



Toys For Thoughts

Branksome Hall Asia
Mina, Seoha, Hyoyeon, Jiyu

Introducing Our Team

We are from Jeju, South Korea!



▲ Our School, Branksome Hall Asia in Jeju

Seoha Kim



"I want to design for real users, which will give me more significant feedback"

Jiyu Choi



"I enjoy learning design softwares. I would like to utilize my knowledge and skills to drive a positive impact to local community."

Hyoyeon Lee



"I am passionate about designing user-centered products that could bring a real impact to local community."

Mina Sung

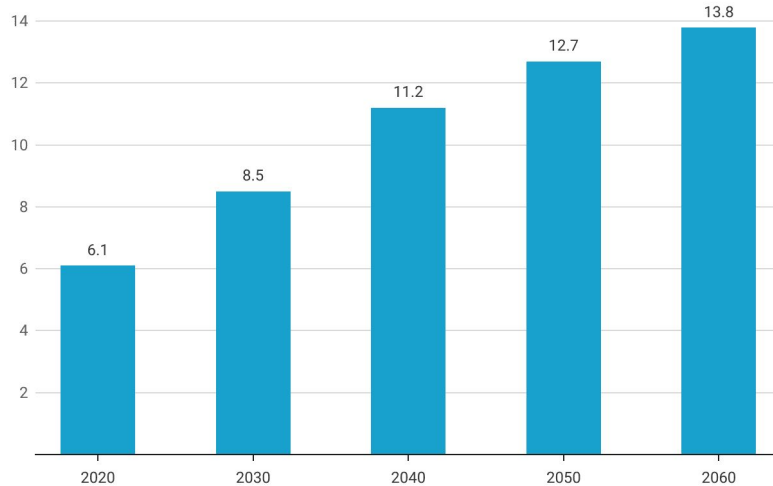


"I want to help elderly people and their families who struggle with Alzheimer's, as my family and I once did."

Problem

Projected Numbers of Older People with Alzheimer's

The U.S. (2020-2060) (in millions)



(in millions)

Source: Market.us Media

- Alzheimer's disease is a brain disorder that slowly damages the brain and leads to problems with memory and cognition.
- People with Alzheimer's face difficulties with memory, thinking, and communication.

The projected number of people with Alzheimer's in 2060

13,800,000

Personal Motivation



Mina

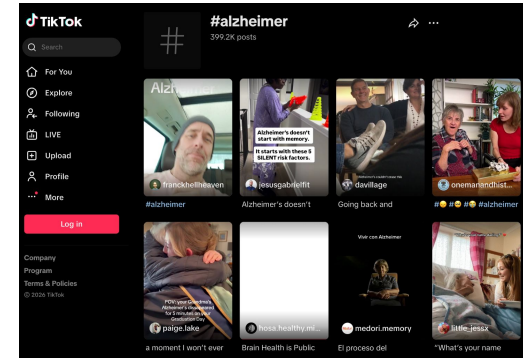
My grandfather is 90 years old. Seeing him slowly lose parts of himself because of Alzheimer's has been one of the hardest challenges for me and my entire family.

Through social media, we saw TikTok trends that raise awareness of Alzheimer's disease by sharing real stories of grandparents and parents living with the condition. These stories reminded us that many families face similar challenges.

We established Toys for Thoughts to create toys that support cognitive engagement of elderly people and raise awareness of Alzheimer's disease.



▲ Mina's grandfather





Solution



“Toys can help slow Alzheimer’s progression by stimulating problem-solving, memory, and sensory engagement. ”

- Use various colors and materials for visual and tactile engagement
- Design effective toy mechanisms (how different parts work together)
- Provide simple instruction cards for easy play



Safety considerations for elderly people:

- Removed sharp edges
- No small pieces to prevent choking

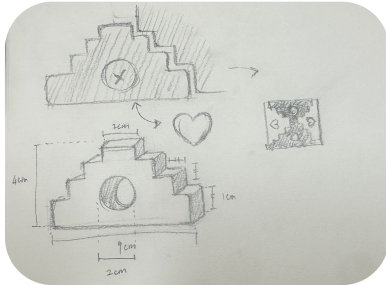


SDG Goal: Good Health and well-being



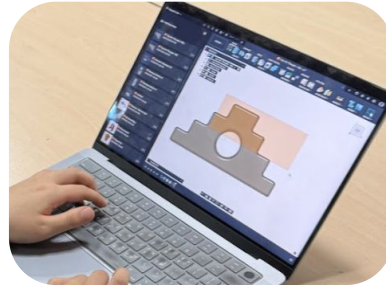
Process

Brainstorming



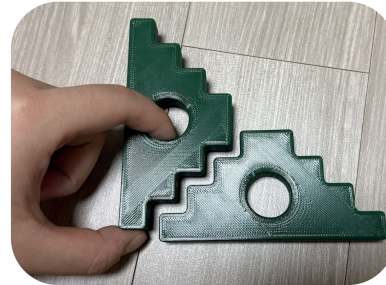
- Brainstorm the form, the main mechanism, and the measurements of the toys.

CAD Model Creation



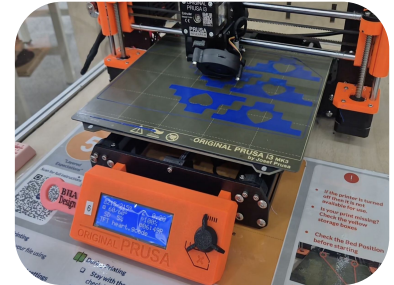
- Create CAD model in Fusion 360 based on the sketch

Prototyping



- Initial prints check scale, form, safety, interlocking, and etc. before mass production
- Reduce waste and allow design improvements.

Mass Production



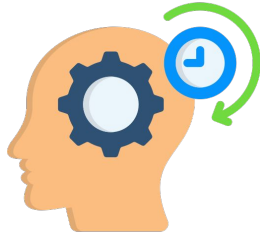
- Produce the toys on a large scale.

Possible Materials & Equipment

- PLA plastic & 3D printer
- Cardboard & laser cutter
- Wood & CNC router



Expected Benefits of Our Toys



Benefit 1

Improves aspects of memory

- Encourages memory recall and problem-solving
- Helps keep the brain active and engaged.



Benefit 2

Reduces anxiety

- Familiar and repetitive activities provide a sense of routine
- Help elderly individuals feel calmer and less stressed.



Benefit 3

Enhances mood

- Encourages social interaction, improving emotional health.
- Gives a sense of achievement, which boosts confidence and positive emotions.

Community Engagement

Aim to...

- Collaborate with the Jeju Elderly Care Center (제주도립노인요양원) in Jeju, South Korea.
- Hold workshops to introduce the toys created by our team and to interact with the elderly community.
- Donate the toys for long-term use at the center.
- Receive feedback and observe how the toys are used through interactions within the elderly community at the center to improve future toy designs.

Jeju 제주특별자치도립
노인요양원

