

# Course : Test implementation for mobile applications

*Practical course - 2d - 14h00 - Ref. TIM*

*Price : 1720 CHF E.T.*

Developing a mobile application means checking its robustness and reliability, and ensuring that the interface and ergonomics are in line with requirements. This course will introduce you to a complete testing approach, as well as the tools required for testing in each environment.

## Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Understand the different types of mobile applications and associated environments
- ✓ Defining a test strategy
- ✓ Create Android/Apple test devices
- ✓ Implement generic tests on the Laptop segment
- ✓ Handling specific technical test utilities

## Intended audience

Testers wishing to create and capitalize on a Test repository, project managers and project owners.

## Prerequisites

Connaissances générales en développement. Avoir suivi le cours "Processus et méthode de test" et/ou avoir déjà pratiqué une activité de tests. Connaître l'environnement Windows.

## Practical details

### Teaching methods

Mise en œuvre de Techniques de tests Démonstration des outils

## Course schedule

### PARTICIPANTS

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### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

## 1 ISTQB® Mobile application testing concepts

- What is a mobile application?
- Types of software testing. Mobile application development and testing cycles.
- Specific campaigns. Notion of Verification and Validation (V&V). Test case specification.

## 2 Mobile applications overview

- Technology architecture.
- Main types of mobile application.
- Overview of cell phone testing.
- Ergonomics, Attractiveness, Safety, Compliance.

## 3 Defining a test strategy

- Risk management. Determining test effort.
- Determine test platforms.

### Demonstration

Simulator for Web applications like Iphoney.

## 4 Android applications test

- Android OS features. Introduction to DDMS and DDME. Android-specific test criteria.
- Approach and techniques for testing Android applications.
- Choose a test device with emulators.
- Capture logs to analyze results.

### Exercise

Test set-up and analysis.

## 5 Apple application test

- Apple OS features. Notions on application installation, submission process.
- Apple-specific test criteria.
- Approach and techniques for testing Apple applications.
- Choose a test device with emulators.

### Exercise

Setting up generic test devices "Apple".

## 6 Generic tests on the Laptop part

- OS regression test, link test, link test with mobile applications.
- Battery consumption test.
- Test call processing, SMS, exchanges.
- Memory use test. Stress Test.

### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

## 7 Mobile application testing utilities

- Screen capture and memory usage measurement tools.
- File explorers. Stress testing tools.
- Log collectors

### Exercise

Implementation of mobile application testing tools.

## 8 Summary for MOA

- Test campaigns. Prioritizing test effort. Specify test campaigns.
- Execute campaigns under different conditions of comfort and network coverage.
- Tests on physical terminals versus emulators.
- Logistics: creation and management of a fleet of mobile terminals, and associated GSM subscriptions.
- Use a specialized external test platform.