Subject card

Subject name and code	Software Usability, PG_00048275			
Field of study	Informatics			
Date of commencement of studies	February 2023	Academic year of realisation of subject		2022/2023
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_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 throuhout the software lifecycle.	[SW1] Assessment of factual knowledge
	[K7_W43] Knows and understands, to an increased extent, the nformal, technical and social aspects of the operation of complex information systems in the information society and in the global information n infrastructure.	Is able to design a model of a software user.	[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_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 workn	Plans and conducts experimental software usability study.	[SU1] Assessment of task fulfilment
	[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

Subject contents	
	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
	Exam	50.0%	50.0%
	Project	50.0%	50.0%

Recommended reading		
	Basic literature	• Sikorski Marcin, Interakcja człowiek-komputer, PJWSTK, 2010.
	Supplementary literature	• 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 tworzonym aplikacjom, 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:

Example issues/ example questions/ tasks being completed	
	Task 1. Usability evaluation of applications Taks 2. Elaboration of prototype of a software tool.

Work placement	
	Not applicable