

CELEBRATING
12 YEARS

QualityThought®



MANUAL TESTING



MEET OUR MENTOR



RAMANA BHUPATHI

Ramana Bhupathi has more than 15+ years of experience in the IT industry, of which 10 years+ has been in the training and coaching professional from IT organizations working in various roles and domains like Product Development, Marketing, Manufacturing, Energy etc, and also been helping clients with leading technologies and innovative ways of working to improve Agility. Apart from this he has run consulting business, started his own business, led IT organizations, built Agile Startups in Artificial Intelligence.

Ramana's skills have been Agile Transformation, Product Life Cycles, Project Management & Development in domains like Financial Services, Insurance, Trading, Risk Management & E-learning.

As an Enterprise Agile Coach:

- Training executives, program managers and teams in agile frameworks including SAFe, Scrum, Kanban.
- Providing strategy and operational coaching for teams and management.
- As a subject matter expert on Agile frameworks and processes
- Providing instruction and training to teams in the area of Agile principles, frameworks and values.
- Providing process direction to executives, management, PMO, and others as required for enterprise transformation.
- Facilitate team and organizational events and meetings as required such as PI planning and sprint planning, retrospectives, etc.



As a Sr. Agile Consulting Coach:

- Agile transformation project to migrate from a waterfall to Scrum/Kanban.
- Providing both strategic transformational support and team coaching.
- Moving clients to sustainable agile maturity within the organization.
- Serve as subject matter expert on agile principles, frameworks, and values.
- Provide instruction and training to teams in the area of agile principles, frameworks, and values
- Provided agile direction to management in regards to culture and organizational change as a Coach and SME for the agile principles, frameworks, and values.
- Facilitate team and organizational events and meetings as required such as PI planning and sprint planning, retrospectives, etc.
- Coach and mentor Scrum Masters and Product Owner in their respective roles to grow in maturity and influence within the team

FUNCTIONAL TESTING

- **Types of application**
 - 1) Web Application Testing
 - 2) Database Testing

- **Projects**
 - 1) Insurance Domain

- **Process Models**
 - 1) Waterfall Model
 - 2) V-Model
 - 3) Agile Methodology

- **Test Management Tools**
 - 1) ALM Octane
 - 2) Jira

- **Additional Skills**
 - 1) Oracle
 - 2) Unix

- **Support from QT**
 - 1) Resume Preparation
 - 2) Mock Interviews
 - 3) Interview KIT
 - 4) Placement Assistance

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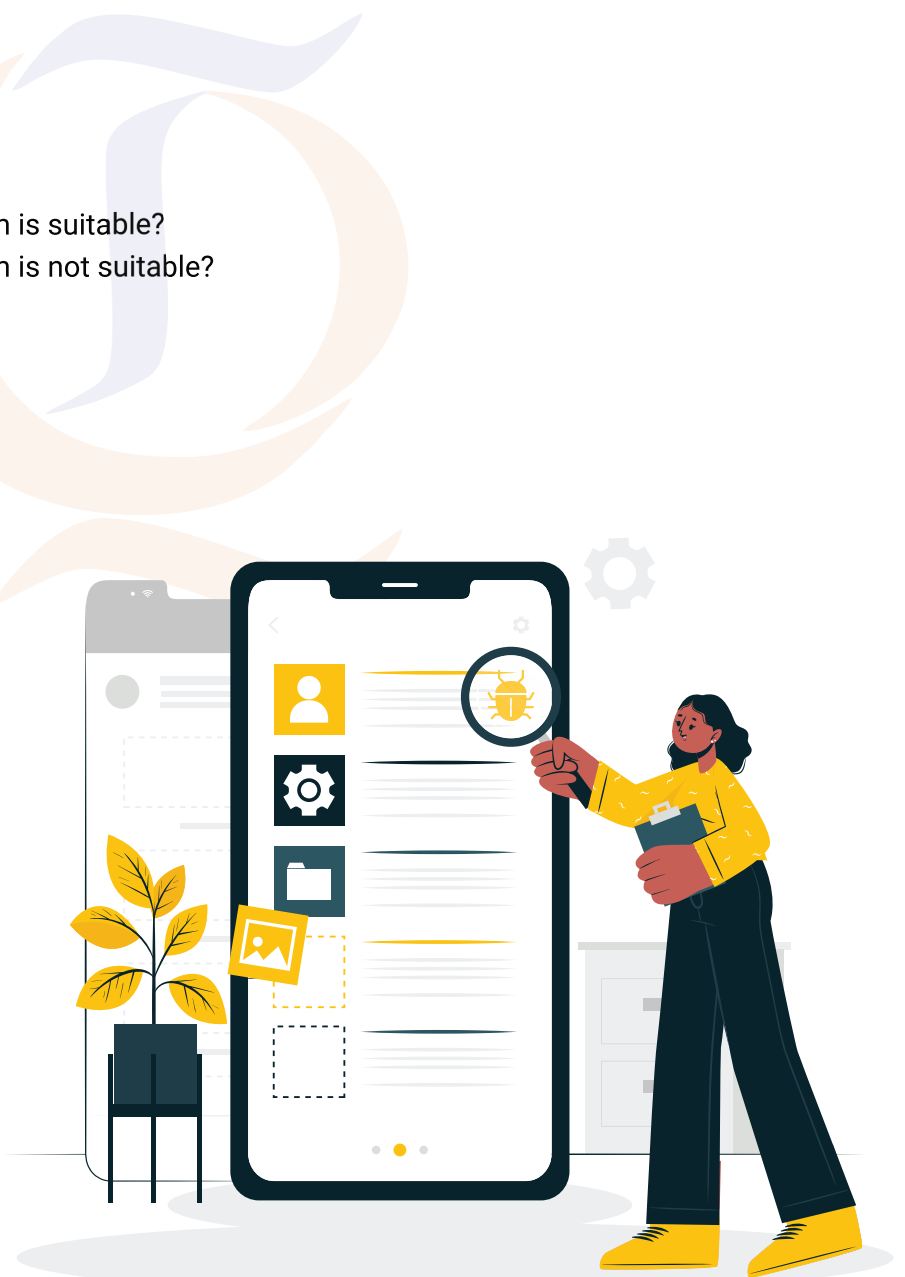
SECTION 1: TESTING BASICS

- Introduction to Software Testing Industry
- What is Quality?
- Why we need to deliver Quality Software?
- What are the benefits of delivering high quality software to end users?
- How to deliver Quality Software?
- Importance of Quality Assurance team in delivering Quality Software?
- Importance of Quality Control team (Testing) team in delivering Quality Software?
- What is the importance of Software Testing Team?
- Why we need to do Software Testing?
- What are the differences between Quality Assurance and Quality Control?
- When to start Testing?
- What are the Testing Techniques?
 - 1) Static Testing
 - 2) Dynamic Testing
- Explain importance of Static Testing with examples?
- Explain importance of dynamic Testing with examples?
- Explain differences between Static Testing and Dynamic Testing?
- Explain differences between
 - 1) Proactive Approach vs Reactive Approach
 - 2) Verification vs. Validation
 - 3) Prevention vs. detection
- What are the Testing Methodologies?
 - 1) White box Testing
 - 2) Black box Testing
 - 3) Grey box Testing
- Explain differences between Black box Testing and White box Testing?
- Explain below Terminologies?
 - 1) Mistake
 - 2) Error
 - 3) Bug
 - 4) Defect
 - 5) Failure
- What are the Categories of Defects?
- How does Testing affect Risk?
- Should Testing Be Done only After the Build and Execution Phases are Complete?
- What Kind of Input Do We Need from the End User to Begin Proper Testing?
- A Defect Which Could Have Been Removed during the Initial Stage is removed in a Later Stage. How does this Affect Cost?
- Explain Testing Principles?
- Explain differences between Product Testing and Project?
- Skills required to get job in software Testing

SECTION 2: AGILE METHODOLOGY

2.1: Agile Methodology concepts:

- Need of Agile Methodology
 - 1) What is Agile?
 - 2) Why Agile is so popular?
 - 3) When to go for Agile?
 - 4) For what kind of Projects Agile is suitable?
 - 5) For what kind of projects Agile is not suitable?
- Agile Methodology principles
 - 1) Agile Manifesto
- Comparison of traditional Models with Agile
 - 1) Compare Agile with waterfall Model
 - 2) Compare Agile with V Model
- Benefits of Agile Methodology
- Drawbacks of Agile Methodology
- Agile Methodology Frameworks
- Introduction to Scrum Framework
 - 1) What is scrum?
 - 2) For what kind of projects scrum is suitable?
 - 3) For what kind of projects scrum is not suitable?
 - 4) Discussion on Sprint Planning
 - 5) Discussion on story cards
- Components of Scrum Framework
 - 1) Scrum Roles
 - 2) Scrum Artifacts
 - 3) Scrum Events
- Scrum Roles and Responsibilities
 - 1) Product Owner
 - 2) Scrum Master
 - 3) Scrum Development team
- Scrum Artifacts
 - 1) Product Backlog
 - 2) Sprint Backlog
 - 3) Burn down Chart
- Scrum Events
 - 1) Sprint Planning Meeting
 - 2) Daily Scrum Meeting
 - 3) Sprint Review Meeting
 - 4) Sprint Retrospective Meeting
- Tools Usage in Agile
 - 1) JIRA-Agile
- Templates helpful for Agile Testing
 - 1) Product Backlog Template
 - 2) Release Plan Sample



- 3) Sprint Planning Template
- 4) Story Wall
- 5) Technical Design Template
- 6) Test Plan Sample
- 7) User Story Sample
- 8) Example Agile weekly report
- 9) Planning Poker
- 10) Impediments log

- Agile Testing process
- Sample Resume for Agile

2.2: ADVANCED AGILE METHODOLOGY

- Estimation Techniques in Agile
- How to identify scrum Failures
- Kanban Framework
- Scrum Framework vs. Kanban Framework
- Future of Agile
- Certification info for Agile

2.3: ADVANCED AGILE METHODOLOGY

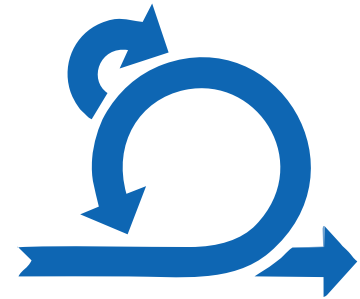
SECTION 3: TESTING CLASSIFICATION

3.1: BLACK BOX TESTING CATEGORIES

- Functional Testing
- Non Functional Testing
 - 1) Performance testing
 - 2) Security testing
 - 3) Usability testing
 - 4) compatibility Testing

3.2: TESTING METHODS

- Smoke Testing
- Sanity Testing
- Retesting
- Regression Testing
- Exploratory testing
- Adhoc Testing
- Alpha Testing
- Beta Testing
- Mutation Testing
- Localization Testing
- Manual Testing
- Automation Testing

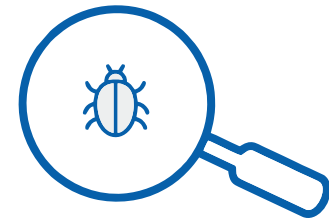


3.3: LEVELS OF TESTING

- Unit Testing
- Integration Testing
- System Testing
- Acceptance Level

SECTION 4: STLC

- Test Strategy
- Test Plan 4.3 RTM
- Story Analysis (Requirement Analysis)
- Test case Design
- Test case Review
- Test Execution
- Defect Reports
- Test case, Test script, Test log
- Sample Test cases for GUI and Business Rules
- Sample System Scenario's for System Level
- Test case Design Techniques
 - 1) Equivalence Partitioning
 - 2) Boundary Value analyses
 - 3) Decision Table
 - 4) Error Guessing
- Test case Review Techniques
 - 1) Peer Review,
 - 2) Formal Review,
 - 3) Walkthrough
- Test Case Execution
 - 1) Test Result
 - 2) Updating test logs
 - 3) Cycle Test execution criteria
- Defect
 - 1) How to raise a defect
 - 2) Defect Tracking and Management
 - 3) Defect Life Cycle
 - 4) Priority VS Severity
 - 5) Triage Team
 - 6) Deferred defects
 - 7) Defect Reports



SECTION 5: TEST MANAGEMENT TOOLS

- 1) ALM Octane
- 2) JIRA



SECTION 6: SDLC

SDLC PHASES

➤ 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

➤ Waterfall Model

- 1) Waterfall Model
- 2) Advantageous and Drawbacks of Waterfall Model

➤ V Model

- 1) Verification and Validation Model
- 2) Compare V model and Waterfall Model
- 3) Advantageous and Drawbacks of V Model
- 4) When to Start Testing



SECTION 7: ADVANCED TESTING

- Entry criteria and Exit criteria
- Testing Metrics
- Defect Reports
- Test Reports
- Release Notes and Sign off report
- Auditing
- Estimations
- Insurance and Banking Domain

SECTION 8: TESTING TOOLS LIVE PROJECT

- Project 1: Insurance domain
- Project 2: Banking domain
- Project 3: E commerce domain



SECTION 9: ADDITIONAL TECHNICAL COURSES

- SQL
- UNIX

SECTION 10: DB TESTING WITH SAMPLE PROJECT

SECTION 11: INTERVIEW QUESTIONS

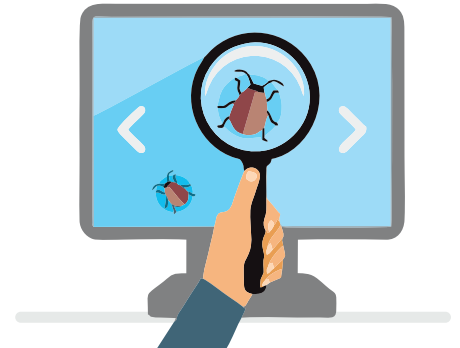
- Testing Tools fresher interview questions
- Experienced Interview questions
- HR oriented interview questions
- Resume preparation

DATA BASE TESTING:

- Introduction to database testing
- Layers of an application
 - 1) Why testing at data layers is important
 - 1) Primary functions of a database layer
- Why to test and What to test in a database
- Differences between UI and Database testing
- Skills needed to perform database testing
- Types of Database testing
 - 1) Structural testing
 - 1) Functional testing
 - 1) Non-functional testing
- How to test a database
- Database/RDBMS Concepts
 - 1) Constraints
 - 1) Data Integrity
 - 1) Database Normalization
 - 1) Most popular RDBMS
- SQL Concepts
 - 1) Types of SQL statements
 - o Data Definition Language
 - o Data Manipulation Language
 - o Data Control Language
 - o Transaction Control Language
- Important SQL Commands
- SQL in detail
 - o DESC/SHOW
 - o COUNT
 - o DISTINCT
 - o WHERE
 - o OPERATORS IN SQL
 - o WILD CARDS
 - o AND & OR
 - o TOP
 - o ORDER BY
 - o GROUP BY/HAVING
 - o INSERT INTO/SELECT INTO
 - o UPDATE/ALTER
 - o DELETE/TRUNCATE/DROP
 - o ALIASES
 - o JOINS
 - o UNION/INTERSECT/EXCEPT
 - o CREATE
 - o DATA TYPES
 - o NULL VALUES
 - o INDEXES
 - o VIEWS
 - o DATE FUNCTIONS
 - o TEMPORARY TABLES
 - o SUB QUERIES
 - o SEQUENCES
 - o SQL INJECTION
- Assignments
- Interview Questions
- Project
- Resume Preparation

LIVE PROJECT ESSENTIALS

- Project Name :
- Project Description:
- Client Name:
- Client Description:
- Process Followed in the Project:
- Tools Used in the Project:
- Environments in the Project:
- Team Size:
- Team Distribution:
- Roles and Responsibilities:
- Client calls
- Releases in Project
- Project Architecture
- Testing Life Cycle in the Project:
- Product Backlog
- Requirements in Requirement Management Tool
- Stories from Customer
- Success Criteria of the Story
- Story Analysis
- Query Tracker
- System Test Plan
- Requirement Traceability Matrix
- Test case Design Check list
- GUI Test cases
- System scenario's
- Test case Review checklist
- Review Process in Project
- Test case Review Tracker
- Test case Execution
- Test Log
- Defect Life Cycle in Project
- Role of Quality Center in Project
- Role of JIRA in project
- Weekly status Report
- Release Status Report
- Status Mails
- Regression Testing in Project
- Exploratory Testing in Project
- Bugs Identified in Project
- Risks Identified in Project and Contingency Plan
- Challenges Identified in Project
- Issues in Project
- Test case Design techniques involved in project
- How you executed the Test cases in Quality center
- Scenario based Questions from Project
- Practical Sessions
- Interview KIT
- Resume Preparation
- Mock Interviews



STUDENT TRANSFORMATION STAGES



OUR STUDENTS ARE PLACED IN
