

MGA 671 Interaction Design Methods (5 ECTS, 135h), spring 2017 (16 weeks)

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Contact Details: All email communication regarding this course should be sent to pk.kosmas@idmaster.eu cc'ing pzaphiri@idmaster.eu. Special online “office hours” will be set up for group and individual mentoring and those will be conducted through google hangout/chat.

Course objectives: To obtain basic knowledge about principles and methods of interface and interaction design. To familiarize the students with the interaction design process and to develop group work skills.

Course content: Introduction to interaction design. Contextual inquiry. Personas. Scenario-based design. Involving stakeholders in the participatory design process. Developing user interface concepts and metaphors. Paper prototyping. Testing the paper prototypes. Interaction styles.

Learning Outcomes: Upon successful completion of the course, participants will be able to: understand the design process of software user interfaces; choose appropriate methods for involving stakeholders in the design process; write personas, scenarios; create and test paper prototypes.

Workload: In order to successfully conclude this course, students are required to do both individual and group-based activities. Delivery is organized as a workshop where students work on interaction design projects (26 hours). Theoretical topics are presented as short modules through google classroom and other forms of synchronous and asynchronous communication. Independent work is divided into three parts: work on a group project (approximately 70 hours); work on individual assignments (approximately 8 hours); work on literature (approximately 26 hours).

Assessment: The exam grade consists of following components: interaction design project done as a group assignment (70%); individual assignments (30%). Final mark will be on a 0-10 scale in increments of 0.5 points. Passing grade is 5 out of 10.

Expected individual work activities: It is possible to receive 30 points for two individual assignments (15 points each) that will be announced later in the semester and will be based on the readings.

- Individual Assignment 1: Assignment on page 31 of the book
- Individual Assignment 2: Part A of Assignment on page 272-273 of the book

Expected group work activities: It is possible to receive 70 points for the interaction design group project. The following design artifacts and steps are assessed in the group project:

- Group Assignment 1: project design concept/brief (max 10 points)
- Group Assignment 2: personas and scenarios (max 10 points); conceptual design (max 10 points)
- Group Assignment 3: paper prototypes (max 10 points); paper prototype evaluations (10 points)
- Group Assignment 4: special topic in Interaction Design Methods (max 10 points)
- Group Assignment 5: final report and presentation (max 10 points).

The design script will be announced on google classroom during the first week of classes.

If students have contributed a significantly different amount of time to the group project the instructor may raise or lower the points. Late submissions are not accepted.

Assessment criteria: Grades will be based on these criteria:

91–100% of the work is done — excellent: outstanding work with only few minor errors.

81–90% of the work is done — very good: above average work but with some minor errors.

71–80% of the work is done — good: generally good work with a number of notable errors.

61–70% of the work is done — satisfactory: reasonable work but with significant shortcomings.

50–60% of the work is done — sufficient: passable performance meeting the minimum criteria.

49% or less of the work is done — fail: more work is required before the credit can be awarded.

Technology needed to perform this course: Basic knowledge of computers and a desire to learn how to use some basic drawing/UI prototyping tools

Synchronous activities: The delivery of the course will be primarily asynchronous with discussions taking place mainly through the google classroom platform. In addition though, there will be set times for short synchronous sessions (either text chat or voice chat through google hangouts). In each session we will discuss acquired knowledge, provide feedback and/or mentor students. We will divide these session in groups and a time for discussion will be agreed with the students. The times and days of these synchronous sessions will be decided and announced early in the semester.

Required Textbook: Jenny Preece, Yvonne Rogers, and Helen Sharp. 2015. *Beyond Interaction Design: Beyond Human-Computer Interaction* (4th Edition). John Wiley & Sons, Inc., New York, NY, USA.

The pedagogical script for this course:

Sessions	Topic/Materials	Tasks/assignments	Technology
Session 0: 16-22/01	Induction session: Getting familiar with the course environments and technologies Material: Course pedagogical script	Assignments: 1) Read course Pedagogical script 2) Explore course Resources 3) Buy the required textbook (http://eu.wiley.com/WileyCDA/WileyTitle/productCd-EHEP003334.html#purchase)	Google applications
Session 1: (23/1-05/02)	Introduction to Interaction Design Material: Chapter 1 of the book and additional resources on google classroom	The main aims of this session are to: <ul style="list-style-type: none"> • Explain the difference between good and poor interaction design. • Describe what interaction design is and how it relates to human-computer interaction and other fields. • Explain the relationship between the user experience and usability. • Describe what and who is involved in the process of interaction design. 	Google Hangout and classroom

		<ul style="list-style-type: none"> ● Outline the different forms of guidance used in interaction design. ● Enable you to evaluate an interactive product and explain what is good and bad about it in terms of the goals and core principles of interaction design. 	
	Work on Assignment 1 of Group project and Individual Assignment 1	<p>Read the design script and decide on the product/application you plan to design</p> <p>Assignments:</p> <ol style="list-style-type: none"> 1) Reach Chapter 1 of book 2) Read and start working on Group Assignment 1 - project design concept (due on 05.02) 3) Read and start working on your Individual Assignment 1 - Assignment on page 31 of the book (due on 05.02) 	Google classroom
Session 2: (06/02-19/02)	<p>Data Gathering and Establishing Requirements (Data gathering methods, requirements, personas, scenarios)</p> <p>Material: Chapter 7+9+10 of the book and additional resources on google classroom</p>	<p>The main aims of this session are to:</p> <ul style="list-style-type: none"> ● Discuss how to plan and run a successful data gathering program. ● Enable you to plan and run an interview. ● Enable you to design a simple questionnaire. ● Enable you to plan and carry out an observation. ● Describe different kinds of requirements. ● Enable you to identify different kinds of requirements from a simple description. ● Explain how different data gathering techniques (those introduced in Chapter 7 and others) may be used during the requirements activity. ● Enable you to develop a scenario, a use case, and an essential use case from a simple description. ● Enable you to perform hierarchical task analysis on a simple description. ● Explain what is meant by the problem space. ● Explain how to conceptualize interaction. 	Google Hangout and classroom

		<ul style="list-style-type: none"> ● Describe what a conceptual model is and how to begin to formulate one. ● Discuss the use of interface metaphors as part of a conceptual model. ● Outline the core interaction types for informing the development of a conceptual model. ● Introduce paradigms, visions, theories, models, and frameworks informing interaction design. 	
	<p>Work on Group Assignment 2 of Group project: personas and scenarios</p> <p>Work on Individual Assignment 2</p>	<p>Develop personas and scenarios based on your data gathering techniques.</p> <p>Assignments:</p> <ol style="list-style-type: none"> 1) Read chapters 7, 9 and 10 of book 2) Read and start working on Group Assignment 2 (due on 19/02) 3) Read and start working on Individual Assignment 2 - only part A of page 272-273 assignment from the book (due on 19/02) 	Google classroom
Session 3: (20/2-05/03)	<p>Conceptual Design, Prototyping and Construction</p> <p>Material: Chapter 2 of the book and additional resources on google classroom</p>	<p>The main aims of this session are:</p> <ul style="list-style-type: none"> ● Explain what is meant by the problem space. ● Explain how to conceptualize interaction. ● Describe what a conceptual model is and how to begin to formulate one. ● Discuss the use of interface metaphors as part of a conceptual model. ● Outline the core interaction types for informing the development of a conceptual model. ● Introduce paradigms, visions, theories, models, and frameworks informing interaction design. 	Google Hangout and classroom

	Work on Assignment 3 of Group project: conceptual design	Assignments: <ol style="list-style-type: none"> 1) Read Chapter 2 of the book 2) Read and start working on Assignment 3 (due on 19/03) 	Google classroom
Session 4: (06/03-19/03)	Individual meetings with teams - Group mentoring Material: Chapter 11 of the book and additional resources on google classroom	The main aims of this session are: <ul style="list-style-type: none"> • Describe prototyping and different types of prototyping activities. • Enable you to produce simple prototypes from the models developed during the requirements activity. • Enable you to produce a conceptual model for a product and justify your choices. • Explain the use of scenarios and prototypes in design. • Introduce physical computing kits and software development kits, and their role in construction. 	Google Hangout and classroom
	Work on Assignment 3 of Group project: testing tasks and paper prototypes	Assignments: <ol style="list-style-type: none"> 1) Reach Chapter 11 of the book 2) Read and finish Assignment 3 (due date 19/03) 	Google classroom
Session 5: (20/3-02/04)	Special Topics in Interaction Design Methods Material: Assigned readings	Assignments: <ol style="list-style-type: none"> 1) Participate in a synchronous communication to demonstrate your prototype and receive feedback 	Google Hangout and classroom
	Work on Assignment 5 of Group project: testing the paper prototypes	Assignments: <ol style="list-style-type: none"> 1) Start working on Assignment 4 (due date 16/04) 	Google classroom
Session 6: (03/04-16/04)	Individual meetings with teams - Group mentoring	Assignments: <ol style="list-style-type: none"> 1) Participate in a synchronous communication to demonstrate your prototype and receive feedback 	Google Hangout and classroom

	Work on Assignment 6 of Group project: user interface prototypes	Assignments: 1) Finish working on Assignment 4 (due date 16/04)	Google classroom
Session 7: (17/04-30/04)	Individual meetings with teams - Group mentoring	Assignments: 1) Participate in a synchronous communication to demonstrate your prototype and receive feedback	Google Hangout and classroom
Session 8: (01/05-14/05)	Presentation of the final projects	Assignments: 1) The group project is presented.	Google presentation and documents