

# Selenium Python - WAITS

## Step by Step

Today we will learn:

Why to use waits in Selenium

What are Implicit & Explicit waits

How to use Implicit and Explicit waits

Why are waits required:

- All elements on a web page may not load at the same time
- Required for websites using Ajax and Javascript
- To avoid ElementNotVisible exception from Selenium

Selenium web driver has 2 types of waits

Implicit - poll the DOM for a specific duration to locate an element 500ms until timeout

10 sec -

Explicit - waits for a certain condition to occur before proceeding with next step

Sample Code :

```
from selenium import webdriver
from selenium.webdriver.support.ui import WebDriverWait
from selenium.webdriver.support import expected_conditions as EC
from selenium.webdriver.common.by import By
from selenium.common.exceptions import TimeoutException
```

```
driver = webdriver.Chrome(executable_path=../drivers/chromedriver.exe")
# Implicit Waits
# driver.implicitly_wait(10)

driver.get("https://google.com")

driver.find_element_by_name("q").send_keys("Automation")

wait = WebDriverWait(driver, 10)
try:
    element = wait.until(EC.element_to_be_clickable((By.NAME,"btnK1")))
    print("element is clickable")
except TimeoutException:
    print("element is not clickable")
    exit(1)

element.click()

# driver.find_element_by_name("btnK").click()

print("Test Completed")
driver.close()
driver.quit()
```

## References:

<https://seleniumhq.github.io/selenium/docs/api/java/org/openqa/selenium/support/ui/ExpectedConditions.html>

[https://seleniumhq.github.io/selenium/docs/api/dotnet/html/T\\_OpenQA\\_Selenium\\_Support\\_UI\\_ExpectedConditions.htm](https://seleniumhq.github.io/selenium/docs/api/dotnet/html/T_OpenQA_Selenium_Support_UI_ExpectedConditions.htm)