## **CS-C3120 Human-Computer Interaction**

#### EXAM 15.12.2023

### General instructions:

- Write your name, student number and your signature to each paper
- Allowed equipment: Pen and paper
- Language: The recommended language is English, but the answers can be written in Finnish or in Swedish

# 1) Definitions of key concepts in the context of Human-computer interaction (HCI) and Human-centred design (HCD) (12p)

Describe the following key concepts and provide examples.

- a) Usability (max 3p)
- b) User experience (UX) (max 3p)
- c) Heuristic evaluation (max 3p)
- d) Accessibility (max 3p)

# 2) The process model of human-centred design of interactive systems, defined in ISO standard, includes four key activities and is characterized as being an iterative process. (10p)

- a) What are these four key human-centred design activities? (max 4p)
- b) What kind of methods are used in each activity? (max 4p)
- c) How are the principles of human-centred design related to the process model? (max 2p)

### 3) Affordances in Interface Design (8p)

- a) What is an affordance and how are affordances related to interface design? (max 2p)
- b) Introduce the following three principles of user interface design with examples: Visibility, Constrains and Mapping. (max 6p)