**Selenium WebDriver**

1. **Advantages of using Selenium WebDriver?**

* Open Source: Selenium WebDriver is open source.
* Language Support: It supports multiple programming languages.
* Works Across Multiple OS: It can be used on different operating systems.
* Cross Browser Compatibility Testing: It allows testing across different web browsers.

1. **How to instantiate a WebDriver object for different browsers?**

**4) Define any ten methods in the WebDriver and their return types.   
3) Difference between findElement() and findElements() methods in WebDriver.  
4) How to handle frames using WebDriver?  
5) Different waits available in WebDriver and difference between them?  
6) How to capture screenshots in Selenium WebDriver?  
7) What are different types of commands available in Selenium WebDriver?  
8) How to keyboard and mouse actions in Selenium WebDriver?  
9) How dropdowns can be handled?  
10) How Alerts can be handled?  
  
Locators:  
  
  1) Different types of locators in Selenium?  
  2) Which locator is mostly preferred?  
  3) How to handle dynamic elements using locators in Selenium?  
  4) What is the XPath axes concept?  
  5) What are the advantages and disadvantages of using ID as a locator?  
  6) How to locate elements based on their attributes using CSS selectors?  
  7) Importance of using unique locators ?  
  8) How to handle nested elements with locators in Selenium?  
  9) Differences between absolute and relative XPath expressions.  
  
Waits:  
  
  1) What are all the types of waits available in Selenium.  
  2) Explain the need for implicit and explicit waits in Selenium.  
  3) What is the syntax for implicit and explicit waits?  
  4) What are fluent waits and how do they differ from other types of waits?  
  5) How to handle dynamic content loading using waits in Selenium?  
  6) What are the exceptions that can occur due to synchronization issues in Selenium?  
  7) How to implement custom wait conditions in Selenium?  
  8) What is the difference between Thread.sleep() and Selenium waits?  
  9) How to handle stale element reference exceptions in Selenium?  
  10) Explain the concept of ExpectedConditions in Selenium.  
  
Handling Different Browsers:  
  
  1) What are desired capabilities in Selenium?  
  2) What is the importance of browser drivers in Selenium automation?  
  3) How to handle browser notifications and pop-ups in Selenium?  
  4) How do you switch between different browser windows and tabs in Selenium?  
  
Actions:  
  
  1) What are all the methods available in actions class?  
  2) How to perform mouse hover actions in Selenium WebDriver?  
  3) How to automate keyboard interactions keys in Selenium?  
  4) What are drag-and-drop actions and how to implement them in Selenium?  
  5) How to handle right-click actions in Selenium?  
  6) What is the difference between click() and submit() methods in Selenium?  
  7) How to handle checkboxes and radio buttons using Selenium WebDriver?**