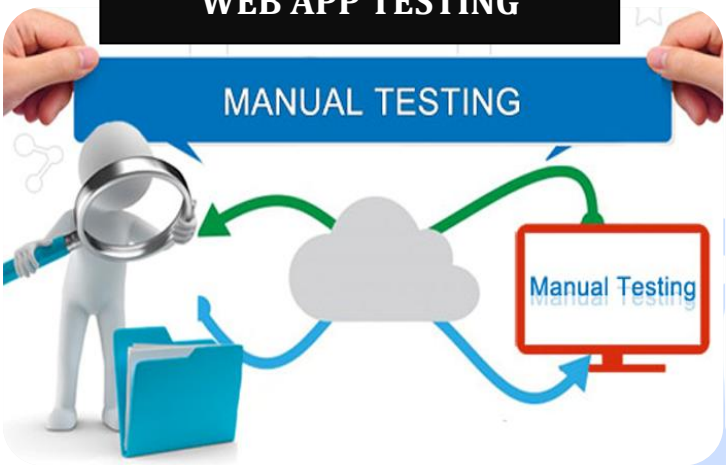
QUALITY THOUGHT
INFOSYSTEMS (INDIA) PVT. LTD.

FUNCTIONAL TESTING

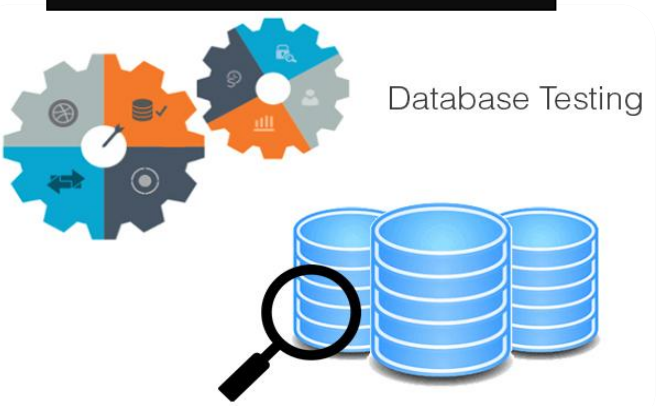
MANUAL TESTING

(Complete Package)

WEB APP TESTING



DB TESTING (Oracle)



We are ready to serve Latest Testing Trends, Are you ready to learn?

New Batches Info

START DATE :

TIMINGS :

DURATION :

TYPE OF BATCH :

FEE :

FACULTY NAME :

LAB TIMINGS :

FUNCTIONAL TESTING

High Level Course Overview:

1. **Types of application:**
   - **a.** Web Application Testing
   - **b.** Database Testing

2. **Projects**
   - **a.** Insurance Domain

3. **Process Models**
   - **a.** Waterfall Model
   - **b.** V-Model
   - **c.** Agile Methodology

4. **Test Management Tools**
   - **a.** ALM Octane
   - **b.** Jira

5. **Additional Skills**
   - **a.** Oracle
   - **b.** Unix

6. **Support from QT**
   - **a.** Resume Preparation
   - **b.** Mock Interviews
   - **c.** Interview KIT
   - **d.** Placement Assistance

Section 1: Testing basics

1.1 Introduction to Software Testing Industry
1.2 What is Quality?
1.3 Why we need to deliver Quality Software?
1.4 What are the benefits of delivering high quality software to end users?
1.5 How to deliver Quality Software?
1.6 Importance of Quality Assurance team in delivering Quality Software?
1.7 Importance of Quality Control team (Testing) team in delivering Quality Software?
1.8 What is the importance of Software Testing Team?
1.9 Why we need to do Software Testing?
1.10 What are the differences between Quality Assurance and Quality Control?
1.11 When to start Testing?
1.12 What are the Testing Techniques?
- 1.12.1 Static Testing
- 1.12.2 Dynamic Testing

1.13 Explain importance of Static Testing with examples?
1.14 Explain importance of dynamic Testing with examples?
1.15 Explain differences between Static Testing and Dynamic Testing?
1.16 Explain differences between
- 1.16.1 Proactive Approach vs Reactive Approach
- 1.16.2 Verification vs. Validation
- 1.16.3 Prevention vs. detection

1.17 What are the Testing Methodologies?
- 1.17.1 White box Testing
- 1.17.2 Black box Testing
- 1.17.3 Grey box Testing

1.18 Explain differences between Black box Testing and White box Testing?
1.19 Explain below Terminologies?
- 1.19.1 Mistake
- 1.19.2 Error
- 1.19.3 Bug
- 1.19.4 Defect
- 1.19.5 Failure

1.20 What are the Categories of Defects?
1.21 How does Testing affect Risk?
1.22 Should Testing Be Done only After the Build and Execution Phases are Complete?
1.23 What Kind of Input Do We Need from the End User to Begin Proper Testing?
1.24 A Defect Which Could Have Been Removed during the Initial Stage is removed in a Later Stage. How does this Affect Cost?
1.25 Explain Testing Principles?
1.26 Explain differences between Product Testing and Project?
1.27 Skills required to get job in software Testing

Section 2: Agile Methodology

2.1 Agile Methodology Concepts:

1. **Need of Agile Methodology**
   - 1.1 What is Agile?
   - 1.2 Why Agile is so popular?
   - 1.3 When to go for Agile?
   - 1.4 For what kind of Projects Agile is suitable?
   - 1.5 For what kind of projects Agile is not suitable?
2. **Agile Methodology principles**
   - 2.1 Agile Manifesto
3. **Comparison of traditional Models with Agile**
   - 3.1 Compare Agile with waterfall Model
   - 3.2 Compare Agile with V Model
4. **Benefits of Agile Methodology**
5. **Drawbacks of Agile Methodology**
6. **Agile Methodology Frameworks**
7. **Introduction to Scrum Framework**
   - 7.1 What is scrum?
   - 7.2 For what kind of projects scrum is suitable?
   - 7.3 For what kind of projects scrum is not suitable?
   - 7.4 Discussion on Sprint Planning
   - 7.5 Discussion on story cards
8. **Components of Scrum Framework**
   - 8.1 Scrum Roles
   - 8.2 Scrum Artifacts
   - 8.3 Scrum Events
9. **Scrum Roles and Responsibilities**
   - 9.1 Product Owner
   - 9.2 Scrum Master
   - 9.3 Scrum Development team
10. **Scrum Artifacts**
    - 10.1 Product Backlog
    - 10.2 Sprint Backlog
    - 10.3 Burn down Chart
11. **Scrum Events**
    - 11.1 Sprint Planning Meeting
    - 11.2 Daily Scrum Meeting
    - 11.3 Sprint Review Meeting
    - 11.4 Sprint Retrospective Meeting
12. **Tools Usage in Agile**
    - 12.1 JIRA-Agile
13. **Templates helpful for Agile Testing**
    - 13.1 Product Backlog Template
    - 13.2 Release Plan Sample

13.3 Sprint Planning Template
13.4 Story Wall
13.5 Technical Design Template
13.6 Test Plan Sample
13.7 User Story Sample
13.8 Example Agile weekly report
13.9 Planning Poker
13.10 Impediments log

14. Agile Testing process
15. Sample Resume for Agile

2.2 Advanced Agile Methodology:

16. Estimation Techniques in Agile
17. How to identify scrum Failures
18. Kanban Framework
19. Scrum Framework vs. Kanban Framework
20. Future of Agile
21. Certification info for Agile

2.3 Interview Questions

Section 3: Testing classification

3.1. Black box testing categories

1. Functional Testing
2. Non Functional Testing
    a. Performance testing
    b. Security testing
    c. Usability testing
    d. compatibility Testing

3.2 Testing Methods

a. Smoke Testing
b. Sanity Testing
c. Retesting
d. Regression Testing
e. Exploratory testing
f. Adhoc Testing
g. Alpha Testing
h. Beta Testing
i. Mutation Testing
j. Localization Testing
k. Manual Testing
l. Automation Testing

3.3. Levels of Testing

2.5.1 Unit Testing
2.5.2 Integration Testing
2.5.3 System Testing
2.5.4 Acceptance Level

Section 4: STLC

4.1 Test Strategy
4.2 Test Plan
4.3 RTM
4.4 Story Analysis (Requirement Analysis)
4.5Test case Design
4.6 Test case Review
4.7 Test Execution
4.8 Defect Reports
4.9 Test case, Test script, Test log
4.10 Sample Test cases for GUI and Business Rules
4.11 Sample System Scenario's for System Level

4.12 Test case Design Techniques

- ✓ Equivalence Partitioning
- ✓ Boundary Value analyses
- ✓ Decision Table
- ✓ Error Guessing

4.13 Test case Review Techniques

- ✓ Peer Review,
- ✓ Formal Review,
- ✓ Walkthrough

4.14: Test Case Execution

4.14.1 Test Result
4.14.2 Updating test logs
4.14.3 Cycle Test execution criteria

4.15 Defect

4.15.1 How to raise a defect
4.15.2 Defect Tracking and Management
4.15.3 Defect Life Cycle
4.15.4 Priority VS Severity
4.15.5 Triage Team
4.15.6 Deferred defects
4.14.7 Defect Reports

Section 5: Test Management Tools

5.1 QC
5.2 JIRA

Section 6: SDLC
SDLC Phases:
6.0 Introduction to Software Development Cycle

1. Plan
2. Analyze
3. Design
4. Development
5. Testing
6. Implementation

Different SDLC approaches

1. Sequential Approach
2. Incremental Approach
3. Iterative approach
4. Spiral Approach

6.1 Waterfall Model

6.1.3 Waterfall Model
6.1.4 Advantageous and Drawbacks of Waterfall Model

6.2 V Model

6.2.1 Verification and Validation Model
6.2.2 Compare V model and Waterfall Model
6.2.3 Advantageous and Drawbacks of V Model
6.2.4 When to Start Testing

Section 7: Advanced Testing

7.1 Entry criteria and Exit criteria
7.2 Testing Metrics
7.3 Defect Reports
7.4 Test Reports
7.5 Release Notes and Sign off report
7.6 Auditing
7.7 Estimations
7.8 Insurance and Banking Domain

Section 8: Testing Tools live project

8.1 Project 1: Insurance domain
8.2 Project 2: Banking domain
8.3 Project 3: E commerce domain

Section 9: Additional Technical courses

9.1SQL
9.2 UNIX

Section 10: DB Testing with Sample project

Section 11: Interview questions

11.1 Testing Tools fresher interview questions
11.2 Experienced Interview questions
11.3 HR oriented interview questions
11.4 Resume preparation

Data Base Testing:

1. **Introduction to database testing**
2. **Layers of an application**
   - ✓ Why testing at data layers is important

- ✓ Primary functions of a database layer

3. **Why to test and What to test in a database**
4. **Differences between UI and Database testing**
5. **Skills needed to perform database testing**
6. **Types of Database testing**
   - ✓ Structural testing
   - ✓ Functional testing
   - ✓ Non-functional testing
7. **How to test a database**
8. **Database/RDBMS Concepts**
   - ✓ Constraints
   - ✓ Data Integrity
   - ✓ Database Normalization
   - ✓ Most popular RDBMS
9. **SQL Concepts**
   - ✓ Types of SQL statements
     - Data Definition Language
     - Data Manipulation Language
     - Data Control Language
     - Transaction Control Language
   - ✓ Important SQL Commands
   - ✓ SQL in detail
     - DESC/SHOW
     - COUNT
     - DISTINCT
     - WHERE
     - OPERATORS IN SQL
     - WILD CARDS
     - AND & OR
     - TOP
     - ORDER BY
     - GROUP BY/HAVING
     - INSERT INTO/SELECT INTO
     - UPDATE/ALTER
     - DELETE/TRUNCATE/DROP
     - ALIASES
     - JOINS
     - UNION/INTERSECT/EXCEPT
     - CREATE
     - DATA TYPES

- NULL VALUES
- INDEXES
- VIEWS
- DATE FUNCTIONS
- TEMPORARY TABLES
- SUB QUERIES
- SEQUENCES
- SQL INJECTION

10. Assignments
11. Interview Questions
12. Project
13. Resume Preparation

Live Project Essentials

1. Project Name :
2. Project Description:
3. Client Name:
4. Client Description:
5. Process Followed in the Project:
6. Tools Used in the Project:
7. Environments in the Project:
8. Team Size:
9. Team Distribution:
10. Roles and Responsibilities:
11. Client calls
12. Releases in Project
13. Project Architecture
14. Testing Life Cycle in the Project:
15. Product Backlog
16. Requirements in Requirement Management Tool
17. Stories from Customer
18. Success Criteria of the Story
19. Story Analysis
20. Query Tracker
21. System Test Plan
22. Requirement Traceability Matrix
23. Test case Design Check list
24. GUI Test cases
25. System scenario's
26. Test case Review checklist
27. Review Process in Project
28. Test case Review Tracker
29. Test case Execution
30. Test Log
31. Defect Life Cycle in Project
32. Role of Quality Center in Project

33. Role of JIRA in project
34. Weekly status Report
35. Release Status Report
36. Status Mails
37. Regression Testing in Project
38. Exploratory Testing in Project
39. Bugs Identified in Project
40. Risks Identified in Project and Contingency Plan
41. Challenges Identified in Project
42. Issues in Project
43. Test case Design techniques involved in project
44. How you executed the Test cases in Quality center
45. Scenario based Questions from Project
46. Practical Sessions
47. Interview KIT
48. Resume Preparation
49. Mock Interviews

About Trainer:

Name of Trainer : Ramana

Years of Exp : 11+ Years

Designation : Sr. Test Lead

1. Currently Working as Sr. Test Lead with CMMI Level 5 Company and having **11+ Years of Experience** in Software Testing **(Functional Testing & DB Testing).**
2. **Mr. Ramana** handled **113 batches** and trained **10000+ Professionals** from last 8 Years.
3. He is the first faculty to start Live Project Oriented Testing with **Agile Scrum & Kanban Framework** in Hyderabad.