
Course Code: HSDET01G

Course Title: Software Development Engineer in Testing

Description:

SDET is a 10-day training course designed to equip individuals with the necessary skills and knowledge to excel in roles that involve both software development and software testing.

Objectives:

Participants learn: how to write efficient, maintainable, and scalable code to develop automated tests and tools.

- How to use frameworks to automate the testing process across different platforms and environments.
- How to inspect web elements, manipulate the DOM, and perform actions on web applications programmatically.
- With the rise of microservices architecture and web APIs, SDET training includes instruction on how to test APIs effectively.
- CI/CD concepts and tools such as Jenkins, Travis CI, GitLab CI/CD, etc.
- How to identify and isolate software defects, troubleshoot issues, analyze logs, and use debugging tools effectively to diagnose problems in code and test scripts.

Prerequisites:

Basic knowledge on Java and Manual testing.

Duration:

80 Hrs

Topics:

Unit 1: Python

- Basics of Python
- Introduction to Python
- Python Programming
- FILE I/O
- Web Scraping
- Automation

Unit 2: Selenium WebDriver

- Browser Handling
- Locating Elements
- Handling WebElements
- Synchronization
- Handling Windows

- Alerts and Frames
- JavaScript Executor

Unit 3: Selenium TestNG

Unit 4: Selenium WebDriver with Maven

Unit 5: Cucumber Behaviour Driven Development

Unit 6: JIRA

Unit 7: Selenium Framework

Unit 8: API Testing Using SOAP UI

- Groovy Script fundamentals
- XML
- Service Oriented Architecture
- Understanding WSDL
- SOA and Web Services Testing
- Mock web services using SOAP UI
- Groovy and SOAP UI
- REST API Testing
- Advanced Rest API Concepts

Unit 9: Mobile Testing

- Overview
- Strategy
- Approach
- Scope

Unit 10: Appium

- Introduction to Appium
- Locator
- Native Apps Automation
- Native Apps Automation
- Hybrid Apps
- Appium iOS
- Framework.

Audience:

Anyone who has experience in manual testing and is aware of Java programming. Anyone interested in automation testing.