

Assignment 4 - Project Custom-Made Interface

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Team Members



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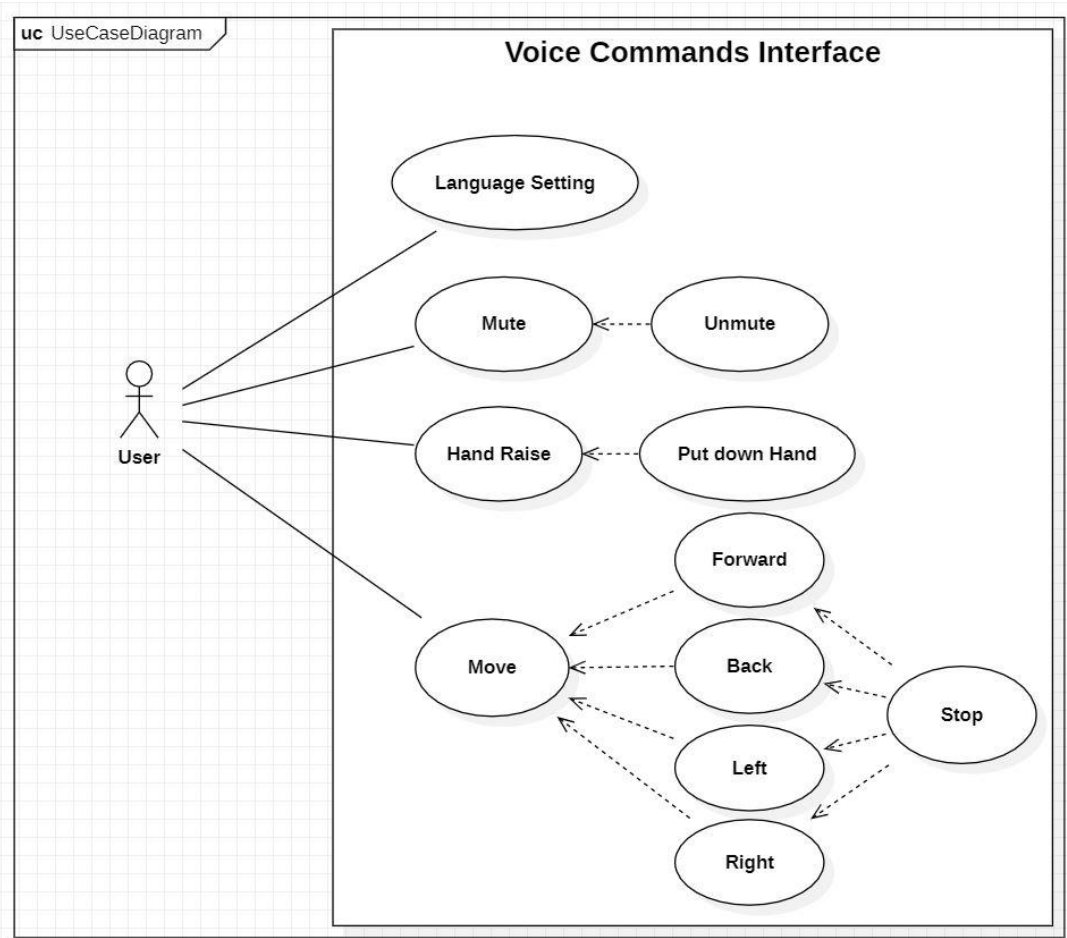
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Use Case Changes

- Language Setting
- Mute/ Unmute
- Raise/ Drop hand
- Move



Demo

NASA TLX

NASA-TLX Scoring Worksheet

Raw Scores and Weighting (According to the TLX Scoring Manual)

Instructions: Enter raw/unweighted rating scores in columns B - G.

*Note: Means for individual scores treat "0" as valid rather than missing data.

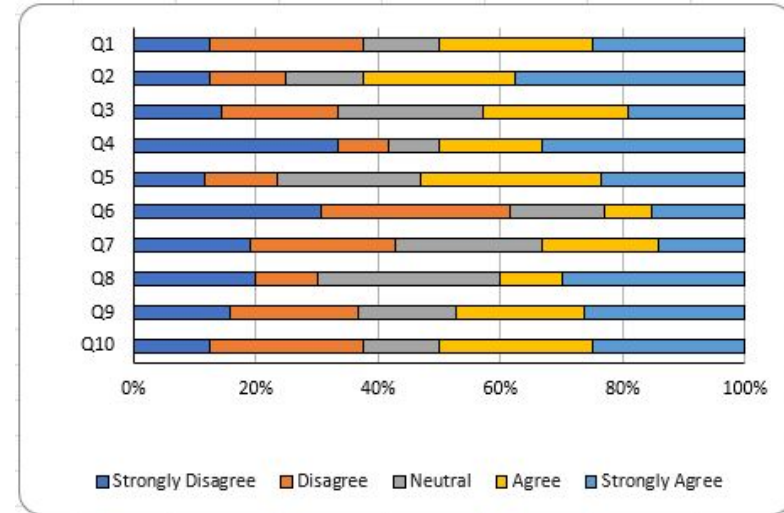
User #	Mental	Physical	Temporal	Performance	Effort	Frustration
0/Ex	55	10	75	25	80	40
1	5	5	6	6	2	5
2	3	1	3	9	3	2
3	1	1	1	10	1	1
4	2	1	2	8	4	2
5	3	2	7	8	3	1
6	1	1	1	10	7	1

Individual Scores						
Weighted						Raw/Unweighted
Mental	Physical	Temporal	Performance	Effort	Frustration	Mean*
165	10	225	125	80	80	45.67
25	25	36	36	4	25	5.21
9	1	9	81	9	4	5.38
1	1	1	100	1	1	7.00
4	1	4	64	16	4	4.89
9	4	49	64	9	1	5.67
1	1	1	100	49	1	7.29

Group Score Results			
Weighted		Raw/Unweighted	
Overall	5.91	Overall	4.17
Diagnostic Subscores		Diagnostic Subscores	
Mental	8.17	Mental	2.50
Physical	5.50	Physical	1.83
Temporal	16.67	Temporal	5.92
Performance	74.17	Performance	8.50
Effort	14.67	Effort	3.33
Frustration	6.00	Frustration	2.00

System Usability Score (SUS)

- Inconsistent scores



Participant	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10				
	I think that I will like to use this system frequently	I found the system useful	I thought I would like to learn a lot of things about this system	I think that I would like to use this system frequently	I found the system useful	I thought I would like to learn a lot of things about this system	I would imagine that I would like to use this system frequently	I found the system useful	I felt very confident when I used the system	I needed to learn a lot of things before I could get going with this system	Score			
1	2	1	3	4	2	4	4	2	3	1	55			
2	4	1	4	1	2	4	5	1	4	2	75			
3	2	1	5	1	4	2	5	3	3	1	77.5			
4	4	2	5	2	5	1	4	1	4	2	85			
5	4	3	4	4	4	2	3	3	3	5	65	Average:		71.5

Presence Questionnaire

	Average	Gap	% out of total
Total:	86.4	46.6	65%
Realism	31.4	17.6	64%
Possibility to act	21.6	6.4	77%
Quality of interface	12.6	8.4	60%
Possibility to examine	11.8	9.2	56%
Self-evaluation of performance	9	5	64%

Other Feedback

- Closer Voice Detection
- Adding a user interface
- Instructions
- Keeping WASD as a options
- Making the scene less distracting



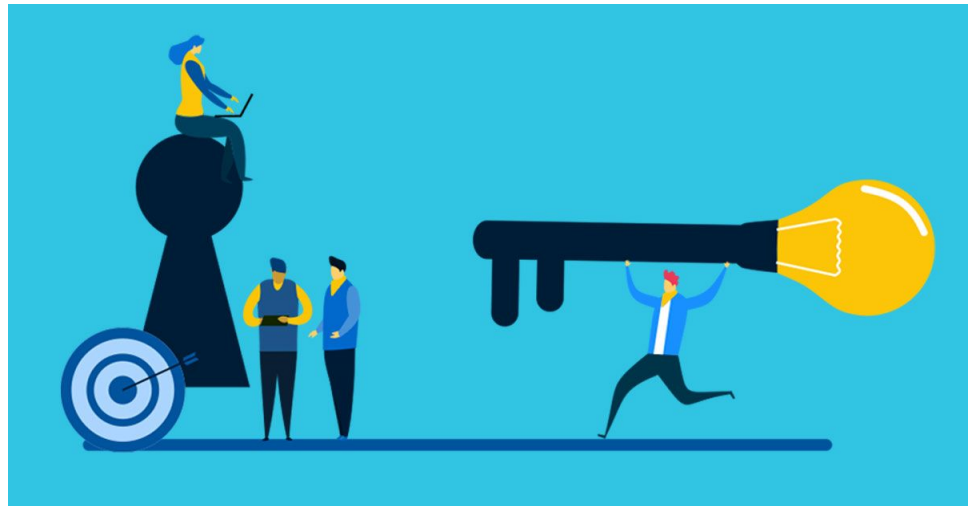
Limitations

- Missing actual voice command functionality
- VR functionality
- Multi Language Inputs
- Different Languages Inputs
- User needs to be in a quiet environment
- Not customizable



Takeaways

- Wake up word to reduce user error
- Cancel out background noise
- Add a User Interface
- Keep WASD Movement
- Improve audio detections



Appendices

NASA TLX

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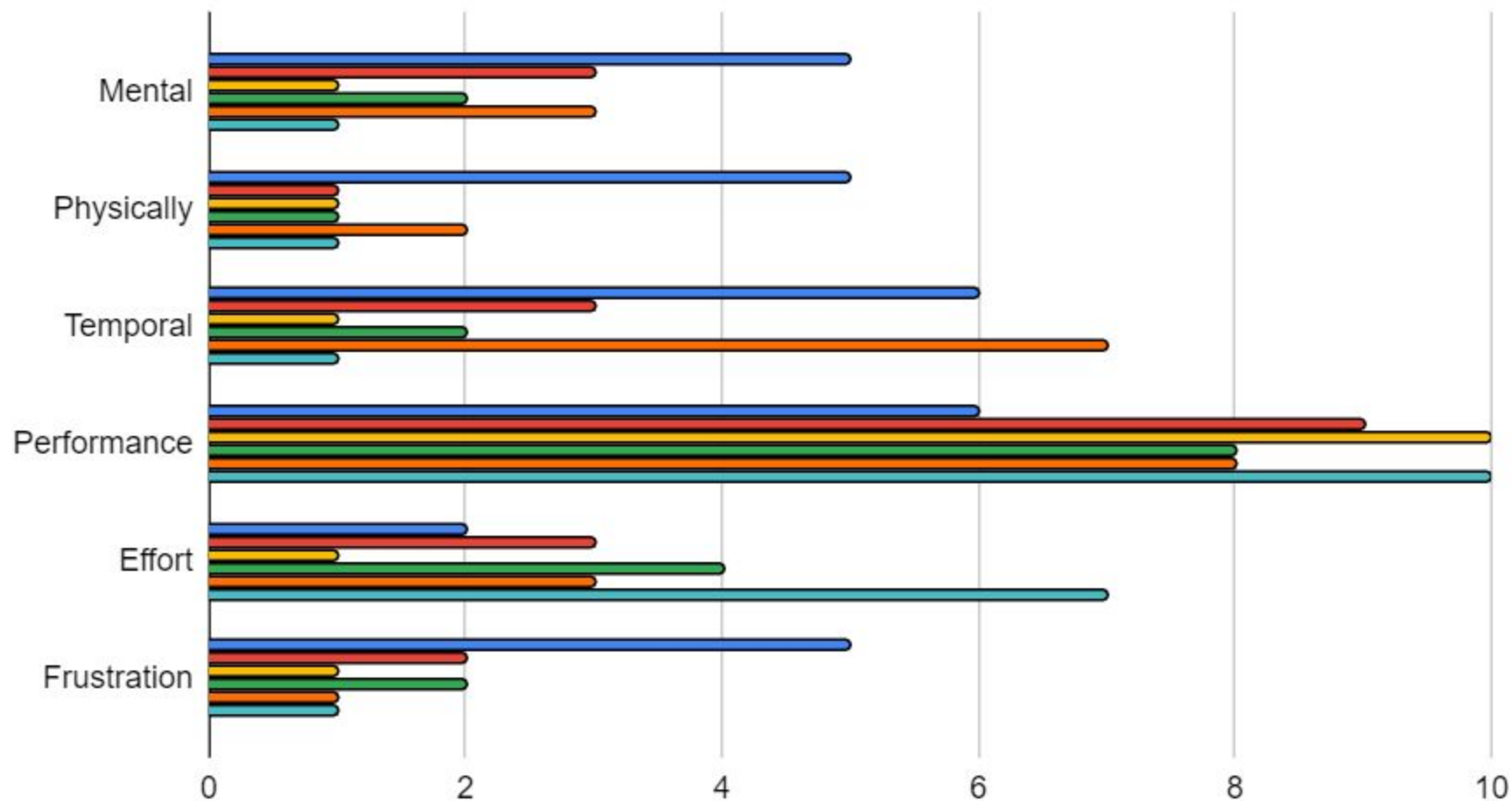
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TLX



User Testers



Our group helping other teams

