**Browser commands:**

Following is a list of browser commands available in C# with Selenium.

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| **Command Name** | **Description** | **Syntax** |
| **Url Command** | This command is used to open a specified URL in the browser. | driver.Url = "https://www.guru99.com" |
| **Title Command** | This command is used to retrieve the page title of the web page that is currently open | String title = driver.Title |
| **PageSource Command** | This command is used to retrieve the source code of web page that is currently open. | String pageSource = driver.PageSource |
| **Close Command** | This command is used to close the recently opened browser instance. | driver.Close(); |
| **Quit Command** | This command is used to close all open browser instances | driver.Quit(); |
| **Back Command** | This command is used to navigate to the previous page of browser history. | driver.Navigate().Back(); |
| **Forward Command** | This command is used to navigate to the next page of browser history. | driver.Navigate().Forward() |
| **Refresh Command** | This command is used to perform browser refresh. | driver.Navigate().Refresh() |

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| **Command Name** | **Description** | **Syntax** |
| **Click command** | This command is used to click on a Webelement. For the element to be clickable, the element must be visible on the webpage. This command is used for checkbox and radio button operations as well. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement")); element.Click(); |
| **Clear command** | This command is specifically used for clearing the existing contents of textboxes. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  element.Clear(); |
| **SendKeys command** | This command is used to input a value onto text boxes. The value to be entered must be passed as a parameter to | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  element.SendKeys("guru99"); |
| **Displayed command** | This command is used to identify if a specific element is displayed on the webpage. This command returns a Boolean value; true or false depending on the visibility of web element. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  Boolean status = element.Displayed; |
| **Enabled command** | This command is used to identify if a particular web element is enabled on the web page. This command returns a Boolean value; true or false as a result. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  Boolean status = element.Enabled; |
| **Selected command** | This command is used to identify if a particular web element is selected. This command is used for checkboxes,radio buttons, and select operations. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  Boolean status = element.Selected; |
| **Submit command:** | This command is similar to click command, The difference lies in whether the HTML form has a button with the type Submit. While the click command clicks on any button, submit command clicks on the only the buttons with type submit. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement")); element.submit(); |
| **Text command** | This command returns the innertext of a Webelement. This command returns a string value as a result. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  String text=element.Text; |
| **TagName command** | This command returns the HTML tag of a web element. It returns a string value as the result. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement")); String tagName = element.TagName; |
| **GetCSSValue Command:** | This method is used to return the color of a web element on the form of a rgba string (Red,Green,Blue, and Alpha). | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  String color = element.getCSSValue;  **Output**– If the color of element is red, output would be rgba(255,0,0,1) |

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| **Command Name** | **Description** | **Syntax** |
| **SelectByText Command** | This command selects an option of a dropdown based on the text of the option. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  select.SelectByText("Guru99"); |
| **SelectByIndex Command** | This command is used to select an option based on its index. Index of dropdown starts at 0. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  select.SelectByIndex("4"); |
| **SelectByValue Command** | This command is used to select an option based on its option value. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  select.SelectByValue("Guru99"); |
| **Options Command** | This command is used to retrieve the list of options displayed in a dropdown. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  List<IWebelement> options = select. Options;  int size = options.Count;  for(int i=0;i<options.size();i++)  {  String value = size.elementAt(i).Text;  Console.writeLine(value);  }  The above code prints all the options onto console within a dropdown. |
| **IsMultiple command** | This command is used to identify if a dropdown is a multi select dropdown; A multi select dropdown enables user to select more than one option in a dropdown at a time. This command returns a Boolean value. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  Boolean status = select.IsMultiple(); |
| **DeSelectAll command** | This command is used in multi select dropdowns. It clears the options that have already been selected. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  select.DeSelectAll(); |
| **DeSelectByIndex command** | This command deselects an already selected value using its index. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  select.DeSelectByIndex("4"); |
| **DeSelectByValue command** | This command deselects an already selected value using its value. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  select.DeSelectByValue("Guru99"); |
| **DeSelectByText command** | This command deselects an already selected value using its text. | IWebelement element = driver.FindElement(By.xpath("xpath of Webelement"));  SelectElement select = new SelectElement(element);  select.DeSelectByText("Guru99"); |

**Code Samples**

**Example 1: Click on a link using XPATH Locator:**

**Test Scenario:**

1. Navigate to Demo Guru99 web page – <https://demo.guru99.com/test/guru99home/>
2. Maximize the window
3. Click on the ‘Testing’ menu
4. Close the browser

using NUnit.Framework;

using OpenQA.Selenium;

using OpenQA.Selenium.Chrome;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Guru99Demo

{

class CSS

{

IWebDriver m\_driver;

[Test]

public void cssDemo()

{

m\_driver = new ChromeDriver("D:\\3rdparty\\chrome");

m\_driver.Url = "https://demo.guru99.com/test/guru99home/";

m\_driver.Manage().Window.Maximize();

IWebelement link = m\_driver.FindElement(By.XPath(".//\*[@id='rt-header']//div[2]/div/ul/li[2]/a"));

link.Click();

m\_driver.Close();

}

}

}

**Example 2: Entering data into TextBox and Click on a button using XPATH locator:**

**Test Scenario:**

1. Navigate to Guru 99 demo page – <https://demo.guru99.com/test/guru99home/>
2. Enter data into email text box
3. Click on sign up button

using NUnit.Framework;

using OpenQA.Selenium;

using OpenQA.Selenium.Chrome;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Guru99Demo

{

class CSS

{

IWebDriver m\_driver;

[Test]

public void cssDemo()

{

m\_driver = new ChromeDriver("G:\\");

m\_driver.Url = "https://demo.guru99.com/test/guru99home/";

m\_driver.Manage().Window.Maximize();

// Store locator values of email text box and sign up button

IWebElement emailTextBox = m\_driver.FindElement(By.XPath(".//\*[@id='philadelphia-field-email']"));

IWebElement signUpButton = m\_driver.FindElement(By.XPath(".//\*[@id='philadelphia-field-submit']"));

emailTextBox.SendKeys("test123@gmail.com");

signUpButton.Click();

}

}

}

**Example 3: Entering data into TextBox and Click on a button using CSS locator:**

**Test Scenario:**

1. Navigate to Guru 99 demo page – <https://demo.guru99.com/test/guru99home/>
2. Enter data into email text box
3. Click on sign up button

using NUnit.Framework;

using OpenQA.Selenium;

using OpenQA.Selenium.Chrome;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Guru99Demo

{

class CSS

{

IWebDriver m\_driver;

[Test]

public void cssDemo()

{

m\_driver = new ChromeDriver("G:\\");

m\_driver.Url = "https://demo.guru99.com/test/guru99home/";

m\_driver.Manage().Window.Maximize();

// Store locator values of email text box and sign up button

IWebElement emailTextBox = m\_driver.FindElement(By.CssSelector("input[id=philadelphia-field-email]"));

IWebElement signUpButton = m\_driver.FindElement(By.CssSelector("input[id=philadelphia-field-submit]"));

emailTextBox.SendKeys("test123@gmail.com");

signUpButton.Click();

}

}

}

**Example 4: Select a value in the dropdown:**

**Test Scenario:**

1. Navigate to Guru 99 demo page – <https://demo.guru99.com/test/guru99home/>
2. Click on SAP link
3. Enter data onto name and email text boxes
4. Select a value from the Course dropdown
5. Close the browser

using NUnit.Framework;

using OpenQA.Selenium;

using OpenQA.Selenium.Chrome;

using OpenQA.Selenium.Support.UI;

namespace Guru99Demo

{

class TestSelect

{

IWebDriver m\_driver;

[Test]

public void selectDemo()

{

m\_driver = new ChromeDriver("G:\\");

m\_driver.Url = "https://demo.guru99.com/test/guru99home/";

m\_driver.Manage().Window.Maximize();

IWebElement course = m\_driver.FindElement(By.XPath(".//\*[@id='awf\_field-91977689']"));

var selectTest = new SelectElement(course);

// Select a value from the dropdown

selectTest.SelectByValue("sap-abap");

}

}