

MGA 685 Prototyping

4 ECTS, Fall 2021, 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. We'll then 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 dimensions.

Next, 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 as well as 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:

Stephanie Bandli (<https://www.linkedin.com/in/stephanie-bandli-a14769153>)
stephanie.bandli@idmaster.eu

I'm Stephanie, a learning experience designer from Cape Town, South Africa. My background is in instructional design and UI design. I started my career in the instructional design industry, creating interactive online learning content in the corporate and education sectors. I was incredibly interested in how students interacted with online content, specifically interactive games and lessons. This led me to complete my MSc in Interaction Design. This allowed me to start including UI design and user testing into my career and work both in instructional design

and UI design. I now freelance full time and have a business called Who's your ADDIE? As an alumni of this degree, I am excited to be on this journey with you. Just like you, I'm still learning and growing as an interaction designer and I am excited to learn from all of you and to share what I've learnt as well.

Contact Details:

The best way to contact me is via my idmaster.eu email (stephanie.bandli@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
- Conduct usability testing of a prototype and integrate feedback into your design
- Create a mid- or high-fidelity interactive prototype informed by visual design principles, usability heuristics and design patterns
- Explain the process of transitioning a prototype into a pilot 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 the course calendar will automatically register all the submission deadlines to your calendar.

The session schedule is as follows:

- Session 1 (01/09 - 14/09): Introduction to prototyping
- Session 2 (15/09-28/09): Discovery and ideation
- Session 3 (29/09-12/10): From sketching to prototyping
- Session 4 (13/09 - 26/10): Low-fidelity prototypes
- Reading and Reflection Week (27/19 - 02/11)
- Session 5 (3/11-16/11): Testing and iterating
- Session 6 (17/11-30/11): Interactive digital prototypes
- Session 7 (01/12-15/12): Presentation and next steps

Workload:

In order to successfully complete this course, you are required to participate in Google Classroom discussions and reflections, complete a portfolio of work of all assignments and present this portfolio of work in the final synchronous class presentation.

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)

Assessment:

The course grade consists of the following components:

- Google Classroom discussion (5%)
- Reflection activity (5%)
- Portfolio of work submission (65%)
- Final presentation (25%)

Your final mark will be on a 0-10 scale in increments of 0.5 points. Passing grade is 5 out of 10.

The assignment schedule is as follows:

- Session 1 (01/09 - 14/09): Class discussion
- Session 2 (15/09-28/09): Portfolio assignment: User research and defining your problem
- Session 3 (29/09-12/10): Portfolio assignment: Sketching and storyboarding
- Session 4 (13/09 - 26/10): Portfolio assignment: Creating a paper prototype & Individual assignment: Reflection activity
- Reading and Reflection Week (27/19 - 02/11)
- Session 5 (3/11-16/11): Portfolio assignment: Testing your paper prototype
- Session 6 (17/11-30/11): Portfolio assignment: Creating an interactive mid-fidelity prototype
- Session 7 (01/12-15/12): 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.

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 assignments 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.