Subject code: M.5(4)	**Subject name:** Mobile application requirements analysis		
Study load: 2 ECTS	**Load of contact hours:** 28	**Study semester:** Spring	**Assessment:** Credit / No credit
Objectives:	students studying the basic concepts and principles of the formation and analysis of user requirements for mobile application programs, familiarity with various technologies and techniques for identifying and formalizing requirements, mastering the skills of working with complexes of documentation, testing and requirements management tools.		
Course outline:	Topics covered: 1. Features of the development of software requirements for mobile applications. 2. Creation and analysis of requirements. 3. Development of requirements. 4. Documenting requirements. 5. Quality attributes. 6. Prototyping. 7. Special requirements. 8. Management requirements. 9. Implementation of the requirements building process. Contact lessons will be divided into two parts: laboratory work and practical training with individual and team tasks.		
Learning Outcomes:	By the end of the course students (in the terms of knowledge, skills, and attitudes) should be able to: 1 – apply standards for the design of technical documentation at various stages of the life cycle of an information system; 2 – compile technical documentation at various stages of the life cycle of an information system; 3 – analyse the feasibility of the requirements, evaluate the complexity of the implementation of the requirements for software; 4 – align software requirements with interested parties; 5 – develop and coordinate technical specifications for software components and collaborate with a software architect.		
Assessment Methods:	Assessment is split into two parts: tests, individual tasks, including 3 mandatory presentations, and team tasks during course (60% of points) and group project in the end of the course (40% of points).		
Teacher(s):	Vakhtin Alexsey		
Prerequisite subject(s):	None		
Compulsory Literature:	Karl E. Wiegers Software Requirements: Practical Techniques for Gathering and Managing Requirements Throughout the Product Development Cycle. (Pro-Best Practices).		
Replacement Literature:	Steve McConnell Code Complete,		

<table>
<tr><td></td><td>Robert C. Martin The Clean Coder: A Code of Conduct for Professional Programmers.</td></tr>
<tr><td>Participation requirements:</td><td>Individual project must be presented by end of the course.</td></tr>
<tr><td>Independent work:</td><td>I. To develop requirements for the following software systems being designed (according to options):
1. The banking system. It is necessary to realize the possibility of registering a client, opening credit and deposit accounts. Calculation of accrued interest, commissions, etc. Generation of reports on clients and bank affairs. To provide for the possibility of opening accounts at predetermined tariffs, adjusting tariffs, and creating an individual tariff.
2. Software for the clinic or diagnostic center. Provide for patient registration options. Viewing and editing the schedule of doctors, making a patient appointment. Enter the results of the examination and the doctor’s opinion. Printout of test results, doctor’s conclusions. To realize the possibility of access to the data of analyzes and conclusions of the doctor through the personal account of the patient.
3. Online store (auto goods, household chemicals, goods for repair, etc.). To consider the division of goods into categories, the search for goods by parameters. Order formation, order processing, etc.
4. The control system with the help of evoked visual potentials. To consider a plug-in module for obtaining data of evoked potentials with EEG, a signal processing module, and a control module based on commands received from the signal processing module.
5. The control system using miosignals. To consider a plug-in module for obtaining data of evoked potentials with EEG, a signal processing module, and a control module based on commands received from the signal processing module.

II. Conducting an analysis of the developed requirements of the practical task option for your classmate</td></tr>
<tr><td>Grading criteria scale or the minimal level necessary for passing the subject:</td><td><table><tr><td>Failed</td><td>Laboratory and practical tasks not completed</td></tr><tr><td>Passed</td><td>Laboratory and practical tasks completed</td></tr></table></td></tr>
<tr><td>Information about the course:</td><td>Room ___, on ___ at ___</td></tr>
<tr><td>1) Date 1</td><td>Laboratory 1
Features of the development of software requirements for mobile applications.</td></tr>
<tr><td>2) Date 2</td><td>Practical 1
Features of the development of software requirements for mobile applications.</td></tr>
<tr><td>3) Date 3</td><td>Laboratory 2
Creation and analysis of requirements.</td></tr>
<tr><td>4) Date 4</td><td>Practical 2</td></tr>
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	Creation and analysis of requirements.
5) Date 5	**Laboratory 3** Development of requirements.
6) Date 6	**Practical 3** Documenting requirements.
7) Date 7	**Laboratory 4** Quality attributes.
8) Date 8	**Practical 4** Prototyping.
9) Date 9	**Laboratory 5** Special requirements.
10) Date 10	**Practical 5** Special requirements.
11) Date 11	**Laboratory 6** Management requirements.
12) Date 12	**Practical 6** Management requirements.
13) Date 13	**Laboratory 7** Implementation of the requirements building process.
14) Date 14	**Practical 7** Implementation of the requirements building process.