



Subject card

Subject name and code	Software Usability, PG_00048275						
Field of study	Informatics						
Date of commencement of studies	February 2024	Academic year of realisation of subject			2023/2024		
Education level	second-cycle studies	Subject group			Optional subject group Subject group related to scientific research in the field of study		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Software Engineering -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Agnieszka Landowska					
	Teachers	dr hab. inż. Agnieszka Landowska dr inż. Michał Wróbel					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	0.0	30
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours		Self-study	SUM	
	Number of study hours	30	4.0		16.0	50	
Subject objectives	The purpose of the subject is to get familiar with the problem and methods of quality assurance and user experience evaluation in the software development.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_K02] is ready to provide critical evaluation of received content and to acknowledge the importance of knowledge in solving cognitive and practical problems	Proposes modifications of designed and existing software applications based on the results of the usability study.	[SK5] Assessment of ability to solve problems that arise in practice
	[K7_U08] while identifying and formulating engineering tasks specifications and solving these tasks, can: n- apply analytical, simulation and experimental methods, n- notice their systemic and non-technical aspects, n- make a preliminary economic assessment of suggested solutions and engineering work	Plans and conducts experimental software usability study.	[SU1] Assessment of task fulfilment
	[K7_U42] can solve engineering and research problems including design, assessment and maintenance of information systems and applications, using experimental methods and management techniques	Proposes modifications of designed and existing software applications based on the results of the usability study.	[SU4] Assessment of ability to use methods and tools
	[K7_W43] Knows and understands, to an increased extent, the formal, technical and social aspects of the operation of complex information systems in the information society and in the global information infrastructure.	Is able to design a model of a software user.	[SU1] Assessment of task fulfilment
[K7_W06] Knows and understands, to an increased extent, the basic processes taking place in the life cycle of devices, facilities and technical systems.	Is able to place usability evaluation and planning throughout the software lifecycle.	[SW1] Assessment of factual knowledge	
Subject contents	<ol style="list-style-type: none"> 1. The concept of quality, usability and user experience, 2. Selection of the attributes of quality for use with the method: tree quality, GQM 3. Methods and techniques of measuring usability 4. Prototyping 5. Study of the user experience (UX) 6. Tools to help in the study of usability and user experience 7. The issue of accessibility (users with special needs). 		
Prerequisites and co-requisites	No requirements		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project	50.0%	50.0%
	Exam	50.0%	50.0%
Recommended reading	Basic literature	<ul style="list-style-type: none"> • Sikorski Marcin, Interakcja człowiek-komputer, PJWSTK, 2010. 	
	Supplementary literature	<ul style="list-style-type: none"> • Bill Albert, Tom Tullis. Measuring the user experience: collecting, analyzing, and presenting usability metrics. Newnes. 2013. • Martin Paul, Bateson Patrick, Measuring behaviour. An introductory Guide. Cambridge University Press, 2007. • Jayaswal, Patton, „Oprogramowanie godne zaufania”, Helion, 2010. • Bereza-Jarociński B.: Inżynieria oprogramowania: jak zapewnić jakość tworzonej aplikacji, Gliwice, Wydawnictwo Helion, 2009. • Begier B.: Doskonalenie jakości oprogramowania przez włączenie użytkowników w proces jego wytwarzania, Poznań, Wydawnictwo Politechniki Poznańskiej, 2007. • Tidwell J.: Designing interfaces, Projektowanie interfejsów: sprawdzone wzorce projektowe, Gliwice, Wydawnictwo Helion, 2012. • Cooper A.: Wariaci rządzą domem wariatów: dlaczego produkty wysokich technologii doprowadzają nas do szaleństwa i co zrobić, żeby tego uniknąć, Warszawa, Wydawnictwa Naukowo-Techniczne, 2001. 	
	eResources addresses	Adresy na platformie eNauczanie: Software usability - 2024 - Moodle ID: 36215 https://enauzanie.pg.edu.pl/moodle/course/view.php?id=36215	
Example issues/ example questions/ tasks being completed	Task 1. Usability evaluation of applications Task 2. Elaboration of prototype of a software tool.		
Work placement	Not applicable		