

## **Second assignment – Humans**

### **Human subjects, Universal Design, Usability testing**

Due: 29.09.19, 23:59

Est. word count: 900-1500 (300-500 for each part)

You can write your assignment in English or Norwegian.

#### **1) Human subjects**

Imagine you are designing a study about the not new, yet rarely used Swipe type – a text entry method available on Android phones/and also iPhone from version iOS13 (see <https://www.digitaltrends.com/mobile/ios-13-swipe-keyboard-wwdc-2019/>). With this study you are about to evaluate the effectiveness of this type of text entry.

- a) Who would you consider appropriate potential participants for this project?
- b) What would you want to know about participants' habits in text messaging (or any note-taking)?
- c) What risk might this study pose when participants are asked to perform tasks on their own phone?
- d) What risks would a study pose when the students perform a set of tasks on phones provided in a laboratory setting?

#### **2) Universal Design: Answer the following questions**

- a) Explain shortly why Universal Design is not only about people with disabilities or impairments, but it is design for all people.
- b) Who coined the term *Universal Design*?
- c) What is the difference between barrier-free design and Universal Design?
- d) What does the macro, meso and micro level perspectives refer to when we talk about universal design?
- e) How do we call “universal design” in Interaction Design?
- f) Give 3 examples of methods used in Universal Design studies within Interaction Design.
- g) Give examples of two prioritized areas of Universal Design in Norway.
- h) When did the law on Universal Design in Higher Education came into force?
- i) What does the law and regulation on Universal Design in Higher Education refers to? Explain it in your own words.
- j) Give example of a setting where proxy-users are appropriate to include in a study. What is a proxy user?
- k) What does the GAP model refer to? What does the social model refer to? What about the medical one?
- l) How is UD relevant for AI research?

#### **3) Usability testing**

Imagine that you are planning a user-based usability test to evaluate an interface that allows tracking a device-user's digital footprint, such as the accumulated time of use, the energy consumption of different applications on the device (to immerse yourself into this task, you may want to search for an app on Apple Store or Google Play that somehow tracks and shows a device's use over time).

- a) Where would you recruit potential participants?
- b) Would you utilize real consumer data in the usability testing?
- c) What might five representative tasks be?
- d) How would you compare the usability of this interface with other interfaces for similar tasks?