



# **Agile Quality Assurance for Software Teams Training Course**

**Ref: #QUA5390**



## Course Introduction / Overview:

In the fast-paced world of software development, quality assurance is no longer a final step before release but an integrated, continuous process. This training course is designed to provide software professionals, QA engineers, and agile team members with frameworks and practical skills to embed quality into every stage of the development lifecycle. It goes beyond traditional, manual testing to focus on the mindset, tools, and practices of modern Agile Quality Assurance. We will explore how to work in small, iterative sprints, automate testing, and use data to make smarter, faster decisions. The curriculum is informed by the foundational work of global academics like Eric Ries, whose book "The Lean Startup" has revolutionized how companies build and test new products. His concept of the "build-measure-learn" feedback loop is a perfect fit for a modern QA team. This program provides a clear blueprint for turning a potential bottleneck into a powerful engine for delivering high-quality software on time. BIG BEN Training Center is committed to empowering software teams to innovate with confidence.

## Target Audience / This training course is suitable for:

- QA engineers and analysts.
- Software developers.
- Scrum master's and agile coaches.
- Project managers.
- Product owners.
- Software development managers.
- Business analysts.



## **Target Sectors and Industries:**

- Information technology and software.
- Financial services.
- E-commerce and retail.
- Telecommunications.
- Healthcare technology.
- Gaming and entertainment.
- Government agencies.

## **Target Organizations Departments:**

- Software Development.
- Quality Assurance (QA).
- Product Management.
- DevOps.
- Engineering.
- IT operations.
- Project Management Office (PMO).

## **Course Offerings:**

By the end of this course, the participants will have able to:



- Embed quality assurance into the agile development lifecycle.
- Write and manage user stories with clear acceptance criteria.
- Automate tests at various levels (unit, integration, UI).
- Use data to identify and prioritize bugs.
- Collaborate effectively within a cross-functional agile team.
- Implement a continuous integration and continuous delivery (CI/CD) pipeline.
- Develop a plan for a robust regression testing strategy.
- Understand the role of QA professionals in a modern software team.

## **Course Methodology:**

This training course uses a highly interactive and case-based methodology to ensure participants gain actionable skills in agile quality assurance. The program incorporates detailed case studies of agile teams that have successfully integrated QA into their workflow, as well as those that have struggled with a traditional, siloed approach. We will use interactive workshops and live coding exercises to practice critical skills like writing test cases, using a test automation framework, and running a defect triage meeting. The course includes a hands-on group project where participants will work together to create a full QA plan for a fictional software feature. BIG BEN Training Center believes that hands-on training is essential for mastering these new ways of working. Our expert facilitators will guide discussions and provide personalized feedback, ensuring that participants leave with the confidence and practical experience needed to lead a successful agile team.

## **Course Agenda (Course Units):**

### **Unit One: The Role of QA in an Agile World**



- From traditional QA to agile QA.
- The Agile Manifesto and its principles.
- The "whole team" approach to quality.
- Testing pyramid vs. testing quadrant.
- Case studies of agile quality transformations.

## **Unit Two: Agile Planning and Requirements**

- Writing user stories with a quality mindset.
- Acceptance criteria and "Definition of Done".
- Planning for quality in each sprint.
- Test-Driven Development (TDD) principles.
- Behavior-Driven Development (BDD).

## **Unit Three: Test Automation and CI/CD**

- The automation pyramid.
- Introduction to automation tools.
- Building a test automation strategy.
- Integrating tests into a CI/CD pipeline.
- Managing and maintaining automated tests.

## **Unit Four: Defect Management and Reporting**

- Identifying and logging defects.
- Triage and prioritization of bugs.
- Root cause analysis for software defects.
- Using metrics to measure quality.
- Communicating quality to stakeholders.



## **Unit Five: The Future of Agile Quality**

- Introduction to DevOps.
- Performance and security testing.
- The role of AI and machine learning in testing.
- Building a personal roadmap for quality leadership.
- Leading an agile team with confidence.

## **FAQ:**

### **Qualifications required for registering to this course?**

There are no requirements.

### **How long is each daily session, and what is the total number of training hours for the course?**

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

### **Something to think about:**

How can a QA professional, whose traditional role has been to find problems, transition to a role as a proactive partner in an agile team who helps prevent them?

### **What unique qualities does this course offer compared to other courses?**



This training course is a highly specialized program that focuses on the critical, yet often misunderstood, relationship between agile methodologies and quality assurance. We go beyond a simple focus on testing tools to provide a holistic framework for embedding quality into a software team's culture and processes. Our curriculum is tailored to address the specific needs of software professionals, providing them with frameworks to manage not just the technical aspects of testing but also the collaborative and strategic ones. The course distinguishes itself by emphasizing not only the technical skills needed to automate tests but also the interpersonal skills required to influence a positive outcome in a cross-functional team. By focusing on both the practical and the cultural aspects of agile QA, this program provides an invaluable skill set that is essential for any professional committed to a career in modern software development.