

SOFTWARE TESTING



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MANUAL TESTING SYLLABUS

1. INTRODUCTION OF SOFTWARE TESTING

What is software testing?
Why is testing necessary?
Testing Principles
Best Practices in Testing
Skills for Testing
Various Task Involved In Testing
Difference between Verification & Validation
Difference between QA & QC

2. DEVELOPMENT OF SOFTWARE APPLICATION

Introduction of Software Process
Phases in SDLC
Waterfall Model
Phases of Waterfall Model
Advantages & Disadvantages
Spiral Model
Phases of Spiral Model
Spiral Model Strengths & Weaknesses
When should you use Spiral Model
Prototype Model
Phases
Advantages & Disadvantages
Agile Model
Scrum methodology
Sprints in Scrum
Scrum Roles
Scrum Artifacts & Ceremonies
V-shaped Model
Steps in the V-shaped Model
V-shaped Strengths & Weaknesses
Challenges Regarding To Each Development Phases



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3. LEVELS OF SOFTWARE TESTING

Unit Testing
Integration Testing
Various Approaches Of Integration Testing
System Testing
Acceptance Testing

4. TESTING METHODOLOGIES

Black Box Testing
Advantages & Disadvantages
White Box Testing
Statement Coverage
Decision Coverage

5. TYPES OF NON FUNCTIONAL TESTS

Security Testing
Recovery Testing
Configuration testing
Compatibility Testing
Installation Testing
Performance Testing
Parallel Testing
Volume Testing
Internationalization Testing
Localization Testing

6. TYPES OF FUNCTIONAL TESTS

Other Types Of Testing

7. PROCESS OF TESTING

Test Planning
Test Analysis
Test Design
Construction and verification
Testing Cycles
Final Testing and Implementation
Post Implementation



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8. TEST DESIGN FOR FUNCTIONAL TESTING

Introduction To Test Design
Inputs For Test Design Activity
Test scenarios
Test Cases
Test Case Management
Best Practices Of Test Cases
Test Data
Black Box Test Technique
Requirement Traceability Matrix(RTM)

9. TEST EXECUTION

Test Execution Cycle
Entry Criteria For Test Execution
Smoke /Sanity Testing
Test Execution
Retesting And Regression Testing
Ending The Test Execution Activity
Test Closure Activities

10. DEFECT MANAGEMENT

Defect /Bug
Causes For Defect
Defect Reporting
Defect Attributes
Severity And Priority
Defect Life Cycle
Advantages Of Defect Tracking

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11. QUALITY AND PROCESS IMPROVEMENT

Define What Is Quality
Application Of Concept Of Quality To Software Application
Quality Assurance
Quality Control
Testers Contribution To Quality Of Software Application
Software Testing Metrics

12. GETTING EQUIPPED TO START

Challenges In Testing
Best Practices In Test
Skills Required For A Tester
Career Path Of A Tester
How To Keep Updated

13. CASE STUDY

14. INTERVIEW PREPARATION.



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AUTOMATION TESTING SYLLABUS

1. Benefits Of Automation Testing
2. What And When To Automate
3. Introduction To Automation Tools
4. Comparison with other tools like QTP/ UFT , RFT

SELENIUM

1. Introduction Of Selenium

Explanation of selenium and its advantages
Differences between selenium and QTP

2. Components Of Selenium

Selenium IDE
Selenium RC
Selenium Grid
Selenium WebDriver

3. Selenium JAVA language

Introduction
Data types
JAVA Variables
JAVA Modifier.
Comments in JAVA
JAVA Basis
Execution of JAVA

4. Introduction Of Selenium IDE

Main Features of Selenium IDE
Installing Selenium IDE
Test with Selenium IDE



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5. Selenium Webdriver

Introduction to selenium webdriver
Setting up eclipse
Downloading and configuring webdriver in eclipse

6. Selenium WebDriver Commands

Get Commands
Navigate Commands
Element Visibility Commands
Other Commands

7. Locators Of Selenium (Webdriver)

Tools to identify elements and object
Google Chrome Developer Tools
Locating elements by ID, Name, LinkText, ClassName etc.
XPath , Types in X-path

8. Advanced Features IN Selenium

Handling Pop Up / Alert Window
Drop Down Operation
Scroll Down/up
Right Click Operation

9. Concept of framework

Introduction to framework
Use of framework
Different types of framework
Different types of packages in framework

10. TestNG Framework

Introduction to TestNG
Setting up eclipse
Downloading and configuring TestNG in webdriver
Functionality provided by TestNG
Parallel Testing
Report Generation



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11. Data Driven Framework

Data driven testing

Apache poi library and installation

Advantages of using Data Driven Framework



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