

Designing Interactive Systems II

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Assignment 6: Mobile Window Systems

Group Members

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Compiling and Running the Code

The code can be found in two different directories:
`DIS2_Gesture_Detector` and `DIS2_MusicPlayer`.

To compile and run the code, open the respective `.xcodeproj` file in Xcode and use the tool's functionality to Build and Go.

Particularities of Our Design

In the Gesture Detector, we detect single and double tap as well as left, right and circular swipe gestures. For the circular swipe gesture to be detected, several criteria have to be fulfilled: The start and end point must be sufficiently close, the movement must have a certain length, and the sequence of angles must correspond to that one of a circle. If a circle is detected, three equally distributed points of the movement are compared to check whether the movement was clockwise or counterclockwise. A message on the screen will tell about the detected gesture, or at which stage the gesture check failed.

In the music player, each of the recognized gestures is mapped to an appropriate action, as displayed on the screen. The mapping was chosen in order to be as natural as possible, e.g. the circular gesture corresponds to turning a volume knob on a hi-fi rack.