AN INSTITUTE FOR SPECIALIZED STUDIES!



# **Introduction to Advance QTP course Content**

#### NTRODUCTION TO AUTOMATION

- Automation Testing
- Benefits of Automation Testing
- Automation Testing Vs Manual Testing
- Automation Test Tools
- Tool selection criteria

# QTP 11.00 INTRODUCTION

- Quick Test Pro Overview
- Starting Quick Test
- Quick Test Window
- Quick Test Window Layout
- Using Quick Test Commands

#### DIFFERENT WAYS OF DEVELOPING AUTOMATION TESTS

- Test Recording
- Standard Recording
- Analog Recording
- Low Level Recording
- Writing Script
- Descriptive Programming

## WORKING WITH OBJECT REPOSITORIES AND TEST OBJECTS

- How QTP learns & identifies Objects
- Working with Test Objects
- Object Spy
- Object Identification Configuration
- Smart Identification
- Merging Shared Object Repositories
- Shared objects Repositories Comparison
- Associating shared objects Repositories to a Test
- Working with Test objects methods & Properties

# VB SCRIPT LANGUAGE OVERVIEW

- VB Script Data Types
- VB Script Variables
- VB Script Constants



AN INSTITUTE FOR SPECIALIZED STUDIES!

- Conditional Statements
- Loops, Select cases and Arrays
- Functions

#### USER DEFINED FUNCTIONS

- Creating User Defined Functions
- Functions Advantages
- Generic Functions Creation
- Creating Function Libraries
- Associating Function Libraries
- Preparing Regression Test Automation Suites
- Implementation of Function Decomposition

#### VB SCRIPTING ADVANCED

- Internet Explorer Application
- File system Objects
- Data Base Connection
- Record Set Object and COM Object
- Word Application Object
- Error handling with Err Object and Dictionary Object
- XML Util Object
- QC Util Object
- DOM Object
- Basics WSH Scripting
- Working with Shell

#### SYNCHRONIZATION

- Synchronization Need
- Different ways of synchronizing the Tests
- Default Synchronization Time Out Configuration
- Exist Statement and Wait Statement
- Synchronizing Point

## CHECKPOINTS

- Introduction to Checkpoint
- Adding Checkpoints to a Test
- Checkpoints Types
- Standard Checkpoint
- Image and Bitmap Checkpoint
- Table Checkpoint
- Text Checkpoint
- Text Area Checkpoint



AN INSTITUTE FOR SPECIALIZED STUDIES!

- Accessibility Checkpoint
- Page and Database Checkpoint
- XML Checkpoint
- Checkpoints Supported Environment
- Validating Above Checks through Code

#### OUTPUT VALUES

- Introduction to Output Values
- Different Output Values
- Defining Output Values
- Output Values Storing
- Using Output Values in the Script
- Substitute Above Output Values through Code

#### **TRANSACTIONS**

- Purpose
- Transactions Inserting
- Ending Transactions Inserting
- Analyzing Transaction Results

# WORKING WITH ACTIONS

- Introduction to Actions
- Actions Benefits
- Creating Tests with Multiple Actions
- Guidelines
- Creating new Actions
- Insert Actions
- Inserting Copy of an Action
- Inserting Existing Actions
- Splitting Actions and Action Parameters
- Test Modularity Implementation
- Creating a Action Template
- Difference between Reusable Actions & Functions

#### DEVELOPING DATA DRIVEN TESTS

- Parameterize Tests Introduction
- Parameterize a Test Manually
- Parameterize Test using Data table
- Parameterization through XML Files, Excel Files and Flat Files
- Parameterize a Test by using Environment Variables
- Data Driven Test
- Create Data Driven Tests



AN INSTITUTE FOR SPECIALIZED STUDIES!

Local & Global Data Tables

## REGULAR EXPRESSIONS

- Regular Expressions Introduction
- Defining Regular Expressions
- Working with RegExp Object

#### DEBUGGING

- Debugging Needs
- Break Points
- Step Into, Step Over and Step Out
- Debug Viewer, Watch, Variable and Command

## INTRODUCTION TO AUTOMATION

- Automation Testing
- Benefits of Automation Testing
- Automation Testing Vs Manual Testing
- Automation Test Tools
- Tool selection criteria

#### OTP 11.00 INTRODUCTION

- Quick Test Pro Overview
- Starting Quick Test
- Quick Test Window
- Quick Test Window Layout
- Using Quick Test Commands

# DIFFERENT WAYS OF DEVELOPING AUTOMATION TESTS

- Test Recording
- Standard Recording
- Analog Recording
- Low Level Recording
- Writing Script
- Descriptive Programming

## WORKING WITH OBJECT REPOSITORIES AND TEST OBJECTS

- How QTP learns & identifies Objects
- Working with Test Objects
- Object Spy
- Object Identification Configuration
- Smart Identification
- Merging Shared Object Repositories
- Shared objects Repositories Comparison
- Associating shared objects Repositories to a Test



AN INSTITUTE FOR SPECIALIZED STUDIES!

Working with Test objects methods & Properties

## VB SCRIPT LANGUAGE OVERVIEW

- VB Script Data Types
- VB Script Variables
- VB Script Constants
- Conditional Statements
- Loops, Select cases and Arrays
- Functions

#### USER DEFINED FUNCTIONS

- Creating User Defined Functions
- Functions Advantages
- Generic Functions Creation
- Creating Function Libraries
- Associating Function Libraries
- Preparing Regression Test Automation Suites
- Implementation of Function Decomposition

#### VB SCRIPTING ADVANCED

- Internet Explorer Application
- File system Objects
- Data Base Connection
- Record Set Object and COM Object
- Word Application Object
- Error handling with Err Object and Dictionary Object
- XML Util Object
- QC Util Object
- DOM Object
- Basics WSH Scripting
- Working with Shell

#### SYNCHRONIZATION

- Synchronization Need
- Different ways of synchronizing the Tests
- Default Synchronization Time Out Configuration
- Exist Statement and Wait Statement
- Synchronizing Point

# CHECKPOINTS

- Introduction to Checkpoint
- Adding Checkpoints to a Test
- Checkpoints Types



AN INSTITUTE FOR SPECIALIZED STUDIES!

- Standard Checkpoint
- Image and Bitmap Checkpoint
- Table Checkpoint
- Text Checkpoint
- Text Area Checkpoint
- Accessibility Checkpoint
- Page and Database Checkpoint
- XML Checkpoint
- Checkpoints Supported Environment
- Validating Above Checks through Code

#### **OUTPUT VALUES**

- Introduction to Output Values
- Different Output Values
- Defining Output Values
- Output Values Storing
- Using Output Values in the Script
- Substitute Above Output Values through Code

## TRANSACTIONS

- Purpose
- Transactions Inserting
- Ending Transactions Inserting
- Analyzing Transaction Results

#### WORKING WITH ACTIONS

- Introduction to Actions
- Actions Benefits
- Creating Tests with Multiple Actions
- Guidelines
- Creating new Actions
- Insert Actions
- Inserting Copy of an Action
- Inserting Existing Actions
- Splitting Actions and Action Parameters
- Test Modularity Implementation
- Creating a Action Template
- Difference between Reusable Actions & Functions

#### DEVELOPING DATA DRIVEN TESTS

- Parameterize Tests Introduction
- Parameterize a Test Manually



AN INSTITUTE FOR SPECIALIZED STUDIES!

- Parameterize Test using Data table
- Parameterization through XML Files, Excel Files and Flat Files
- Parameterize a Test by using Environment Variables
- Data Driven Test
- Create Data Driven Tests
- Local & Global Data Tables

#### **REGULAR EXPRESSIONS**

- Regular Expressions Introduction
- Defining Regular Expressions
- Working with RegExp Object

## **DEBUGGING**

- Debugging Needs
- Break Points
- Step Into, Step Over and Step Out
- Debug Viewer, Watch, Variable and Command

# DESCRIPTIVE PROGRAMMING

- Descriptive Programming Introduction
- When to use Descriptive Programming
- Descriptive Programming Approach
- Static Representation
- Dynamic Representation
- Dynamic Objects Handling
- Handling Similar Objects
- Generic Scripts Developing

#### VIRTUAL OBJECTS

- Virtual Objects introduction
- Manage Virtual Objects

# WORKING WITH WEB TABLES

- Developing the Start Up Scripts
- Launching QTP
- Setting Tool Options
- Setting Test Options
- Opening and Running a Test
- Store Results in Required Location



AN INSTITUTE FOR SPECIALIZED STUDIES!

- Closing a Test
- Closing QTP

## API PROGRAMMING

- API Introduction
- Windows API Library
- API Library Registering
- Calling the Library Functions in API

# SCRIPTING IN REAL-TIME ENVIRONMENT

- Quick Test Pro Coding Standards and Best Practices
- Naming Conventions
- Coding Rules

#### AUTOMATION FRAMEWORKS

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

# WORKING WITH THE QUALITY CENTER

- Connecting to Quality Center
- Disconnecting from Quality Center
- Integrating the Quickest with Quality Center
- Uploading Automation Resources in Quality Center
- Saving Tests into Quality Center
- Opening Tests from the Quality Center
- Executing Tests from Quality Center

#### ADDITIONAL COVERAGE



AN INSTITUTE FOR SPECIALIZED STUDIES:

- Utility Objects
- Step Generator
- Function Definition Generator
- Examples and Scenarios Relevant to Major Businesses