Syllabus

Kursbeschreibung

Titel der Lehrveranstaltung	Interactive Interface Design and Development
Code der Lehrveranstaltung	76260
Zusätzlicher Titel der Lehrveranstaltung	
Wissenschaftlich-disziplinärer Bereich	INFO-01/A
Sprache	Italienisch
Studiengang	Bachelor in Informatik
Andere Studiengänge (gem. Lehrveranstaltung)	
Dozenten/Dozentinnen	Prof. Rosella Gennari, Rosella.Gennari@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/8607
Wissensch. Mitarbeiter/Mitarbeiterin	
Semester	Zweites Semester
Studienjahr/e	3
KP	6
Vorlesungsstunden	30
Laboratoriumsstunden	30
Stunden für individuelles Studium	90
Vorgesehene Sprechzeiten	
Inhaltsangabe	– Fundamentals of interaction design – Fundamental of interaction design principles for web apps – Fundamental of interaction design patterns for web apps – Interaction design prototyping techniques for web apps – Interaction design prototyping tools for web apps – Fundamentals of programming, client-side, for web apps

Themen der Lehrveranstaltung	This course teaches students how to design and develop the interaction of a web application by placing users and their requirements at the center of the design and development process. It begins with a brief overview of user requirements and how to specify them, for example through the use of scenarios. The course then introduces fundamental web design principles and patterns, including aspects such as navigation, color, and visual hierarchy. Through assignments, students learn how to prototype a web application interface by considering user requirements, design principles, and established patterns, possibly using IoT physical-computing devices. Design techniques covered include wireframing and the creation of sitemaps.
Stichwörter	Human-centred Design, Principles and Patterns, Prototyping, Methods, Techniques
Empfohlene Voraussetzungen	The necessary prerequisite for this course is Web and Internet Engineering, as it provides the essential knowledge of HTML and CSS required to follow the course. For students interested in deepening HCI topics it also suggested to attend the "HCI for Business" course from the Business Informatics study program, as it covers topics related to the user-centred context-of-use analysis and conceptual modeling, which are relevant for this course.
Propädeutische Lehrveranstaltungen	
Unterrichtsform	This course will be delivered through a combination of formal lectures and project-work.
Anwesenheitspflicht	Attendance is not compulsory but highly recommended. Non-attending students must contact the lecturer at the start of the course to agree on the modalities of the independent study.
Spezifische Bildungsziele und erwartete Lernergebnisse	Knowledge and Understanding – D1.17 Know the main methods for the design of interactive smart objects for IoT Applying knowledge and understanding

	– D2.14 Be able to develop Mobile applications. – D2.16 Ability to develop applications in the web area. – D2.19 Be able to apply the own knowledge in different working contexts. – D2.23 Be able to coordinate small project teams and to interact with members of the group. – D2.25 Be able to apply interactive design principles and patterns for IoT solutions and smart objects. Ability to make judgments – D3.2 Be able to work autonomously according to the own level of knowledge and understanding. Communication skills – D4.1 Be able to use one of the three languages English, Italian and German, and be able to use technical terms and communication appropriately. – D4.5 Be able to work in teams for the realization of IT systems. Learning skills – D5.2 Have acquired learning capabilities that enable to carry out project activities in companies, public institutions or in distributed development communities.
Spezifisches Bildungsziel und erwartete Lernergebnisse (zusätzliche Informationen)	
Art der Prüfung	The assessment is divided into two parts, A1 and A2. A1 is related to the design of an interactive interface: it assesses knowledge and understanding, besides the application of user-centred design principles, methods and techniques. A2 is related to assignments of the course for the prototyping of an interactive interface: it asks to apply knowledge, make judgements, communicate findings, and learn independently. For students attending >70% of the course hours with a positive attitude, and tackling assignments, A1 consists of a closed-book written test, and A2 of a mash-up project. For all other students, A1 and A2 consist of two closed-book written tests.

	Specific information is delivered at the start of the course. A mock-up of exam is delivered at the end of the course.
Bewertungskriterien	The final grade will be based on the outcomes of A1 (50% of the mark) and A2 (50% of the mark). All grades reflect both the correctness, completeness and the clarity of resolutions. Attending and non-attending students are evaluated on the same course materials.
Pflichtliteratur	Published on the course Teams channel.
Weiterführende Literatur	Published on the course Teams channel.
Weitere Informationen	
Ziele für nachhaltige Entwicklung (SDGs)	Hochwertige Bildung