

**Manual Testing**

***By Venkat***

1. Introduction to Software Testing

Learn Testing definition, Testing Importance, Roles and Responsibilities, Testing principles, Quality definition, how much testing is enough, Differences between Manual and Automation Testing.

**Hands-on Exercise: Identify negative test scenarios for hotel application and gather requirements for hotel application login page.**

**Demo application url:** <http://adactinhotelapp.com/>

1. Software Development Life Cycle

What is SDLC, Types of SDLC phases, Types of SDLC models, Pros and Cons of SDLC.

**Hands-on Exercise: Perform ad-hoc testing on Hotel application and find at least 5 valid bugs.**

**Gather requirements for hotel application new registration page.**

**Demo application url:** <http://adactinhotelapp.com/>

1. Software Testing Methodologies

Black Box Testing, White Box Testing, Grey Box Testing, Boundary value analysis, equivalence partitioning, error guess, decision table.

**Hands-on Exercise: Apply Boundary Value Analysis and Equivalence partitioning on password field.**

**Demo application url:** <http://adactinhotelapp.com/>

**Hands-on Exercise: Apply Decision table on hotel application login screen**

**Demo application url:** <http://adactinhotelapp.com/>

1. Prepare Test Cases

Prepare manual test cases for hotel app, prepare manual test cases for account creation, Prepare manual test cases for calculator.

**Demo application url:** <http://adactinhotelapp.com/>

1. Functional Testing

Functional Testing, Integration Testing, Smoke Testing, Sanity Testing, System Testing, Regression Testing, Acceptance Testing.

**Hands-on Exercise: prepare functional test cases for hotel application, prepare smoke test cases for hotel and testyou application.**

**Demo application url:** <http://adactinhotelapp.com/>

1. Non-Functional Testing

Performance Testing, Usability Testing, Volume Testing, Compatibility Testing, Security Testing

**Hands-on Exercise: prepare compatibility test cases for hotel application, prepare security test cases for hotel application.**

1. Software Testing Life Cycle

Requirement Analysis, Test Strategy and Test Plan, Test case Creation, Test data creation, Test environment setup, Test case Execution, Defect Logging, Defect Fix & Re-Verification.

**Hands-on Exercise: write sample test plan for hotel application.**

1. Quality Assurance and Quality Control

Difference between QA and QC, QA techniques and QC techniques.

Install test management tool TestLink.

1. Behavior-driven development and Test-driven development

Behavioral Driven Development, Test-Driven Development

**Hands-on Exercise: prepare test cases in BDD, install Tidy Gherkin extension on chrome for BDD test cases.**

**Demo application url:** <http://adactinhotelapp.com/>

1. Requirement Traceability Matrix

Preparing Traceability Matrix, Need of Test Metrics, various types of metrics

**Hands-on Exercise:**Create Test Cases for an application, Create Traceability Matrix, Perform sample testing

1. Bug Life Cycle

Defect Logging, Defect Assign, Defect Tracking, Defect Severity and Priority

**Hands-on Exercise:**Identify log Defects, Use Bugzilla Tool to log a defect and apply different stages of a bug (open, fixed, close etc.)

**Demo application url:** <http://adactinhotelapp.com/>

1. Agile Process

Understand Agile Process, Scrum methodology

Install JIRA or Rally tools to understand agile scrum process.

Create User Stories, Tasks and Bugs in JIRA.

**JIRA Install Link:** [**https://www.atlassian.com/software/jira/try**](https://www.atlassian.com/software/jira/try)

1. Team Collaboration & Best practices

Test Status Reports, Test Closure Reports, Tester and Developer, Team Collaboration, Client Interaction, Onshore/Offshore Model, Mitigate current challenges

**Hands-on Exercise –**Write sample test status report

1. Testing Tools

Functional Testing Tools, Non-Functional Testing Tools, API testing tools, Mobile Testing tools.

**Hands-on Exercise:**Install Selenium IDE tool and record automation script.

1. Resume preparation & Interview Question and Answers discussion