1. Selenium Introduction

Discussion about automation and different automation tools
Selenium Introduction
Selenium Components
Introduction of selenium Components
Platform and Language support
Limitations of the selenium

2.HTML, CSS, XPATH

HTML Tags and attributes
CSS and CSS Selectors
XPath – Nodes, Syntax, Axes, Operators, Examples

4. Selenium WebDriver

Selenium WebDriver Introduction
Download and Configure WebDriver bindings with Visual Studio
How to use WebDriver
Different drivers in WebDriver
Finding Elements and performing user actions
Writing WebDriver scripts
Running WebDriver Tests on Internet Explorer, Firefox & Google Chrome
Manage web driver (switching windows, timeouts, cookies etc.)
Loading browser profile
Debugging WebDriver Tests
Remote WebDriver
Taking screenshots
Remote webdriver

5. Identifying UI Elements (Locators)

Identifying WebElement using different locators and demonstrate usage of each
By ID, By Name, By Link, By PartialLink, By XPath, By CSS Selector, By Tag, By Class)
Handling various WebElement using WebDriver – Textbox, checkbox, radio button, web tables,
Using SelectElement
Finding multiple elements
Challenges in finding elements and solutions
Retrieving data from different controls for verifications
Working with complex controls like grids, third party controls etc.

6. Selenium Concepts

Actions
Performing different kinds of mouse operations
Performing different kinds of keyboard operations
Synchronization
Implicit wait
Explicit wait

Explicit wait with extension to make life easier
Fluent wait

7. C# Concepts

C# - Program Structure
C# - Basic Syntax
C# - Data Types
C# - Type Conversion
C# - Variables
C# - Constants
C# - Operators
C# - Decision Making
C# - Loops
C# - Encapsulation
C# - Methods
C# - Nullables
C# - Arrays
C# - Strings
C# - Structure
C# - Enums
C# - Classes
C# - Inheritance
C# - Polymorphism
C# - Operator Overloading
C# - Interfaces
C# - Namespaces
C# - Preprocessor Directives
C# - Regular Expressions
C# - Exception Handling
C# - File I/O

7.Framework

 Nunit Framework development and integration with existing open source frameworks
Download and Configure NUnit with Visual Studio
Nuit features – Attributes and Assertions
Page Object Model / Objects reusability