

# TRAININGRITE



# Transform your manual QA department to become automation testers.

We know which skills are needed for today's software development. As companies continue to adapt Agile methodologies, quality software must be developed quickly. Having your QA members with the right skills is crucial stay competitive and cost-effective.

Our training program has helped transform Fortune 500 companies for over 7 years, equipping them in the core tools in automation testing. We have developed a successful curriculum, along with a library of resources - including videos, PDFs, assignments, and test applications.

### Who are SDETs?

#### **SDET Domain Skills**

Core Programming

Automation Testing Framework

User Acceptance Testing

Agile, TDD, BDD Practices

Web Development

Web Services

ETL Testing

### **SDET Programs**

SDET Starter 3 Days

SDET Core 5 Days

SDET Fundamental 3 Weeks

SDET Complete 6 Weeks

Software Development Engineers in Test are experts in automation test engineering, and make a perfect fit for Agile Scrum teams.

An SDET's wide domain knowledge make them a valuable asset in software development as testers with knowledge of how the SDLC process works, how to design and develop testing frameworks, and how to write test plans that meet the client's business demands.

The responsibilities of SDETs typically include finding bugs and defects, as well as designing, implementing, and executing test cases and scripts. Additionally, they can validate, document, and verify fixes and testing development.

The end goal of creating an SDET is to produce a competent engineer to design and develop automation testing frameworks, while working with developers and stake-holders to produce robust and relevant business-driven test plans.



## **SDET Starter**

#### 3-DAY TRANSFORMATION PROGRAM

SDET Starter is a designed to introduce participants to programming and Selenium WebDriver. Covering the basics, this practical training course is taught at a fast pace in order to cover the essential topics while also providing time for participants to practice developing test plans.

#### **Core Programming**

Basic Control Structures Object-Oriented Programming File Handling Exception Handling Data Structures

#### Introduction to Selenium

Selenium IDE
Writing Selenium WebDriver Tests
Creating Test Outlines
Finding Elements
Unit Testing Frameworks
Cross-Browser Testing
Assertions
Test Reporting Methods
Introduction to Data-Driven Testing
Introduction to Frameworks
Introduction to Source Control

### RECOMMENDED CONTINUED TRAINING

#### 2-Day Advanced Track

Creating a Testing Framework
Writing Reusable Code
Data-Driven Frameworks
Page Object Model

Advanced Case Study
Developing Real World Test Plans
for Your Business Application

Project Management Tools
Continuous Integration
Build Tools
Source Control

#### 2-Day BDD Track

What is BDD and TDD?
Bringing QA & Business Together
How to Write Effective Feature Files
Given-When-Then Scenarios
Cucumber Framework
Gherkin Language
Cucumber and Data Tables
Cucumber and Selenium
Cucumber and POM
Cucumber Options and Properties

# SDET Core 5-DAY TRANSFORMATION PROGRAM

SDET Core is a popular, cost-effective program that will help migrate your team from manual testing to automation testing, providing the basic training needed to create an automated test framework

#### **Core Programming**

Basic Control Structures
Object-Oriented Programming
File Handling
Exception Handling
Data Structures

#### **Selenium Automated Testing**

Introduction to Selenium
Selenium IDE
Writing Selenium WebDriver Tests
Creating Test Outlines
Finding Elements
Action Class
Assertions
Test Reporting Methods

Testing Frameworks
Writing Reusable Code
Data-Driven Frameworks
Page Object Model

Project Management Tools
Continuous Integration
Build Tools
Source Control

#### **Behavior-Driven Development**

What is BDD?
Writing Effective Feature Files
Given-When-Then Scenarios
Cucumber Framework
Gherkin Language
Cucumber and Data Tables
Cucumber and Selenium

# SDET Fundamental 3 WEEK TRANSFORMATION PROGRAM

SDET Fundamental Training is a robust, efficient 3-week training program that covers the topics that are needed to develop a confident, skilled, well-rounded automation tester.

#### WEEK 1

#### **Core Programming**

Basic Control Structures
Object-Oriented Programming
File Handling
Exception Handling
Data Structures
Continuous Integration
Source Control

#### WEEK 2

#### **Testing Web Technologies**

Web Service Testing SOAP / REST JavaScript & XML JavaScript Testing Frameworks Jasmine Protractor

#### WEEK 3

#### **Automated Testing**

Selenium WebDriver
Functional Testing
User-Acceptance Testing
Data-Driven Testing
Creating a Testing Framework
Behavior-Driven Development
Cucumber / SpecFlow

#### **Additional Resources**

- · Can be taken as 3 consecutive weeks or with a week off in between
- · Off-week comprehensive project
- · 2 quizzes each week
- · 2 assignments each week

# SDET Complete 6 WEEK TRANSFORMATION PROGRAM

SDET Complete is geared towards a total department transformation that will train participants in all the tools they will encounter during their projects. From web development to automation testing to ETL, this program will train and expose them to the powerful tools in the industry.

WEEK 1 Core Programming	WEEK 2 Advanced Java Programming	WEEK 3 Web Development
Basic Control Structures Object-Oriented Programming File Handling Exception Handling Data Structures Continuous Integration Source Control	JDBC Threads Code Review Design Patterns JEE Architecture JSP, JSTL, Servlets	Anatomy of a Web Page HTML, CSS, Javascript Bootstrap XML NodeJS
WEEK 4 Automation Testing	WEEK 5 Automation Testing	WEEK 6 ETL Testing
AngularJS Jasmine JavaScript Testing Web Service Testing SOAP / REST	Selenium WebDriver Functional Testing Data-Driven Testing Creating a Testing Framework Behavior-Driven Development Cucumber	Informatica DataWarehousing MongoDB

#### **Additional Resources**

- · Recommended for 2-weeks of training then 2-weeks off
- · Off-week comprehensive project
- · 2 quizzes each week
- · 2 assignments each week

### **Case Study DOES IT WORK?**

Migrating your QA team members to automation testing is an investment. We understand the risks, challenges, and questions that you're considering. However, we have a wealth of successful experiences to show that our training programs produce significant results.

























Fannie Mae

#### The Challenge

Fannie Mae wanted to modernize their SDLC process and transition to a fully Agile environment. This included a change in thinking and practice for all team members, including QA testers, developers, business analysts, and managers.

#### Our Solution

We began with one SDET Complete training with managers and directors. This initial batch allowed them to see, observe, and gauge what topics would be relevant and then provide important feedback to help guide the future training batches.

We continued a 2-year process with SDET Fundamental training batches to train over 150 attendees. Our wholistic approach also integrated Fannie Mae's domain of finance, banking, and mortgages, to guide our applications to develop and test.

#### The Result

We received great feedback from everyone involved - from managers to the attendees. Our thorough reporting based on quiz scores, attendance, lab assignments, and project, gave directors easy-to-evaluate metrics as they surveyed progress and results.



# **Common Questions**

#### How many people can attend a training?

We recommend group sizes of 5-10, but can accommate any size group including up to 20 attendees.

#### Who should attend an SDET training?

Our SDET transformation programs are designed for manual testers who have little to no experience in writing code. Some of the training may be helpful for other roles (example, BDD would be relevant for developers or stake-holders).

# Our QA testers have no coding experience; will this training be too much for them?

Thousands of participants have gone through our training programs, many of whom have had no prior programming experience. There may be a steeper learning give at the beginning, but we are confident that by the end of the training, attendees will be competent to write comprehensive test scripts.

#### Can you do online training?

We recommend onsite training, as this allows for a better working relationship between trainer and attendee. There is a significant difference in interaction when onsite.

#### Resources

Online LMS Portal

Documentation

Quizzes

**Assignments** 

Classroom Code

Additional Framework / Algorithms

Comprehensive Off-Week Project for SDET Fundamental and SDET Complete

1-Year Video Access

Ongoing Support Forum

Thorough Summary Reporting

Certificate of Completion

