Hochschule München University of Applied Sciences

# Courses in English
## Course Description

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| **Department** | 07 Computer Science and Mathematics |
| **Course title** | **Mobile Application Development** |
| **Course number** | |
| **Hours per week (SWS)** | 4 |
| **Number of ECTS credits** | 5 |
| **Course objective** | * Students can understand how mobile applications are programmed and how they run on mobile devices.<br>* Students develop in-depth knowledge of a specific topic in the field of mobile applications, in particular by designing and implementing a custom application on a mobile platform<br>* Students learn the ability to present their mobile application in writing. A solution and its results as well as the comparison with existing applications must be adequately documented.<br>* Students learn to organize a software development project in the context of mobile applications.<br>* Students learn to work in a team. |
| **Prerequisites** | programming skills, understanding of computer science |
| **Recommended reading** | * React Native, "Create native apps for Android and iOS using React", 2021, URL: https://reactnative.dev/<br>* further readings will be announced in class. |
| **Teaching methods** | project-based learning, student presenations, app demos, readings |
| **Assessment methods** | 40% presentations in class, 60% project work |
| **Language of instruction** | English |
| **Name of lecturer** | Prof. Dr. Gudrun Socher |
| **Email** | gudrun.socher@hm.edu |
| **Link** | http://www.cs.hm.edu/die_fakultaet/ansprechpartner/professoren/socher/ |
| **Course content** | This course studies selected, specific aspects of the functionality of mobile applications. The exact topics including the type of application, the context of the application and the type of mobile devices will be announced on the first day of class.<br><br>Topics include:<br><br>* Mobile applications and their platforms<br>* Examples of mobile applications and current developments<br>* Common development environments and programming languages for mobile devices<br>* Sensors in mobile devices (e.g., accelerometers, GPS, camera)<br>* Input options (touch screen, multi-touch)<br>* Use of mobile networks (Bluetooth, WLAN)<br>* Innovative human-machine interaction |
| **Remarks** | |