# All About Desired Capabilities

In this lesson, we will discuss the desired capabilities for both Chrome and Firefox and options available for them.

#### WE'LL COVER THE FOLLOWING

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### Introduction #

Desired capabilities is a collection of key/value pairs used to configure a particular instance of the browser. It helps to set the properties or capabilities of a WebDriver. There are browser-independent capabilities like browser name, version, acceptSslCerts, etc and browser-specific capabilities like FirefoxOptions for Mozilla Firefox, and ChromeOptions for Chrome.

### Desired capabilities for Chrome #

We have to create an instance of <a href="ChromeOptions">ChromeOptions</a> with Chrome-specific capabilities. We can then pass the <a href="ChromeOptions">ChromeOptions</a> object to the <a href="ChromeDriver">ChromeDriver</a> constructor like below:

```
ChromeOptions options = new ChromeOptions();
options.addExtensions(new File("<path to extension file>")); // add an ext
ension
options.setAcceptInsecureCerts(true); // accept all SSL certs by defaults
options.setUnhandledPromptBehaviour(UnexpectedAlertBehaviour.ACCEPT);
options.setHeadless(true); // To run Chrome browser in a headless environm
ent
options.addArguments("start-maximized"); // Start Chrome maximized

WebDriver driver = new ChromeDriver(options); // create chromeDriver instance
```

Refer link for all available *ChromeOptions*.

## Desired capabilities for Firefox #

We have to create an instance of FirefoxOptions with Firefox-specific capabilities. We can then pass the FirefoxOptions object to the FirefoxDriver constructor like below:

```
FirefoxOptions options = new FirefoxOptions()
  options.setCapability("enableVNC", true);
  options.setCapability("screenResolution", "1280x1024x24");
  options.addArguments("-headless"); // to start firefox in headless mode

WebDriver driver = new FirefoxDriver(options);
```

Refer link for all available *FirefoxOptions*.

That is all for the Desired capabilities. In the next lesson, you'll learn the emulation of mobile-web.