WEBDRIVER WAITS

WHY WAIT COMMANDS:

When a page loads on a browser, various web elements on the page may load at a different time intervals. due to this variation in time lags(for loading web elements) an issue arises. Wait commands help to observe and trouble these issues

Wait commands direct a test script to pause for a certain time before throwing a ElementNotFound Exception

IMPLICIT WAIT:

Implicit Wait directs the Selenium WebDriver to wait for a certain measure of time before throwing an exception. Once this time is set, WebDriver will wait for the element before the exception occurs.

SYNTAX: driver.manage().timeouts.implicitlyWait(Duration.ofSeconds(30));

* It has to be written only once in the code
* When to write🡪 After launching browser
* Affecting method🡪findElement,findElements
* What happens after timeout?//Throws Exception
* findElement🡪NoSuchElement Exception
* findElements🡪 empty list

EXPLICIT WAIT

Explicit waits are used to halt the execution until the time a particular condition is met or the maximum time has elapsed. Unlike Implicit waits, Explicit waits are applied for a particular instance only.

When we like to wait for element behaviour or for the target locators!

* To become clickable
* Elements to become visible
* Element to become enabled
* Alert to appear
* Window to appear

Fluent Wait(Super Class)

WebDriver Wait(Sub class)

* Every 500ms(polling interval),the code will go and check if the expected condition is met or not
* If it is met,It performs the action
* If not met,Sleeps for another 500ms before poll again
* After crossing maximum time,it throws TimeOutExpection

EXAMPLES:

WAIT FOR ALERT

WebDriverWait wait = new WebDriverWait(driver,Duration.ofSeonds(30));

Wait.until(ExpectedConditions.alertIsPresent();

WAIT FOR VISIBILITY/INVISIBILITY/STALENESS/NUMBEROFWINDOWS:

WebElement ele = driver.findElement(By.xpath(“value of xpath”));

WebDriverWait wait = new WebDriverWait(driver,Duration.ofSeonds(30));

Wait.until(ExpetedConditions.visibilityOf(ele));

Wait.until(ExpectedConditions.invisibilityOf(ele));

Wait.until(ExpectedConditions.stalenessOf(ele));

Wait.until(ExpectedConditions.numberOfWindowsToBe(3));