Course Title	Mobile Development		
Semester	Fall (semester 1)		
Inholland Faculty	Faculty of Engineering, Design and Computing, Department of Information Technology		
Language of instruction	English		
Cycle	Bachelor level		
Inholland Location	Haarlem		
Code Subjects	**Code**	**Subject Title**	**ECTS**
	1918MOBL1Z	Mobile Platforms	6
	1920MOBL3Z	Mobile User Interface Design	2
	1920MOBL4Z	Project Application Design	5
	1922MOBL8Z	Research Mobile 1	2
	1922MOBL7Z	Project Mobile Application	10
	1922MOBL5Z	Mobile Security	3
	1920MOBL6Z	Research Mobile 2	2
Number of ECTS	30		
Content subjects	The vast adoption of mobile devices such as mobile phones and tablets has rapidly changed the landscape of stand-alone application development for consumer applications. Mobile devices provide various application design challenges, due to their modest screen sizes, and provide innovative application opportunities. This minor focuses on teaching you how to design and develop native applications for iOS and Android, with an authentic platform specific look and feel. Designing a mobile application is covered in Mobile UX workshops. Hands on development experience with iOS and Android is obtained in workshops covering these platforms. A preparation for using the applicable programming languages (Swift and Kotlin) is provided in separate workshops. A course consisting of classes and workshops provides you insights in security best practices. The core of the minor consists of a group project for an external client (not for profit), which provides you the opportunity to seeing your mobile application being applied in practice.		

Lecturer(s)	Teachers of the Computer Science Haarlem study program and guest lectures and workshops by specialists from the field of mobile application development.
Learning outcomes	Competences: Analysing - Exploring trends in communication and designing IT and/or digital media products - Setting up an analysis report (target audience, purpose, context, information and communication needs, visualisation and application) and relate this to trends in IT and/or digital media products - Researching trends on the subject of IT infrastructure based on (international) technological, economical and social developments and innovations - Perform a requirements analysis for corporate infrastructure to explore functional and non-functional requirements - Perform a requirements analysis for a software system involving various stakeholders in the context of existing systems - Describing security aspects of computer systems connected to (public) networks Designing - Designing of IT and/or digital media products based on a specifically developed (innovative) functionality, interaction form, style and/or service, including user experience, usability tests and innovative technology - Designing a software system consisting of existing and new systems, taking into account quality requirements and stakeholders Realising - Realizing and testing of dynamic IT and/or digital media products with the application of innovative technologies - Developing and releasing a software system that cooperates with existing systems, according to the designed architecture, making use of existing frameworks Goals: The student is able to: - design a mobile application for iOS and Android, while taking into account user interface design guidelines - develop a native application for iOS and Android using Swift and Kotlin respectively - apply best practices in communication and security when designing and developing an application

	- cooperate with fellow students in software development activities - effectively communicate with external clients (not for profit)
Mode of delivery, planned activities and teaching methods	Strategies and teaching activities - Workshops by experts - Do research with your project group - Lectures on theory combined with practical exercises
Prerequisites and co-requisites (if applicable)	Audience: Bachelor ICT 3rd year with experience in programming.
Recommended or required reading and/or other learning resources/tools	
Assessment methods and criteria	- Project assessment consisting of a design review, code review and two presentations. - Individual iOS and Android assignments - Written exam in mobile security All assessments must be completed with a sufficient grade
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