Study programme(s):
Level: Bachelor studies
Course title: Mobile application development
Lecturer: Danijela D. Tešendić
Status: elective
ECTS: 6
Requirements: None

Learning objectives

Introduce basic concepts of mobile applications and methods and tools for development of mobile applications to students.

Упознавање студената са основним концептима мобилних апикација и начинима и алатима за развој моблних апликација.

Learning outcomes

Minimum:

After successful completion of this course students are able to describe architecture of mobile applications, as well as methods and tools for application development. Also, students are able to develop basic mobile application for specific platform.

Desirable:

After successful completion of this course students are able to explain specifics of mobile applications, to describe architecture of the applications, as well as methods and tools for application development. Also, students are able to develop mobile application for specific platform that includes basic components of that platform like user interface components, data storage, communication with HTTP services etc.

Syllabus

Theoretical instruction

In theoretical part of this course students are introduced with specifics of mobile devices and specifics and architectures of mobile applications. Also, students are introduced with different platforms for mobile application development. One of the mobile platforms is taught in details as well as methods for application development in that platform. Concepts of applications that are taught during the course are user interface development, development of custom user interface components, showing maps and locations on maps, different data storage options on device and access to those storages, development of background services on device, as well as communication with Internet services using HTTP protocol.

Practical instruction

In practical part of this course students use tools for mobile application development. During semester students develop applications for one specific platform in environment for that platform and in that way, they illustrate concepts taught in theoretical instruction.

Literature

Recommended

1. Hardy, Brian, and Bill Phillips. *Android Programming: The Big Nerd Ranch Guide*. Addison-Wesley Professional, 2013.

2. Annuzzi, Joseph, Lauren Darcey, and Shane Conder. *Introduction to Android application development: Android essentials*. Pearson Education, 2014.

3. Keur, Christian, and Aaron Hillegass. *Ios programming: The Big Nerd Ranch Guide*. Atlanta, 2015.

Weekly teaching load				
Lectures: 2	Exercises: 0	Practical Exercises: 2	Student research: 0	Other:

Teaching methodology

Classical teaching methods using computer equipment are applied during theoretical instruction. Practical instruction is performed in computer laboratory where students are introduced with development tools through practical work. Through practical examples and labs, they illustrate theoretical concepts taught during theoretical instruction.

Grading method (maximal number of points 100)

Pre-exam oblications	points	Final exam	points
Project	70	Oral exam	30