**Selenium Wait types**

Implicit Wait:

The implicit wait will tell to the web driver to wait for certain amount of time before it throws a "No Such Element Exception". The default setting is 0. Once we set the time, web driver will wait for that time before throwing an exception.

Syntax:

driver.manage().timeouts().implicitlyWait(TimeOut, TimeUnit.SECONDS);

Explicit Wait:

The explicit wait is used to tell the Web Driver to wait for certain conditions (Expected Conditions) for the maximum time before throwing an "ElementNotVisibleException" exception. The explicit wait is an intelligent kind of wait, but it can be applied only for specified elements.

Syntax:

WebDriverWait wait = new WebDriverWait(driver, 10);

WebElement element = wait.until(ExpectedConditions.elementToBeClickable(By.id(“someid”)));

PageLoadTimeout:

Sets the amount of time to wait for a page load to complete before throwing an error. If the timeout is negative, page loads can be indefinite.

Syntax:

driver.manage().timeouts().pageLoadTimeout(100, TimeUnit.SECONDS);

Script Timeout:

Sets the amount of time to wait for an asynchronous script to finish execution before throwing an error. If the timeout is negative, then the script will be allowed to run indefinitely.

Syntax:

**driver.manage().timeouts().setScriptTimeout(100,** TimeUnit.SECONDS**);**

Fluent Wait:

The fluent wait is used to tell the web driver to wait for a condition, as well as the frequency with which we want to check the condition before throwing an "ElementNotVisibleException" exception.

*Frequency*: Setting up a repeat cycle with the time frame to verify/check the condition at the regular interval of time

Syntax:

Wait<WebDriver> wait = new FluentWait<WebDriver>(driver)

.withTimeout(60, TimeUnit.SECONDS)

.pollingEvery(5, TimeUnit.SECONDS)

.ignoring(ElementNotVisibleException.class);

WebElement ele = wait.until(new Function<WebDriver, WebElement>() {

public WebElement apply(WebDriver driver) {

return driver.findElement(By.id("some id"));

}

});

ele.click();