

Hands-on course , 3
day(s)
Ref : TQB

Participants

This formation is addressed to professionals of the software test: IT test manager, senior IT developer...

Pre-requisites

To have taken the ISTQB® Foundation Level training and to be certified ISTQB Foundation level.

Next sessions

ISTQB Advanced Level, Technical Test Analyst, Certification

OBJECTIVES

This three-day course covers four main areas — risk management, techniques for performing effective and efficient functional testing, approaches to testing the technical non-functional characteristics and attributes of software systems and examination of tools and basic automation concepts.

1) The Technical Test Analyst's Tasks in Risk-Based Testing

2) Structure-Based Testing

3) Analytical Techniques

4) Quality Characteristics for Technical Testing

5) Reviews

6) Test Tools and Automation

7) Certification

Certification

This course is followed by official ISTQB certification exam.

1) The Technical Test Analyst's Tasks in Risk-Based Testing

- General introduction of risk analysis and testing.
- Risk Identification.
- Risk Assessment.
- Risk Mitigation.

Exercise

Review question, exam preparation.

2) Structure-Based Testing

- General introduction of structure-based testing.
- Condition Testing.
- Decision Condition Testing.
- Modified Condition/Decision Coverage (MC/DC) Testing.
- Multiple Condition Testing.
- Path Testing.
- API Testing.
- Selecting a Structure-Based Technique.

Exercise

Review question, exam preparation.

3) Analytical Techniques

- General introduction of analytical techniques.
- Static Analysis.
- Control Flow Analysis. Data Flow Analysis.
- Using Static Analysis for Improving Maintainability. Call Graphs.
- Dynamic Analysis.
- Overview. Detecting Memory Leaks.
- Detecting Wild Pointers. Analysis of Performance.

Exercise

Review question, exam preparation.

4) Quality Characteristics for Technical Testing

- General introduction.
- General Planning Issues.
- Security Testing.
- Reliability Testing.
- Performance Testing.
- Resource Utilization.
- Maintainability Testing.
- Portability Testing.

Exercise

Review question, exam preparation.

5) Reviews

- General introduction of review.
- Using Checklists in Reviews.

- Architectural Reviews.
- Code Reviews.

Exercise

Review question, exam preparation.

6) Test Tools and Automation

- Integration and Information Interchange Between Tools.
- Defining the Test Automation Project.
- Selecting the Automation Approach.
- Modeling Business Processes for Automation.
- Specific Test Tools.
- Fault Seeding/Fault Injection Tools.
- Performance Testing Tools. Tools for Web-Based Testing.
- Tools to Support Model-Based Testing. Component Testing and Build Tools.

Exercise

Review question, exam preparation.

7) Certification

- Revision on the main themes approached in formation.
- Practice test to involve itself.
- Installation of the examination: 2 hours, the last day on 3PM, by the GASQ selected by the ISTQB.