DIGILEAF INC.
Leading Excellence Among Fellows

Software Test Automation

This course will discuss a step-by-step process to determine if an organization is prepared for test automation. It encompasses the principles used for automated test effort preparation, tool selection, and formation of an automated test team with workable applications and examples in scripting methods, test implementation, assessment and measurement for automated test efforts. It stresses on acquiring the most out of automated testing tools, error handling and logging methods, and developing an efficient automated testing architecture.

Training Objectives

At the end of the course, the participants will be able to:
1. Identify necessary factors for successful test automation.
2. Identify what testing segment can be automated in each phase of software development.
3. Evaluate automated testing tools.
4. Develop and utilize a valid and consistent strategy for planning, developing, executing, reporting and maintaining automated tests.
5. Estimate the cost and expectations on investment returns in terms of efficiency gains and bugs shipped.
6. Set realistic test automation goals.
7. Recognize the required talents in an automation test team.
8. Establish test automation activities.

Duration 2 days

Topics

I. Introduction to Test Automation
   a) What Automation Can Achieve and What It Costs
   b) Building the Right One and Avoiding the Bad
II. Automation Standards and Principles
   a) Automated Testing Lifecycle Methodology
   b) Build and Utilize a Test Framework
III. Tool Evaluation and Selection
   a) Selecting the Right Tool for the Task
   b) Build or Buy?
   c) Management Commitment
   d) Product Support and Education
IV. Architectures – Test Assets Arrangement for Efficiency
   a) Test Asset Management
   b) Test Scripts/Cases as Organization Assets
   c) Scale, Reuse, Compound Versions, Platform Dependence/Independence
V. Test Automation Process Preparation
   a) Initial Factor to Automate
   b) Capture versus Create
   c) Scope Cost and Timelines Approximation
   d) Automation Team Roles
VI. Automated Test Effort Implementation
   a) Test Construction
   b) Test Execution
   c) Test Results Capture & Analysis
   d) Test Results Verification