

Interaction Technology and Techniques

Assignment 5: Text Input

Summer semester 2015

Submission due: Sunday, 17. May 2015, 23:55

Hand in in groups of max. two.

Goals of this assignment

- get an overview of the state of the art in pointing / text entry research
- learn more about QT signals and slots
- get some more experience with PyQt and graphical applications
- perform a small experiment

5.1: Get an overview of current research in text entry / pointing

The CHI conference is the most important annual scientific conference in the area of human-computer interaction. Watch the CHI 2015 showreel at <https://www.youtube.com/playlist?list=PLn0nrSd4xjjZp2cUxcrwGhw8hEySRi-bn> and find three examples of research on novel interfaces or interaction techniques for text entry or pointing. Find the papers online and provide a short summary of each (max. 5 lines) in your own words.

Hand in the following file:

chi-2015-research.txt: a plain text file containing short summaries of three papers from CHI 2015.

Points

- **1** File has been submitted and is not empty
- **3** good, concise summaries

5.2: Implement a text entry speed measuring tool

Implement a tool that allows for measuring and displaying typing speed.

- download the example file `textedit.py` and adjust it.
- no template text needs to be provided. The user may enter any text they like.
- test data should be logged to stdout in CSV format (see <http://www.cse.yorku.ca/~stevenc/tema/> for best practices of logging such data)
- the current typing speed should be displayed to the user in a separate widget
- use QT signals and slots for reacting to key events and updating the speed indicator.

text_entry_speed_test.py: a Python/PyQt script implementing a typing speed test.

Points

- **1** Script has been submitted and does not print out errors
- **1** Script conforms to PEP8
- **1** Script is well structured and includes comments
- **2** Script works as expected
- **1** Script uses signals and slots
- **1** Script outputs sensible and valid CSV data

Submission

Submit via GRIPS until the deadline

All files should use UTF-8 encoding and Unix line breaks. Python files should use spaces instead of tabs.

Have Fun!