Software Testing training Course Syllabus

Course Content:

Software Testing (Manual, Automation, SQL) - Training Plan

Software Testing (Manual, Automation, 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.


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

QTest
• Test plan: Releases and Builds
• Requirements
• Creating Testcases
• Creating and using parameters
• Using data query
• Executing test runs and submitting defects
• Complex scenario
• Setting up qTest explorer (web and desktop)
• Using qTest Explorer (Web and Desktop)

Bugzilla
• Log-in to Bugzilla account
• Creating a BugReport
• Create graphical reports
• Using Browse Function
• Simple Search Option in Bugzilla
• Add or remove column to default search screen
• Advance Search Option in Bugzilla
• Using Preferences in Bugzilla

ALM
• Introducing HP ALM
• Release Specifications
• Requirements Specifications module in HP ALM
• Test Plan Modules
• Defect Management Life Cycle
• Report & Analysis

JIRA

• Introduction To JIRA
• Test Management In JIRA
• Advanced Search And Introduction To JQL (JIRA Query Language)
• Generating Reports In JIRA
• Introduction To JIRA Agile
• Create an issue in JIRA
• Sub-Task
• WorkFlows
• Plug-ins in JIRA
• JIRA Agile
• Creating issue in Agile
• How to create an Epic in Agile
• Use of Clone and Link in JIRA
• Reports in JIRA
• Kanban Board and Managing issues
• JIRA Scrum Vs JIRA Kanban

Backlog

• Easy bug tracking tool
• Search and advanced search features
• 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 Automation testing tools

• Selenium
• UFT/QTP
• Appium

Interview Preparation

• Manual Testing Interview Questions Discussion
• Real-Time Interview Questions and Answers Discussion
• Agile Testing Interview Questions Discussion
• JIRA 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 Greens technologies 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!