> MSc Interaction Design

April 9th, 2024

Andreas Papallas

Curriculum Coordinator

The MSc Interaction Design is a distance-learning postgraduate programme offered by the Cyprus University of Technology in collaboration with Tallinn University since 2016.

Outline of Presentation

- **Part I: Establishment and Objectives**
- Part II: Programme Description
- Part III: Faculty/Teaching Staff

Establishment

- The programme has been developed by a joint committee of the Cyprus University of Technology and Tallinn University in 2014 following a global feasibility report, market research and analysis.
- Successfully accredited by accreditation agencies in Estonia and Cyprus, members of the European Association for Quality Assurance in Higher Education.
- First students in Fall 2016.
- First graduates in 2019.

The MSc Interaction Design is hosted on its dedicated publicly available website: www.idmaster.eu

ESTONIAN QUALITY AGENCY FOR HIGHER AND VOCATIONAL EDUCATION

enqa.
European Association for Quality Assurance in Higher Education

About the Programme

The program prepares passionate and creative interaction design experts with a strong background in user experience and human-computer interaction.

- Designed specifically for distance-learning with emphasis on practice-based learning
- Full-time and part-time modes of study
- 2 years minimum, 4 years maximum study
- Offered in English
- 120 ECTS

The programme has been listed as 6th in the world for online interaction design master's degree programs (http://bit.ly/2NDuUjl) and the most affordable (http://bit.ly/2QRHhGy).

Aims and Objectives

The MSc Interaction Design programme aims to:

- Provide academic and practice-based knowledge in design, technology, and theory as related to the domain of Interaction Design and Human-Computer Interaction;
- Develop creativity, design and technology skills in the domain of Interaction Design and Human-Computer Interaction;
- Produce graduates ready to effectively lead multi-disciplinary teams and collaborate in the design and development of successful software and technical systems and/or pursue doctoral level education.

Learning Outcomes 1/2

By the end of the MSc Interaction Design students will be able to:

- Frame HCI and interaction design in the broad picture of the networked societies and the European Digital Agenda, making the social, cultural and ethical implications of digital media tangible, and therefore debatable;
- Build conscious reflective and reflexive practices that frame individual worldviews and approaches to research and design;
- Apply high quality criteria for academic interaction design research and consider their practical applications within the industry;

Learning Outcomes 2/2

By the end of the MSc Interaction Design students will be able to:

- Develop research questions, approaches and methods for understanding, analyzing and communicating design and design outcomes as human activity;
- Critically evaluate the difference between models, theories, and practices of interaction design while engaging with practice-based projects;
- Develop digital artifacts and know how to explore the aesthetic and functional potential of interaction design through research and experimentation;

Admission Requirements

A degree in a related field (e.g Computer Science, Informatics, Design, Media Studies, Internet Studies, Social Sciences, Psychology and Education) with a minimum grade point average (GPA) of 6.5/10, or equivalent, from a recognized and accredited university.

- Excellent command of the English language..

Admissions Evaluation Process

Prospective candidates apply through TLU platform DreamApply and submit:

- Documentation regarding previous qualifications
- Documentation regarding English language requirements
- CV including work examples
- Motivation letter

Candidate evaluation is completed in three steps:

Step 1: Eligibility check

Submitted documents are checked for validity and meeting minimum requirements (TLU)

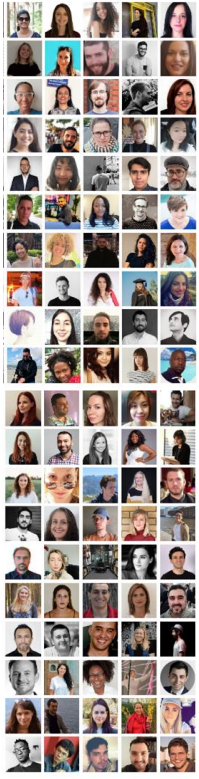
Step 2: Document Evaluation

A 3-member panel based at CUT evaluates and scores against a number of criteria the submitted documents.

Step 3: Interview

A different 3-member panel based at TLU conducts interviews, evaluates and scores candidates.

Candidates need to secure a combined score of 70/100 to be offered a place.



Student Profile

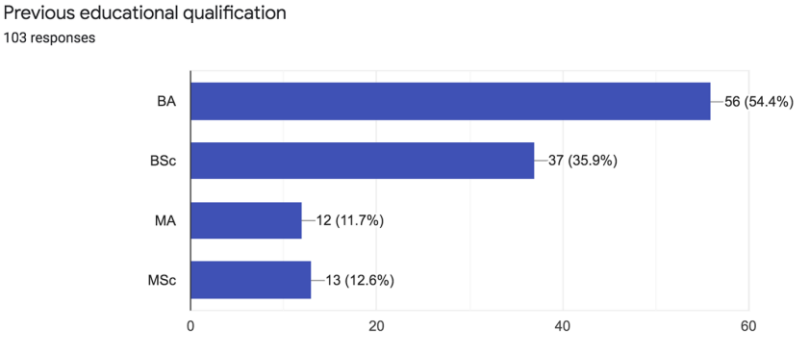
Age

24-29: 20	19.8%
30-34: 36	35.7%
35-39: 28	27.7%
40-49: 14	13.8%
50+: 3	3%

Gender

Male	49.5%
Female	50.5%

Arts and Design (38%)
Computer Science (19%)
Humanities (13%)
Social Sciences (13%)
Engineering (10%)
Finance, Economics and Management (10%)

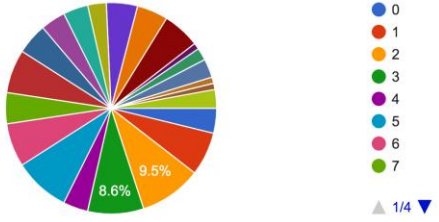


Student Profile

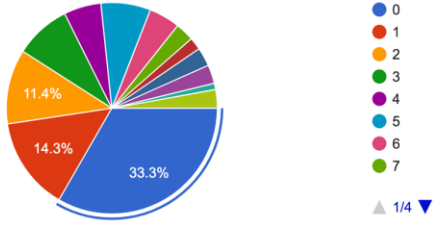
Most students have been working for a number of years (1-10y consists more than 50%) however have zero to little experience in interaction design (0-2y consists more than 50%)

They join the MSc to either help them pivot into the industry or gain necessary knowledge and skills to help them progress in a field they have recently joined.

Years of work experience prior to joining the program:
105 responses

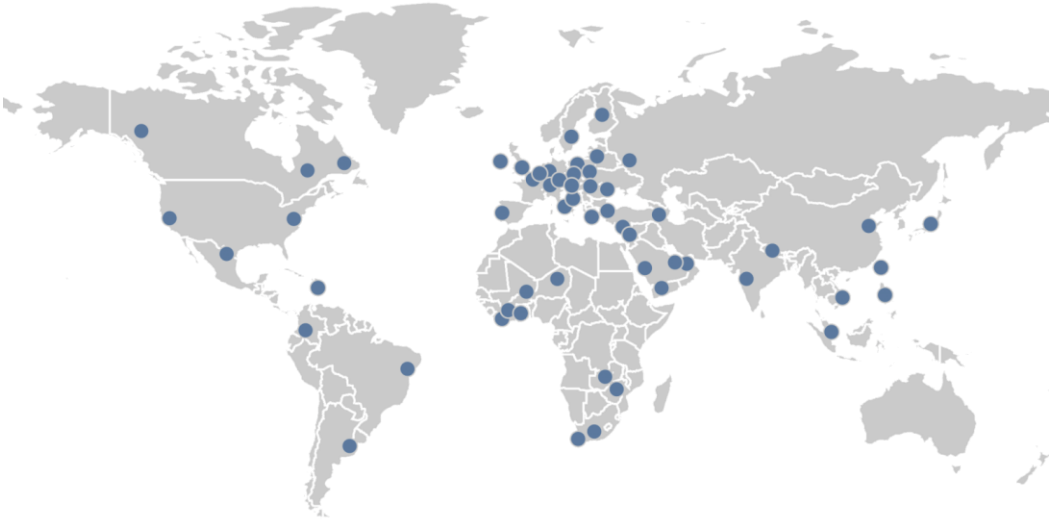


Years of related (to MSc Interaction Design) work experience prior to joining the program:
105 responses



Armenia, Austria, Brazil, Canada, China, Colombia, Côte d'Ivoire, Cyprus, Estonia, Germany, Greece, India, Ireland, Italy, Luxembourg, Latvia, Lebanon, Liberia, Mexico, Nepal, Netherlands, Poland, Qatar, Moldova, Russia, Saint Lucia, Saudi Arabia, Singapore, South Africa, Sweden, Switzerland, Taiwan, UK, United Arab Emirates, USA, Zambia.

Global cohort



Career Prospects / Employment

Graduates of the programme can be employed as:

- Interaction Designers,
- Mobile Designers,
- Service Designers,
- Usability Specialists,
- User Interface Designers,
- Content Strategists,
- Creative Directors,
- Creative Technologists,
- Design Strategists,
- Developers (front-end),
- Information Architects

Most of our current students are already employed.

Career Prospects / Employment

Our graduates are employed in a range of sectors from FinTech to Digital Transformation Consultancies, building their own start-ups and Academia:

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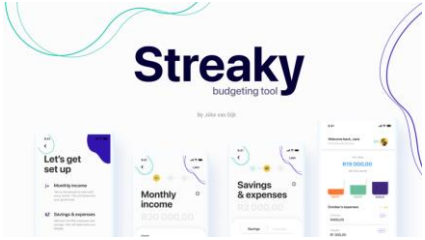
Course workload distribution

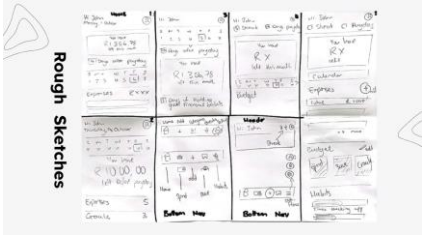
Module	Course	Semester	Lead	ECTS	S1	S2	S3	S4	TLU	CUT
Foundation courses	Foundations of HCI	S1	TLU	6	6				6	
Foundation courses	Research methods	S1	CUT	6	6					6
Foundation courses	Design Theory and Methodology	S1	CUT	4	4					4
Core courses	Field Research Methods	S2	TLU	4		4			4	
Core courses	Interaction Design Methods	S2	CUT	4	4					4
Core courses	Development of Interactive Systems	S2	TLU	4		4			4	
Core courses	User Experience Evaluation	S2	TLU	4		4			4	
Complementary courses	Universal Design	S2	CUT	6		6				6
Complementary courses	Current Topics in Human-Computer Interaction	S2	TLU	4		4			4	
Complementary courses	Prototyping	S1	CUT	4	4					4
Practice and specialization	Practice	S2	CUT	6		6				6
Practice and specialization	Individual Subject	S2	TLU	6	6				6	
Core courses	Interaction Design Project	S3	CUT	16			16			16
Foundation courses	Master Thesis Seminar	S3	TLU	16			16		16	
Master Thesis	Master Thesis	S4	Both	30				30	15	15
				120	30	28	32	30	59	61

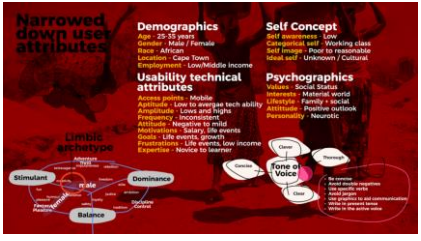
Semester 1 (Fall Term, September - December)

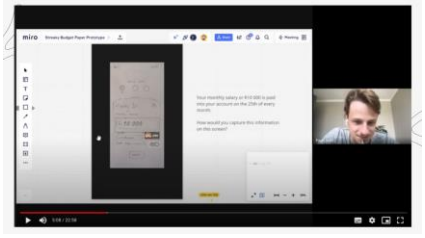
Core courses	
MGA 671 – Interaction Design Methods	4 ECTS
Complementary courses	
MGA 685 – Prototyping (4 ECTS)	4 ECTS
Foundation courses	
MGA 674 – Research Methods MGA 676 – Design Theory and Methodology IFI7316.DT – Foundations of HCI	6 ECTS 4 ECTS 6 ECTS
Practice and specialization	
IFI7330.DT – Individual Subject	6 ECTS
Total	30 ECTS

MGA 685 – Prototyping









View Iklwa prototype

View presentation

View Fork prototype

View presentation

View Streaky prototype

View presentation

MGA 676 – Design Theory and Methodology

UX Research Toolbox for Elder-Friendly Early Warning Systems

Aimilia-Marina Liosi, Chiunhau You, Diana Rapp

The Problem

Disaster risk reduction (DRR) is a fundamental part of social and economic development and a central topic of the SDGs, Sustainable Cities and Communities. One of the major components of DRR is the development of effective Early Warning Systems (EWS). However, there is a common communication gap between these technical-oriented top-to-bottom EWSs and the users, especially among those most vulnerable groups affected by natural hazards, such as the elders.

The Toolbox

To support the data collection for designing EWS, we propose a set of methods which have been adjusted according to our audience, elderly and other vulnerable populations that are at risk of natural and human-made disasters. This toolbox aims to provide UX designers appropriate tools to approach the elderly and understand their thoughts, feelings and actions. It is hoped to inform the design of elder-friendly EWSs that takes elders and vulnerable people into full consideration to improve their sense of safety and wellbeing.

The Framework & Tools

1 Connect with the audience

Communicating effectively and connecting with older adults is a complex process. For the accumulation of meaningful and descriptive information, the researcher must connect with the audience on a deep, genuine but professional level.

Conversation Starters

Conversation starters help researchers connect and communicate effectively with participants. The concept is to ask participants some introductory personal questions, to get to know and understand them better, and then ask them questions related to the subject matter to get initial opinions.

Preparation time: 10 - 45 min.
Time carrying out the exercise: 45 - 60 min.
Difficulty: Medium
What you'll need: audio/video recorder

2 Understand their feelings

Encouraging participants to express themselves freely is an essential preliminary step in order to understand them in a more holistic way. It is important for the researcher to remain open to any insights the audience offers.

Collage

Collage is an easy and entertaining way to allow participants to visually depict their own viewpoints on a topic, using simple everyday materials. When allowing them to express freely using images, participants share meaningful information in a limited amount of time and, simultaneously, get mentally prepared to respond to further detailed inquiries.

Preparation time: 20 min.
Time carrying out the exercise: 30 min.
Difficulty: Easy
What you'll need: paper, magazines, scissors, glue, audio recorder

3 Describe the problems

Being able to describe or express the problems the audience is facing is vital in trying to find solutions to them. In this step the researchers further investigate what the struggles, frustrations or fears the audience is dealing with the most.

Card Sorting

Card sorting is a great way to get the participants thinking and making them comfortable with the subject matter. The idea is to present a deck of cards to ask them to either pick a card that best corresponds to the theme presented by the researcher or alternatively, have the participant rank or sort multiple cards according to preference or relevance.

Preparation time: 1 - 3 hr.
Time carrying out the exercise: 30 min.
Difficulty: Easy
What you'll need: 30-60 cards, paper and pen for notes, audio recorder

Tips: How to work with older adults?

Recognise diversity: It is a misconception that people of older age are a homogenous group. Make sure to include a wide variety of people to ensure meaningful and descriptive results.

Challenge assumptions of incompetence: Do not underestimate the elder's ability and desire to engage with technology as well as help in the development of new technologies.

Be empathetic: Be patient and take time to explain things that are unclear to the participant.

Be curious: Make the most of the full life experiences and resourcefulness of this group.

Conclusion

To help UX researchers and developers alike address the experience gap between existing EWSs and the elderly users, we proposed a UX toolbox and a set of methods adjusted according to the audience to support the preliminary data collection from the target group. The toolbox consists of three main steps with tailored fieldwork tools supporting each of the steps. It emphasizes on building trust and connection with the elderly audience and eliciting thoughts and feelings with the use of conversation and visual materials.

The Equitable Empowerment of Women's Health Toolkit

A design strategy for UX researchers to promote equitable access to reproductive healthcare options, bodily autonomy and the empowerment of women

Jenika Ekovich-in 't Veen and Thalia Tsarli | Interaction Design Masters Programme, Tallinn University, Estonia

1. Introduction and context

According to the United Nations (UN), **expanding access to contraception and providing family planning services** is critical for achieving Sustainable Development Goals (SDG). Even though globally many more women now use modern forms of contraception, strong disparities remain in lesser-developed **Sub-Saharan African nations** whereby less than half the need is met in countries such as Chad, Somalia, and South Sudan.

By 2030, the UN aims to ensure "universal access" for women to sexual and reproductive health care services and strives to successfully integrate these strategies and programs on a national level.

Sustainable Development Goals

- Universal access to sexual and reproductive health and rights
- Access to modern contraception, information, and healthcare services
- Universal access to family planning education and services
- Achieve gender equality and empower all women and girls

2. Research motivation

Having a child poses significant financial consequences and delays educational and professional opportunities that negatively impact young women, especially those from underprivileged nation and communities.

As put forth by the UN, many women and couples want to postpone pregnancy and have better family planning options. Young women and adolescent girls are most severely impacted by unwanted pregnancy which affects their chances of upward socioeconomic mobility.

55%

Percentage of young women and adolescent girls in Sub-Saharan African countries that have **unmet contraception and family planning needs.**

3. Toolkit overview and insights

The toolkit includes methodological activities that can be used for gathering information specific to the reproductive healthcare and family-planning needs and experiences of adolescent girls and young women who reside in Sub-Saharan African nations.

This toolkit can help you as a UX Researcher achieve the following:

- **UNDERSTAND** participant **mental models**, values, emotions, needs and beliefs surrounding contraception and family planning norms and practices on a systematic level
- **DEFINE** the problem space related to accerss and adoption of contraception and family planning services per **internal factors** such as attitudes, emotions, expectations, personal values, needs, and feelings
- **DISCOVER** what **external factors** such as barriers, environments, systems and socio, political, and cultural influences impact adoption and access to contraception, family planning, and having bodily autonomy
- **GATHER attitudinal and behavioral insights** related to contraception, bodily autonomy, family planning, and how that shapes actions, practices,, coping strategies, and entire experiences

4. Methods and activities

Participants recruited via convenience sampling based on student network. All activities were coordinated through Google Meet among five participants.

Card sorting activity
- Conducted remotely, online
- Uncovers mental models
- Helps understand people's values
- Sparks deep conversation

Collage making activity
- Conducted remotely, online
- Empowers participant creativity
- Taps into emotional experiences
- Draws out deep cognitive issues

Peers observing peers activity
- Conducted remotely, online
- Participants take charge
- Promotes learning in context
- Gives detailed experiential data

Comprehensive references available upon request*

5. Results

From the combined activities, we came to learn the following about the participants based on all survey data:

Highest obtained education level

- Bachelor's diploma
- Master's diploma

Age of participants

- 18-24 years old
- 25-34 years old
- 35-44 years old

Languages spoken fluently

Main factors that affect and influence access and adoption to contraception, access to family planning services, and feelings of bodily autonomy:

Positive support factors
- Strong friendship networks
- Caring family dynamics
- Healthy romantic relationships
- Feelings of independence
- Financial stability and income
- Career and work fulfillment
- Education and knowledge
- Scientific research and healthcare
- Government funding and services
- Feelings of personal control

Negative impact factors
- Gender inequality and roles
- Oppressive religious values
- Pressure to conform to society
- Laws against women's rights
- Doubts on birth control safety
- Financial insecurity and poverty
- Lack of self confidence
- Judgement from others
- Laws against abortion access
- Fearing violence from others

6. Conclusions

We were able to derive deep insights into a highly sensitive and personal topic in a way that was both **respectful, engaging, and creatively stimulating** for participants involved. We focused strongly on maintaining rapport and remaining empathetic towards participants' needs throughout the research process. Based on the above results, internal personal beliefs and values often conflict with external societal beliefs and pressures from other people, governments, and systems that obstruct equality and access.

2. Generative session methodologies

1. Card Sorting Activity, materials

All content cards featuring (royalty-free, open source) images, concept, and descriptions

Participant 1, sorting results

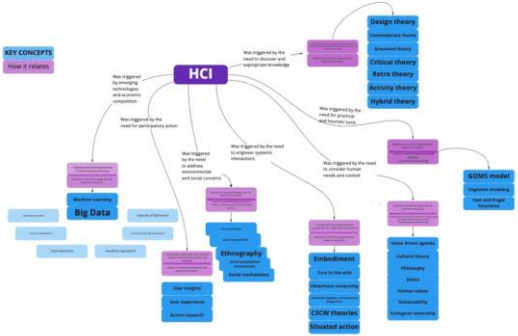
Participant 2, sorting results

IFI7316.DT – Foundations of HCI

HCI Revisited: Norman Chovuchovu, Kerri-Ellen Casey, Mallory Ruth, Giles Thomas Martin

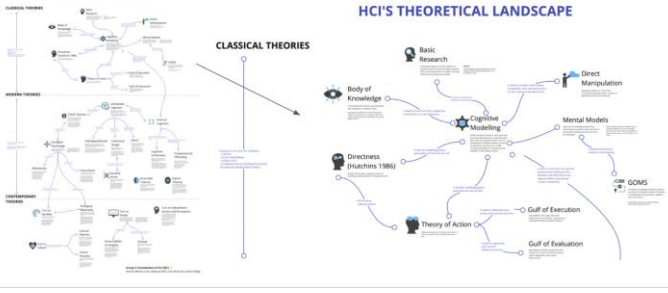
Link to high-resolution diagram

Link to core concepts



Andreas Kitsi, Aimilia-Marina Liosi, Chiunhau You, Diana Rapp

High - Res



Group 1: Joké van Dijk, Jenika Ekovich-in 't Veen, Vesna Dean, Sabrina Edinger, & Tuan Le

Reflections

- **Ubiquitous computing** and the rise of pervasive technologies had a pivotal and transformational role in influencing the rise of new research domains and the development of new technologies
- With the above in mind, there is pronounced focus on **intelligent technologies** and how their integration shapes human-robot interaction as well as technologies that augment, support, and replace the cognitive processes of users
- It's quite fitting that **User-Centered Design** was one the main branches that came from our cross-reference table, given that human-computer interaction focuses on the user's experience of using technologies.
- **Accessibility** is currently a hot topic in HCI due to fact that we want to be more inclusive when it comes to enabling anyone access to information and technologies to improve their daily lives.
- **Privacy and trust** are key features in developing systems due to violations being more transparent to the public and greater skepticism (e.g., data breaches, people's information being shared without their consent, user tracking, etc)
- **Mental health** has come to the forefront in both how technologies and online social environments can help facilitate psychological well-being through social support

Scenario 2: Timeliner

Andreas Kitsi (Activity Theory), Norman Richard Chovuchovu (Situated Action)

Theoretical framework(s) to guide our research

CSCW (Main)
Activity Theory (Potentially at the end)

How?

We intend to create an environment between the participating international and local scientists so that they can participate in a participatory design system where they can suggest solutions that can align their practices and workflows.

Why?

As timeliners consist of a collaborative tool for scientific writing, and CSCW revolves around the support that computer systems offer for coordination and collaboration tasks, this framework is ideal for this case study.

Context:

Online tool (Accessible)
Synchronous & asynchronous collaboration
Scientific Community (Multidisciplinary)
- Research Project Teams
- Researchers - individuals

Local and International communities

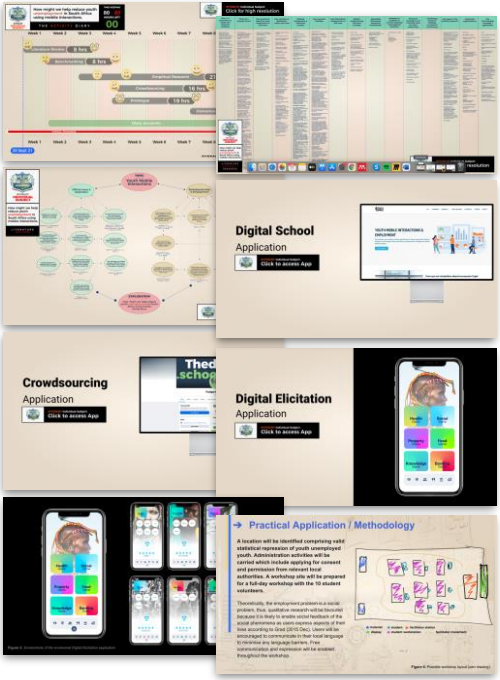
Problem:

The disruption of concurrent practices and workflows when it comes to collaborative scientific work.

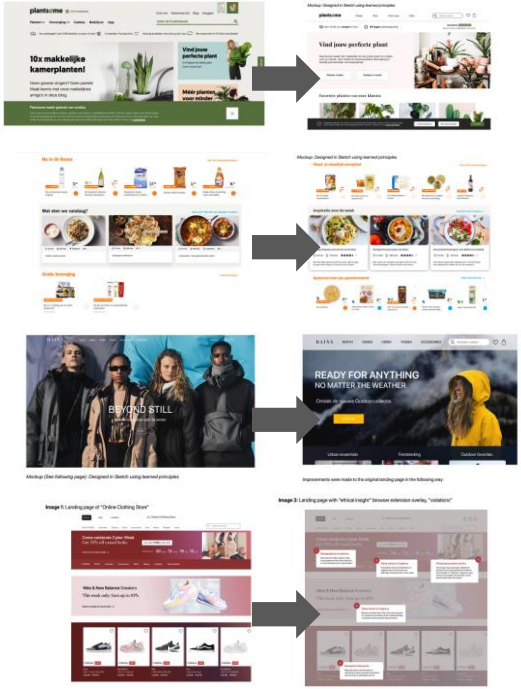
Possible research Questions:

RQ1: How can scientific collaboration be achieved using online collaboration tools?
RQ2: Can a collaboration tool be used to support concurrent practices and workflows in a research context

IFI7330.DT – Individual Subject



Learnings applied in case study



Learnings applied in exercises

Course certificates and final reports

Semester 2 (Spring Term, January - June)

Core courses	
IFI7309.DT – Development of Interactive Systems IFI7310.DT – User Experience Evaluation MGA 686 – Field Research Methods	4 ECTS 4 ECTS 4 ECTS
Complementary courses	
IFI7329.DT – Universal Design IFI7160.DT – Current Topics in Human-Computer Interaction	6 ECTS 4 ECTS
Practice and specialization	
MGA 675 – Practice	6 ECTS
Total	28 ECTS

IFI7310.DT – User Experience Evaluation

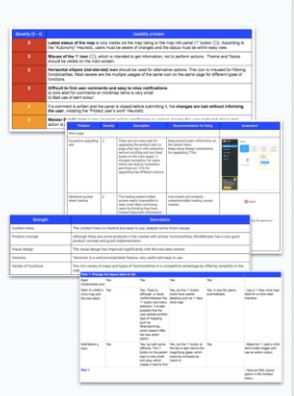
USABILITY EVALUATION MindMeister

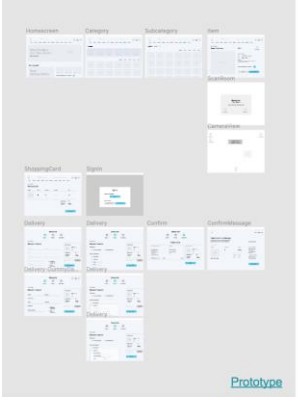
RESULTS AND RECOMMENDATIONS

Overall, the new redesign of MindMeister passed the usability evaluation successfully. A few usability issues have been reported (interface, navigation, iconography), but none of them compromise the launching of the new version and, most importantly, the user experience as a whole.

CONCLUSIONS AND LEARNINGS

We have reached our evaluation goals by identifying and prioritizing main usability issues, suggesting informed design recommendations for improvement and defining the main usability strengths of the new MindMeister beta version. Not ever underestimating contact with real users, our results were solid and consistent, and made us learn the power of such accessible and easy to implement usability evaluation methods. We wished we had the opportunity to invite more experts, which was impossible due to time and access constraints.





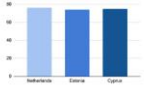
4. Learnings from hi-fi evaluation using mixed-methods

Usability and UX of Ikea US mobile and regional website

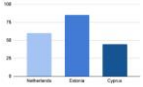
Goal of study: Generate findings and insights related to usability of Ikea mobile website v.s. Ikea regionally-based websites using performance metrics, issue-based metrics, and self-reported metrics via A/B testing.

Research problem: (1) Understand how usable each website is relative to one another in terms of effectiveness, efficiency, and user satisfaction; (2) determine user perceptions and expectations of each website comparatively.

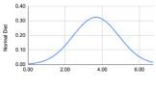
Summary of results:



SUS Scores Ikea US

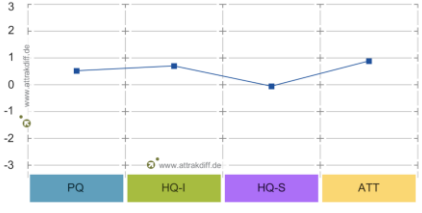


SUS Scores Ikea Regional



Task completion times (all four tasks aggregated)

Diagram of average values



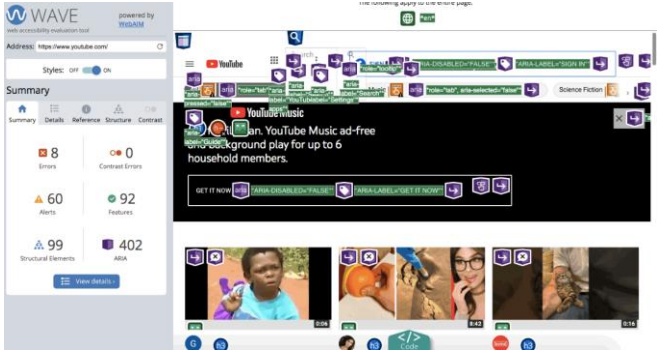
Product:Zillow (n=12)
PQ:0,52 HQ-I:0,70 HQ-S:-0,05 ATT:0,90

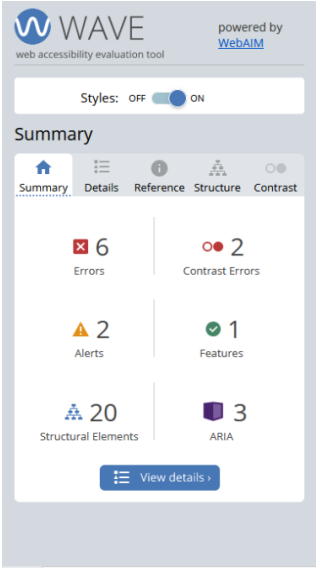
Portfolio-presentation

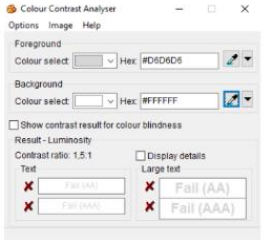
Product:Zillow (n=12)
PQ:0,52 Confidence:0,81
HQ:0,33 Confidence:0,63

https://docs.google.com/presentation/d/13Lq5RVmJFJVev5cLR6BNH0yBHGOyjVOOkFQRQP4tJOc/edit?usp=sharing

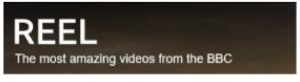
IFI7329.DT – Universal Design







FAIL : 1,5 :1



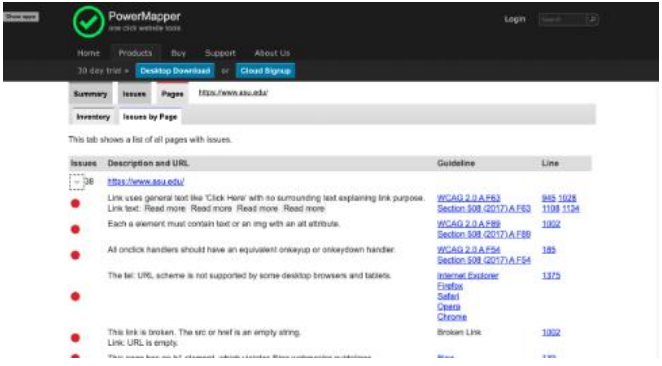
WCAG 2.1 AA Level Web Accessibility Audit

Website: www.formula1.com | **Verdict :** Non-compliant | **Date:** March 28, 2021

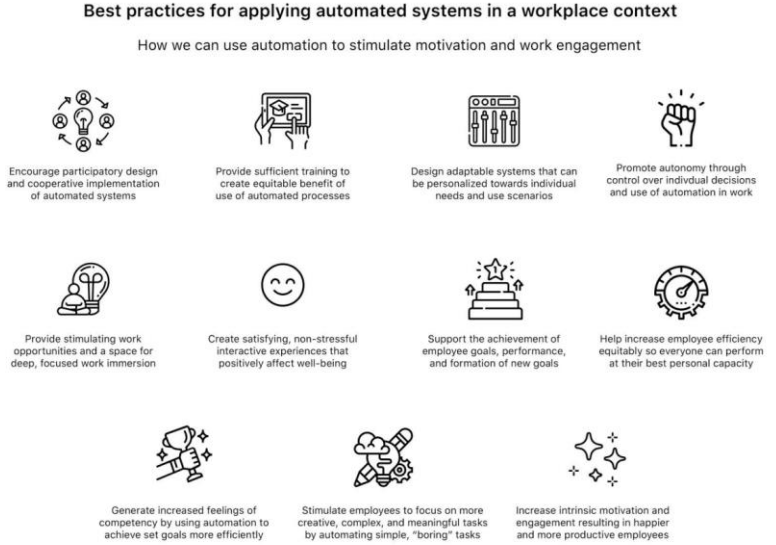
#	Requirement	Relevant	Successes	Failures	Score
1	Links that open in a new tab or a new window should either have an "aria-label" attribute or a screen-reader only element explaining to screen-readers that this opens in a new tab.	Yes	0	24	0%

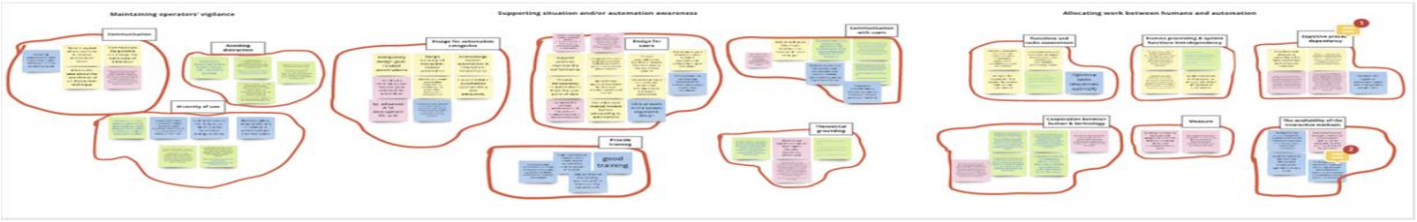
Code snapshots of some failed elements

- <img src="/etc/designs/fom-website/images/fia_logo.png" alt="Federation Internationale de l'Automobile">
- Authentics



IFI7160.DT – Current Topics in Human-Computer Interaction

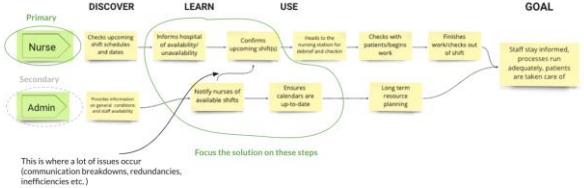


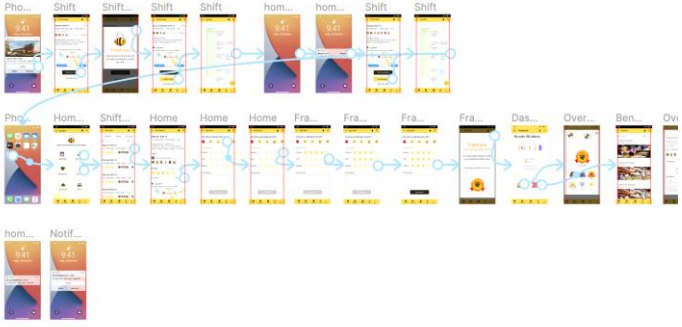


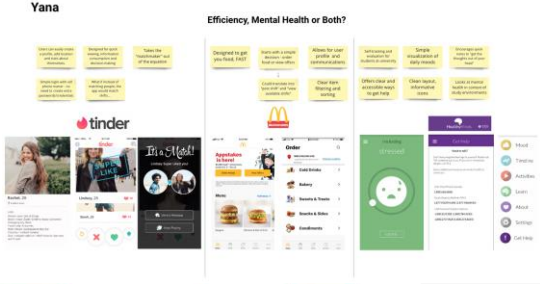
Semester 3 (offered every term)

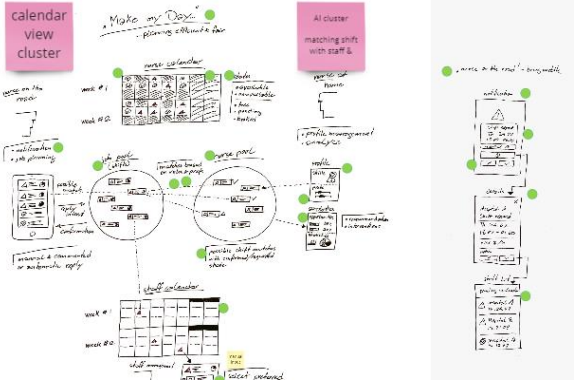
Core courses	
MGA 682 – Interaction Design Project (16 ECTS)	16 ECTS
Foundation courses	
IFI7328.DT – Master´s Thesis Seminar (16 ECTS)	16 ECTS
Total	32 ECTS

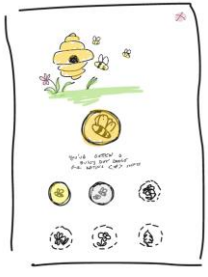
MGA 682 – Interaction Design Project



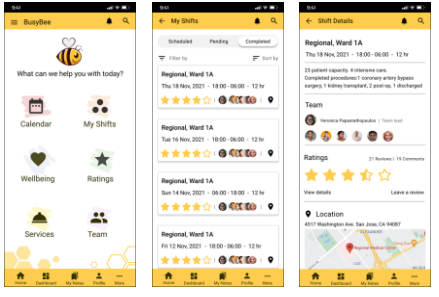


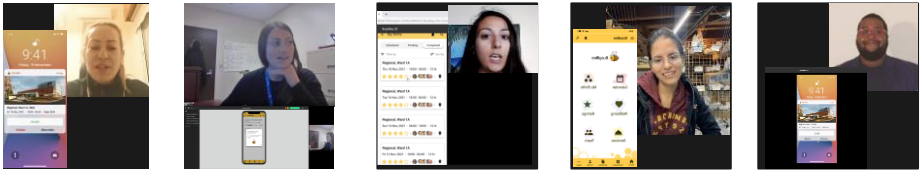






BusyBee

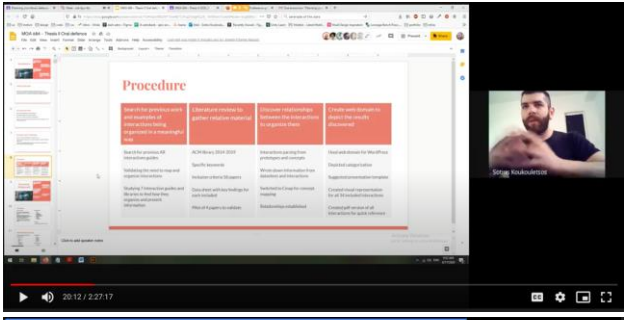




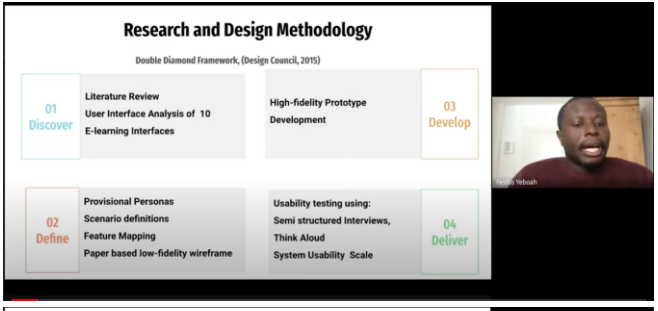
Semester 4 (offered every term)

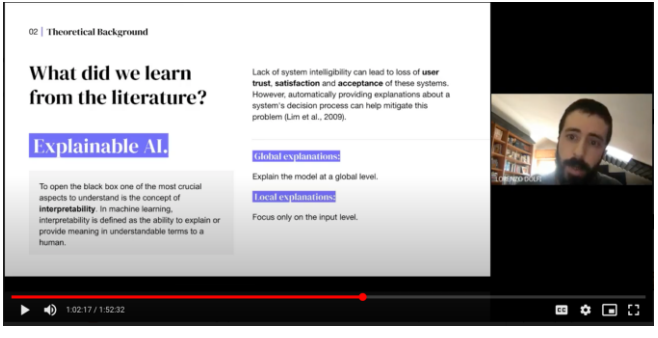
Master's Thesis	
IFI7040.DT – Master's Thesis	30 ECTS
Total	30 ECTS

IFI7040.DT – Master's Thesis



shorturl.at/kotBF





Outline of Presentation

- Part I: Establishment and Objectives
- Part II: Programme Description
- **Part III: Faculty/Teaching Staff**

Faculty Members

Permanent Staff

Panayiotis Zaphiris (Professor) - Coordinator
PhD, Wayne State University, USA
Human Computer Interaction, Social Computing and Inclusive Design

David Lamas (Professor) - Coordinator
PhD, Portsmouth University, UK
Design theory and methodology

Mati Mõttus (Lecturer)
PhD, Tallinn University, EE
Hedonic aspects of UX. Specific focus on physiological computing and implicit interactions

Abiodun Ogunyemi
PhD, Tallinn University, EE
Designing engagement for technology-enhanced environments, workplace learning, human-centred software engineering.

Sonia Sousa (Associate Professor) - Curriculum Coordinator
PhD, Sheffield Hallam, UK
Human Computer Interaction,Technology Enhanced Learning, User experience evaluation, Trust in technology

Vladimir Tomberg (Associate Professor)
PhD, Tallinn University, EE
Interaction design, Behaviour change, Learning

Hans Põldoja (Associate Professor)
Head of Studies, TLU
PhD, Aalto University, FI
Educational Technology

Faculty Members

Special Teaching Staff

Andreas Papallas - Curriculum Coordinator
MPhil, University of Cambridge, UK
Design Thinking, Design Theory and Methodology, Architectural Design, Sustainable Development.

Panagiotis Kosmas
PhD, Cyprus University of Technology, CY
Teaching methodologies with emerging technologies, child-computer interaction, instructional design, educational technology.

Alexandros Yeratziotis
PhD, Nelson Mandela University, South Africa
User Experience, Human-Computer Interaction, Usability Inspection Methods (UIMs)

Sonia Andreou
PhD, Cyprus University of Technology, CY
Visual communication, Graphic design, Semiotics, Advertising

Gabriela Beltrão
MSc, Tallinn University, EE
Human computer Interaction

Daniel Irabien Peniche
MSc, Tallinn University, EE
Human computer Interaction

Visiting Staff 2021

Katie Tzanidou
VP Global Head of Research, Reuters
ex-Google UK

Administrative Staff

Kristi Oikimus, TLU
Study Counsellor and Specialist

Elena Stavrinidou, CUT
Study Counsellor and Specialist

> MSc Interaction Design

April 9th, 2024

Thank you for your patience.

Questions?

www.idmaster.eu for more information

Contact us at: info@idmaster.eu