

MGA 682 Interaction Design Project

16 ECTS, Spring 2022, 16 weeks

Course overview:

The purpose of the Interaction Design Project module is to build and expand the competences and skills you have gained throughout the programme through developing a major interaction design project, what we call the capstone project. You will get to develop a brief for the project that is based on your individual interests supported by class discussions and online resources. The course will take you through the process of developing a brief, background knowledge through applying a variety of research methods, following a user-centred design approach of iterating and prototyping to finally evaluate your interactive project and critically analyse your findings to produce a final product. Upon completion of the course you will have a polished capstone project you can use in your portfolio that showcases your work and process.

The goal is two-fold, first, for you to apply your learning to solve a complex interaction design problem from start to evaluation and second, to learn and develop methods for doing so by developing a novel approach inspired and informed by industry design thinking and project management frameworks such as Agile, Design Sprint, Scrum, Kanban and others. Regardless of the specifics of the frameworks you will study or develop, the process and structure of the course involves the following stages: problem defining, brief development, ideation, storyboarding, high-fidelity prototyping, user testing, representation and pitching.

Capstone Project Problem Framing:

You will develop your own brief for your capstone project based on your own interests.

Instructor:

Andreas Papallas (<http://www.andreaspapallas.com/>) papallas@idmaster.eu

Here is a little bit of information about me and why I teach this course: My background is in architecture, urban design and sustainable urban development, I am both an academic researcher and teacher at the Cyprus University of Technology and a practicing architect, therefore I have experience of combining the two worlds not just in day-to-day life but how can methods used in academia such as the design thinking methods we will be using here can be applied in a commercial setting. At CUT, we have created a small part of the lab we call '[design explorations](#)' (you might want to check the link). Through this identity we have applied design thinking principles for organisations and businesses in multiple settings, taught these in workshops across the world and attended training from Google and other organisations on various occasions. I am also a certified Design Sprint Facilitator and IBM Design Thinking Co-Creator even though these certifications are mainly useful to show

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people outside the realm of design thinking we are somehow certified to do stuff. I am passionate about design thinking having used and adapted methods both online and offline, in business, commercial and research settings and I hope through this course you will find a place in your heart for design thinking as well.

Contact Details:

Best way to get in touch with me is via my idmaster.eu email (papallas@idmaster.eu), a second way is through posting in the google classroom environment or if you see me 'online' in the chat on hangouts feel free to drop me a message. In addition, special online "office hours" can be set up for group or individual mentoring if needed through google hangout/chat.

Learning outcomes:

Upon successful completion of the course, you will be able to:

- Apply knowledge gained in various courses within the programme to develop concepts, frameworks and approaches in response to a specified design problem
- Describe and visualise an interaction design problem.
- Adapt and apply a range of user- and problem-centred methods to develop a specific design brief.
- Use tools and techniques to build a commercial quality UX Interaction Design project that responds to the brief and problem.
- Evaluate the outcomes of the design approach based on a variety of factors.

Schedule:

The delivery of the course is organized in 7 bi-weekly segments called 'sessions'. Each session kicks off with an assignment release on google classroom every other Wednesday at 8am Cyprus time. The deadline for your assignment submission is the Tuesday before the new assignment release at midnight. Subscribing the course calendar will automatically register all the submission deadlines to your calendar.

Each assignment release includes a series of activities which you will need to complete in sequence. We strongly believe peer learning is an asset of this programme as the individual experiences and backgrounds provide the breeding ground for excellence, therefore activities that require engagement with your peers (such as participating in peer evaluations and group discussions) are an integral part of the work for this course.

Contents:

You will consider all the learnings from the MSc programme to craft your own 6-session process of taking a challenge from 'defining the problem' to 'proposing a viable solution' and everything in between. In the first session you will take into account the processes and frameworks you have learned in the programme as well as additional resources to craft a 'Development Brief' which is essentially a detailed plan for your 6-session process that

needs to include needs analysis and defining, crafting ideas, high-fidelity prototype development, user evaluation and a final product video and pitch deck.

While you will have a high degree of freedom in which problem or challenge you will tackle and the process or strategies you will adopt to develop a solution, there are particular deliverables that are required per bi-weekly session. These are:

1. **Session 1: Development Brief** - a detailed document outlining your strategy for every step of the process to develop a solution. You will look into design thinking and development frameworks such as the Design Sprint, Scrum, Kanban, Agile etc. as well as learnings from the programme on user-centred design processes to describe: *(a) your own step-by-step framework for tackling interaction design problems and (b) your approach for each step.* While the frameworks you will be looking at refer typically to groups, this project is an individual one. Therefore your framework should also take into account a process run by a single interaction designer. Nevertheless, your engagement with experts and users in various stages along the way as well as gathering data from secondary sources is required.
2. **Session 2: Problem Definition Document** - while the first session deals with the process you need to adopt for reaching a solution to a wicked problem, this session deals with defining the problem. You might have done documents such as this in previous courses. You are expected though to both engage with relevant literature and create your own primary data from engaging with users. Learnings on ethnographic ways of data collection might be useful in this regard and depending on the problem statement and scope you might need to develop your own methods and approaches as part of this session. The submission requires a problem definition outline document that includes an *initial problem statement, review of bibliography and state of the art, fieldwork information and learnings, a user journey map that shows the problematic areas you are looking at, and a revised problem statement based on the stages you have followed.*
3. **Session 3: Ideation & Storyboard** - At this stage you will follow your development brief guidelines and activities to ideate, brainstorm, explore possible solutions and decide on one or two approaches to take forward. You might choose at this stage to do a low-fi prototype and test with users or peers from the course as part of the process. Regardless of the approach you will need to submit documentation of your ideation process and a storyboard of your solution.
4. **Session 4: High-Fidelity Prototype** - The natural next step is to develop a high-fidelity prototype. Honing the skills from other courses you will consider functionality, usability and aesthetics among other parameters to design and craft a high-fidelity prototype that will appear and feel real even though it might have limited paths and capabilities depending on the critical part of the user journey you are looking to

evaluate and prove. *With the high-fidelity prototype you will need to submit documentation of your design process, inspiration and rationale for making the design and other choices you have made.*

5. **Session 5: User Evaluation Report** - You will test out your prototype with users. It is important to select a challenge from the beginning of the course that will allow you at this stage to have easy access to a pool of users to evaluate your prototype and ideas. The evaluation methods, heuristics and frameworks will need to be justified and well-suited to the particular challenge and research questions. The submission is a report on your findings and reflections on what should be improved. You might proceed in carrying out some improvements before proceeding to the next step that will include visualisations of your prototype.
6. **Session 6: Product Video** - As part of the evaluation effort for your solution/product/idea and in preparation for pitching your idea to a wider audience it is critical to develop the communication tools necessary to support your reasoning. This comes in the form of a product video. This can range from a series of slides with a voiceover to a hybrid that contains animated or filmed segments. You need within the video to describe the problem and your solution. A viewer should be able to understand the need and the effectiveness of your response from just the video. This should be of maximum 1 minute duration and will be the submission for this session.
7. **Session 7: Pitch Deck** - To accompany your final presentation, you should prepare a pitch deck. A pitch deck is a story-telling format for a presentation aimed typically to investors with the purposes of convincing of a real need and a viable solution. While normally this would include information on market size and financials, for the purposes of the requirements of the course, you will need to include only the following: introduction, problem, solution, product, competition.

During each session a discussion space will be opened. The aim is to use the discussion space as a 'coffee break' space. A space where you can share information and resources, ask questions and discuss progress. I will be dropping-in but the aim is for this space to be a peer learning space and not to be instructor-led.

Assessment:

The course grade consists of the following components submitted at the end of the course:

- Research Report & Brief and Current Customer Journey 30%
A single PDF file that includes preparatory work on needfinding and project brief development.
- Interaction Design Capstone Project 70%
One final design [20%] (working prototype or representation through drawings, renders, app, game, website or similar); process journal [20%] (unedited sketchbook,

blog or medium.com account that documents your process), product video [10%], and final presentation [20%].

Your submissions for each session will not be individually graded. Final submission package needs to secure at least 50% of the marks to pass the course.

Grading system:

This is a pass/fail course.

Technology needed:

Basic knowledge of design and prototyping tools (as developed through other courses in the programme). I will give you access to our educational package at miro and mural that you might find useful. Other tools for conducting remote evaluations might be necessary. We are open to requesting access to other online resources you might find as long as we have the time to go through the university processes (so identify these early).

CoVid-19 notice:

We always ask you to put your own health and well-being first and depending on context and circumstances you might have to adapt your activities and toolkit implementation in a way that is flexible and can run both online and in face-to-face contexts. I will remind you of this throughout the course but make sure to get in touch if you have any specific queries, worries or concerns or especially if you have been affected directly or indirectly by the pandemic and the events surrounding it.

Supplementary Bibliography