

Программа учебной дисциплины « Coding Mobile Apps for Entrepreneurs »

Утверждена

Академическим советом ООП

Протокол № от «__»____20__ г.

Автор	Комаров М.М., к.т.н., PhD
Число кредитов	6
Контактная работа (час.)	
Самостоятельная работа (час.)	
Курс	2 курс
Формат изучения дисциплины	С использованием онлайн-курса

1. Course summary

Course is aiming to teach students about technological aspects and business opportunities while developing mobile applications.

2. Area of application and Regulatory References

The Course Program has been prepared for lecturers, teaching assistants for the Master Programme “E-business”, elective course.

The Course Program has been developed in accordance with:

- National curriculum standard
- Educational Program 38.04.05
- University Academic Plan of the Education Program 38.04.05.

Lectures are provided via MOOC: <https://ru.coursera.org/learn/android-app>

3. Learning objectives

The general goal of the course is to prepare graduates for effective performance of the managerial role of mobile applications implementation, work in team and to be able to build business based on mobile technologies.

Therefore, aims of the course are:

- To involve students into the actual problems connected mobile development.
- To present an overview of different mobile technologies and technology-based business approaches.
- To equip students with the knowledge of the major development issues of mobile applications.
- To equip students with the knowledge of basic principles of developing and managing mobile solutions and systems.

4. Learning outcomes

The course develops the following competencies:

Student should estimate and analyze different known scientific methods and approaches in terms

of data collection, storage and processing.

Student should be capable to make managerial decisions, to assess their consequences and to bear responsibility for the outcomes.

These indicated and contributed during the preparation of explanation and analysis of the particular area mobile commerce solutions, particular market and business-model.

Student should improve methods of e-business and department involved in e-business of non-network companies.

Students should identify and make prognoses about modern approaches on increasing business efficiency.

5. How the Course fits in with the Curriculum

The Course is provided as non-obligatory course within the Master Program “E-business”

The Course is to be based on the acquisition of the following Courses:

- Scientific seminar
- Entrepreneurship and business-models at the Internet
- Research on the Internet
- Enterprise Architecture Modeling

The Course requires the following students’ competencies and knowledge:

- Basic computer science principles and skills
- Basic mobile technologies understanding
- Basic software-development skills

6. Course Schedule

№	Topic
1	<i>Introduction</i>
2	<i>Create the Storyboard for Your Application</i>
3	<i>Install Tools, Create HelloWorld App</i>
4	<i>Build Your First Interactive Application</i>
5	<i>Toward Your Application, Step-By-Step</i>
6	<i>Transform Your Storyboard Into Actual Application</i>
7	Final exam

7. Forms and Types of control

The course is based on a rather complicated method of grading.

Final score consists of:

- score for current work during the classes – O_1 ;
- final exam presentation – O_2 .

Final score O looks as follow:

$$O = 0,6 * O_1 + 0,4 * O_2.$$

8. Literature

8.1 Core textbooks:

1. Friesen, Jeff. Learn Java for Android Development, Apress, Access at: <https://library.books24x7.com/toc.aspx?bookid=62984>

8.2 Additional supporting articles and conference papers:

1. Tim Hayden, Tom Webster “The Mobile Commerce Revolution”, Pearson Education, 2015
2. Paul Skeldon “M-commerce”, Crimson Publishing, 2012
3. Terence Craig; Mary E Ludloff “Privacy and Big data”, Sebastopol, CA: O'Reilly, 2011.
4. Esther Swilley “Mobile Commerce: How It Contrasts, Challenges, and Enhances Electronic Commerce”, Business Expert Press, 2016
5. In Lee (Ed) “Mobile applications and knowledge advancements in e-business”, Idea Group Inc (IGI) , 2013.
6. Michael Mordhorst, “How to Help Enterprises Going Mobile: Investigation on Influences and Requirements of Business Apps Within Enterprise Mobility”, Anchor Academic Publishing, 2014
7. Brian Ernest Mennecke, Troy J. Strader (eds.), “Mobile Commerce: Technology, Theory, and Applications”, Idea Group Inc (IGI), 2003

9. Course content

№	Topic	Description
1	<i>Introduction</i>	This module presents pedagogic approach and demonstrates the kind of applications students will be able to build at the end of the course.
2	<i>Create the Storyboard for Your Application</i>	In this module there will be design of personalized app from a user's perspective.

3	<i>Install Tools, Create HelloWorld App</i>	This module guides students in the development of an Android application using the Android Studio Integrated Development Environment (IDE). First it points to the right place to install the Android Studio IDE and the Android Software Development Kit (SDK). Next it walks through the steps of using them to create a basic "Hello World" application and it describes how to transfer the application for execution on a physical Android device and on an emulator. At the end of the module students will be familiar with Android tools.
4	<i>Build Your First Interactive Application</i>	In this module you associate for the first time a graphical user interface with an activity controlling it, resulting in a first interactive application. We will re-use this same schema next week when developing the 9 apps presented in week 2 (and so will your personalized app).
5	<i>Toward Your Application, Step-By-Step</i>	Step by step in the development of 5 of the basic building blocks.
6	<i>Transform Your Storyboard Into Actual Application</i>	In this part, there will be development of the remaining 4 basic building blocks.
7	Exam	

The main goal of all seminars – to practice using the knowledge gained during the lectures, to propose and develop new mobile application prototype.

10. Guidelines for Knowledge Assessment

Milestone (Control) expects from the students to present current version of mobile application prototype with different functionality implementation – what they read from the literature, description of use-cases, general definitions in the area of mobile development etc.

During the examination process students will be asked to present their mobile applications prototypes and answer questions related to Android development like: “What is activity in Android development?”, “How to configure mobile applications launch”.

12. Educational technologies

Subsequently the course will use some elements of “stress ignition”:

- Dialog with the students – the lecture may be interrupted at any moment by a question of the lecturer either addressed to the whole audience or addressed to a particular student.
- Analysis and harsh critique of individual and collective presentations.
- Collective responsibility – all members of a project group share the same grade.
- Computer-assisted simulations and presentations are an integrated part of the course.