
Non-HTML POP UP

- Pop ups which are developed without using the HTML are called as non-html pop ups.

Characteristics of Non-HTML pop ups

- We cannot inspect the elements which are present on non-html pop ups.
- Based on the characteristics of non-html pop ups, non-html popups are classified into following types.
 1. Alert/Java Script pop up
 2. File upload pop up
 3. File download pop up
 4. Window pop up
 5. Notification pop up

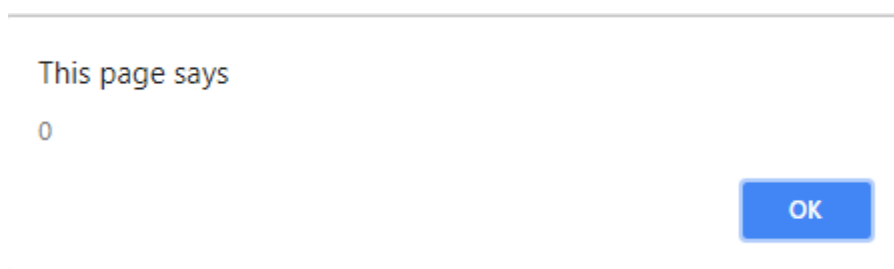
Alert or Confirmation pop-up

What is Alert?

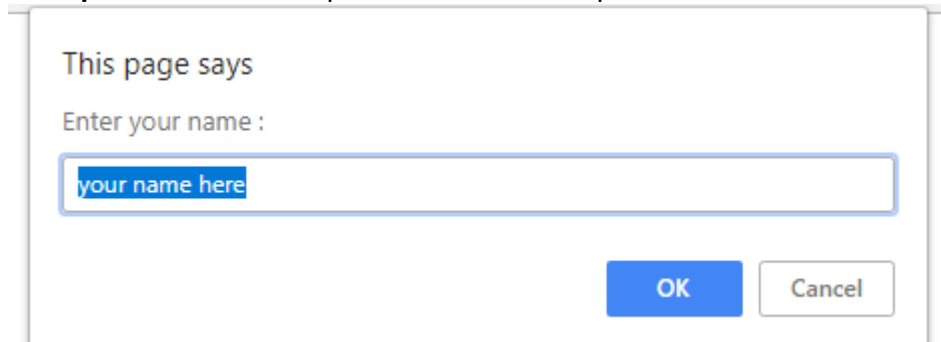
- Alert is a small message box which displays on-screen notification to give the user some kind of information or ask for permission to perform certain kind of operation. It may be also used for warning purpose.

Here are few alert types:

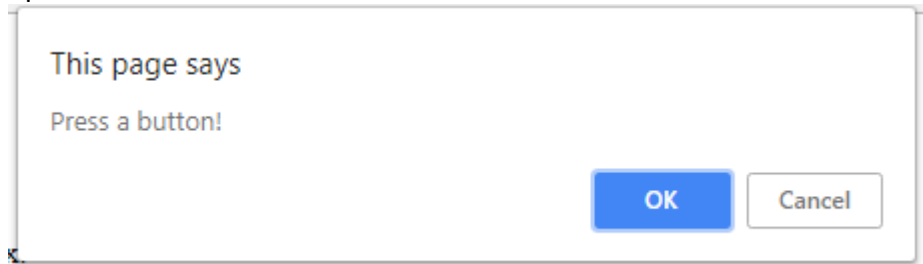
1. **Simple Alert:** This simple alert displays some information or warning on the screen.



2. **Prompt Alert:** This Prompt Alert asks some input from the user.



3. **Confirmation Alert:** This confirmation alert asks permission to do some type of operation



Note: before performing any operations on the pop ups first we need to find the characteristics of pop ups, than only we can able to find the solution to handle the pop ups, because selenium cannot handle all the types of pop ups, if you know the characteristics. It will become easy to handle the pop ups.

Characteristics of alert pop up:-

1. We cannot inspect the pop-up
2. We can move the pop-up
3. It contains only one button ('ok' or 'yes') or two buttons ('ok' and 'yes').

Note: This kind of pop-up is also called as web based pop-up and java script pop-up.

In order to perform operation on the alert pop-up, we first transfer the control from webpage to the pop-up.

- Selenium provides us with a class called **Alert**.
- Alert class gives us following methods to deal with the alert:

```

alert.accept()
alert.dismiss()
alert.send_keys("keysToSend")
alert.text
alert.authenticate(["username", "password"])

```

Note: Authenticate method has been deprecated now.

1. **Accept:** - accept () method clicks on the "Ok" button as soon as the pop up window appears.
2. **Dismiss:** - dismiss () method clicks on the "Cancel" button as soon as the pop up window appears.
3. **Text:** - text method returns the text displayed on the alert box.
4. **send_keys ():** - send_keys () method enters the specified string pattern into the alert box.

In order to make use of these methods, first we need to pass the control to the pop-up window.

In order to pass the control we use the below statement.

```
alert = driver.switch_to.alert
```

The above statement, switch the control to alert pop up and returns the object of alert.

HTML code to generate the simple alert.

```
<html><head>
  <script type="text/javascript">
    function display(luckyNumber) {
      var firstNameLength = firstName.value.length;
      var shoeSizeValue = shoeSize.value;
      var luckyNumber = firstNameLength * shoeSizeValue;
      alert(luckyNumber);
    }
  </script>
</head>
<body>
  <form action="" method="get" name="myForm" id="myForm">
    <table width="1400" border="1">
      <tbody><tr>
        <td>First Name:</td>
        <td><input name="firstName" type="text" id="firstName"></td>
      </tr>
      <tr>
        <td>Gender:</td>
        <td><input name="gender" type="text" id="gender"></td>
      </tr>
      <tr>
        <td>Shoe Size:</td>
        <td><input name="shoeSize" type="text" id="shoeSize"></td>
      </tr>
      <tr>
        <td><input type="button" onclick="display(luckyNumber.value)" value="Calculate Lucky Number"></td>
        <td></td>
      </tr>
      <tr>
        <td>Lucky Number:</td>
        <td><input name="luckyNumber" type="text" id="luckyNumber"></td>
      </tr>
    </tbody></table>
  </form>
</body></html>
```

Program to click on Ok button?

```
1 from selenium import webdriver
2 from selenium.webdriver.common.by import By
3
4 driver = webdriver.Chrome()
5 driver.maximize_window()
6 driver.get("file:///C:/Users/PriyaPrasad/Desktop/HTML%20Pages/alertPopUp.html")
7 driver.implicitly_wait(30)
8
9 driver.find_element(By.XPATH, "//button[text()='Try it']").click()
10
11 alert = driver.switch_to.alert
12 alert.accept()
13
14 driver.close()
```

Another HTML code for generating the Alert pop-up

```

1  <html><head><title> Qspiders </title>
2  </head><body>
3  <div id="header">
4  <ul id="linkTabs">
5  <li>
6  <a href="https://www.google.com/">Google</a>
7  </li>
8  <li>
9  <a href="http://abodeqa.wordpress.com/">abodeQA</a>
10 </li>
11 </ul>
12 </div>
13 <div class="header_spacer"></div>
14 <div id="container">
15 <div id="content" style="padding-left: 185px;">
16 <table id="selectTable">
17 <tbody>
18 <tr>
19 <td>
20 <div>
21 <select id="SelectID_One">
22 <option value="redvalue">Red</option>
23 <option value="greenvalue">Green</option>
24 <option value="yellowvalue">Yellow</option>
25 <option value="greyvalue">Grey</option>
26 </select>
27 </div>
28 </td>
29 <td>
30 <div>
31 <select id="SelectID_Two">
32 <option value="applevalue">Apple</option>
33 <option value="orangevalue">Orange</option>
34 <option value="mangovalue">Mango</option>
35 <option value="limevalue">Lime</option>
36 </select>
37 </div>
38 </td>

```

```

39 <td>
40 <div>
41 <select id="SelectID_Three">
42 <option value="selectValue">Select</option>
43 <option value="elephantvalue">Elephant</option>
44 <option value="mousevalue">Mouse</option>
45 <option value="dogvalue">Dog</option>
46 </select>
47 </div>
48 </td>
49 </tr>
50 <tr>
51 <td>
52
53
54
55 <p>Click the button to display a confirm box.</p>
56 <button onclick="myFunction()">Try it</button>
57 <script>
58 function myFunction()
59 {
60   confirm("Press a button!");
61 }
62 </script>
63
64
65 </td>
66 </tr>
67 </tbody>
68 </table>
69 </div>
70 </div>
71
72 </body></html>

```

Program to click on cancel button?

```

>from selenium import webdriver
from selenium.webdriver.common.by import By

driver = webdriver.Chrome()
driver.maximize_window()
driver.get("file:///D:/Study/Docs/Java/Old%20Desktop%20Data/New%20folder/pop-ups/alertPopUp.html")
driver.implicitly_wait(30)

driver.find_element(By.XPATH, "//button[text()='Try it']").click()
alert = driver.switch_to.alert
alert.dismiss()

driver.close()

```

Program to get the text from the alert pop up?

```
1 from selenium import webdriver
2 from selenium.webdriver.common.by import By
3
4 driver = webdriver.Chrome()
5 driver.maximize_window()
6 driver.get("file:///D:/Study/Docs/Java/Old%20Desktop%20Data/New%20folder/pop-ups/alertPopUp.html")
7 driver.implicitly_wait(30)
8
9 driver.find_element(By.XPATH, "//button[text()='Try it']").click()
10 alert = driver.switch_to.alert
11 print("Text present on the alert pop-up: ", alert.text)
12 alert.dismiss()
13
14 driver.close()
```

HTML code:

```
<html>
  <head>
    <title>Qspiders</title>
    <script type="text/javascript">
      <!--
        function getValue() {
          var retVal = prompt("Enter your name : ", "your name here");
          document.write("You have entered : " + retVal);
        }
      //-->
    </script>
  </head>

  <body>
    <p>Click the following button to see the result: </p>

    <form>
      <input type="button" value="Click Me" onclick="getValue();">
    </form>
  </body>
</html>
```

Write a program to enter the text to alert pop up?

```
1 from selenium import webdriver
2 from selenium.webdriver.common.by import By
3
4 driver = webdriver.Chrome()
5 driver.maximize_window()
6 driver.get("file:///C:/Users/PriyaPramod/Desktop/HTML%20Pages/AlertValue.html")
7
8 driver.find_element(By.XPATH, "//input[@value='Click Me']").click()
9
10 alert = driver.switch_to.alert()
11 alert.send_keys("Qspiders")
12 alert.accept()
13
14 driver.close()
```

Note: If alert pop up is not present, web driver will through the below exception

"NoAlertPresentException"

Write a program to handle the alert pop up using the try and except

```
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.common.exceptions import NoAlertPresentException

driver = webdriver.Chrome()
driver.maximize_window()
driver.get("file:///C:/Users/PriyaPramod/Desktop/HTML%20Pages/alertPopUp.html")
driver.implicitly_wait(30)

driver.find_element(By.XPATH, "//button[text()='Try it']").click()

try:
    alert = driver.switch_to.alert
    print('Alert is present')
    print('Text present on alert pop is:', alert.text)
    alert.accept()
except NoAlertPresentException:
    print('No alert is present')

driver.close()
```

Program to verify the alert pop up is present or not

- In order to check if the alert pop up is present or not. We use explicit wait condition called `alert_is_present ()` condition class, which checks is alert pop up is present. If available it will pass the control to alert pop up and returns the object of alert.
- If not available, it will poll for maximum time and throws the **TimeoutException**.

```
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.webdriver.support.wait import WebDriverWait
import selenium.webdriver.support.expected_conditions as EC

driver = webdriver.Chrome()
driver.maximize_window()
driver.get("file:///C:/Users/PriyaPramod/Desktop/HTML%20Pages/alertPopUp.html")
driver.implicitly_wait(30)

driver.find_element(By.XPATH, "//button[text()='Try it']").click()

wait = WebDriverWait(driver, 50)
status = wait.until(EC.alert_is_present())
print('Text on Alert:', status.text)
status.accept()

driver.close()
```

Program to verify and handle the pop up using explicit wait and try and except.

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

driver = webdriver.Chrome()
driver.maximize_window()
driver.get("file:///C:/Users/PriyaPramod/Desktop/HTML%20Pages/alertPopUp.html")
driver.implicitly_wait(30)

driver.find_element(By.XPATH, "//button[text()='Try it']").click()

try:
    alert = WebDriverWait(driver,30).until(EC.alert_is_present())
    print('Alert is present')
    print('Text present on alert pop is:',alert.text)
    alert.accept()
except TimeoutException:
    print('No alert is present')

driver.close()
```