

KokemUX: Step-by-Step UX Design Process

Marta Larusdottir
Reykjavik University
Reykjavik, Iceland
marta@ru.is

Virpi Roto
Aalto University
Helsinki, Finland
virpi.roto@aalto.fi

Ioana Visescu
Reykjavik University
Reykjavik, Iceland
ioanad@ru.is

Abstract

Ensuring that software meets users' needs is crucial for a good user experience. However, software developers sometimes prioritise their own needs, resulting in software that falls short for users. This tutorial introduces the KokemUX process, a structured user-centred approach to software development. By prioritising user needs throughout the development process, KokemUX ensures a positive user experience. Participants will learn key steps like creating an Eagle View, analysing user groups, and defining UX goals. Ideal for researchers and developers, this hands-on tutorial offers practical guidance for designing original and user-friendly digital services.

CCS Concepts

• **Human-centered computing** → **Human computer interaction (HCI)**; **HCI design and evaluation methods**; • **Software and its engineering** → **Designing software**.

Keywords

User-Centred Design, User-Centred Design Methods, Design Sprint, Software Design, Concept Design

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1 Introduction

Ensuring that the software meets the users' needs is crucial for good user experience. However, software developers sometimes prioritise their own needs, resulting in software that falls short for users. There's a growing call for structured approaches that involve users throughout the software development process. This tutorial introduces a new structured user-centred approach, the KokemUX process, which leads the team through continuous steps across four phases. Participants will engage in three key steps of the KokemUX process: Creating the Eagle View; Analyzing user groups and Defining UX goals. The process has garnered positive feedback in research studies for its step-by-step approach. Ideal for researchers and developers, this hands-on tutorial offers an

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opportunity to explore innovative ideas focusing on users through the KokemUX process.

Do you or your colleagues want to design original and user-friendly digital services but do not know how? Or do you need to teach user-centred design to non-designers? While most user-centred design guidance is vague about its activities, KokemUX process provides step-by-step guidance all the way from understanding the context, stakeholders, and user needs to prototyping and user evaluation through instructed steps. The process consists of 4 phases, each with several well-defined activities. In this tutorial, we explain the steps and engage the participants in hands-on exercises with three key steps of the process: Creating an Eagle View; Analyzing user groups, and Defining UX goals. The instructors have developed the process through several university courses and presented earlier versions of the process in academic conferences.

2 Learning Objectives

By the end of the tutorial, participants: • will understand why and when to use the KokemUX process • will understand the structure of the KokemUX process • can apply three steps of the KokemUX process, the Eagle View, User Group Analysis, and UX Goals • can utilize the kokemux.com website to work independently on the KokemUX process We envision that NordiCHI 2024 attendees would want to take this tutorial to learn how to involve users in a structured step-by-step way in the early phases of innovative research or software development projects.

3 A Schedule Overview of Planned Activities and Format

We will hold a three-hour tutorial onsite. The tutorial is scheduled in two 90-minute sessions.

Session 1:

- Introduction to the tutorial schedule and the presenters.
- Introduction to the KokemUX process.
- Introduction to the Eagle View step – the first step in the KokemUX process.
- Participants practice the Eagle View step.
- Introduction to the user group analysis step – the second step in the KokemUX process.
- Participants practice the User Group Analysis step.
- Discussion of the benefits of conducting these steps and how these can be adapted to various projects and teams.

Session 2:

- Introduction to UX goals – the fourth step in the KokemUX process.
- Participants practice the UX goals step.
- Discussion on how UX goals could be evaluated.

- Introduction to how the process could be used in the industry and research.
- Q/A session and open discussion at the end.

Marta Larusdottir and Virpi Roto are the founders of the Koke-mUX process. The process has evolved since 2017, when a user-centred design approach was conducted in an intensive course for university students, and the students' feedback was gathered [5]. In 2018, the approach of a design sprint by Knapp et al., [1] was included in the course, combined with conducting several UCD activities [5]. In 2019, an iterated UCD approach, the UCD Sprint process, was established [9]. Since then, we have studied the UCD Sprint process in several research studies, with two current publications [7, 10]. We have also conducted tutorials and courses on the UCD Sprint process at NordiCHI 2022 [8], INTERACT 2021 [2] and in 2023 [4] and at CHI 2023 [3]. All this research has resulted in the KokemUX process, which we are eager to introduce at NordiCHI 2024. The process has been used in two courses on the university level, at Aalto University and Reykjavik University, giving positive initial feedback, but the data gathered still needs to be analysed further.

4 Prerequisites and Level

The intended audience of this tutorial includes: • Non-designers such as researchers and technology experts interested in prototyping their ideas through user-centred design methods • Educators interested in including the KokemUX approach in their teaching • IT professionals who are interested in learning about a user-centred way of running a design sprint. We assume the participants in the tutorial have some prior knowledge of user-centred design. Ideally, the participants have participated in the first steps of idea discovery for software projects. Participants familiar with design sprints will learn how to focus more on users and involve them more frequently in the design sprints.

5 Promotional Strategy

We will create a web page explaining the above aspects of this tutorial. We will distribute the tutorial adverts to relevant international and local email lists (NordiCHI announcements, CHI announcements, SIGCHI Finland, etc) and to social media (LinkedIn, Facebook, X) with relevant tags (nordichi, uxdesign, ucd, hcd, etc).

6 Background of the Instructors

Marta Larusdottir is a professor in the Department of Computer Science at Reykjavik University. She has taught HCI courses in Iceland for over 20 years and participated in teaching HCI courses internationally. In her teaching she wants the students to be active in solving projects and understanding the material through developing skills of using UCD methods. She has used Knapp's design sprints for 7 years for teaching agile processes in a project management Masters program [1]. She was one of the proposers of UCD Sprint and the responsible teacher of a two-week course when taught in Iceland in 2018 [5, 6]. She was also one of the instructors of the UCD Sprint course at INTERACT 2021 [2] and INTERACT 2023 [4], tutorial at NordiCHI 2022 [8] and a course at CHI 2023 [3]. Marta is responsible for introducing the UCD Sprint, the Eagle

View and the User Group Analysis steps in this tutorial. She will also coach the practical work on using these two steps.

Virpi Roto is a senior university lecturer in the Department of Design, at Aalto University, Finland. She has 25+ years of experience in user-centred design both in industry and academia. She was one of the original proposers of the User-Centred Design Sprint and the responsible teacher of a related two-week course that was taught in Helsinki in 2019 [9]. She was also one of the instructors in the UCD Sprint course at INTERACT 2021 [2] and INTERACT 2023 [4], in a tutorial at NordiCHI 2022 [8] and a course at CHI 2023 [3]. In this tutorial, Virpi is responsible for introducing the concept of UX goals and coaching the participants through practical work on defining UX goals.

Ioana Visescu is a PhD student in the Department of Computer Science at Reykjavik University under the supervision of Dr. Marta Larusdottir. With a background in business and technology, and an interest in user experience, her research focuses on design and design methodologies and their applications in academia. Ioana was one of the instructors in the UCD Sprint tutorial at [8] and a course at CHI 2023 [3] and at INTERACT 2023 [4]. Ioana will be responsible for assisting participants during practical work.

7 Onsite Requirements

We would need people to use blackboards / Whiteboards to draw on for the Eagle View activity. We will probably have 4 people in each group, so depending on the number of participants, we would need several whiteboards. Otherwise, we would need people to be able to work in groups and discuss.

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