

Project Summary and Conclusions

Original Project Objective and Scope

Our group produced work to meet the project request for proposal from Radius Innovation & Development. The RFP specified that the scope of this project should have involved the following work:

- Characterize the user needs to identify key requirements for the product (direct evidence of end user elicitation in addition to existing literature research is expected).
- Based on the requirements, brainstorm, develop and propose (3) design options for the physical form of the assistant, auditory interface, and digital user interface based on the requirements. Solutions should maximize the user experience, usability, robustness, and safety. The output of this activity should be sketches, renderings, screens, and/or diagrams with an accompanying design description.
- Conduct early stage user research to refine design direction. Research should include a protocol and discussion guide. Findings should drive the down selection of a single digital, physical, and auditory design direction.
- Perform a task analysis and risk assessment on the refined design. This activity should be used to “de-risk” your design, so evidence of risk mitigations must be identified and incorporated into the design.
- Develop (1) “interacts-like” prototype of the design solutions. The prototype should allow for simulated use evaluation.
- Conduct simulated use testing of the prototype with identified target user group(s).

Design Process and Challenges Faced

We approached this design challenge by deciding that we would all contribute to every phase of the CLIMBER process as a group by meeting every Monday to collectively discuss all of the work that was being completed at any given point. We also had the opportunity to have check-ins with Jordan and Selim at Radius each Thursday to get feedback. We were individually responsible for specific components of all of the work that went into the final deliverables as to divide work individually produced.

The shift to remote learning brought many challenges to our group that we were not anticipating. Given that the target demographic of the product was older adults, we no longer had the ability to conduct any face to face user entered research once the virus became a local concern.

We also knew we would not be able to create a physical prototype of the product or conduct any usability testing on the design of the form. This prevented us from being able to discover any specific ergonomic related usability concerns.

Lessons Learned and Opportunities for improvement

Looking back to our initial user-centered research, we may have benefitted from distributing a questionnaire to members of our target demographic in early February to give us feedback from more older adults who were not from the New England Area. This may have allowed us to enter interviews and focus groups with more specific questions and been in a more narrowed down design direction sooner with information from a broader audience. If we had a better crafted sample of our target consumer it may have also reduced the amount of usability tests needed later on in the process, which would have been helpful given the limitations we had to work with around testing the product.

Future Directions and Next Steps

A key next step to this project would involve using the usability testing moderator's guide to conduct thorough and controlled product testing. This would hopefully enable the team to validate or discover concerns with our current final designs. We also thought it would be important to develop the connected application for synchronization and setup of the device with a focus on seamless integration. Lastly, we also would like to explore further branding and development of the personality for Bridgette. For this product to be successful and stand out among existing voice assistants, it is important that the tone, pitch, and cadence of the assistant are thoughtfully designed as well as any other unique quirks to distinguish it among competitors in the market.

References

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