

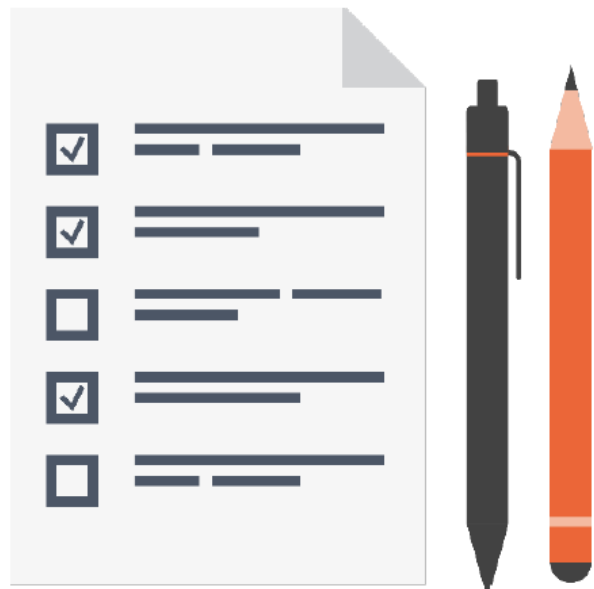
# WebDriver API: Tabs, frames, alerts

# Agenda



- Pop ups
- Alerts
- Iframes
- Tabs/windows

# After today's session you should be able to:



- Switch between multiple windows
- Handle different browser pop ups
- Switch between iframes

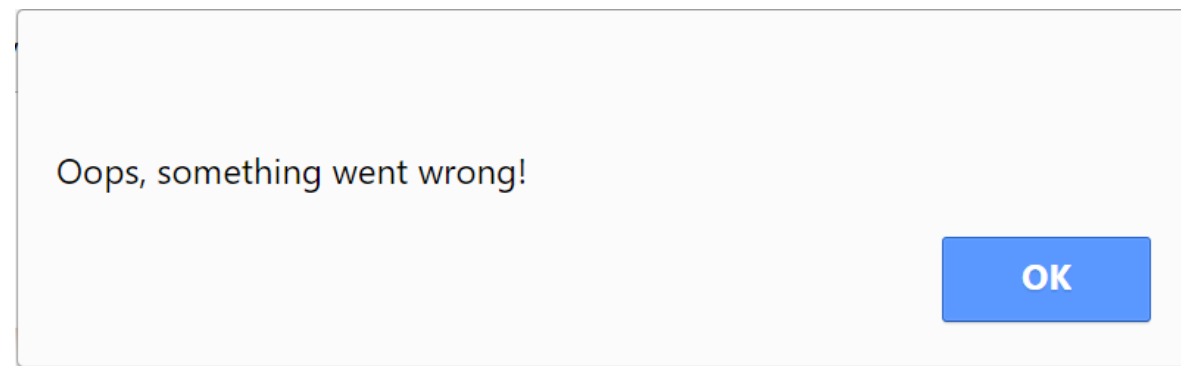
# Pop up



Anything that comes out of the browser

- JavaScript alerts
- Modals
- Dialogs

# JavaScript alerts



- Type of a pop up
- Blocks the page when present
- User has to accept or cancel
- Not part of html

# JavaScript alert

```
Alert alert = driver.switchTo().alert();
```

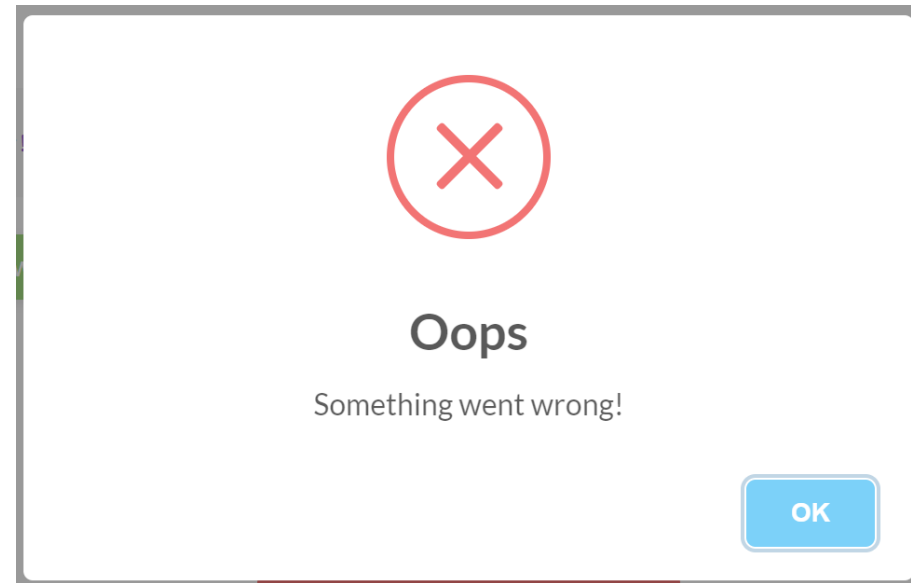


```
alert.accept();
```

```
alert.dismiss();
```

```
alert.sendKeys("hello");
```

# Browser pop up



- Part of html
- Does not always block the web page
- Can be located using usual locator

# Browser pop up

```
WebElement okBtn = driver.findElement(By.id("ok"));  
okBtn.click();
```



- Can be treated as a regular WebElement
- Subject to same actions as click(),  
sendKeys() etc



# Iframes



- Html page inside another  
html page
- Used to put content from one  
page into another
- Ads, video players...

# Iframes



- Html page inside another html page
- Used to put content from one page into another
- Ads, maps, video players...
- Done use *iframe* tag

# Iframes

the map is embedded using an iframe

The screenshot displays a real estate website interface. At the top, there is a search bar with the location "Washington, DC, USA", a date range from "02/17/2018" to "08/16/2018", and a dropdown menu for "1 bed". Below the search bar, a red vertical line separates the map from the listings. The map on the left shows various neighborhoods in Washington, DC, with price tags for different areas: \$1200, \$1440, \$1100, \$967, \$1000, \$850, \$1667, and \$1275. The listings on the right include a section for "99 listing found" and a specific listing for a "fully furnished private bedroom with all utilities in Shaw" for \$1808 per month, available now with a minimum stay of 6 months. Another listing for \$950 is partially visible at the bottom.

# Iframes

```
WebElement iframe =  
    driver.findElement(By.tagName("iframe"));  
  
driver.switchTo().frame(iframe);  
  
driver.switchTo().frame(0);  
  
driver.switchTo().frame("iframe-id");  
  
driver.switchTo().parentFrame();
```



# Multiple windows



- For selenium there is no difference between tab or window
- Every tab/window is a separate window
- Selenium can control one window at a time
- We can switch to windows using *windows handles*

# Multiple windows



```
driver.getWindowHandle()
```

```
driver.getWindowHandles()
```

```
for (String window : driver.getWindowHandles()) {  
    driver.switchTo().window(window);  
    System.out.println(driver.getTitle());  
}
```