

Software Testing training Course Syllabus

Course Content:

Software Testing (Manual, API/Web Services, SQL) - Training Plan

Software Testing (Manual, API, SQL) course Contents has been developed working together with hundreds of hiring companies in India to prepare fresh graduates to work as Software Testing Engineer OR Quality Analyst.

The Software Testing course contains Manual Testing, API Testing & SQL and the syllabus will help candidates in their preparation for the International Software Testing Qualifications Board (ISTQB) examination.

Introduction of Software Testing

- What is Software testing
- What is Quality
- Importance of testing
- Tools used for Testing
- Manual and Automation Testing
- Principles of Software Testing

Software Development Life Cycle

- SDLC and SDLC Phases
- Requirements and Analysis
- Design
- Development
- Testing
- Deployment
- Operation and Maintenance

SDLC Models

- Waterfall Model
- V Model
- Spiral Model
- Iterative Model
- Agile Model

Development Architectures

- One Tier Architectures
- Two Tier Architectures
- Three Tier Architecture
- N-Tier Architecture

Software Testing Life Cycle

- What is STLC?
- Entry and Exit Criteria • STLC Phases
- Requirement Analysis
- Test Planning
- Test Design
- Test Execution
- Sign Off
- Test Scenario Preparation
- Test Case Preparation
- Test Environment and Test Data Preparation
- Requirement Traceability Matrix

Levels of Testing

- Testing Techniques used in Levels of Testing
- White Box Testing Technique
- Black Box Testing Technique
- Unit Testing
- Integration Testing
- System Testing
- Functional Testing
- Non Functional Testing
- User Acceptance Testing

Types of testing

- Functional Testing
- White Box Testing
- Black Box Testing
- Positive Testing
- Negative Testing
- Beta Testing
- Live Environment Testing
- Smoke Testing
- Sanity Testing
- Regression Testing
- Formal Testing
- Informal Testing
- Monkey Testing
- Re-Testing

Risk Based Testing

- Non Functional Testing
- Performance Testing
- Load/Stress Testing
- Usability Testing
- Accessibility Testing
- Security Testing

Effective software metrics

- Test Case Productive Preparation
- Test Execution Summary
- Test Case Coverage
- Defect Acceptance
- Defect Rejection
- Test Efficiency
- Effort Variance
- Schedule Variance

Requirements Traceability Matrix (RTM)

- Forward Traceability
- Backward Traceability
- Bi-Directional Traceability
- Examples Of RTM
- Test Coverage

Testing Techniques

- Equivalence Case Partition
- State Transition Technique

Decision Table Technique

- Boundary Value Analysis

- Error Guessing Technique
- Adhoc Testing

Defect Management

- Difference between Defect and Bug
- Defect Life Cycle
- Defect Tacking Tools
- Create a Bug Report
- Raise a Bug in JIRA
- Severity & Priority

Agile methodologies

- Agile Methodologies Overview
- Agile Scrum
- Agile ceremonies
- Agile artifacts
- Kanban
- Adaptive Project Framework (APF)
- Extreme Project Management (XPM)

Agile Scrum

- Why we go for Agile?
- Agile Manifestos and Scrum
- Roles involved in Agile
- Terminologies used in Agile

Ceremonies in Agile

- Sprint Grooming
- Sprint Planning
- Daily Scrum Meeting
- Sprint Review

- Sprint Retrospective

VSO (Visual Studio Online)

- What is Sprint
- What is Backlog
- What is Sprint Backlog
- Assign backlog items to a sprint
- Add tasks to backlog items
- Set sprint capacity
- Adjust work to fit sprint capacity
- (Optional) Share your sprint plan
- Update the Taskboard
- Monitor your sprint burndown

JIRA

- Introduction To JIRA
- Test Management In JIRA
- Generating Reports In JIRA
- Introduction To JIRA Agile
- Create an issue in JIRA
- Sub-Task
- WorkFlows
- JIRA Agile
- Creating issue in Agile
- How to create an Epic in Agile
- Reports in JIRA
- Kanban Board and Managing issues
- JIRA Scrum Vs JIRA Kanban

Backlog

- Full history of issue updates and status changes
- Project and issues with subtasks
- Git and SVN built-in
- Gantt Charts and Burndown charts
- Wikis and Watchlists
- Native mobile apps
- Kanban-style boards for visual workflow

Live Testing Projects

- Travel Domain Explanation
- Ecommerce Domain Explanation
- Banking Domain Explanation
- Insurance Domain Explanation
- Healthcare Domain Explanation
- Educational Domain Explanation

Overview on API testing tools

- Web Service Basics
- About Postman tool
- Create GET, POST, PUT, DELETE request
- Understand GET vs POST request method
- Work with real-world APIs
- JavaScript basics for tests
- Write API tests in Postman
- Use data from Excel files (CSV) or JSON
- Use Postman variables to create workflows and scenarios

Database Tutorial

- SQL Introduction
- Why SQL is required
- SQL Commands
- Create Database/Table
- SQL Alter table
- SQL Rename table
- SQL Drop Database
- SQL Insert Into
- Drop Table
- SQL Select
- SQL Select Distinct
- SQL Where
- SQL And Or Not
- SQL Order By
- SQL Update
- SQL Delete
- SQL Select Top
- SQL Like
- SQL Wildcards
- SQL Min Max
- SQL In
- SQL Between
- SQL Alias
- SQL Constraints
- SQL Not Null
- SQL Primary Key
- SQL Foreign Key
- SQL Joins
- SQL Inner Join
- SQL Left Join
- SQL Right Join
- SQL Full Join
- SQL Interview Questions Answers

Interview Preparation

- Manual Testing Interview Questions Discussion
- Real-Time Interview Questions and Answers Discussion
- Agile Testing Interview Questions Discussion
- VSOJIRA Interview Questions Discussion

Understanding Real-time scenarios and work culture

- Project explanation
- Challenges faced by tester
- Roles and responsibilities of a tester
- Day to day activities of a tester

Real-Time project

- To put your knowledge on into action, you will be required to work on two industry-based projects that discuss significant real-time use cases.
- These projects are completely in-line with the modules mentioned in the curriculum and help you to clear the certification exam.

Resume preparation

- Your resume is arguably the most critical part of the modern job application process.
- A well-organized, tailored resume will increase your chances of landing an interview while a poorly written resume could get lost in the sea of applicants.
- We will help you to prepare your impressive resume with best specification of your skill set

Mock-Interview

Mock interviews by us gives you the platform to prepare, practice and experience the

- real-life job interview.
- Familiarizing yourself with the interview environment beforehand in a relaxed and stress-free environment gives you an edge over your peers.
- Our mock interviews will be conducted by industry experts with an average experience of 5+ years. So you're sure to improve your chances of getting hired!