

# Manual Testing

## Course Content

### Introduction to Software Testing

- What is software Testing
- Why Software Testing
- Benefits of Software Testing
- Who will do the Software Testing
- What is Defect
- Project Vs Product
- What is Software Development Life Cycle
- Why Software Development Life Cycle
- Phases of Software Development Life Cycle
- Initial
- Analysis
- Design
- Coding
- Testing
- Delivery & Maintenance

### Software Development Life Cycle (SDLC ) Models

- Water fall model
- Vmodel
- Prototype Model

Agile Model with Scrum Method

### Software Testing Methodologies

- Block box Testing
- What is Block Box Testing
- Who will Perform Block Box Testing
- How to Perform Block Box Testing
- Block Box Testing Techniques

### White Box Testing

- What is White Box Testing

### Software Development Life Cycle (SDLC)

- What is Quality
- Who will Perform Block Box Testing
- How to Perform White Box Testing
- White Box Testing Techniques

### Gray Box Testing

- What is Gray Box Testing

- Who will Perform Gray Box Testing
- How to Perform Gray Box Testing
- Gray Box Testing Techniques

## LEVELS OF TESTING

### UNIT TESTING

- What is Unit Testing
- Who will Perform Unit Testing
- How to Perform Unit Testing

### Module/ Component Testing

- What is Component Testing
- Who will Perform Component Testing
- How to Perform Component Testing
- Integration Testing Techniques

### Integration Testing

- What is Integration Testing
- Who will Perform Integration Testing
- How to Perform Component Integration Testing
- Integration Testing Techniques

### System Testing

- What is System Testing
- Who will Perform System Testing
- How to Perform System Testing
- System Testing Techniques

### User Acceptance Testing (UAT)

- What is UAT testing
- Who will Perform UAT testing
- How to Perform UAT testing
- UAT Testing Techniques
- Alpha Testing

## VERIFICATION&VALIDATION

### VERIFICATION

- What is verification
- Who will perform
- Verification techniques
- Reviews
- Audits
- Walk through

### VALIDATION

- What is validation
- Who will perform

- Validation techniques
- FUNCTIONAL & NON FUNCTIONAL TESTING**
- Smoke testing
- Sanity testing
- **TEST CASE DESIGN**
- • Identify the test scenarios
- • Identifying test plan contains
- • Test case techniques
- • Boundary value analysis
- • Equivalence class partitioning
- • Error guessing
- • Preparing the test cases
- • Test data preparation
- • Types of test cases
- • Functional test case
- • Non functional test cases
- • Positive test cases
- • **NEGATIVE TEST CASES**
- • **TEST CASE REVIEW**
- • Peer review
- • Lead review
- • Client review
- • Review checklist
- • **TRACEABILITY MATRIX**
- **TEST EXECUTION**
- • Release process
- • Different environments involved in testing
- • What is environment
- • How many environments QA do have
- • Executing the test cases
- **RESULT ANALYSIS & REPORTING**
- • Analyze the test cases(pass/fail)
- • Defect reporting
- • Defect life cycle
- • What is severity
- • What is priority

- • Severity vs priority
- • Deferent defect tracking tools
- **DELIVERY AND MAINTANANCE**
- • Exit criteria for testing sign off
- • Test summary report
- • Delivery process
- • What is maintenance
- • Maintenance process
- **ADDITIONAL TERMINOLOGY**
- • Team hierarchy
- • Role & responsibility
- • Central repository
- • Project metrics
- **PROJECT WORKSHOP**
- **REAL TIME PROJECT WORKSHOP FLOW**
- • Kick of meeting
- • Team formation
- • Introduction to client /meeting
- • Domain/requirement discussions
- • Review the requirements
- • Requirements clarifications-query tracker
- • Test plan preparation: planning and scheduling
- • Test case design
- • Test case review: peer review, lead review, client /BA review
- • Types case execution
- • Result analysis & reporting the issues
- • Reporting the bugs
- • Regression testing
- • Test summary report & sigh off testing
- • UAT\_ client
- • Release meeting
- • Go live
- • Maintenance if required
- **TESTING PROCESS**
- **IMPLEMENTATION ( WORKSHOPS)**
- • Requirements gathering& understanding

- • Requirements gathering(BA)
- • Requirements understanding\_SRS(Team)
- • Prepare the clarifications/queries\_query tracker
- • Requirements clarifications meeting client /BA
- **TEST PLANNING**
- • Test plan preparation
- • Scheduling
- • Estimate the tasks
- • Estimation techniques-test case point analysis
- • Planning the tasks
- • Risks identifying & management
- • Resources stability
- • Software availability
- • Leave planner, etc
- **TEST CASE DESIGN**
- • Test Case Document
- • Test Case Design
- • Identifying the scenarios: high level ,low level ,+ve ,-ve
- • Converting the scenarios into test cases
- • Test case writing
- • Test data if required
- • Test Case Design Techniques: BVA, ECP ,Error Guessing
- • Function/Non Functional Testing
- • Functional:+Ve, -Ve
- • Non Functional :OS, Gul, Usability, Browser Compatibility.
- • Performance,Stress,Load,Etc
- **REVIEW THE TEST CASES**
- • Peer review: Check lists-review comments
- • Lead review: Review comments
- • Client/BA review: Review comments' update the test cases based on  
on
- review comments
- • Review the updated test plan
- • Sign off test cases by client/BA
- **TEST CASE EXECUTION**

- • Get the test case execution plan: what to start, when to end
- • Execute the test cases for smoke testing
- • Functional test cases
- • Non functional test cases
- • Results analysis
- • Bug reporting
- • Bug tracker explanation
- • How to log, edit ,close
- • Test status report
- • Get the modified build, retesting the bug identified by testers
- • Regression testing
- • Identify the regression test cases
- • Test sign off
- • Test summary report
- **UAT-USER ACCEPTANCE TESTING**
- • UAT by client/BA
- • Release meeting
- • Go live
- • Maintenance if required
- • Queries
- **TEST DELIVERABLES**
- • Requirements documents(SRS)
- • Test plan
- • Test cases
- • Traceability matrix
- • Defect analysis report
- • Test summary report
- **COMMON TEMPLATES USED**
- • Query Tracker
- • SRS/FRS
- • Project Plan: MPP(Optional)
- • Test Plan
- • Estimation
- • Test Case Doc
- • Test Case Review Template-Checklists
- • Bug Tracker

- • Test Summary Report
- We are @ Social media