

Practical Automation Scripting for Testers

Course Description

This course teaches the fundamentals of developing test automated scripts in the most commonly used scripting language, namely **Visual Basic Scripting**, for most of the test automated execution tools. It is a hands-on computer-based training course in Visual Basic Scripting for test automation. It also teaches candidates how to learn and evolve their scripting designs and techniques with the application of an automation framework according to best development practices.

Intended Audience

The course is relevant to both manual testers and test automators of all experience levels who will be performing the development or execution of test automated execution scripts and DO NOT possess the following knowledge and skills sets:

- Visual Basic Scripting
- Object Orientated Programming and Design
- Pseudo Coding
- Best Development Practices

Course Content

This course covers the following areas:

- **Context of Test Automation Scripting**
 - Overview of test automation architecture
 - Think like a developer
 - Object-orientated programming versus scripting
 - Differences and similarities of programming and scripting languages
 - Test automation tool types
 - Version control for developing automated scripts
- **Developing Automated Test Scripts**
 - Best scripting practices
 - Scripting guidelines for automation execution
- **Visual Basic Scripting**

Delegates will learn how to script in Visual Basic (the most often used test automated execution scripting language) with hands-on computer experience and practical exercises. The following topics will be covered:

 - Variables and arrays
 - Functions, subroutines, and methods
 - Conditional/selection and looping statements
 - Classes and libraries
 - File input and output
 - Database connections and batch processing
 - Assertions and Defensive Programming
- **Scripting in Automation Frameworks**

This section describes the main types of test automation frameworks, their importance, effects, and practical implementations for developing automation scripts. The following framework models will be discussed with practical exercises and examples:

 - Record and playback
 - Test modularity framework

- Test library architecture framework
- Keyword or table-driven framework
- Data-driven framework
- Hybrid framework models
- **Research and Development**
A discussion will be held on ongoing research and development and proof of concepts for automated test execution for specific organisational needs.

Course details

- **Prerequisites**
Successful completion of Software Test Automation Architecture course is required. It will be advantageous for candidates to have completed the Practical Software Testing course with general knowledge of the information technology industry.
- **Course presentation and duration**
An experienced software testing practitioner will present the course. The course duration is three days with hands-on computer-based training. The training runs from 08:00 to 16:30. This includes a lunch and two tea breaks daily.
- **Training Style**
The course is conducted in a classroom style. Candidates use practical tasks to consolidate theoretical concepts. Any testing-related problems encountered in the workplace can be discussed in the course.
- **Course materials, certification, and assessment**
Comprehensive course notes are provided. Practical exercises, which are completed during the course, are handed in electronically for evaluation. On successful completion of this course, the Test and Data Services' *Certificate in Practical Automation Scripting for Testers* is awarded. The candidate's result will be displayed on their certificate.
- **Training Venues**
Test and Data Services (Pty) Ltd presents courses at several well-established training facilities in Midrand (near Johannesburg and Pretoria), Cape Town, and Durban. Training can be arranged at the client's premises depending on adequate facilities and candidate numbers.

Contact

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