

Manual Testing (3 Months)

Duration: 3 Months (~120 Hours)

Mode: Live Online / Classroom

Designation after completion: Manual Tester / QA Analyst

Tools & Technologies: JIRA, Bugzilla, TestLink, Excel/Google Sheets

Certifications prepared: ISTQB Foundation

Course Syllabus (12 Weeks)

Week 1 – Introduction & Basics

- What is Software Testing & its importance
- Difference between QA, QC & Testing
- SDLC vs STLC
- Software Testing Life Cycle phases
- Assignment → Write QA role explanation for an Agile team

Week 2 – Testing Fundamentals

- Principles of Software Testing
- Types of Testing: Functional vs Non-functional
- Verification vs Validation
- White-box vs Black-box testing
- Assignment → Compare functional vs non-functional tests with examples

Week 3 – Test Levels & Models

- Unit, Integration, System, UAT
- V-Model, Agile, Waterfall testing models
- Alpha vs Beta testing
- Assignment → Identify test levels in a banking project case

Week 4 – Test Planning & Design

- Test Strategy & Test Plan creation
- Entry & Exit Criteria
- Roles & responsibilities of QA team
- Assignment → Write a sample test plan for a shopping cart app
- Mock Interview 1

Week 5 – Test Case Writing

- Test Case design techniques: Equivalence Partitioning, BVA
- Positive & Negative Test Cases
- Test Data Preparation

- Assignment → Write test cases for Login Page

Week 6 – Functional Testing

- Smoke Testing, Sanity Testing
- Regression Testing concepts
- Re-testing vs Regression Testing
- Assignment → Perform regression on calculator app

Week 7 – Defect Management

- Defect Life Cycle
- Defect Severity vs Priority
- Bug tracking with JIRA / Bugzilla
- Assignment → Log 3 sample defects with severity/priority

Week 8 – Agile Testing

- Agile Testing concepts
- QA role in Scrum
- Sprint planning, daily stand-ups, retrospectives
- Assignment → Write test cases from Agile User Stories
- Mock Interview 2

Week 9 – Specialized Testing

- Compatibility testing (OS, Browser, Devices)
- Usability Testing
- Exploratory & Ad-hoc Testing
- Assignment → Perform cross-browser test on Gmail login

Week 10 – UAT & Acceptance Testing

- UAT role in projects
- UAT Checklist preparation
- Sign-off process
- Assignment → Prepare UAT checklist for Banking Portal

Week 11 – Metrics & Reporting

- QA Metrics: Defect density, Test coverage
- Test summary reports
- Assignment → Prepare QA weekly status report

Week 12 – Revision & Project

- Review of all testing phases
- Mini Project: End-to-end Manual Testing for an e-commerce site
- Mock Interview 3