Questionnaire

1 Personal information

In what age group are you?

☐ 19 and under

☐ 20–29

☐ 30–39

☐ 40–49

☐ 50–59

☐ 60+

Gender:

☐ Male

☐ Female

2 To be completed before the experiment

2.1 Orientation and navigation for visually impaired

Please rate the following tasks according to the difficulty for a visually impaired compared to a sighted:

about the same →
← a lot more difficult

Crossing a street	☐	☐	☐	☐	☐
Walking in a park	☐	☐	☐	☐	☐
Navigating in an unknown apartment	☐	☐	☐	☐	☐
Navigating in a known apartment	☐	☐	☐	☐	☐

Besides the tasks mentioned above, which other tasks do you think are difficult for visually impaired?

_____

_____

Please rate how important the following cues are for navigation:

not important $\rightarrow$

$\leftarrow$ very important

Listening to environmental sounds .... ☐ ☐ ☐ ☐ ☐

Listening to food step sounds .... ☐ ☐ ☐ ☐ ☐

Touching with the hands.. ☐ ☐ ☐ ☐ ☐

Force-feedback from the cane .... ☐ ☐ ☐ ☐ ☐

Smelling environmental smells .... ☐ ☐ ☐ ☐ ☐

Besides the cues mentioned above, which other cues do you think are important for navigation?

_____

_____

3 To be completed after the experiments

3.1 Program evaluation

Please rate the following aspects of the program:

agree completely $\rightarrow$

$\leftarrow$ strongly disagree

Navigation with vision was easy and intuitive .... ☐ ☐ ☐ ☐ ☐

The localization of sounds in 3D was good .... ☐ ☐ ☐ ☐ ☐

The cause of the sound was clear.................................... ☐ ☐ ☐ ☐ ☐

3D audio was convincing... ☐ ☐ ☐ ☐ ☐

Which rotation type did you like more?

☐ Discrete Rotations

☐ Continuous Rotations

3.2 Orientation and navigation for visually impaired

Please rate the following tasks according to the difficulty for a visually impaired compared to a sighted:

about the same →
← a lot more difficult

Crossing a street . . . .   ☐ ☐ ☐ ☐ ☐

Walking in a park . . . .   ☐ ☐ ☐ ☐ ☐

Navigating in an unknown apartment . . . .   ☐ ☐ ☐ ☐ ☐

Navigating in a known apartment . . . .   ☐ ☐ ☐ ☐ ☐

Besides the tasks mentioned above, which other tasks do you think are difficult for visually impaired?

_____

_____

Please rate how important the following cues are for navigation:

not important →
← very important

Listening to environmental sounds . . . .   ☐ ☐ ☐ ☐ ☐

Listening to food step sounds . . . .   ☐ ☐ ☐ ☐ ☐

Touching with the hands . . . .   ☐ ☐ ☐ ☐ ☐

Force-feedback from the cane . . . .   ☐ ☐ ☐ ☐ ☐

Smelling environmental smells . . . .   ☐ ☐ ☐ ☐ ☐

Besides the cues mentioned above, which other cues do you think are important for navigation?

_____

_____