



NEWGEN
SOFTECH

SOFTWARE TESTING



Software Testing

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 Development Process
- Phases in SDLC
- Waterfall Model Phases Advantages & Disadvantages
- Spiral Model & It's Phases
- Spiral Model Advantages & Disadvantages
- Prototype Model and It's Phases
- Prototype Model Advantages & Disadvantages
- V-shaped Model & It's Phases
- V-shaped Advantages & Disadvantages
- Challenges Regarding To Each Development Phases

3. LEVELS OF SOFTWARE TESTING

- Unit Testing
- Integration Testing
- Various Approaches of Integration Testing

- System Testing
- Acceptance Testing

4. TESTING METHODOLOGIES

- White Box Testing
- Advantages & Disadvantages of White Box Testing
- White Box Testing Techniques-Statement Coverage and Decision Coverage
- Black Box Testing & It's Type (Functional and Non-Functional)
- Advantages & Disadvantages of Black Box Testing
- Black Box Testing Techniques
- Grey Box Testing

5. TYPES OF NON-FUNCTIONAL TESTS

- Installation Testing
- Configuration Testing
- Compatibility Testing
- Performance Testing
- Load Testing Vs Stress Testing Vs Volume Testing
- Globalization Testing Vs Localization Testing
- Security Testing
- Recovery Testing

6. TYPES OF FUNCTIONAL TESTS

- Static Testing Vs Dynamic Testing
- Positive Testing Vs Negative Testing
- Smoke Testing Vs Sanity Testing
- Regression Testing Vs Re-Testing

- Exploratory Testing Vs Adhoc Testing Vs Monkey Testing
- Component Testing VS GUI Testing
- User Acceptance Testing
- Alpha Testing Vs Beta Testing
- Accessibility Testing

7. PROCESS OF TESTING

- Test Planning
- Test Analysis
- Test Design
- Construction and verification
- STLC- Software Testing Life Cycle
- Final Testing and Implementation Post Implementation

8. TEST DESIGN FOR FUNCTIONAL TESTING

- Introduction To Test Design
- Test scenarios
- Test Cases
- Test Case Management
- Test Data
- Black Box Test Technique- Test Case Preparation
- 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

12. AGILE MODEL

- Agile Model
- Scrum methodology
- Sprints in Scrum Roles
- Scrum Artifacts & Ceremonies

13. DATABASE TESTING

- Basic Concepts
- CRUD Operation
- Query and Sub Query
- Join and It's Types

13. API TESTING

- What is API?
- Postman Tool Usage

- HTTPS methods and Code series
- Interview Question and Answer

13. GETTING EQUIPPED TO START

- Challenges In Testing
- Best Practices In Test
- Career Path of A Tester

14. RESUME BUILD-UP AND MOCK INTERVIEW

15. Naukri Profile Creation

AUTOMATION TESTING SYLLABUS

- Benefits Of Automation Testing
- What And When To Automate
- Introduction To Automation Tools
- Comparison with other tools like QTP/ UFT , RFT

3. CORE JAVA

- Installation JDK
- Global Local Variable, Data type, Operators
- Class and Methods
- Access Modifiers
- Static
- Strings Class
- If & Else if Conditions
- Switch Cases
- For loop, each loop, While loop
- Method Overloading
- Constructor
- Final Keyword
- Scanner Class
- Inheritance , Polymorphism, Encapsulation, Abstraction
- Interface

- This and Super Keyword
- Exception Handling
- File Handling reading & Writing xlsx and xls
- Properties
- Arrays Its Type
- List and Array List
- Set and Map
- HashSet Vs Hashmap Vs Hashtable

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

4. Introduction Of Selenium IDE

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

5. Selenium Web driver

- Introduction to selenium web driver
- Setting up eclipse
- Downloading and configuring web driver 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 frameworks

- 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

11. Data Driven Framework

- Data driven testing
- Apache poi library and installation
- Advantages of using Data Driven Framework