

Assignment 6 – Human-Computer Interaction 2

Note: Exercises are voluntary with the goal of preparing you for the final exam. The sample solution will be presented during the exercise sessions on Monday.

Concepts and coding skills taught in these exercises are relevant for the exam.

Exercise 1: capacitive vs. resistive touch

1. Explain the technical difference between capacitive and resistive touch.
2. If you want to use a stylus, which property does the stylus need for each technology to detect stylus-touch interaction?

Exercise 2: accelerometer vs. gyroscope

1. What does each of those sensors measure?
2. If your mobile phone is flat on a table and you turn it – from your perspective – from portrait to landscape orientation. Which of both sensors is required to sense that rotation and why?

Exercise 3: dump sensor data

1. Use the following methods (<http://www.w3.org/TR/orientation-event/>) to output your device's orientation on the screen (alpha, beta and gamma.)
2. Use hammer.js to detect swipe motion to the left and right. Make a text appear indicating the direction of the swipe.