(0).getMessage(): Retrieves the message of the first performance log entry.
- 47. driver.manage().logs().get("performance").get(0).getTimestamp(): Retrieves the timestamp of the first performance log entry.
- 48. driver.manage().logs().get("performance").get(0).getLevel(): Retrieves the log level of the first performance log entry.
- 49. driver.manage().logs().get("server").get(0).getMessage(): Retrieves the message of the first server log entry.
- 50. driver.manage().logs().get("server").get(0).getTimestamp(): Retrieves the timestamp of the first server log entry.
- 51. driver.manage().logs().get("server").get(0).getLevel(): Retrieves the log level of the first server log entry.
- 52. driver.manage().logs().get("browser").get(0).get("message"): Retrieves the message of the first browser log entry in a specific format.
- 53. driver.manage().logs().get("driver").get(0).get("message"): Retrieves the message of the first driver log entry in a specific format.
- 54. driver.manage().logs().get("client").get(0).get("message"): Retrieves the message of the first client log entry in a specific format.
- 55. driver.manage().logs().get("performance").get(0).get("message"): Retrieves the message of the first performance log entry in a specific format.
- 56. driver.manage().logs().get("server").get(0).get("message"): Retrieves the message of the first server log entry in a specific format.

<u>IavaScript Execution Commands</u>

- 1. driver.executeScript("return document.title"): Executes JavaScript to return the title of the current page.
- 2. driver.executeScript("window.scrollTo(0, document.body.scrollHeight)"): Scrolls to the bottom of the page.
- 3. driver.executeScript("window.scrollTo(0, 0)"): Scrolls to the top of the page.
- 4. driver.executeScript("arguments[0].click()", element): Clicks on the specified element using JavaScript.

- 5. driver.executeScript("return arguments[0].innerHTML", element): Returns the inner HTML of the specified element.
- 6. driver.executeScript("return arguments[0].value", element): Returns the value of the specified form element.
- 7. driver.executeScript("arguments[0].style.backgroundColor = 'yellow'", element): Changes the background color of the specified element to yellow.
- 8. driver.executeScript("return window.location.href"): Returns the current URL of the page.
- 9. driver.executeScript("window.location.href = 'http://example.com'"): Navigates to the specified URL.
- 10. driver.executeScript("return document.readyState"): Returns the current state of the document (e.g., 'loading', 'interactive', 'complete').
- 11. driver.executeScript("return document.querySelector('selector').textContent"): Returns the text content of the specified element.
- 12. driver.executeScript("document.querySelector('selector').value = 'new value'"): Sets the value of the specified input element.
- 13. driver.executeScript("document.querySelector('selector').setAttribute('attribute', 'value')"): Sets an attribute of the specified element.
- 14. driver.executeScript("return document.querySelector('selector').getAttribute('attribute')"): Retrieves the value of an attribute of the specified element.
- 15. driver.executeScript("document.querySelector('selector').focus()"): Focuses on the specified element.
- 16. driver.executeScript("return window.getComputedStyle(document.querySelector('selector')).getPropertyValue('propert y')"): Returns the computed style property value of the specified element.
- 17. driver.executeScript("document.querySelector('selector').blur()"): Removes focus from the specified element.
- 18. driver.executeScript("return document.querySelectorAll('selector').length"): Returns the number of elements matching the selector.
- 19. driver.executeScript("document.querySelector('selector').scrollIntoView()"): Scrolls the specified element into view.
- 20. driver.executeScript("document.querySelector('selector').remove()"): Removes the specified element from the DOM.
- 21. driver.executeScript("return document.querySelector('selector').classList"): Returns the class list of the specified element.
- 22. driver.executeScript("document.querySelector('selector').classList.add('class-name')"): Adds a class to the specified element.
- 23. driver.executeScript("document.querySelector('selector').classList.remove('class-name')"): Removes a class from the specified element.
- 24. driver.executeScript("return document.querySelector('selector').checked"): Returns whether the specified checkbox or radio button is checked.
- 25. driver.executeScript("document.querySelector('selector').click()"): Clicks on the specified element using JavaScript.
- 26. driver.executeScript("return document.querySelector('selector').dataset.attribute"): Returns the value of a data attribute of the specified element.
- 27. driver.executeScript("document.querySelector('selector').setAttribute('data-attribute', 'value')"): Sets a data attribute of the specified element.

- 28. driver.executeScript("return document.querySelector('selector').innerHTML"): Returns the inner HTML of the specified element.
- 29. driver.executeScript("document.querySelector('selector').innerHTML = 'new content'"): Sets the inner HTML of the specified element.
- 30. driver.executeScript("return window.performance.timing"): Returns performance timing information of the current page.
- 31. driver.executeScript("return window.localStorage.getItem('key')"): Retrieves a value from local storage.
- 32. driver.executeScript("window.localStorage.setItem('key', 'value')"): Sets a value in local storage.
- 33. driver.executeScript("return window.sessionStorage.getItem('key')"): Retrieves a value from session storage.
- 34. driver.executeScript("window.sessionStorage.setItem('key', 'value')"): Sets a value in session storage.
- 35. driver.executeScript("return document.querySelector('selector').scrollHeight"): Returns the scroll height of the specified element.
- 36. driver.executeScript("return document.querySelector('selector').offsetWidth"): Returns the offset width of the specified element.
- 37. driver.executeScript("return document.querySelector('selector').offsetHeight"): Returns the offset height of the specified element.
- 38. driver.executeScript("return document.querySelector('selector').offsetTop"): Returns the offset top of the specified element.
- 39. driver.executeScript("return document.querySelector('selector').offsetLeft"): Returns the offset left of the specified element.
- 40. driver.executeScript("document.querySelector('selector').setAttribute('style', 'property:value')"): Sets a CSS style property of the specified element.
- 41. driver.executeScript("document.querySelector('selector').dispatchEvent(new Event('event-type'))"): Dispatches a custom event on the specified element.
- 42. driver.executeScript("return document.querySelector('selector').dataset"): Returns all data attributes of the specified element.
- 43. driver.executeScript("return document.querySelector('selector').hasAttribute('attribute')"): Checks if the specified element has the given attribute.
- 44. driver.executeScript("document.querySelector('selector').setAttribute('attribute', 'value')"): Sets an attribute of the specified element.
- 45. driver.executeScript("return document.querySelector('selector').childNodes.length"): Returns the number of child nodes of the specified element.
- 46. driver.executeScript("return document.querySelector('selector').parentNode"): Returns the parent node of the specified element.
- 47. driver.executeScript("return document.querySelector('selector').nextElementSibling"): Returns the next sibling element of the specified element.
- 48. driver.executeScript("return document.querySelector('selector').previousElementSibling"): Returns the previous sibling element of the specified element.
- 49. driver.executeScript("return window.getComputedStyle(document.querySelector('selector')).visibility"): Returns the visibility style property value of the specified element.

50. driver.executeScript("return window.getComputedStyle(document.querySelector('selector')).display"): Returns the display style property value of the specified element.

File Upload and Download Commands

File Upload Commands

- 1. driver.findElement(By.cssSelector("input[type='file']")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with type 'file'.
- 2. driver.findElement(By.id("file-upload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific ID.
- 3. driver.findElement(By.name("file")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific name.
- 4. driver.findElement(By.xpath("//input[@type='file']")).sendKeys("/path/to/file"): Uploads a file using XPath to locate the file input element.
- 5. driver.findElement(By.cssSelector("input.upload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to a file input element with a specific class.
- 6. driver.findElement(By.cssSelector("input[type='file']")).sendKeys("/absolute/path/to/file") : Uploads a file using the absolute path to the file input element.
- 7. driver.findElement(By.id("uploadButton")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an element used for file uploads.
- 8. driver.findElement(By.xpath("//input[@name='fileUpload']")).sendKeys("/path/to/file"): Uploads a file using XPath to locate the file input element by its name attribute.
- 9. driver.findElement(By.cssSelector("input#file-upload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific CSS ID.
- 10. driver.findElement(By.className("file-input")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific class name.
- 11. driver.findElement(By.xpath("//input[@id='file-upload']")).sendKeys("/path/to/file"): Uploads a file using XPath to locate the file input element by its ID.
- 12. driver.findElement(By.cssSelector("input.file")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific class name.
- 13. driver.findElement(By.name("uploadFile")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific name.
- 14. driver.findElement(By.id("fileUpload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific ID.
- 15. driver.findElement(By.xpath("//input[contains(@id, 'upload')]")).sendKeys("/path/to/file"): Uploads a file using XPath to locate the file input element by a partial ID match.
- 16. driver.findElement(By.cssSelector("input[type='file'][name='fileUpload']")).sendKeys("/pat h/to/file"): Uploads a file by specifying its path to an input element with both type and name attributes.
- 17. driver.findElement(By.cssSelector("input#upload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific CSS ID.
- 18. driver.findElement(By.name("fileUpload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific name.
- 19. driver.findElement(By.className("upload-file")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific class.

- 20. driver.findElement(By.xpath("//input[@type='file' and @name='file']")).sendKeys("/path/to/file"): Uploads a file using XPath to locate the file input element by type and name attributes.
- 21. driver.findElement(By.cssSelector("input[type='file'][id='fileUpload']")).sendKeys("/path/t o/file"): Uploads a file by specifying its path to an input element with both type and ID attributes.
- 22. driver.findElement(By.id("file-upload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific ID.
- 23. driver.findElement(By.xpath("//input[@type='file'][@id='fileUpload']")).sendKeys("/path/to/file"): Uploads a file using XPath to locate the file input element by type and ID attributes.
- 24. driver.findElement(By.name("fileUpload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific name.
- 25. driver.findElement(By.className("file-upload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific class.
- 26. driver.findElement(By.cssSelector("input.upload")).sendKeys("/path/to/file"): Uploads a file by specifying its path to an input element with a specific class.
- 27. driver.findElement(By.xpath("//input[@type='file']")).sendKeys("/path/to/file"): Uploads a file using XPath to locate the file input element.

File Download Commands

- 1. driver.get("http://example.com/file-download-url"): Navigates to the URL for downloading a file.
- 2. driver.findElement(By.linkText("Download File")).click(): Clicks a link to download a file based on the link text.
- 3. driver.findElement(By.cssSelector("a.download")).click(): Clicks a download link based on its CSS class.
- 4. driver.findElement(By.xpath("//a[text()='Download']")).click(): Clicks a download link using XPath based on its visible text.
- 5. driver.findElement(By.id("download")).click(): Clicks a download button or link based on its ID.
- 6. driver.findElement(By.name("downloadFile")).click(): Clicks a download button or link based on its name attribute.
- 7. driver.findElement(By.className("download-button")).click(): Clicks a download button or link based on its class name.
- 8. driver.findElement(By.xpath("//a[contains(@href, 'download')]")).click(): Clicks a download link using XPath based on a partial href attribute.
- 9. driver.findElement(By.cssSelector("a[href*='download']")).click(): Clicks a download link based on a partial href attribute using CSS selector.
- 10. driver.findElement(By.xpath("//button[@id='download']")).click(): Clicks a download button based on its ID.
- 11. driver.findElement(By.cssSelector("button.download")).click(): Clicks a download button based on its CSS class.
- 12. driver.findElement(By.linkText("Download PDF")).click(): Clicks a download link based on the link text for PDF files.
- 13. driver.findElement(By.xpath("//a[@href='/files/sample.pdf']")).click(): Clicks a download link for a specific file using XPath based on its href attribute.

- 14. driver.findElement(By.cssSelector("a[href='/files/sample.docx']")).click(): Clicks a download link for a specific file using CSS selector based on its href attribute.
- 15. driver.findElement(By.xpath("//a[contains(text(), 'Sample Download')]")).click(): Clicks a download link using XPath based on partial text.
- 16. driver.findElement(By.id("downloadFileButton")).click(): Clicks a download button based on its ID.
- 17. driver.findElement(By.xpath("//a[@class='file-download']")).click(): Clicks a download link using XPath based on its class attribute.
- 18. driver.findElement(By.linkText("File Download")).click(): Clicks a download link based on the link text.
- 19. driver.findElement(By.cssSelector("a.download-link")).click(): Clicks a download link based on its CSS class.
- 20. driver.findElement(By.xpath("//button[text()='Download']")).click(): Clicks a download button using XPath based on its visible text.
- 21. driver.findElement(By.cssSelector("button.file-download")).click(): Clicks a download button based on its CSS class.
- 22. driver.findElement(By.id("fileDownload")).click(): Clicks a download button based on its ID.
- 23. driver.findElement(By.name("fileDownload")).click(): Clicks a download button based on its name attribute.
- 24. driver.findElement(By.xpath("//a[@data-action='download']")).click(): Clicks a download link using XPath based on a custom data attribute.

Proxy Management Commands

- 1. driver.manage().addCookie(new Cookie("name", "value")): Adds a new cookie to the browser session.
- 2. driver.manage().deleteCookieNamed("name"): Deletes a specific cookie by its name.
- 3. driver.manage().deleteAllCookies(): Deletes all cookies for the current domain.
- 4. driver.manage().getCookieNamed("name"): Retrieves a specific cookie by its name.
- 5. driver.manage().getCookies(): Retrieves all cookies for the current domain.
- 6. driver.manage().window().setSize(new Dimension(width, height)): Sets the size of the browser window.
- 7. driver.manage().window().setPosition(new Point(x, y)): Sets the position of the browser window on the screen.
- 8. driver.manage().window().maximize(): Maximizes the browser window.
- 9. driver.manage().window().fullscreen(): Makes the browser window fullscreen.
- 10. driver.manage().window().minimize(): Minimizes the browser window.
- 11. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the default wait time for locating elements.
- 12. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for a page to load.
- 13. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the timeout for asynchronous scripts.
- 14. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the implicit wait time for elements.
- 15. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the maximum wait time for a page to load.

- 16. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the maximum time for asynchronous scripts.
- 17. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the implicit wait time for locating elements.
- 18. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the timeout for waiting for a page to load.
- 19. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the maximum time for scripts to execute.
- 20. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the implicit wait time for elements.
- 21. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for a page to load.
- 22. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for scripts to execute.
- 23. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the default wait time for element location.
- 24. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Configures the timeout for waiting for a page to load.
- 25. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures the maximum time for asynchronous script execution.
- 26. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Configures implicit waits for element interactions.
- 27. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Configures maximum wait time for complete page loading.
- 28. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures script timeout duration.
- 29. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Configures default waiting time for elements.
- 30. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the maximum time allowed for a page to fully load.
- 31. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the maximum allowed time for scripts to run.
- 32. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Configures wait time for locating elements.
- 33. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets timeout for the page to load completely.
- 34. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets timeout for executing scripts.
- 35. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets wait time for locating elements.
- 36. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Configures maximum wait time for a page to load.
- 37. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures timeout for script execution.
- 38. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Configures implicit waits for element interactions.

- 39. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Configures timeout for complete page loading.
- 40. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures maximum time for script execution.
- 41. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Configures wait time for locating elements.
- 42. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Configures maximum wait time for a page load.
- 43. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures timeout for executing scripts.
- 44. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets default wait time for elements.
- 45. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Configures timeout for waiting for page to load.
- 46. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures maximum time for script execution.
- 47. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets implicit wait time for elements.
- 48. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the timeout for complete page loading.
- 49. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures maximum time for script execution.

Mobile Web Testing Commands (Specific to Appium)

- 1. driver.findElement(By.id("element_id")).click(): Clicks on a web element identified by its ID.
- 2. driver.findElement(By.name("element_name")).sendKeys("text"): Sends text to a web element identified by its name.
- 3. driver.findElement(By.xpath("//xpath")).click(): Clicks on a web element using XPath.
- 4. driver.findElement(By.cssSelector("selector")).getText(): Retrieves the text from a web element using CSS selector.
- 5. driver.findElement(By.className("class_name")).isDisplayed(): Checks if a web element is displayed.
- 6. driver.findElement(By.linkText("link_text")).click(): Clicks on a link identified by its text.
- 7. driver.findElement(By.partialLinkText("partial_link_text")).click(): Clicks on a link identified by partial text.
- 8. driver.findElement(By.tagName("tag_name")).sendKeys("text"): Sends text to a web element identified by its tag name.
- 9. driver.findElement(By.id("element_id")).submit(): Submits a form element identified by its ID.
- 10. driver.findElement(By.name("element_name")).clear(): Clears the text from a web element identified by its name.
- 11. driver.findElement(By.xpath("//xpath")).getAttribute("attribute_name"): Retrieves the value of an attribute from a web element using XPath.
- 12. driver.findElement(By.cssSelector("selector")).getAttribute("attribute_name"): Retrieves the value of an attribute from a web element using CSS selector.

- 13. driver.findElement(By.className("class_name")).click(): Clicks on a web element identified by its class name.
- 14. driver.findElement(By.xpath("//xpath")).sendKeys("text"): Sends text to a web element using XPath.
- 15. driver.findElement(By.name("element_name")).isEnabled(): Checks if a web element identified by its name is enabled.
- 16. driver.findElement(By.id("element_id")).getText(): Retrieves the text from a web element identified by its ID.
- 17. driver.findElement(By.linkText("link_text")).getText(): Retrieves the text from a link identified by its text.
- 18. driver.findElement(By.xpath("//xpath")).getSize(): Retrieves the size of a web element using XPath.
- 19. driver.findElement(By.cssSelector("selector")).getSize(): Retrieves the size of a web element using CSS selector.
- 20. driver.findElement(By.className("class_name")).getLocation(): Retrieves the location of a web element identified by its class name.
- 21. driver.findElement(By.id("element_id")).getLocation(): Retrieves the location of a web element identified by its ID.
- 22. driver.findElement(By.xpath("//xpath")).isSelected(): Checks if a web element is selected using XPath.
- 23. driver.findElement(By.cssSelector("selector")).isSelected(): Checks if a web element is selected using CSS selector.
- 24. driver.findElement(By.className("class_name")).getCssValue("property_name"): Retrieves the value of a CSS property from a web element identified by its class name.
- 25. driver.findElement(By.name("element_name")).getCssValue("property_name"): Retrieves the value of a CSS property from a web element identified by its name.
- 26. driver.findElement(By.id("element_id")).findElement(By.xpath("//child_xpath")).click(): Clicks on a child element of a web element identified by its ID.
- 27. driver.findElement(By.cssSelector("selector")).findElement(By.className("child_class_name")).click(): Clicks on a child element of a web element identified by its CSS selector.
- 28. driver.findElement(By.xpath("//xpath")).findElement(By.name("child_name")).click(): Clicks on a child element of a web element identified by its XPath.
- 29. driver.findElement(By.className("class_name")).findElement(By.linkText("child_link_text")).click(): Clicks on a child element of a web element identified by its class name.
- 30. driver.findElement(By.id("element_id")).findElement(By.tagName("tag_name")).sendKeys(" text"): Sends text to a child element of a web element identified by its ID.
- 31. driver.findElement(By.xpath("//xpath")).findElement(By.cssSelector("child_selector")).getT ext(): Retrieves the text from a child element using XPath.
- 32. driver.findElement(By.cssSelector("selector")).findElement(By.xpath("//child_xpath")).getT ext(): Retrieves the text from a child element using CSS selector.
- 33. driver.findElement(By.className("class_name")).findElement(By.xpath("//child_xpath")).g etAttribute("attribute_name"): Retrieves the value of an attribute from a child element using class name.
- 34. driver.findElement(By.id("element_id")).findElement(By.linkText("child_link_text")).getCss Value("property_name"): Retrieves the value of a CSS property from a child element using ID.

- 35. driver.findElement(By.xpath("//xpath")).findElement(By.name("child_name")).getLocation (): Retrieves the location of a child element using XPath.
- 36. driver.findElement(By.cssSelector("selector")).findElement(By.className("child_class_name")).isDisplayed(): Checks if a child element is displayed using CSS selector.
- 37. driver.findElement(By.className("class_name")).findElement(By.cssSelector("child_selector")).isEnabled(): Checks if a child element is enabled using class name.
- 38. driver.findElement(By.id("element_id")).findElement(By.xpath("//child_xpath")).isSelected (): Checks if a child element is selected using ID.
- 39. driver.findElement(By.xpath("//xpath")).findElement(By.linkText("child_link_text")).clear() : Clears the text from a child element using XPath.
- 40. driver.findElement(By.cssSelector("selector")).findElement(By.className("child_class_name")).submit(): Submits a child element using CSS selector.
- 41. driver.findElement(By.className("class_name")).findElement(By.tagName("tag_name")).se ndKeys("text"): Sends text to a child element using class name.
- 42. driver.findElement(By.xpath("//xpath")).findElement(By.cssSelector("child_selector")).get Attribute("attribute_name"): Retrieves the value of an attribute from a child element using XPath.
- 43. driver.findElement(By.cssSelector("selector")).findElement(By.tagName("tag_name")).getSi ze(): Retrieves the size of a child element using CSS selector.
- 44. driver.findElement(By.className("class_name")).findElement(By.xpath("//child_xpath")).g etCssValue("property_name"): Retrieves the value of a CSS property from a child element using class name.
- 45. driver.findElement(By.id("element_id")).findElement(By.className("child_class_name")).ge tText(): Retrieves the text from a child element using ID.
- 46. driver.findElement(By.xpath("//xpath")).findElement(By.tagName("tag_name")).isDisplaye d(): Checks if a child element is displayed using XPath.
- 47. driver.findElement(By.cssSelector("selector")).findElement(By.name("child_name")).getTex t(): Retrieves the text from a child element using CSS selector.
- 48. driver.findElement(By.className("class_name")).findElement(By.cssSelector("child_selector")).getAttribute("attribute_name"): Retrieves the value of an attribute from a child element using class name.
- 49. driver.findElement(By.id("element_id")).findElement(By.xpath("//child_xpath")).getSize(): Retrieves the size of a child element using ID.
- 50. driver.findElement(By.xpath("//xpath")).findElement(By.linkText("child_link_text")).isEnab led(): Checks if a child element is enabled using XPath.
- 51. driver.findElement(By.cssSelector("selector")).findElement(By.name("child_name")).getSiz e(): Retrieves the size of a child element using CSS selector.
- 52. driver.findElement(By.className("class_name")).findElement(By.xpath("//child_xpath")).is Selected(): Checks if a child element is selected using class name.
- 53. driver.findElement(By.id("element_id")).findElement(By.className("child_class_name")).ge tCssValue("property_name"): Retrieves the value of a CSS property from a child element using ID.

Remote WebDriver Commands

- 1. driver.get("URL"): Navigates to the specified URL in the current browser window.
- 2. driver.navigate().to("URL"): Navigates to a new URL.
- 3. driver.navigate().back(): Navigates back to the previous page in the browser history.
- 4. driver.navigate().forward(): Navigates forward to the next page in the browser history.
- 5. driver.navigate().refresh(): Refreshes the current page.
- 6. driver.quit(): Closes all browser windows and ends the WebDriver session.
- 7. driver.close(): Closes the current browser window.
- 8. driver.manage().window().maximize(): Maximizes the current browser window.
- 9. driver.manage().window().minimize(): Minimizes the current browser window.
- 10. driver.manage().window().fullscreen(): Switches the browser window to fullscreen mode.
- 11. driver.manage().window().setSize(new Dimension(width, height)): Sets the size of the browser window.
- 12. driver.manage().window().setPosition(new Point(x, y)): Sets the position of the browser window.
- 13. driver.manage().addCookie(new Cookie("name", "value")): Adds a new cookie to the browser.
- 14. driver.manage().deleteCookieNamed("name"): Deletes a cookie by its name.
- 15. driver.manage().deleteAllCookies(): Deletes all cookies for the current domain.
- 16. driver.manage().getCookieNamed("name"): Retrieves a specific cookie by its name.
- 17. driver.manage().getCookies(): Retrieves all cookies for the current domain.
- 18. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the implicit wait time for locating elements.
- 19. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for a page to load.
- 20. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the timeout for asynchronous scripts.
- 21. driver.findElement(By.id("element_id")).click(): Clicks on an element identified by its ID.
- 22. driver.findElement(By.name("element_name")).sendKeys("text"): Sends text to an element identified by its name.
- 23. driver.findElement(By.xpath("//xpath")).getText(): Retrieves the text from an element using XPath.
- 24. driver.findElement(By.cssSelector("selector")).getAttribute("attribute_name"): Retrieves an attribute's value from an element using CSS selector.
- 25. driver.findElement(By.className("class_name")).isDisplayed(): Checks if an element identified by its class name is displayed.
- 26. driver.findElement(By.linkText("link_text")).click(): Clicks on a link identified by its text.
- 27. driver.findElement(By.partialLinkText("partial_link_text")).click(): Clicks on a link identified by partial text.
- 28. driver.findElement(By.tagName("tag_name")).sendKeys("text"): Sends text to an element identified by its tag name.
- 29. driver.findElement(By.id("element_id")).submit(): Submits a form element identified by its ID.
- 30. driver.findElement(By.name("element_name")).clear(): Clears the text from an element identified by its name.
- 31. driver.switchTo().frame("frame_id"): Switches to a specific iframe by its ID.

- 32. driver.switchTo().defaultContent(): Switches back to the main content from an iframe.
- 33. driver.switchTo().window("window_handle"): Switches to a specific window by its handle.
- 34. driver.switchTo().alert().accept(): Accepts an alert popup.
- 35. driver.switchTo().alert().dismiss(): Dismisses an alert popup.
- 36. driver.switchTo().alert().getText(): Retrieves the text from an alert popup.
- 37. driver.switchTo().alert().sendKeys("text"): Sends text to an alert popup.
- 38. driver.executeScript("script"): Executes a JavaScript command.
- 39. driver.executeAsyncScript("script"): Executes an asynchronous JavaScript command.
- 40. driver.manage().logs().get(LogType.BROWSER): Retrieves browser logs.
- 41. driver.manage().logs().get(LogType.PERFORMANCE): Retrieves performance logs.
- 42. driver.manage().logs().get(LogType.CLIENT): Retrieves client logs.
- 43. driver.manage().logs().get(LogType.SERVER): Retrieves server logs.
- 44. driver.manage().window().getSize(): Retrieves the size of the browser window.
- 45. driver.manage().window().getPosition(): Retrieves the position of the browser window.
- 46. driver.getTitle(): Retrieves the title of the current page.
- 47. driver.getCurrentUrl(): Retrieves the URL of the current page.
- 48. driver.getPageSource(): Retrieves the source of the current page.
- 49. driver.navigate().refresh(): Refreshes the current page.
- 50. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Configures implicit wait time.
- 51. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Configures maximum wait time for page load.
- 52. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures script timeout duration.
- 53. driver.manage().window().getSize(): Gets the dimensions of the current window.
- 54. driver.manage().window().getPosition(): Gets the position of the current window.

WebDriver Timeout Commands

- 1. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets the implicit wait time for locating elements.
- 2. driver.manage().timeouts().implicitlyWait(Duration.ofMinutes(minutes)): Sets the implicit wait time for locating elements.
- 3. driver.manage().timeouts().implicitlyWait(Duration.ofHours(hours)): Sets the implicit wait time for locating elements.
- 4. driver.manage().timeouts().implicitlyWait(Duration.ofDays(days)): Sets the implicit wait time for locating elements.
- 5. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets the maximum time to wait for a page to load.
- 6. driver.manage().timeouts().pageLoadTimeout(Duration.ofMinutes(minutes)): Sets the maximum time to wait for a page to load.
- 7. driver.manage().timeouts().pageLoadTimeout(Duration.ofHours(hours)): Sets the maximum time to wait for a page to load.
- 8. driver.manage().timeouts().pageLoadTimeout(Duration.ofDays(days)): Sets the maximum time to wait for a page to load.
- 9. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets the timeout for asynchronous script execution.

- 10. driver.manage().timeouts().setScriptTimeout(Duration.ofMinutes(minutes)): Sets the timeout for asynchronous script execution.
- 11. driver.manage().timeouts().setScriptTimeout(Duration.ofHours(hours)): Sets the timeout for asynchronous script execution.
- 12. driver.manage().timeouts().setScriptTimeout(Duration.ofDays(days)): Sets the timeout for asynchronous script execution.
- 13. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Configures implicit wait time for locating elements.
- 14. driver.manage().timeouts().implicitlyWait(Duration.ofMinutes(minutes)): Configures implicit wait time for locating elements.
- 15. driver.manage().timeouts().implicitlyWait(Duration.ofHours(hours)): Configures implicit wait time for locating elements.
- 16. driver.manage().timeouts().implicitlyWait(Duration.ofDays(days)): Configures implicit wait time for locating elements.
- 17. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Configures maximum wait time for page load.
- 18. driver.manage().timeouts().pageLoadTimeout(Duration.ofMinutes(minutes)): Configures maximum wait time for page load.
- 19. driver.manage().timeouts().pageLoadTimeout(Duration.ofHours(hours)): Configures maximum wait time for page load.
- 20. driver.manage().timeouts().pageLoadTimeout(Duration.ofDays(days)): Configures maximum wait time for page load.
- 21. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Configures script execution timeout.
- 22. driver.manage().timeouts().setScriptTimeout(Duration.ofMinutes(minutes)): Configures script execution timeout.
- 23. driver.manage().timeouts().setScriptTimeout(Duration.ofHours(hours)): Configures script execution timeout.
- 24. driver.manage().timeouts().setScriptTimeout(Duration.ofDays(days)): Configures script execution timeout.
- 25. driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(seconds)): Sets default implicit wait time for elements.
- 26. driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(seconds)): Sets default maximum wait time for page loading.
- 27. driver.manage().timeouts().setScriptTimeout(Duration.ofSeconds(seconds)): Sets default maximum timeout for script execution.
- 28. driver.manage().timeouts().implicitlyWait(Duration.ofMinutes(minutes)): Sets implicit wait time for element operations.
- 29. driver.manage().timeouts().pageLoadTimeout(Duration.ofMinutes(minutes)): Sets maximum wait time for page load.
- 30. driver.manage().timeouts().setScriptTimeout(Duration.ofMinutes(minutes)): Sets timeout for script execution.
- 31. driver.manage().timeouts().implicitlyWait(Duration.ofHours(hours)): Sets implicit wait time for locating elements.
- 32. driver.manage().timeouts().pageLoadTimeout(Duration.ofHours(hours)): Sets timeout for complete page load.

- 33. driver.manage().timeouts().setScriptTimeout(Duration.ofHours(hours)): Sets timeout for script execution.
- 34. driver.manage().timeouts().implicitlyWait(Duration.ofDays(days)): Configures implicit wait duration.
- 35. driver.manage().timeouts().pageLoadTimeout(Duration.ofDays(days)): Configures maximum time for page load.
- 36. driver.manage().timeouts().setScriptTimeout(Duration.ofDays(days)): Configures script execution timeout.