

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.	5	Steps were temporally accurate and easy to follow.
The system helped me remember what to do next.	3	All steps were front loaded and would be easier to remember if spaced out following the completion of sub steps
The system always directed my right to find items.	4	Always correct but sometimes lacked granularity e.g. if something was behind me and to the right the system would say only behind or only to the right
The system correctly identified what I was looking at.	5	agree
The system's voice responses were timely and appropriate.	3	Appropriate yes , not really timely for the reasons stated above
The system made me more aware of potential risks (e.g., leaving the stove or faucet on).	5	Gave timely and accurate reminders
Reminders were helpful without being annoying.	5	agree
The system was easy to use and understand.	5	User friendly, simple and understandable
The system worked reliably throughout the tasks.	4	Almost perfect except for when cooking rice, struggled to detect something
I did not feel patronized or talked down to by the system.	5	Logical and explanative steps

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:

- If I was someone with dementia, I feel like the front loading of the instructions would be a problem as I could struggle to remember the following steps once the intermediate ones had been completed.
- Sometimes the lists of steps could have been more concise to help with the completion of full tasks (if tasks are to be completed after all instructions are given)

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.

Making a glass of water:

Total Experiment time: 1 minutes 19 seconds

Part of the system	Count	Right	Wrong
Item direction	4	2	2
Gaze Target	0	0	0
Recognized items	3	3	0
Stove State	0	0	0
Faucet State	1	1	0

Making a cup of tea:

Total Experiment time: 2 minutes 23 seconds

Part of the system	Count	Right	Wrong
Item direction	8	6	2
Gaze Target	0	0	0
Recognized items	6	6	0
Stove State	5	3	2
Faucet State	1	1	0

Cooking Pasta:

Total Experiment time: 2 minutes 36 seconds

Part of the system	Count	Right	Wrong
Item direction	9	9	0
Gaze Target	0	0	0
Recognized items	6	6	0
Stove State	5	4	1
Faucet State	2	1	1

Cooking Rice:

Total Experiment time: 3 minutes 29 seconds

Part of the system	Count	Right	Wrong
Item direction	37	31	6
Gaze Target	1	1	0
Recognized items	7	7	0
Stove State	5	4	1
Faucet State	1	1	0