

Feedback Experiment - GLAMICA

Every participant gets this questionnaire in advance.

Instructions:

You will be testing a smart glasses-based support system designed to assist people with dementia. You will perform the following tasks in the listed order:

1. “Make a Glass of Water”
2. “Make a Cup of Tea”
3. “Cook Rice”
4. “Cook Pasta”

Please ask more questions than you normally would during these tasks (e.g., about the process, item locations, or what you can cook with available items) to test the system’s capabilities.

Note: Do not use voice input to preserve your anonymity.

After completing all tasks, please rate the following statements from 1 (Strongly Disagree) to 5 (Strongly Agree). You may also provide reasons for your ratings and add general notes at the end.

After completing all tasks, you will be asked to:

- Rate a series of statements from **1 (Strongly Disagree)** to **5 (Strongly Agree)**, with the option to provide reasons.
- Answer several Yes or No questions about your experience.
- Provide additional feedback notes at the end.

Detailed Rating Scale Explanation:

Please rate the following statements on a scale from 1 to 5:

- **1 – Strongly Disagree:** The statement is never or almost never true in your experience.
- **2 – Disagree:** The statement is rarely true.
- **3 – Neutral:** The statement is sometimes true—about half the time.
- **4 – Agree:** The statement is usually true.
- **5 – Strongly Agree:** The statement is always or almost always true for you.

Statements:

Statement	Rating	Reason
The system always described the steps logically and in the right order.	4	Sometimes the instructions were in wrong order.
The system helped me remember what to do next.	4	It always told me the next step again when I told it what I did last, but it did not recognize what step I'm at by itself
The system always directed me right to find items.	4	The directions it told me were right most of the time
The system correctly identified what I was looking at.	5	The times I asked the system what I'm looking it, it always identified it right
The system's voice responses were timely and appropriate.	4	Most of the time they were fairly fast, but it always needed to finish one thing it says before being able to say the next thing which delayed it
The system made me more aware of potential risks (e.g., leaving the stove or faucet on).	4	The reminders where good but the stove state was sometimes not working properly
Reminders were helpful without being annoying.	5	I think the reminder times where appropriate.
The system was easy to use and understand.	5	I got used to it quickly.
The system worked reliably throughout the tasks.	3	The stove state wasn't working properly sometimes, and the instructions were a bit confusing sometimes.
I did not feel patronized or talked down to by the system.	5	The input the system gave was appropriate.

Yes or No questions:

Question	Yes	No
Did you feel confident using the system after a few minutes?	x	
Did the system ever confuse or distract you during a task?		x
Did the system support you in completing the tasks more efficiently?		x
Did you find it hard getting used to the system?		x
Were the answers you got precise?		x

Other Notes:

- I think the system does not really make me do a task more efficient, but it supports me because it makes me think less about the task.
- The only two bad things I noticed were that the stove state wasn't always recognized properly and that the instructions were sometimes a bit confusing

Quantitative analysis (to be done by the experimenter):

Here the experimenter does a quantitative analysis of the previous experiment. For this the six main functionalities shown in the table below are analysed. Those are the rules for each category:

Part	Right	Wrong
Item direction	Number of correct item directions every time the user sends a prompt.	Number of incorrect item directions every time the user sends a prompt.
Gaze Target	Number of correct gaze-targets every time the user sends a prompt.	Number of incorrect gaze-targets every time the user sends a prompt.
Recognized items	Number of correctly identified items at the end of the recording.	Number of items that were not identified or identified incorrectly at the end of the recording.
Stove State	Number of times the stove state has changed, or a reminder was spoken correctly.	Number of times the state changed incorrectly, or a reminder was not spoken.
Faucet State	Number of times a reminder was spoken correctly.	Number of times a reminder was spoken incorrectly.

Make a cup of water:

Total Experiment time: 2 minutes and 12 seconds

Part of the system	Count	Right	Wrong
Item direction	13	9	4
Gaze Target	4	4	0
Recognized items	4	3	1
Stove State	0	0	0
Faucet State	0	1	0

Make a cup of Tea:

Total Experiment time: 5 minutes and 3 seconds

Part of the system	Count	Right	Wrong
Item direction	26	20	6
Gaze Target	2	2	0
Recognized items	7	6	1
Stove State	6	5	1
Faucet State	2	2	0

Cooking Pasta:

Total Experiment time: 7 minutes and 4 seconds

Part of the system	Count	Right	Wrong
Item direction	53	38	17
Gaze Target	6	4	2
Recognized items	7	6	1
Stove State	6	6	0
Faucet State	1	1	0

Cooking Rice:

Total Experiment time: 6 minutes and 43 seconds

Part of the system	Count	Right	Wrong
Item direction	54	40	14
Gaze Target	7	7	0
Recognized items	7	7	0
Stove State	9	6	3
Faucet State	1	1	0