www.softwaretestinggenius.com

A Storehouse of Vast Knowledge on

Software Testing &

Quality Assurance

Test Creation in QuickTest Professional

Using Keyword Driven Methodology

What is Keyword Driven Methodology

All About ?

What is Keyword Driven Methodology ?

It is a Test Creation Methodology

Involves Selection of Keywords

Keywords Indicate Operations to be Performed

Meant for Structured Test Creation

Structured Tests - Easy to Update & Maintain

Keyword Driven Methodology :

Suitable for Which Type of Companies ?

Having Technically Expert Users :

For Maintaining Resource Frameworks

Having Less Technically Proficient Users :

For Design & Maintenance of Automated Test Steps

Objective: Clear Division of Automation Tasks

Where do the Keywords Come From ?

First Source is :

Built-in Keywords from QuickTest Professional itself

Second Source is :

Our Own User Defined Keywords

What All do We Need to Implement

Keyword Driven Methodology

Keyword Driven Methodology :

What all do we Need to Implement it ?

Desired Resources Like :

- Shared Object Repositories
- Function Libraries
- Recovery Scenarios

Keyword Driven Methodology :

What all do we Need to Implement it ?

Desired Infrastructure

- Persons with Thorough Knowledge of Application
- Expertise of QuickTest Professional Software

Seven Steps to Implement Keyword Driven Methodology In QuickTest Professional

Step 1:

Analyzing the Application to find out the Testing Needs:

- Find out the Application's Development Environment : Like Web, Java or .NET
- Load the Desired QTP Add-ins
- Find out the Business Processes and Functionality we want to Test

Step 2:

Setting up the Object Repositories:

- Decide how to Divide our Actions
- Build Resources to be used by our Tests:

  The most widely used Resource is the Shared Object Repository

Step 3:

Creation of Function Libraries:

- Creation of function libraries containing Functions which Extend QTP Functionality
- Use these keywords to Build Keyword-Driven Tests

Step 4:

Configuration of QTP according to the Testing Needs:

- Setting up of Preferences Like:
  - Global Testing Preferences
  - Run Session Preferences
  - Any Test-Specific Preferences
- Creation of Recovery Scenarios to Instruct QTP how to Proceed when a Step Fails

Contd....

Step 4:

Configuration of QTP according to the Testing Needs:

- **Configuration of QTP window to Easily Access Panes like:**

  The Test Flow Pane

  The Resources Pane

  The Available Keywords Pane.

Step 5:

Building of the Tests:

- Construction of the Tests by Inserting Calls to the Relevant Actions from the Tests
- Creation of one or more Empty Tests and Addition of Actions to them
- Association of the Object Repositories with the Relevant Actions

Contd....

Step 5:

Building of the Tests:

- Association of the Function Libraries and Recovery Scenarios with the Relevant Tests, so that Steps can be Inserted Using Keywords

- Configuration of Test Preferences

Step 6:

Addition of Steps to the Test Actions:

- Addition of steps which use the Keywords Created in Previous Steps
- Enhancement of Tests by Inserting Checkpoints and Output Values:
  Objective - To verify that the Application is Behaving According to Expectations
- Addition of Programmatic Statements to Enhance the Tests Further

Step 7:

Running, Analyzing and Troubleshooting the Tests:

- **When the Tests are Ready:**

  We run them

  View the Run Results

  Troubleshoot the tests, as needed

Advantages of

Keyword Driven Testing

In QuickTest Professional

Advantages of Keyword Driven Testing

- Enables Test Design at a Business Level Rather than at Object Level; For Example QTP Recognizes a Single Option Selection in the application as many steps Like:

  Click on a Button Object

  Mouse Operation on a List Object

  Keyboard Operation on a list sub-item

Contd....

Helps in Creating one Function to Represent All Such Lower - Level Operations in a Single, Business - Level Keyword

Advantages of Keyword Driven Testing

- Tests are Easier to Read and Easier to Maintain due to use of Technical Operations, like Synchronization Statement which Waits for Client-Server Communications to Finish, into Higher Level Keywords

- Leads to a more Efficient Separation between Resource Maintenance and Test Maintenance

Contd....

Advantages of Keyword Driven Testing

- Enables Automation Experts to Focus on Maintaining Objects And Functions while Application Testers Focus on Maintaining The Test Structure and Design

- Avoids Local Object Repositories having Copies of the Same Objects in Many Cases

Contd....

Advantages of Keyword Driven Testing

- Creation of Test with Little Preparation or Planning
- Easier to Create Tests Quickly, since QTP enters the Correct Objects, Methods, and Argument values for us

Contd....

Advantages of Keyword Driven Testing

- **Results in well-planned and better-structured tests, which also results in easier long-term maintenance: What is the Reason for this?**

  We select from Existing Objects and Operation Keywords needing Familiarity with Object Repositories and Available Function Libraries

  We need to have a good idea of what we want our Test to look like before we begin inserting steps

Contd....

Advantages of Keyword Driven Testing

- Enables Addition of Objects and Functions based on Detailed Product Specifications even before a Feature has been added to the Product

- Enables to Begin to Develop Tests for a New Product or Feature Earlier in the Development Cycle

Contd....

www.softwaretestinggenius.com

A Storehouse of Vast Knowledge on

Multiple Answer Interview Questions / Quiz as used by Several MNC's to Evaluate New Testers

and

Hundreds of Interview Preparation Questions on QuickTest Professional (QTP) , LoadRunner , Software Testing & Quality Assurance

Thank You

>>>>>>>>>>>>>>> www.softwaretestinggenius.com <<<<<<<<<<<<<<