



# Software Testing Fundamentals

(Manual Testing)

**Mode of Training:** Online Training

**Name of Trainer:** Mr. Harish

A woman with dark, curly hair and glasses, wearing a pink top, stands in front of a large window with a grid pattern. Her arms are crossed, and she has a serious expression.

**Course  
Curriculum**

## Module 1:

### Sessoin 1:

#### Testing Basics:

- ✓ Testing Introduction
- ✓ Define Software Quality
- ✓ List the Software Quality Attributes
- ✓ Understand Verification and Validation
- ✓ Understand what is Software Testing and its Significance
- ✓ Explain how Testing improves Software Quality
- ✓ Understand History and Evolution of Software Testing
- ✓ Describe Software Testing Principles
- ✓ Define what is a Software Defect and its significance
- ✓ Understand various software development methodologies
- ✓ Explain how testing process would differ based on the development methodology

### Session 2:

#### Types of Testing

- ✓ Functional & Non-Functional Testing
- ✓ Functional & Non-Functional Testing types
- ✓ Functional & Non-Functional Testing Tools
- ✓ Black box Vs White box Testing
- ✓ Manual & Automation Testing
- ✓ Fresh development & Maintenance Testing

## Session 3:

### Levels of Testing

- ✓ Fresh development & Maintenance Testing
- ✓ Benefits of testing at each level
- ✓ Unit Testing
- ✓ Component Integration Testing
- ✓ System Testing
- ✓ System Integration Testing
- ✓ User Acceptance Testing

## Module 2:

### Session 4:

#### Software Testing LifeCycle

- ✓ Knowledge Transition and Requirements Analysis
  - ✓ what is knowledgetransition
  - ✓ Significance of knowledgetransition
  - ✓ Requirement analysis process
  - ✓ Tester involvement in these phases
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## Session 5:

### Requirement Analysis

- ✓ Types of requirements
- ✓ Analyze the requirements specifications
- ✓ Prioritize the requirements
- ✓ Understand clarification management
- ✓ Analyze requirement defects
- ✓ Requirements change management
- ✓ Requirements change management
- ✓ Concept of requirements coverage
- ✓ Difference between Application Development and Maintenance in this phase

## Session 6:

### Test Planning

- ✓ Test Strategy
- ✓ Test Plan
- ✓ Test Strategy vs Test
- ✓ Test Plan sections

## Session 7:

### Test Scenarios and Test Cases Design

- ✓ Test Design Overview
- ✓ Test Scenario Overview
- ✓ Requirement Traceability Matrix for Test Scenarios
- ✓ Test Case Design
- ✓ Test Case Development Process
- ✓ What is a Test Case

## Session 8:

### Test Scenario to Test Case

#### Test Case Development

- ✓ Test Design Techniques
- ✓ Test Case Template
- ✓ Test Case Components

## Session 9:

### System Test Cases writing

- ✓ System Integration Test Cases
- ✓ Test Case Review Process
- ✓ Requirement Traceability Matrix (RTM)
- ✓ Test Data Preparation
- ✓ Test Cases Review
- ✓ Test Environment Setup

## Session 10:

### Test Cases Execution

- ✓ Identify the procedure for Test Data Preparation
- ✓ Planning for Test Execution
- ✓ Test Environment Configuration
- ✓ Test Environment – Test Management Tool Setup
- ✓ Test Environment – Database Setup
- ✓ Test Environment – Test users setup

## Session 11:

### Test Data Setup

- ✓ Test Case Execution and Logging results
- ✓ Test Case Run Status
- ✓ Test Execution Reports

✓ **Session 12:**

**Defect Reporting**

- ✓ 1.what is defect?
- ✓ 2.What is difference between Error , Defect and Bug?
- ✓ 3.Defect Life Cycle

**Session 13:**

**Deep Dive on Agile Methodology and Scrum Framework**

- ✓ SDLC Models
- ✓ Waterfall Model
- ✓ V Model
- ✓ Iteration Model
- ✓ Scrum Framework
- ✓ Roles of Scrum Framework
- ✓ Product Backlog
- ✓ Sprint Backlog
- ✓ Product Owner
- ✓ Scrum Master
- ✓ Scrum Development team
- ✓ Sprint Planning meeting
- ✓ Daily Scrum
- ✓ Sprint Review meeting
- ✓ Sprint Retrospective meeting

**Session 14:**

**Jira**

- ✓ How to use JIRA for Agile Project Management
- ✓ How to use Confluence for Agile Project Management
- ✓ How to use JIRA as Test Management Tool

- ✓ How to use JIRA as Defect Management Tool
- ✓ How to use JIRA for reports and Metrics

## Session 15:

### Project Explanation-Agile Project

- ✓ Product Idea
- ✓ Product Vision statement
- ✓ Product Roadmap
- ✓ Product Backlog
- ✓ Project Architecture
- ✓ Project Test Plan
- ✓ Project Domain Knowledge
- ✓ Release1 Planning and execution for all sprints in JIRA Tool
- ✓ Sprint Planning 1...N
- ✓ Sprint 1 end to end execution
- ✓ Sprint 2 end to end execution
- ✓ Sprint 3 end to end execution
- ✓ Sprint 4 end to execution
- ✓ Sprint 4 end to execution
- ✓ Release2 Planning and execution for all sprints -Student practice in JIRA Tool
- ✓ Sprint Planning 1...N
- ✓ Sprint 1 end to end execution
- ✓ Sprint 2 end to end execution
- ✓ Sprint 3 end to end execution
- ✓ Sprint 4 end to execution
- ✓ Release3 Planning and execution for all sprints -Student practice in JIRA Tool

- ✓ Sprint Planning 1...N
- ✓ Sprint 1 end to end execution
- ✓ Sprint 2 end to end execution
- ✓ Sprint 3 end to end execution
- ✓ Sprint 4 end to execution

## Session 16:

### Interview Questions

<https://www.qualitythought.in/wp-content/uploads/2019/10/Latest-Testing-Interview-Questions.pdf>