

Testing Course Structure

Syllabus:

1. Introduction to Automation

What is testing ?
Need of Automation Testing
Manual Testing Vs Automation Testing
Various Automation Test Tools
Tool selection criteria
Life Cycle of Automation Introduction
to QTP
Overview of Quick Test Pro
Starting Quick Test
Features of QTP
Addin's of QTP
Key Elements of QTP Window
Testing Process of QTP
Architecture of QTP

2. Different ways of Developing

Automation Tests

Recording a test
Standard Recording
Analog Recording
Low Level Recording
Insight Recording
Writing Script

3. Working with Test Objects and Object Repositories

Test Object Model
Object Identification Mechanism
Configuring Object Identification
Object Spy
Object Repository
Types of Object Repositories
Merging Shared Object Repositories
Comparing shared objects Repositories
Associating shared objects Repositories

to a Test

Working with Test objects methods &
Properties

4. VB Script Language Overview

VB Script Data Types
VB Script Variable
VB Script Constants
Conditional Statements
Loops
Select case
Arrays
Functions

5. Checkpoints

Checkpoint Introduction
Adding Checkpoints to a Test
Types of Checkpoints
Standard Checkpoint

Image Checkpoint
Bitmap Checkpoint
Table Checkpoint
Text Checkpoint
Text Area Checkpoint
Accessibility Checkpoint
Page Checkpoint
Database Checkpoint
XML Checkpoint
File Checkpoint
Validating the Above Checks through
Code

6. Synchronization

Need of Synchronization
Different ways of Synchronizing the
Tests
Configuring Default Synchronization
Time Out
Exist Statement

Wait Statement
Synchronizing Point

7. Ways of Script Generation

Recording
Manually through script editor
Step Generator

8. Environment Variables

Need of Environmental Variables
Types of Environment Variables
Classification of user
defined Environment Variables
Working with user defined
Environment Variables

9. Parameters–Data Manipulation

Data Table
Random Number
Environment Parameter

10. Working with Actions

Introduction to Actions
Advantages of using Actions
Creating new Actions
Insert Actions
Inserting Copy of Actions
Inserting Existing Actions
Action Parameters
Test Modularity Implementation
Difference between Reusable Actions
and Functions

11. Functions and Sub Procedures

Overview of Functions
Advantages of Using Functions
Classification of Functions

Creating user defined Functions
Creating Function Libraries
Associating Function Libraries
Creating Sub Procedures

12. Advanced VB Scripting

Working with Internet Explorer
Application
Working with File system Objects
Working with Excel Application
Working with Word Application Object
Working with Data Base Connection
Working with Dictionary Object
Working with Outlook Application
WSH Scripting Basics
Working with Shell

13. Output Values

Output Values Introduction
Different Output Values
Defining Output Values
Storing Output Values
Using Output Values in Script

14. Transactions

Purpose
Inserting Transactions
Analyzing Transaction Results

15. Developing Data Driven Tests

Introduction to Parameterize Tests
Parameterize a Test Manually
Ways of Parameterization
Types of Data Tables
Working with Data Tables
Parameterize a Test using Data table
Parameterization through Excel File

Parameterize a Test using Environment Variables
Data Driven Wizard

16. Regular Expressions

Introduction to Regular Expressions
Defining Regular Expressions
Working with RegExp Object

17. Smart Identification

Use of Smart Identification
Base Filter Properties
Optional Filter Properties

18. Debugging

Need of Debugging
Break Points
Step Into
Step Over
Step Out
Debug Viewer
Watch
Variable
Command

19. Recovery Scenarios

Introduction to Recovery Scenarios
When to use Recovery Scenarios
Defining Recovery Scenarios
Recovery Scenario Manager
Managing Recovery Scenarios
Associating Recovery Scenarios to your Test

20. Descriptive Programming

Introduction to Descriptive Programming

When to use Descriptive Programming
Descriptive Programming Approach
Handling Similar Objects
Developing Generic Scripts
Ways to use Descriptive Programming

21. Virtual Objects

Define Virtual Objects
Manage Virtual Objects

22. Working with AOM Scripts

Launching QTP
Setting Tool Options
Setting Test Options
Opening a Test
Running a Test
Store Results in Required Location
Closing a Test
Closing QTP

23. Automation Frameworks

Introduction
Planning and Design Frame Work
Implementation of Modularity Framework
Library Architecture Framework
Keyword - Driven Framework
Data - Driven Framework
Hybrid Framework