

KIDS & TEENS FREELANCING TRAINING INSTITUTE

Software Quality Assurance (SQA) Course Outline

Module 1: What is SQA and Why It's Important

- Introduction to Software Quality Assurance and its purpose
- Real-life example: Testing a video game before release
- Why quality matters: fewer bugs, better user experience
- Activity: List your favorite apps and what makes them feel "bug-free"

Module 2: Understanding the Software Development Life Cycle (SDLC)

- What is SDLC and how SQA fits into every stage
- Phases: Requirements, Design, Development, Testing, Deployment
- Real-life example: Building and testing a mobile app
- Activity: Match SQA roles with different SDLC stages

Module 3: Types of Testing in SQA

- Manual vs. automated testing
- Functional, regression, performance, usability, and security testing
- Real-life example: Testing different parts of a shopping app
- Activity: Identify types of tests needed for an app idea

Module 4: Test Planning and Documentation

- What is a test plan, test case, and test report?
- Importance of writing clear and organized test documentation
- Real-life example: Checklist for testing an online form

• Activity: Create a simple test case for a login page

Module 5: Introduction to Test Automation

- Benefits of automation in repetitive testing
- Tools: Selenium, JUnit, TestNG basics
- Real-life example: Automatically testing form submissions
- Activity: Watch or simulate a simple automated test run

Module 6: Bug Tracking and Reporting

- How to identify, document, and report software bugs
- Tools: JIRA, Bugzilla, Trello
- Real-life example: Logging bugs during a team project
- Activity: Write and submit a mock bug report

Module 7: SQA Tools & Real-World Practices

- Hands-on with tools: TestRail, Postman, Selenium IDE
- Real-life SQA process in startups vs. big companies
- Activity: Explore a test management tool and report your experience

Module 8: SQA Careers & Certifications

- Career roles: QA Analyst, Test Engineer, Automation Tester
- Certifications: ISTQB, CSTE, Certified Agile Tester
- Real-life example: Journey of an SQA professional
- Activity: Map your career path with skills and goals

Bonus Materials

- Software testing glossary and cheat sheet
- Sample test case templates
- Bug report writing examples
- Interview questions and resume tips
- Certificate of Completion for SQA