MGA 685 Prototyping

4 ECTS, Fall 2023, 16 weeks

Course overview
To design successful interactions, products, services and solutions that truly address a human need, we need to learn how to test our ideas on users and take their feedback into account. We need to be able to put our ideas in the hands of actual users and see how they interact with them (or don't). The only way to design real human-centered solutions is to prototype early and often to intentionally test our ideas.
This course will take you through the entire process of scoping, building, testing and iterating a prototype. We'll start by looking at why prototyping is important and where it fits into the Design Thinking process. Next, we'll cover how to interrogate the context in which we're working, how to define the challenge or goal we're trying to address and how to take into account both business and user needs. We'll then look at how to use these insights to start ideating a solution. Next, we'll explore low-fidelity methods like journey mapping, storyboarding and role play to further explore these solutions and learn how to define the scope of our prototype using various dimensions.
Then, we'll turn to prototyping digital solutions and focus specifically on user flows, information architecture and mobile-first design. We'll then use the concepts and principles learned to create a paper prototype to test on users. To do this, we'll look at best practices for conducting usability testing, some methods you can use and how to implement feedback received into your design.
We'll focus on how to use this feedback to refine your paper prototype into a mid-fidelity interactive prototype. To do this, we'll look at design principles, heuristics, UI patterns, design systems and prototyping tools. Lastly, everyone will share their prototypes and prototyping experience in a final presentation and we'll cover what the next steps would be for developing and producing this prototype and rolling it out into a pilot product.

Instructor: Özge Öztürk **ozgeozturktr** | **ozge@idmaster.eu**
I'm Özge, a senior service designer and business consultant from Amsterdam, The Netherlands. I have 20 years of background in the service industry, working for brands like KLM Royal Dutch Airlines, Air France & American Express. I define myself as a human person by nature. I love to mash up the commercial background I gained through my experience with my growing design expertise -powered by first being a student and now as an instructor of this MSc programme. Where I see myself bringing value is helping the organizations kneading fuzzy ideas into bite-sized actions. I do this by guiding people and teams in those organizations who seek for a clear value-breeding backbone and direction to address floating problems of various sizes and complexities. And I choose to do this with care in the core, which I commit to bring as your instructor & mentor during this semester.

Contact Details:
The best way to contact me is via my idmaster.eu email (ozge@idmaster.eu) or via the Google Classroom environment if you see that I am online.
You can also make an appointment during the online "office hours" which will be posted on Google Classroom if you need to chat about something in person.

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

- Define prototyping in the context of human-centered design and the Design Thinking process
- Ideate appropriate solutions to a given challenge, keeping in mind the context in which you're working
- Use the five dimensions of prototyping and appropriate methods to scope a prototype
- Create a paper prototype using mobile-first design principles
- Create a mid- or high-fidelity interactive prototype informed by visual design principles, usability heuristics and design patterns
- Conduct usability testing of a prototype and integrate feedback into your design
- Explain the process of transitioning a prototype into a pilot or minimum viable product.

Schedule:
The delivery of the course is organised in 8 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 to the course calendar will automatically register all the submission deadlines to your calendar.

The session schedule is as follows:

Session 1 (06/09-19/09): Introduction to prototyping
Session 2 (20/09-03/10): Discovery and ideation
Session 3 (04/10-17/10): From sketching to prototyping
Session 4 (18/10-31/10): Low-fidelity prototypes, testing and iterating
Reading and Reflection Week (01/11-07/11)
Session 5 (08/11-21/11): Interactive digital prototypes I
Session 6 (22/11-05/12): Interactive digital prototypes II
Session 7 (06/12-19/12): Presentation and next steps

Workload:
In order to successfully complete this course, you are required to participate in Google Classroom discussions and reflections, to peer up with your classmates for reflections and for mentoring prototyping activities, complete a portfolio of work of all assignments and present this portfolio of work in the final synchronous class presentation.

In addition to Google Classroom discussions, there will be set times for 2-3 short synchronous sessions through Zoom or Google Meet. Those synchronous sessions intend to guide you through key points to pay attention to throughout some of the activities you will carry on during this semester and can also host guest of honors who will be giving inspirational talks about prototyping. The times and dates of these synchronous sessions will be decided and announced during the semester.

Required Textbook: We will use a number of online resources for this course as well as a required textbook: "Killer UX, Jodie Moule, 2012" (ISBN: 978-0-9871530-9-8)

Optional Textbooks:
Interaction Design: Beyond Human-Computer Interaction, 6th Edition, Rogers, Sharp, Pierce, 2023 (ISBN: 978-1-119-90109-9)
Measuring the User Experience: Collecting, Analyzing, and Presenting UX Metrics, Tullis, 2023 (eBook ISBN: 9780128180815)
Prototyping for Designers, Kathryn Mcelroy | 9781491954089

Assessment:
The course is graded on a pass/fail system. To receive a pass for the course, you'll need to complete and pass every assignment with a minimum of 50% and receive an average of 70% for the course.
The course grade consists of the following components, weighted as follows:

- Google Classroom discussion (5%)
- Reflection activity & peer coaching (10%)
- Portfolio of work submission (65%)
- Final presentation (20%)

The assignment schedule is as follows:
Session 1 (06/09-19/09): Class discussion
Session 2 (20/09-03/10): Portfolio assignment: User research and defining your problem
Session 3 (04/10-17/10): Portfolio assignment: Sketching and storyboarding
Session 4 (18/10-31/10): Portfolio assignment: Creating & testing a paper prototype
Reading and Reflection Week (01/11-07/11)
Session 5 (08/11-21/11): Portfolio assignment: Creating an interactive mid-fidelity prototype
Session 6 (22/11-05/12): Portfolio assignment: Finalizing an interactive mid to hi-fidelity prototype
Session 7 (06/12-19/12): Final presentation

Grading system:
A / 91–100% — excellent: outstanding work with only few minor errors.
B / 81–90% — very good: above average work but with some minor errors.

C / 71–80% — good: generally good work with a number of notable errors.
D / 61–70% — satisfactory: reasonable work but with significant shortcomings.
E / 50–60% — sufficient: passable performance meeting the minimum criteria.
F / 49% — fail: more work is required before the credit can be awarded.

Technology needed:
Basic knowledge of computers and a desire to learn how to use some basic drawing tools. The submissions and assignment completion will be through Google docs and Google slides via Google Classroom. Optional software for prototyping can include InVision Studio, AdobeXD, Figma or Sketch.