



## Fundamentals of Test Automation

Learn to build solid test automation the right way in this one-day, hands-on course designed for professionals in development and testing roles.

- Understand the principles of successfully implementing test automation
- Learn the types of tests that can be automated
- Understand how to properly plan your test automation effort
- Learn how to use test frameworks and other necessary tooling
- Integrate your automated tests into your continuous integration pipeline

### 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 Function 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) and 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.

### **Course Outline:**

#### Introduction

- Introduction to test automation
- The value of test automation
- Misconceptions
- Automation ROI

#### Agile Testing

- Principles of agile testing
- Agile testing roles

#### Test Automation Fundamentals

- Test automation frameworks
- Unit testing
- UI testing
- Selenium basics
- Appium basics
- The Page Object Model
- API testing
- System and Acceptance testing
- Behavior Driven Development
- Using Cucumber

#### Database Testing

- Managing test data
- What to test
- Database test strategy

#### Database Migration and tools

- Managing test data with Flyway
- Virtualization

#### Non-Functional Test Automation

- Performance testing
- Security testing
- Recovery testing

#### Test Automation Strategy

- Why automate
- What to automate
- Best practices
- Continuous Integration and Delivery
- Tool selection
- Test planning

### **Class Schedule:**

Sign-In/Registration 7:30 - 8:30 a.m.

Morning Session 8:30 a.m. - 12:00 p.m.

Lunch 12:00 - 1:00 p.m.

Afternoon Session 1:00 - 5:00 p.m.

*Times represent the typical daily schedule. Please confirm your schedule at registration.*

### **Course Fee Includes:**

- Tuition

- Course notebook
- Letter of completion

**Upcoming Dates:**

Your Location

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