BA19 – User Acceptance Testing (UAT) for Business Analysts (BAs)

Course Length: 2 days / 14 PDUs

Background:
All too often the software products delivered to the business do not meet their expectations, especially with regard to the quality of the product. An effective User Acceptance Testing (UAT) process addresses this issue by confirming the functionality and performance of the product prior to its release. This workshop looks at the business issues which drive the need for a fully functional UAT process and describes the components of such a process. It is designed to help the Business Analyst (BA) to develop an understanding of their role, the process, and the deliverables associated with UAT.

Target Participant:
This course is designed for the Business Analyst professional who is involved with testing the functionality of technology projects.

The objectives of this course are to:

- Develop an understanding about basic concepts associated with User Acceptance Testing
- See how UAT applies to the Software Development Lifecycle (SDLC)
- Recognize benefits of improved quality of deployed software using User Acceptance Testing
- Identify the key roles, activities and deliverables which make up User Acceptance Testing
- Use a Business Use Case to define scenarios for testing
- Create a UAT test plan and write UAT test cases with associated test data
- Understand the process for testing functional and non-functional requirements
- Identify the challenges of testing vendor-supplied applications

Course Outline:

Section 1: Software Testing – the Basics

- What is software testing and why is it important?
- Typical problems that we encounter with software
- The Cost of Quality (CoQ) and the cost of finding defects too late
- The "V" Testing Model
- The four stages of software testing (Unit, Integration, System, User Acceptance Testing (UAT)
- Testing best practices

  Exercise: **"How would you test it?" – A new technology is presented to the participants and they are asked to brainstorm what should be tested to ensure it is working correctly.**

Section 2: Understanding the Tester's Terminology

- What is UAT and what is the role of the Business Analyst?
- Characteristics of a good UAT tester
- The tasks of UAT testing
- The UAT documents
- Common terms & definitions
  - The six testing types for UAT (i.e., smoke, functional, intersystem, usability, regression, stress/load testing)
  - The three testing techniques for UAT (i.e., control flow, parallel, and positive testing)
  - Testing visibility (White Box, Gray Box, and Black Box testing)

  Exercise: **UAT Jeopardy – A fun and fast-paced game of Jeopardy – used as a review of terms, concepts, and roles learned in this lesson.**

Section 3: The UAT Planning Process

- The importance of UAT planning
- What is a UAT Test Plan?
- The six steps for creating a UAT Test Plan
- General testing tips (see Testing Guidelines and Techniques document)
  Exercise: **"Create a UAT Test Plan" – The participants will identify UAT test scenarios from a Business Use Case and identify test objectives and high-level test data for each scenario**

Section 4: UAT Test Coverage

- What is UAT test coverage?
- Using a Requirements Traceability Matrix
- Set the testing scope – what to test and what not to test
- The UAT Test Coverage Matrix
- Verifying Non-functional requirements (i.e., performance, security, usability, availability, etc.)

Section 5: Creating and Executing the UAT Test Cases

- What are the goals of UAT testing?
- What is a UAT Test Case?
- How do UAT Test Plans and Test Cases relate?
- The four steps for creating a UAT Test Case
  Exercise: **"Write a UAT Test Case" – The participants will be asked to write a high-level Test Case from their Business Use Case and define test data for a portion of the steps**
- Preparing, running, and documenting the UAT Tests
- General testing tips and techniques

Section 6: Verifying the Test Results

- Documenting UAT test results
- What is a defect?
- How to log a defect?
- The "bug" lifecycle
- Writing a good problem description
- Taking screen snapshots
- 10 tips to avoid writing bad defect reports
  Exercise: "Log a defect" – The participants will write a concise and complete statement to explain a defect
- Signing-off on UAT

Section 7: Testing Vendor-Supplied Applications

- Challenges of testing vendor-supplied applications
- Challenges to the business
- Eight steps for testing vendor-supplied applications
  Handout: **Review a case-study for testing vendor products**