Fundamentals of Test Automation

- Take a deeper dive into practical automation implementation
- Hands-on practices with a wide variety of automation techniques
- Learn the types of tests that can be automated
- Learn how automation fits into the agile software development and testing approach

Build Solid Test Automation the Right Way

One of the tenets of being successful in test automation is to build solid engineering practices at the beginning; and this course is designed to help you do just that. The *Fundamentals of Test Automation* course covers everything from introducing the basics of test automation - including definitions, benefits and misconceptions, to planning for automation in an agile environment. Along the way we'll explain the various automation test types and techniques including UI, API, Database, Unit, and Functional vs Non-Functional testing. You'll also learn how to select the right approaches to best suit the needs of your organization..

Using a hands-on approach, our experienced instructors will illustrate proper techniques for building maintainable automated tests using frameworks. We will also cover Behavior-Driven Testing (BDD) using Cucumber.

This course also teaches you how to develop your own test automation strategy and get the most out of your tests, as well as integrating them into a continuous integration (CI) process.

Who Should Attend

This course is ideal for those in developer and testing roles who need to learn automation or improve their existing automation knowledge. The course features hands on exercises to illustrate the topics discussed and provides students an opportunity to learn by doing. A working laptop with proper administrative privileges is required for this class.

Laptop Required

This class involves hands-on activities using sample software to better facilitate learning. Each student should bring a laptop with a remote desktop protocol (RDP) client preinstalled. Connection specifics and credentials will be supplied during class. Please verify permissions with your IT Admin before class. If you or your Admin have questions about the specific applications involved, contact our Client Support team [1].

Course Outline

Introduction to test automation
What it is
Risks
How testing creates value
How automated testing creates value

Agile development and testing
Recap on agile manifesto
Agile testing quadrants
Team-based testing

Database testing and managing test data
Database exercises
Non-functional test automation

Test automation strategy
What to automate
Best practices
Integration into CI
Continuous integration exercise
Static code analysis
Static analysis exercise

Test automation techniques

Frameworks overview

Unit testing

Unit test exercise

UI testing

Kantu exercise

UI testing exercise

API testing

API exercise

System and acceptance tests

Exercises

Intro to Cucumber

Cucumber in action

A new scenario

Adding a feature

Dynamic code analysis

Successful code analysis implementation

Test orbits

Test orbit exercise

Planning for automation

Automation tool selection

Staffing strategies

Planning - illustrate the system

Why does automation fail?

Price: $1545