

Manual Concepts and QC

Concepts 1st day

Software Testing and its Importance

Principles of Testing

System Development Life Cycle (SDLC) and System Testing Life Cycle (STLC) and Defect life cycle (DLC)

Difference between Software Testing and Quality Assurance

Real Time server information and models of life cycle 2nd day

Dev ,stage and prod

waterfall model

Rapid application development model

Spiral model

Verification and validation model

Agile model

Types of Testing 3rd day

Unit Testing

Integration Testing

System - Acceptance Testing

Sanity - Smoke Testing

Maintenance - Regression Testing

Non - Functional Testing

And many more other kinds of testing with examples

Test Case Development 4th and 5th day

Steps of Test Case Development

Test Scenario

Test Case Specifications

Test Basis

Traceability Matrix

Various Documents preparation 6th Day

SOFTWARE METRICS IN TEST PLANING (Main Document) 12-07-09

Requirements-Traceability-matrix

TestPlanTemplate

Phases

Test Management and Control 6th Day

Test Estimation
Test Plan
Introduction of QC Tool
installation of software

Quality Centre syllabus

mon to fri 1 to 1.5 hr per day

Quality center: Introduction 7th Day

1. Purpose of Quality center
2. Phases of Quality center
3. Quality center architecture
4. Quality Center Modules

Quality center: Administration 8thday

5. Creation of domain
6. Creation of project
7. Creation of users
8. Assigning users to project

Quality center: Modules 9 th -12 day

9. Requirement module:
 - a. creating requirements
10. Test plan module:
 - a. creating test cases
11. Test lab module:
 - a. creating test sets and
 - b. test execution
12. Defects module:
 - a. defect reporting
 - b. tracking
13. Linking requirements, test cases & defects

Quality center: features and Overview 13 th day

- a. Views
- b. Edit
- c. Analysis :Reports & Graphs

14. Integration with QTP

15. Running QTP scripts from QC

Automation tool - 1

QTP syllabus 15 hrs

INTRODUCTION TO AUTOMATION TESTING

1. Understanding what is Automation Testing and Need of Automation
2. Introducing different areas of automation
3. Difference between manual testing and Automation testing
4. Prerequisites for QTP
5. Introduction to QTP tool and discussion on various version of QTP

TESTING PROCESS OF QTP

6. Understanding the Test Process of QTP
7. Discussion of menu items
8. Discussion on the various components of QTP
 - a. window like test pane
 - b. Test details pane
 - c. Active screen
 - d. Data table
 - e. Information and missing
 - f. Resources window
 - g. Result window
9. Discussion on the keyword view and Expert view

16. CREATING TEST SCENARIOS/COMPONENTS

17. Creating a basic script
18. Recording and script generation
19. Understanding Test Object, Run Object, Pre Learning and Auto Learning
20. Understanding how QTP identifies the objects (Mandatory, Assistive properties & Ordinal Identifier)

PREDEFINED FUNCTIONS IN VB SCRIPT

21. String Functions
 - a. Instr
 - b. Replace
 - c. Right
 - d. Left

- e. Trim

22. Date Time Functions

- a. Date
- b. Time
- c. Day
- d. Month
- e. Week

23. Control Statements

- a. If else and nested if
- b. For
- c. While
- d. Do while
- e. Select

Debugging

- 24. Implementing break point mode
- 25. Debugger window in run time
- 26. Adding variables to debugger window
- 27. V and v approach in Debugger mode

CHECKPOINTS AND OUTPUT VALUES

- 28. Understanding the need of checkpoints in Automation
- 29. Working on various checkpoints available in QTP
- 30. Understanding the need of output values in Automation
- 31. Working on various output values available in QTP
- 32. Understanding the Environment Variables/Global Variables
- 33. Working on both inbuilt and User defined Variables

ACTIONS IN QTP

- 34. Introduction to Actions in QTP, advantages of Actions ,Dis –Advantages of action
 - a. Creating New actions
 - b. Split actions
 - c. Working on reusability of Actions with call to existing and call to copy options

FUNCTIONS, PROCEDURES AND CLASSES (LIBRARY FILES)

- 35. Understanding the need of reusability while Automation Testing
 - a. Creating Local and Global functions in QTP
 - b. Working with Library Files of QTP
 - c. Creating user defined classes, methods and objects in QTP
 - d. Understanding how a function returns the value in QTP
 - e. Associating QLF with Test

OBJECT REPOSITORY

36. Working with Object Repository(Shared and Per- Action)
37. Working with Object Repository Manager
38. Associating Objects Repositories to Actions of QTP
39. Working with Object SPY
40. Discussion of various control in AUT and their mandatory properties
41. Discussion of get to set to properties

Introduction to parameterization

45. Creating a Parameterized script(Data Driven Test)
 46. Working on different methods of Data Table object
 47. Working on different way of parameterizing an object in QTP
53. EXCEL OBJECT METHODS WITH QTP
- a. Create
 - b. Read
 - c. Write
 - d. Save
 - e. Quit

Automation tool -2

Selenium syllabus 20hrs

Selenium IDE Installation of Selenium IDE
Core Java Concepts Installation of Webdriver
Selenium WebDriver Configuring TestNG and Eclipse.
TestNG framework
Sample Project which reflects the real time project.

Over view of Selenium with Java

Installation process
Java and JDK
Java eclipse
Selenium standalone server 2.5.3 with firefox 46 version

Selenium IDE:

Selenium IDE installation
Identifying the elements
Record and playback features.
Converting IDE script to webdriver

Java Concepts:

- Introduction to JAVA
- OOPs concepts
- Conditional statements
- Loops
- Switch statement
- Arrays
- Creating classes and Objects
- Data Types
- Operators in java
- Method overloading
- Constructors
- Constructor overloading
- Inheritance
 - a. Single inheritance
 - b. Multiple inheritance
 - c. Multilevel inheritance
- Method overriding
- Interfaces
- Reading Excel and Writing into Excel files using Java

Selenium WebDriver

- WebDriver environment setup
- First automation program
- Interacting with Chrome, Firefox and IE browsers using WebDriver
- Synchronization in selenium
- Handling Input fields, buttons, dropdowns.
- Handling Check boxes, Radio buttons and Alerts.
- Retrieving the data from the tables.
- Retrieving the data from the drop downs.
- Mouse over the elements and click on buttons
- Handling Multiple windows and Pop-ups
- Data Driven programming
- Taking the screenshots of failed test cases.
- Reading the Data from external files and using in test cases
- Writing the test results to test cases.

TestNG (Test frame work)

- a. TestNg installation
- b. Creating test cases in testng
- c. Creating test suites in testng
- d. Running the test suite using testng
- e. HTML test reports generation

f.Creating Testg.xml file and Run webdriver scripts

[Working on Project](#)