Test protocol FLipMouse

User data

Date:
User Id (initials-YYMMDD):
Name of disability:

Residual functions: Finger movement (at least one): ☐   Head movement: ☐   Lip movement: ☐
Way of input (Finger / Lips):

Evaluation steps

The overall evaluation takes about 70 min. per user.
Execute the following steps and write down comments.

1. Informed consent: Inform user about FLipMouse and potential risks - Request signature. (10 min.)

2. Mount and individually adjust settings of FlipMouse (deadzone, speed, sip/puff values) using GUI configuration software (FLipMouseGUI v2.1). (10 min.)

   Calibration hints: Adjust force gain levels (Force Levels tab) in order to have similar lip/finger force requirements in all directions when moving the cursor. Set deadzone high enough to prevent unintentional movement and low enough to reflect force generation capabilities of the user. Set speed appropriately so that icons of the window decorations can be targeted accurately. Read the wiki for more hints.

   Comments/Problems:

3. Warm-up/training: User tries out mouse movement, learns how to do mouse clicks and dragging. (10 min.)
   Instruct user to do left click (short sip), right click (short puff) and dragging (long sip).

4. Quantitative measurement (3 test runs with aimbooster, 2 min., random coordinates, 800x600) (10 min.)
   a. Set your **screen resolution to 1280x720**
   b. Open aimbooster with FLipMouse evaluation settings
      (http://aimbooster.com/s/z1hdpNS)

   c. For test runs 1-3
      i. Click on **fullscreen mode**
      ii. Click on **start**
      iii. After evaluation, create screenshot of result window and save it as yyyymmdd-<userid>-run-<nr>

5. Qualitative evaluation: (10 min.)
   a. Task 1: Write e-mail with windows onscreen keyboard (osk.exe, and a suitable window size).
      Measure time (seconds) of e-mail writing!

      i. E-Mail text:

         To: veigl@technikum-wien.at
         Subject: FLipMouse evaluation
         Message:
         Hello!
         I am writing an e-mail. Now I can communicate with my friends.

      Time:

   b. Task 2: Drag window from left upper corner to right bottom corner of screen.

6. Fill out evaluation sheet (10 min.)