GROUP 16









Background

Loneliness in the Elderly

Loneliness remains a significant issue among older adults. In 2023, about one in three adults aged 50-80 felt isolated or lacked companionship.

These issues not only affect emotional well-being but also have serious consequences for brain health: They are linked to declines in cognitive function and a higher risk of dementia (including Alzheimer's disease) and a limited social activity can reduce independence in daily tasks.

If these problems are not addressed, they can increase vulnerability, especially in groups with poor physical or mental health, disabilities, or those who live alone. We found out that staying connected is key to mitigating these negative effects.

Technology plays a crucial role in fostering connection and reducing these negative effects, because digital tools help older adults stay in touch with friends and family, even across distances and this interaction provides purpose, routine, and emotional support, helping them maintain a sense of belonging.

User questions

1. Usability and Access Barrier

Current technology can be a barrier for older adults, despite its crucial role in connection. It is essential to design an interface that is so easy that even the least tech-savvy grandparent can use it without help. The design must be empathetic, considering that visibility and needs change with age.

2. Ensuring Meaningful Purpose and Bonding

The platform's goal is to be more than "just playing"; it must become a special moment between generations. The aim is to make it a "window to feel accompanied" rather than "just another app".

Older adults want to contribute, teach, and feel valuable.

3. Fostering Connection through Shared Interests

It is a challenge to go beyond known circles. A system is needed that can connect people who do not know each other but share interests, such as matching a Dominoes-loving grandparent with a child who wants to learn. This must be done while maintaining common and safe ground, like classic games.

Main Existing Problems

1. Technology Usability and Access Barrier

Current technology often acts as a barrier for older adults, particularly when it's not designed with empathy. As people age, they experience declining visibility and changing interface needs, which means many existing applications are fundamentally difficult for the least tech-savvy seniors to use.

2. Distance, Isolation, and Lack of Meaningful Interaction

Social isolation and unwanted loneliness are major social problems, with one-third of older adults reporting that they lack companionship. This situation is made worse by the geographical distance from family and friends, which greatly limits everyday interactions. The main problem is not just a lack of contact, but that seniors feel a void because they cannot contribute, teach, and feel valuable. This lack of purpose and meaningful connection is directly linked to serious health problems, such as cognitive decline and an increased risk of dementia.

User requirements

We initially asked team 02 to create an entire mobile application. However, due to their limited experience with end-to-end UX/UI design, the designers requested that we change the scope of the briefing, and we agreed. The project shifted from developing a complete app to designing a focused product that still needed to incorporate the core requirements of the original mobile application.

We have provided key design concepts based on the following aspects:

1. Interface and User Experience (Usability and Accessibility)

- Simple and Intuitive Design: It must be easy, allowing the least tech-savvy grandparent can use it without help.
- Adapted Visual Elements: A simple and accessible interface is required with large buttons and scalable text, adapting to declining visibility and needs that
- Easy Access: The login process and setting must be quick and simple.
- · Low Cost and Minimal Barriers: It should not require complicated downloads and must have minimal maintenance to ensure accessibility.

2. Interaction and Meaningful Bonding (Purpose)

- Promote Senior Contribution: It must allow older adults to contribute, teach, and feel valuable, transforming the game into a special moment between
- Foster Routine: It would be nice to create routines to facilitate regular meetups. This is achieved through fixed schedules for gaming sessions.
- . Short Sessions: To maximize concentration and engagement, sessions must be
- Integrated Video Communication: To create closeness, the platform must combine the fun of gaming with integrated video calling.

3. Connection and Community (Social Bonds)

- . Matching by Interests: We asked for a matching mechanism based on interests and skill level, allowing connection between people who do not know each other (e.g., a grandparent expert in Dominoes with a child who wants to learn).
- · Classic Games Platform: The basis of the game must be classic games (like Parcheesi, Dominoes, or cards), as they are common and safe ground for multiple generations.
- Initial Support: The involvement of volunteers, senior centers and client service must be considered to provide initial support and facilitate adaptation to the tool.

These examples illustrate how other platforms have solved challenges related to accessibility, matching, and social connection:

- UNO Online / Parchis Star: Show how to adapt classic games to easy-tounderstand mobile and web formats.
- Scrabble: They use skill-level-based matching to create fair games.
- Chess.com / Lichess: Offer platforms for quick and complex games that include the option for video calling.
- Houseparty / Zoom: Demonstrate how video chat can be combined with simple games to encourage socialization.



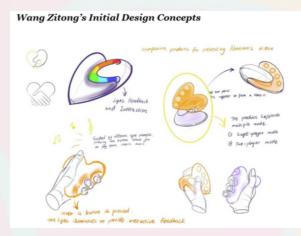


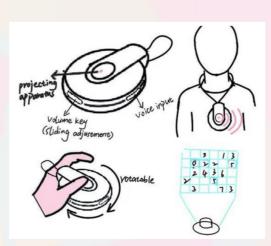


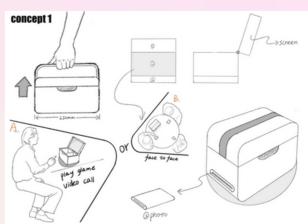


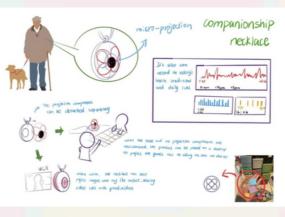


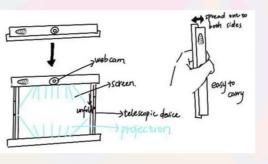
Scheme sketches

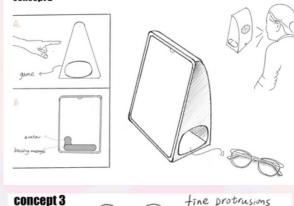




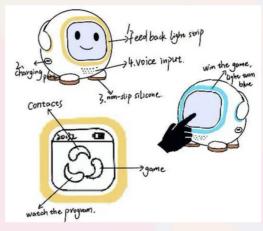














The team conducted a great brainstorming session and explored a wide variety of ideas. The sketching process was creative, clear, and detail-oriented. All of the concepts addressed important needs; however, since our goal was to tackle the transgenerational challenge of supporting the elderly and reducing loneliness, we, as clients, selected one main idea from each team member. We then suggested combining the strongest elements of each concept to develop a unified final product.

Cooperation and Communication









We communicated through various platforms, including the designer's website, Instagram, and email, which facilitated effective collaboration. Throughout the process, we were able to share our ideas, clarify any questions, and resolve doubts efficiently. The team also guided us through certain steps when needed. Overall, the communication from the group was excellent, with Zitong responding promptly and thoroughly to any issues or concerns.

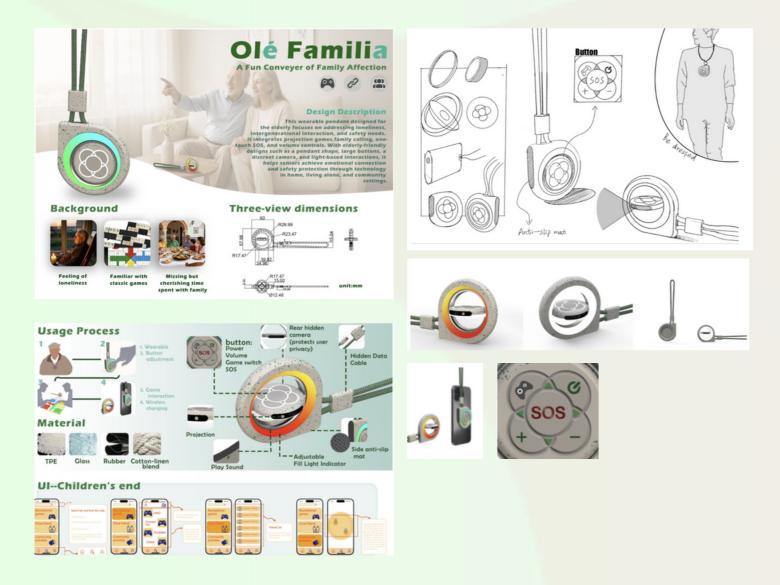




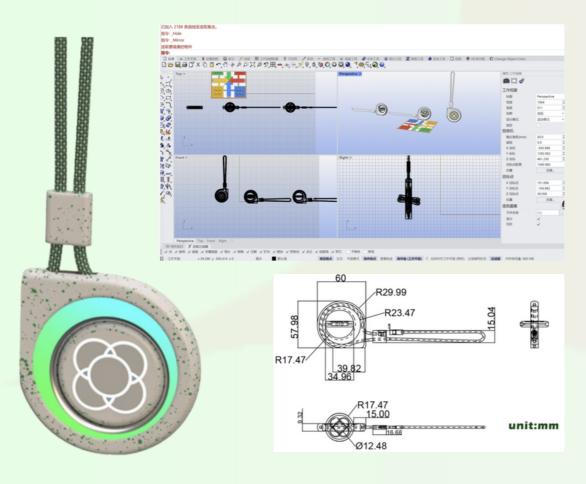


Design Feedback for Leam 02

Concept



3D model & Dimensions



User Experience

The user experience was very positive. Olé Family is a new technology that is easy to use and interact with, allowing users to connect through games with friends, family, or even new people. It effectively combats loneliness while creating enjoyable and meaningful experiences. The interface is intuitive, engaging, and thoughtfully designed, making it accessible for all users. Overall, it is a great concept that promotes connection, fun, and well-being for the elderly.

Conclusion

Communication

The communication throughout the entire process was excellent. The team was consistently attentive, responsive, and highly detail-oriented. They actively listened to our feedback, clarified any questions promptly, and provided guidance whenever needed. Their professionalism and dedication ensured a smooth collaboration, making the whole process efficient, clear, and highly productive.

Product development & Final deliverables

The product development was excellent. The team effectively responded to our needs by creating a portable and accessible technology that helps users connect with others through games, both in-person and remotely. The design is highly aesthetic and thoughtfully conceived, with careful attention to detail, making it convenient to integrate with mobile devices. The rendering work was outstanding, showcasing the team's strong design skills and professionalism. Overall, it was a very well-executed and polished final deliverable.

Time Management

The team demonstrated excellent time management throughout the project. They maintained a highly efficient workflow, completing tasks promptly while keeping a consistent pace. Their ability to organize and prioritize work ensured that deadlines were met without compromising quality, reflecting a professional and well-coordinated approach.

Overall Experience

We really enjoyed working with Team 2. Their professionalism, creativity, and excellent communication made the collaboration smooth and highly productive. The team was attentive, detail-oriented, and efficient, delivering well-developed concepts that addressed our needs. We would be happy to stay in touch and are open to collaborating with them on future projects.