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INSA Campus LyonTech - Bâtiment Hedy Lamarr 6 avenue des Arts - 69621 VILLEURBANNE Phone 0472436060 Web site : http://telecom.insa-lyon.fr/

Informatique

Mobile development

IDENTIFICATION

CODE: TC-5-S1-EC-DMC ECTS: 2.0

HOURS

Lectures: 0.0 h
Seminars: 0.0 h
Laboratory: 32.0 h
Project: 0.0 h

Teacher-student

contact : 32.0 h
Personal work : 0.0 h
Total : 32.0 h

ASSESSMENT METHOD

TEACHING AIDS

TEACHING LANGUAGE

French

CONTACT

M. MERCIER Simon

AIMS

This course aims to train students in developing native mobile applications for Android. By the end of the course, students should have independently or collaboratively created a functional mobile application. Free choice of topic, selected by each group of students, will be encouraged.

Skills:

Architecting code using the latest best practices in Android development.

Making API calls to retrieve data to be displayed in the application.

Designing views with a "mobile application" mindset, considering various screen sizes. Working with constraints of a mobile device (network, data storage, downloading, etc.).

Knowledge:

Kotlin

Jetpack Compose

MVI Architecture

Essential Android libraries (Material3, Accompanist, Retrofit, etc.).

Students are required to bring their laptops for this option.

Reference: https://simonmercier.gitlab.io/mobile-makers/

The targeted skills for this course are:

Level 3

C7 "Implementing, realizing, developing, deploying computer programs"

C8 "Operating, analyzing, improving digital systems"

B2 "Working, learning, evolving autonomously"

A4 "Designing a system in response to a specification"

Level 1

A5 "Processing data"

C3 "Specifying, designing, and modeling algorithms and computer programs"

C4 "Specifying and sizing digital systems in response to customer needs"

B4 "Demonstrating creativity, innovation, entrepreneurship"

These skills will also be utilized:

B3 "Interacting with others, working in teams"

A1 "Analyzing a real or virtual system (or problem)"

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