

# Selenium with C# Course Content :

## Introduction

- What is automation testing.
- Advantages of automation testing.
- When to start automation and how.
- Automation test strategy
- Components of Selenium

## Selenium IDE.

- Recording the scripts.
- Running the scripts.
- How to Save the recording script.
- Object Identification.
- Difference between Test case and Test suit.
- Languages supported while Recording.
- Synchronization in Selenium IDE.
- When to use Selenium IDE
- Advantages of Selenium IDE
- Disadvantages of Selenium IDE

## Working with Visual Studio & Selenium Webdriver

- Set up Visual Studio with Webdriver
- Creating Solution(s)
- Creating different project types.
- Compiling and referencing projects.
- Working with various browsers
- Webdriver commands

- Browser commands
- WebElement commands
- Handling checkbox, Radio buttons, Drop downs, Webtables
- Switching between Alerts, Windows, popups, Iframes
- Identifying Elements
  - By ID, Name, Link, PartialLink, Xpath, CSS, Tagname, Class...
  - Actions – Mouse and Keyboard.
- Synchronization – Implicit and Explicit
- External sources – Excel, XML

#### Frameworks

- Download and configure Nunit with Visual Studio
- Nunit-Attributes, assertions
- Reports – Extent Reports.
- Page Object Model – design pattern.
- PageFactory

#### Code Repository

- Downloading and configuring SVN
- Uploading and downloading code to SVN

#### Continuous Integration

- Download and configure Jenkins.
- Configuring SVN, Visual Studio, email with attachments
- Running jobs from Jenkins manually and through scheduling

#### Selenium GRID

- Overview
- Setting up Grid
- Executing tests in Parallel and in Distributed mode.

## C# Contents

- Internal architecture of .net
- Rules and Regulations of C#.net
- Data Types and types of Data Types
- Methods and types of methods.
- Access specifier – Instance and Static
- Type Casting – Implicit and Explicit
- What is Parsing and Convert, boxing, un-boxing
- Bitwise operators and types
- Loops – for, while, for each, do-while
- Conditional statements
- Arrays
- Constructors – Type of constructors
- Difference between Instance and Static constructors
- Inheritance, advantages of inheritance, types of inheritance
- Destructors
- Polymorphism
- Collections and Generic collections.
- Properties