



Software Testing

SOFTWARE TESTING

Topic 1:

Basic concepts

- Basic Testing Vocabulary
- Quality Assurance versus Quality Control
- The Cost of Quality
- Software Quality Factors
- How Quality is Defined
- Why Do We Test Software?
- What is a Defect?
- The Multiple Roles of the Software Tester(People Relationships)
- Scope of Testing
- When Should Testing Occur?
- Testing Constraints
- Life Cycle Testing
- Independent Testing

- What is a QA Process?
- Levels of Testing
- The “V” Concept of Testing

Topic 2: Testing Techniques

- Structural versus Functional Technique Categories
- Verification versus Validation
- Static versus Dynamic Testing
- Examples of Specific Testing Techniques

Test Administration

- Test Planning
- Customization of the Test Process
- Budgeting
- Scheduling

Create the Test Plan

- Prerequisites to test planning
- Understand the Characteristics of the Software Being Developed
- Build the Test Plan
- Write the Test Plan

Topic 3:

- Test Cases:
- Test case Design
- Building test cases
- Test data mining
- Test execution
- Test Reporting
- Defect Management
- Test Coverage – Traceability matrix

Test Metrics – Guidelines and usage

Test reporting: Guidelines for writing test reports

Topic 4:

Test Tools used to Build Test Reports

Managing Change

- Software Configuration Management
- Change Management

Risks – Risk Analysis and Management with examples

User Acceptance testing – in detail explanation with details

Case Study: How to test web, stand alone and database applications – with examples.

Help with resume and testing interview skills.

Topic 5:

Automation Testing Basics

- Basics of automation testing – why, when and how to perform automation testing
- Factors for choosing a particular tool
- An overview for the major functional testing tools
- Overview of Test management and bug tracking tools