

Introduction to Software Testing [Earn 7 PDUs]

(One day Workshop)

About the Course

A project, under strict vigilance of testing, invariably fetches customer satisfaction (a key for business success).

While high level of testing calls for more investment, inadequate testing leads to enormous customer dissatisfaction. Hence there is a need for optimisation on test-investment (resource and infrastructure) in line with customer requirements.

This workshop provides an insight into the entire framework of testing which includes:

- ❖ Testing an integral part of “SDLC” and “Quality Models” (like ISO/CMMI)
- ❖ Gathering unambiguous and verifiable requirements
- ❖ Developing an inventory of test-assets (like strategy, plan, script, data and reports)
- ❖ Familiarity with levels of testing
- ❖ Exposure to testing-techniques
- ❖ Defect management (during testing)
- ❖ Measuring effectiveness (associated with testing and defect-handling)
- ❖ Industrial best practices

After attending this work shop, the participants (like business analysts, developers and testers) can comfortably adopt industrial best practices by

- ❖ Consolidating comprehensive test-requirements through timely involvement of stake holders (including customer)
- ❖ Developing appropriate test strategy, approach, plan and related assets
- ❖ Handling test-defects effectively and also building defect database (for future defect-prevention)
- ❖ Defining and monitoring “operational effectiveness” (through a set of meaningful metrics)

Workshop format

With a view to closely synchronise the course-contents with real life scenarios, this faculty-led workshop will encourage active involvement of participants.

For “better understanding” of course-contents and “higher acquaintance” with real life problems, the workshop will have intermediate exercises.

Workshop Contents

The workshop covers the topics as below. There are exercises in between.

Introduction

Standards and Testing

- Testing – Quality Assurance (QA) and Quality Control (QC) activities
- Testing – Quality Models ISO 9001 and SEI CMMI

SDLC Models and Testing

Test Assets

- Understanding Test Requirements
- Test Strategy and Test Plans
- Test Scripts
- Test Data and Test Reports

Testing Techniques

- Black Box and White Box testing

Test Design

- Equivalence Partitioning
- Boundary Value Analysis

Testing Types

- Unit and Integration Testing
- Functional Testing
- Regression Testing
- System Testing

Other Testing

- Risk based Testing

Defect Management

- Workflow in defect tracking
- Defect Data and Analysis
- Defect Database (Defect Prevention)

Test Metrics

- Testing defect related metrics
- Testing operation related metrics

Wind up

- Question answer session and workshop-closure

Who should attend

The workshop would be highly beneficial to attendees with some experience in project execution. In particular, the following audience would appreciate the workshop –

- ❖ Product group member or Business analysts
- ❖ Developers and other project team members
- ❖ Quality or Testing group members
- ❖ Project managers
- ❖ Team or Module Leaders