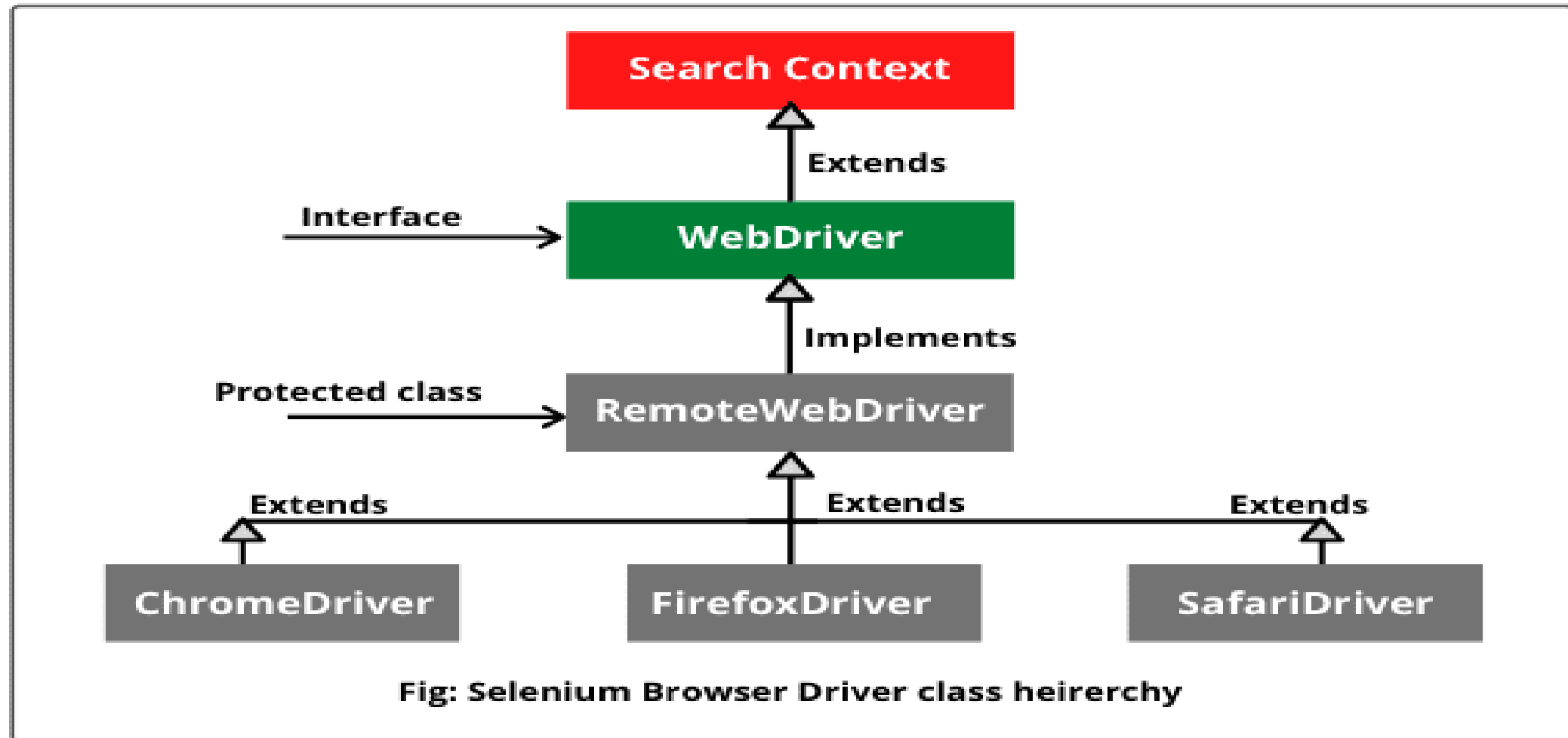# Selenium 3 Architecture

Note: In Selenium 4 Only Changes is Instead of JSON , W3c (world wide Web Consortium) is there.

Selenium WebDriver Architecture

Fig: Selenium Browser Driver class heirerchy

Selenium WebDriver

❑ Selenium WebDriver is a collection of open source APIs which are used to automate the testing of a web application.

❑ Selenium WebDriver tool is used to automate web application testing to verify that it works as expected. It supports many browsers such as Firefox, Chrome, IE, and Safari.

WebDriver Methods in Selenium

WebDriver Method	Description
close()	Closes the current active window if there are multiple windows. The browser quits if only one window is active
findElement()	Find the first WebElement based on the locator type
findElements()	Find all elements within the current page based on the locator type
get()	Loads a new web page in the current browser window
getCurrentUrl()	Gets a string defining the current web page URL
getPageSource()	Gets the complete page source of the loaded web page.
getTitle()	Gets the current page title
getWindowHandle()	Handles a browser after switching a specific window
getWindowHandles()	Handles all browser windows and permits the user to switch control between the parent window and child window
manage()	Receives the option interface
navigate()	Navigates to a specific URL
quit()	Stops/Quits the driver instance and close all open browser windows
switchTo()	Switch from one browser window to another browser window

What is WebElement in Selenium

❏ Anything which is Present in our Website is Called as WebElement

❏ WebElement in Selenium is essentially an HTML element on a website. HTML documents consist of HTML elements. Each HTML element consists of a start tag and an end tag.

3 Important Things to Understand in HTML

In HTML

1)TagName-----------------------------> is nothing but, anything which is comes after the < Symbol .

   Ex: <input>,<body>,<Span>,<button>,<head>,<p>, etc.

2)Attribute(AN="AV"). Attribute Name="Value"

   for ex: class="Value", type="Text", id="Email", name="Password".

3)Text--------> is Nothing but a Sequence of Character or Group of word which is Present Between the >Text< Symbol