**What are Alerts/popups in Selenium?**

***Alerts*** are small popup boxes/windows which display the ***messages/notifications*** and notify the user with some information seeking some permission on certain kinds of operations. Additionally, we can also use them for warning purposes. Sometimes, the user can enter a few details in the alert box as well.

***For Example****, The alert box displayed below requires an action from the user to press****OK****and accept or press****Cancel****and dismiss the message box.*

Application ***alerts*** shift your focus from the current browser window to a newly opened window and force the user to read the message displayed and act accordingly. Users will be blocked and will not be able to work further unless the alert message box gets handled.

***What are the different types of Alerts/popups?***

While automating any web application, [***Selenium WebDriver***](https://www.toolsqa.com/selenium-webdriver/selenium-tutorial/) may encounter alerts that can either be ***application dependant*** or the ***Operating system dependant*** on which the user is working. Based on these categorizations, we can divide the alerts majorly into the following categories:

* ***Windows/OS Alerts****: Window-based alerts are system-generated alerts/popups. The developers invoke the operating system APIs to show these alerts/dialogue-boxes. Handling these alerts in Selenium is a little tricky and beyond the WebDriver's capabilities, as Selenium is an automation testing tool for web applications only, and we need third party utility to automate window based popups.  A few of those utilities are****[AutoIT](https://www.toolsqa.com/selenium-webdriver/autoit-selenium-webdriver/)****and*[***Robot Class***](https://www.toolsqa.com/selenium-webdriver/robot-class/)*in Java. A sample operating system based alert will look as follows and are majorly called Dialog-Boxes*:
* ***Web/Javascript /Browser-based Alerts:*** *Web/Browser based alerts are primarily called****Javascript alerts****and are those alerts that are browser dependant. These alerts are majorly called Popups*.

In this tutorial, we will be focusing majorly on *browser-based alerts*, as they are more prevalent in this web era and are compatible with automation using *Selenium WebDriver*.

Let's now see what the various web-alerts which we can see on multiple web applications are.

**What are the various kinds of alerts provided by Web Applications?**

As we discussed, there are various types of alerts that the developers can implement on web applications. Each of these alerts/popups needs different kinds of actions to handle these alerts. Let's see what these different types of alerts that the web applications provide are:

* ***Simple alert****: These alerts are just****informational****alerts and have an****OK****button on them. Users can click on the****OK****button after reading the message displayed on the alert box. A simple alert box looks like below:*
* ***Prompt Alert***: *In Prompt alerts, some****input requirement****is there from the user in the form of text needs to enter in the alert box. A prompt alert box is displayed like below, where the user can enter his/her username and press the****OK****button or****Cancel****the alert box without entering any details* .
* ***Confirmation Alert****: These alerts****get some confirmation****from the user in the form of****accepting****or****dismissing****the message box. They are different from prompt alerts in a way that the user cannot enter anything as there is no text-box available. Users can only read the message and provide the inputs by pressing the****OK/Cancel****button*.