

# Software Testing with Selenium

## Course Details

### Module 01 •

#### Introduction to Software Testing

- Understanding the importance of Software Testing in the Software Development Lifecycle (SDLC)
- Types of Software Testing: Functional Testing, Non-Functional Testing, Regression Testing, etc.
- Software Testing Techniques and Methodologies

### Module 02 •

#### Introduction to Selenium

- Overview of Selenium and its components: Selenium IDE, Selenium WebDriver, Selenium Grid
- Setting up Selenium WebDriver environment
- Introduction to Selenium WebDriver APIs and commands

### Module 03 •

#### Selenium WebDriver Basics

- Locating Elements on Web Pages using different locators: ID, Name, Class Name, XPath, CSS Selector
- Performing actions on Web Elements: Clicking, Typing, Selecting, etc.
- Handling various User Interactions: Alerts, Pop-ups, Frames, Windows

### Module 04 •

#### Advanced Selenium WebDriver

- Working with Dynamic Elements and Implicit/Explicit Waits
- Handling Dropdowns, Tables, and Dynamic Web Elements
- Performing Actions using Actions Class
- Executing JavaScript commands using JavaScriptExecutor

## Module 05 ●

### Test Automation Frameworks

- Introduction to Test Automation Frameworks: Data-Driven, Keyword-Driven, Hybrid
- Building Test Automation Framework using TestNG and JUnit
- Implementing Page Object Model (POM) for efficient test maintenance

## Module 06 ●

### Handling Test Reports and Integrations

- Generating Test Reports using TestNG Reports, Extent Reports
- Integrating Selenium WebDriver with Continuous Integration (CI) tools like Jenkins
- Overview of Version Control Systems: Git, GitHub, Bitbucket

## Module 07 ●

### Live Projects in Software Testing with Selenium

- Real-world Test Automation Projects
- Hands-on Experience with Selenium WebDriver for Web Application Testing
- Building Automated Test Suites for Regression Testing

## Assessment and Certification ●

- Regular Quizzes and Assignments to Assess Understanding
- Final Selenium Test Automation Project
- Course Completion Certificate

## Duration & Prerequisites ●

- The course is designed to be completed in 4 months.
- Basic knowledge of programming concepts and familiarity with Java and/or C++ programming languages is recommended.

## Who Should Enroll ●

- Quality Assurance Professionals, Test Automation Engineers, and Software Testing Specialists looking to enhance their skills in Test Automation
- Software Developers interested in learning Test Automation using Selenium
- Anyone aspiring to pursue a career in Software Testing

## Outcome

By the end of this course, participants will have gained comprehensive knowledge and practical experience in Software Testing using Selenium. They will be proficient in building and executing automated test scripts, creating robust test automation frameworks, and integrating Selenium WebDriver into CI/CD pipelines, ensuring the quality and reliability of software applications.

## Our Mentors



**Vaibhav Goyal**

NIT WARANGAL

(Mentor : DSA and Full Stack)



**Drishti Mamtani**

BITS PILANI HYDERABAD

(Mentor : Data Science  
and Analytics Part)



**Shubham Mondal**

IIT KHARAGPUR

(Mentor : DSA and Coding)



## Our Students Are Placed In

