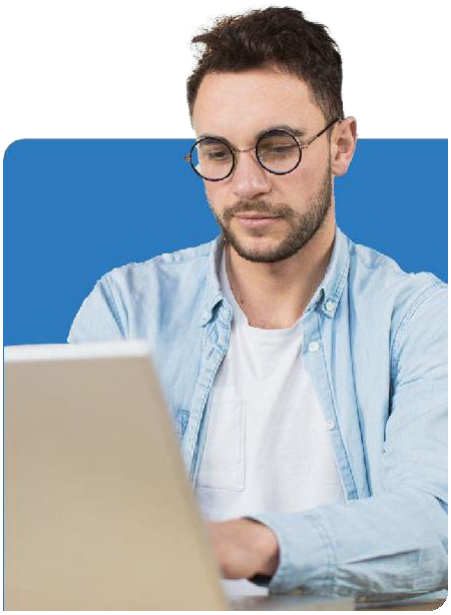
ThriveDX™

QA Automation

TDXQA-101

TDX



ThriveDX QA Automation

Time Commitment

8 days (total of 64 hours / 8 hours per day)

Skill Level

Professional Level

Course Category

QA & Testing

This course is planned to QA manual personnel in their transition to Automation QA.

The course contains three main subjects – JAVA, Selenium and Katalon.

Target Audience

Manual QA personal, developers and anyone interested in writing and executing automatic tests. Basic background in any OOP programming language is required. (Using Variables, flow control, functions)

Prerequisites

Experience in manual testing methods. Background in any development language can be useful in this course.

Program Structure

MODULE 01: Introduction to JAVA (1 hour)

- Java History
- Language Features

MODULE 02: The JAVA Environment (1 hour)

- Java Virtual Machine
- First Java Program
- Java compiler
- Garbage collection
- Installation and distribution

MODULE 03: JAVA Syntax (6 hours)

- Comments
- Variables
- primitive types
- Operations
- Flow control
- Strings
- Arrays

MODULE 04: Java Class Definition (6 hours)

- Methods
- Constructors
- Encapsulation
- static and final variables
- Javadoc
- Object references
- The this keyword

MODULE 05: Strings and Matrixes (4 hours)

- String, StringBuffer, StringBuiler
- Define a matrix
- Working with matrix and graphs

MODULE 06: Packages, JAR files, Class Path (2 hours)

- Packages
- The import statement
- Class loading and CLASSPATH
- Package-friendly access
- JAR files

MODULE 07: Inheritance & Polymorphism (4 hour)

- Inheritance in Java
- The super keyword
- Single inheritance
- protected access
- Implementing polymorphism

MODULE 08: Abstract Classes & Interfaces (4 hours)

- Abstract classes
- Interfaces
- Simulating multiple inheritance
- Disadvantages

MODULE 09: Multi Threading (2 hours)

- Java Thread API
- The Runnable interface
- Threads lifecycle

- Synchronization
- Wait/notify

MODULE 10: Selenium Overview (1 hour)

- Introduction
- Advantages
- Disadvantages

MODULE 11: Selenium IDE (3 hours)

- Download Selenium IDE
- Features
- Understanding HTML
- Pattern Matching
- Different Browsers

MODULE 12: Selenium Web Driver (4 hours)

- Architecture
- Scripting Using Web Driver
- Most Used Commands

MODULE 13: Web Driver and Java (4 hours)

- Adding functions and classes to Web Driver

MODULE 14: Katalon (8 hours)

- Introduction
- Basics
- Writing Test Cases

- Web and Mobile Automation
- Tips & Tricks
- Integration

MODULE 15: Katalon Advanced (4 hours)

- Best Practices
- Katalon Analytics

MODULE 16: Groovy (4 hours)

- Basic Syntax
- Groovy compared to JAVA