Fidject

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Dabin's Letter

Design is communication between designer and user. Forms, functions, and interactions of the product possess the designer's think and logical design process makes them understandable to the user.
That is, the basic of design is to build the designer's own idea. Proceeding design projects following a unified theme with one's fundamental idea maintains consistency, holding your identity.
Here, my design idea is 'creating fun in the periphery.' Hope you enjoy how I proceed the project and it could be an opportunity to think about your design idea.

Fidject

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How can abandoned product hold new value?

Prologue

In the winter semester of 2019, which was the time just before starting a creative design course, I still couldn't finalize my topic. I was, and now also, interested in furniture or interior object and stuck with a vague idea of designing related products. I was having a hard time finding a subject in furniture or interior objects since I had a stereotype that design must solve a problem.

Suddenly, two phrases from two seniors became decisive factors. One of them said 'The starting point of good design is not defining the problem, rather its a question.' UNIST design major students are easy to face the limitations of design thinking because we are basically settled in scientific and engineering knowledge. And I think it has a strong influence on the idea of proceeding design project from a problem. But, as he said, if the design could start from a creative question, I believe it could be a great opportunity to select a much more interesting topic. The other said 'Visually pleasure is also a function and value that a product can have.'

Special thanks to those two seniors; Sangjin and Seunghoon

I thought that the product that loses its value when not in use can attract people if it can be redesigned as a visual pleasure.

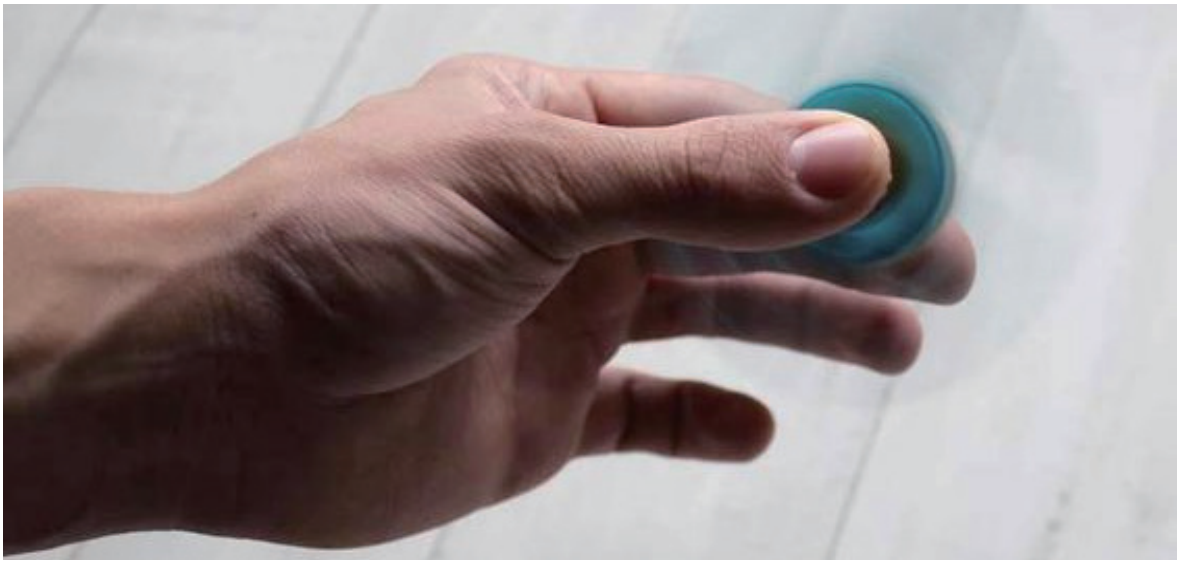
With those two comments, I started to make an interesting question, and it was 'How can we add new value to the product that loses its value when not in use.' The conclusion I made was to redesign the product into an interior object that has the function of visual pleasure only with its existence. Then I seek the products and decide to redesign the fidget-toy into an interior object since fidget-toy is a typical example that easily loses its value because of the practice-oriented functions.

Background

Fidget is the act of moving about restlessly in a way that is not socially recognized as essential to ongoing tasks or events. Fidgeting is on only an indicator of diminishing attention but also a subconscious attempt to increase arousal in order to improve the attention. To transform fidgeting as a physical product, fidget toy has come out, such as fidget cube, fidget spinner, and fidget pad.

People may frequently use the fidget toy, but in terms of real-using time, the degree decreases. This means fidget toys lose their value in the long-run. Value of fidget toy only comes when it is being used in people's hand. In other words, the value of today's fidget toy is only limited in its fidgeting functions.

Refer to the interior object, its uniquity comes from its value of existence. Not only from real-time use, but the interior object also possesses a function of visually pleasured. Then the following idea comes: Redesigning the fidget toy into the interior object.



Fidget toy

The figures above show several fidget toys; spiner, cube, pad, and squeeze

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Concept

Design direction

What form does fidget toy be?

Fidget is a simple and repetitive act. The term simple implies ‘people can get used to it easily’ when repetitive means ‘people can use it continuously.’ Regarding both features, a fidget toy with a singular and simple shape is considered.

Where everday object be placed?

People usually fidget when they can’t concentrate on something or taking a rest for a refresh. Considering both contexts, to induce interactions between the user and the fidget toy the product is required to be noticed by the user and the user can access it easily. Thus, the product needs to be placed where users faced in daily life, and it designated as the wall.

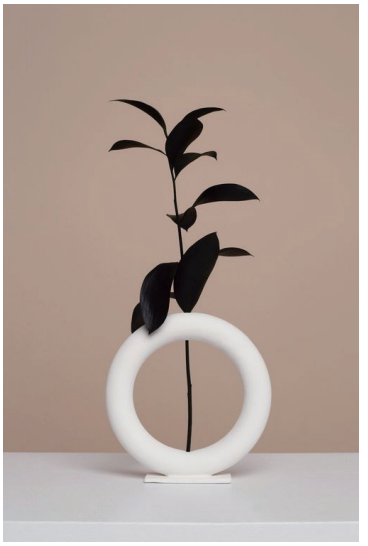
What form does wall mounted product be?

Wall is a space where user interactions do not frequently arise. When products are placed in such space (1) it needs to be able to make users aware of itself (2) it should not interrupt surroundings. To be recognized from such space, the product needs dynamic elements on their form while not breaking the surroundings. Thus, it is decided to use a linear form.

Design keyword

Restrained simplicity

Referring to the researches and design direction, the design keywords seamless, hidden, unity, graceful, etc. stand out under restrained simplicity. Based on the keywords total four types of mood-boards; inspiration, form&line, product, and target are made.





Mood-board Form & line

Mood-board to get insights in terms of form and line

Mood-board Product

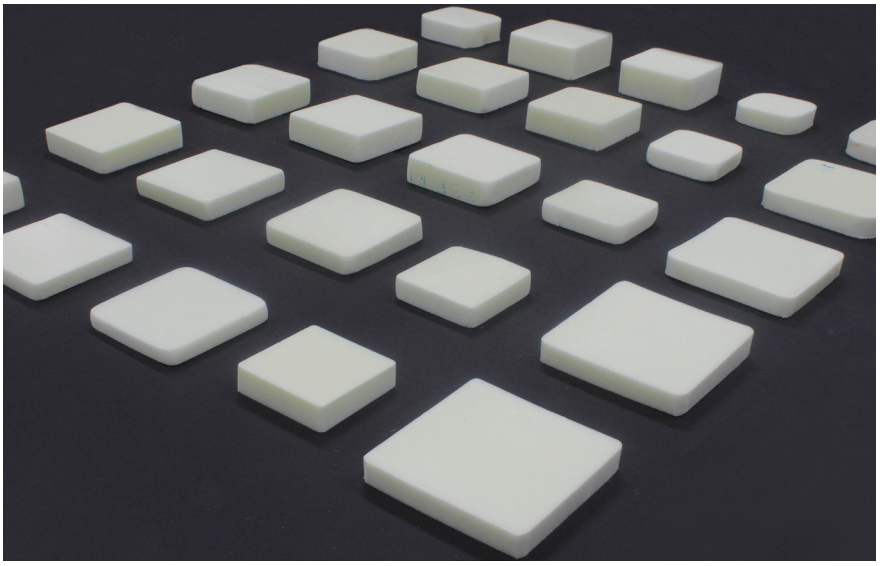
Mood-board to get insights from pre-existing products under simplicity.

Design Development

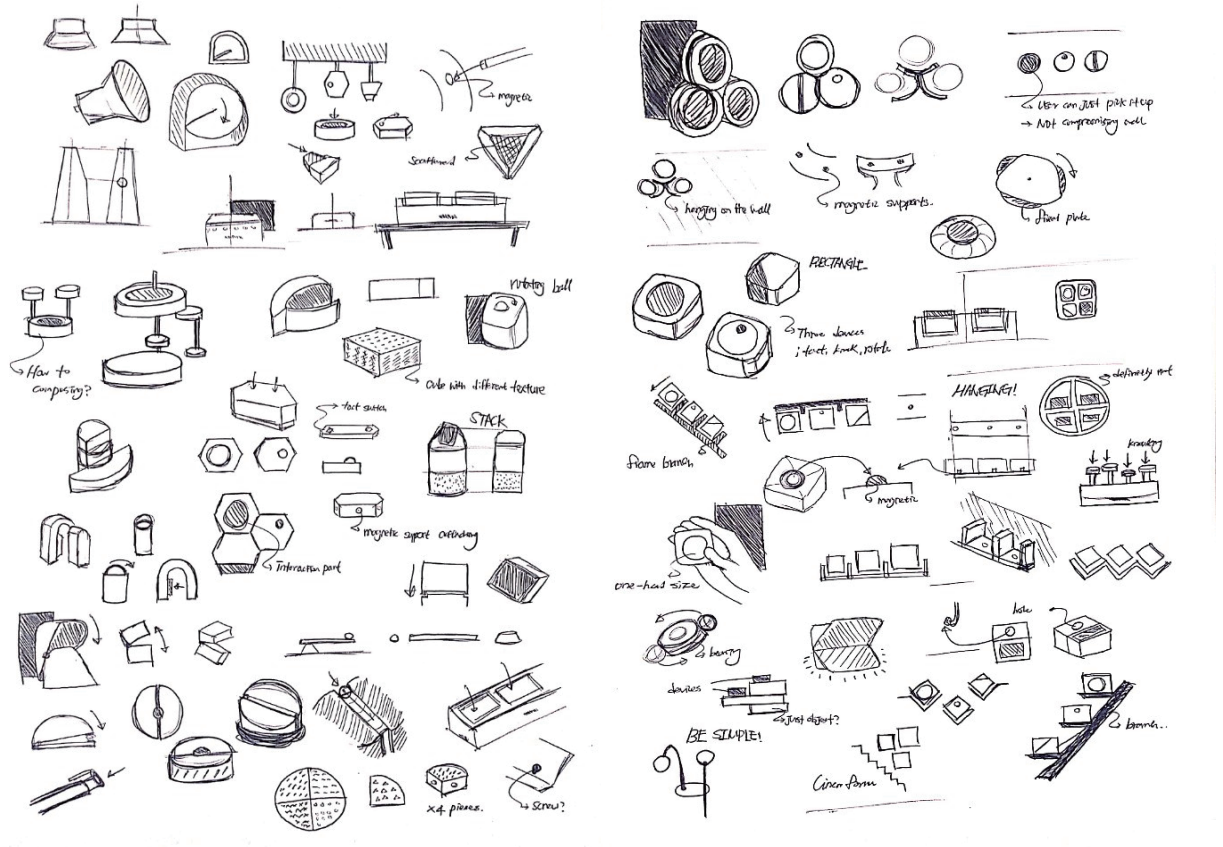
Style

Following the design concept, a form study regarding size, length, height, depth has been done with iso-mockup. The size is considered as which people can hold with their one hand. Refer the insight from the mockup process, different forms with fixed dimensions were reviewed by modeling and thumbnail sketches keeping the theme; simple. Considering the structure, use scenario, and user interaction, the form is finalized with a rectangular shape with different interaction parts.

Regarding the use case scenario that the user picks up the fidget toy, the wall frame must hold a docking system. Eventually, a form that could implement a docking system while maintaining a dynamic line-like shape was considered.



Iso-mockup



Thumbnail sketches

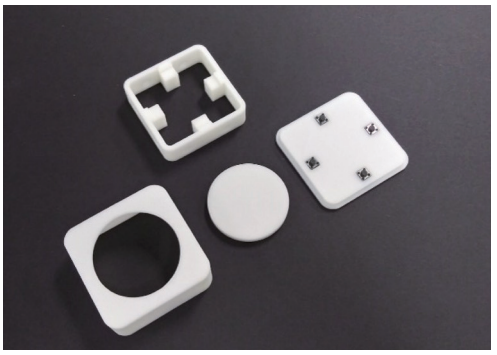
Function

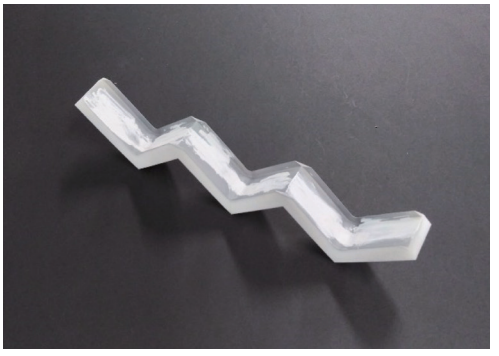
By using the pre-existing fidget toy; the fidget cube which supports various fidgeting, a brief user study has been done to find a satisfying fidget system for implementation. As a result, three systems which are clicking, rotating, and knocking are selected.

There have been several structural trials using a 3D printer to materialize three systems. Four tact switches were used for the clicking system; gear and bump were used for the rotating system which supports small vibrations; a sawtooth structure was used for the knocking system which is similar with a knocking pen.

Interaction

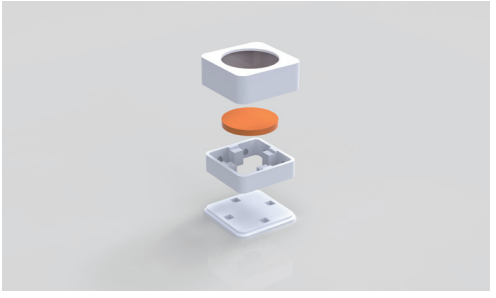
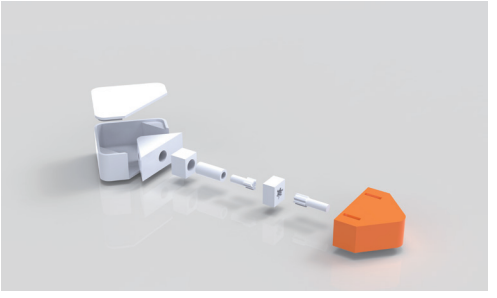
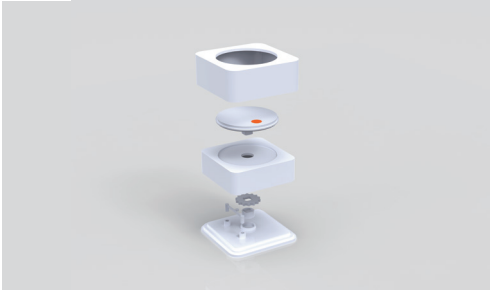
Since each toy has different interactions, unique interaction parts regarding form, dimension, and function are designed for each fidget system. Every interaction part is indicated with a reddish-orange color which has a satisfying composition with white toys and a black wall frame.



Prototyping

Using the 3D printer, prototyping process has been proceeded regarding the structure, assemble, and function.

Structure

Basic structure of fidget toys with orange-colored interaction parts.

Outcome

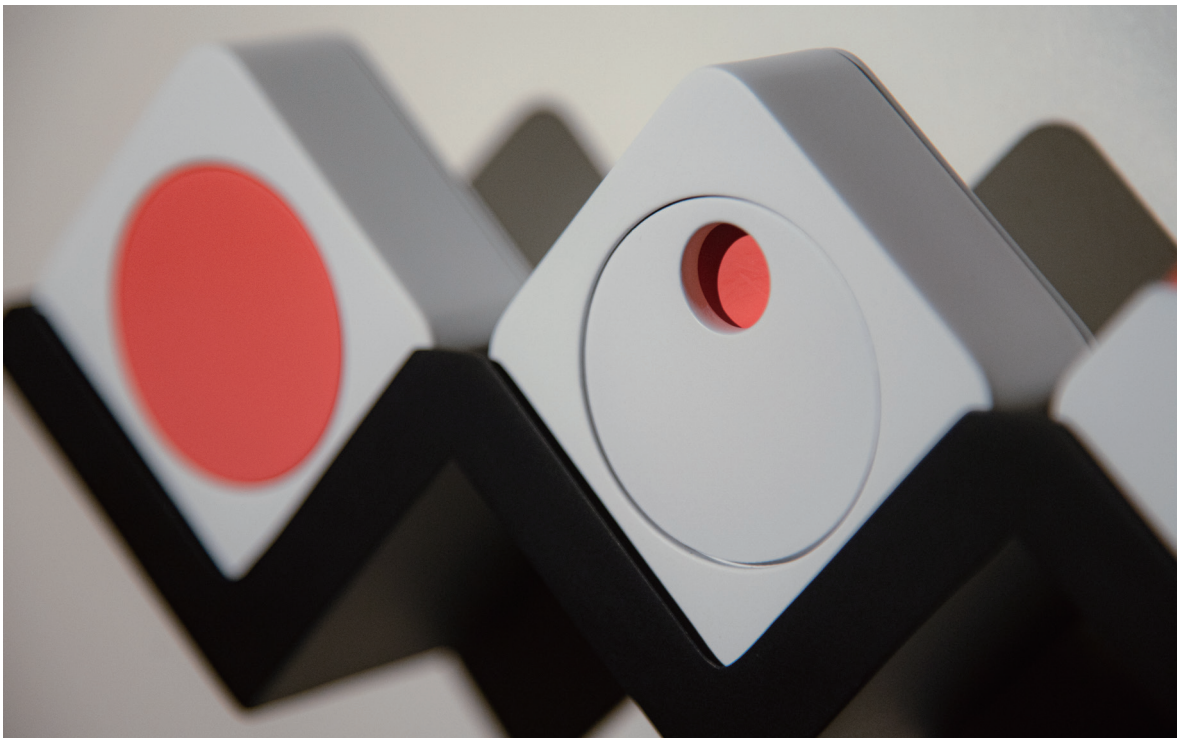
Fidject is a compound word of fidget and object, a product redesigned from an ordinary fidget toy into an interior object. It is consists of three fidget toys and wall architecture that supports toys mounted on the wall. The toys are docked into the frame with the magnet that is involved in both the fidget toy and frame. Interaction parts of each toy are marked reddish-orange which gives affordance and harmony with the white body and black frame. Each fidget toy enables clicking, rotating, and knocking fidget systems.

User scenario

In addition to its simple form, fidject holds simplicity and affordance on its use case scenario ; (1) Users can choose the fidget toy they want to play with from the wall-mounted frame (2) Users can use it wherever they want (3) After playing, users can directly put the toy back to the frame and implanted magnets enables toys fixed stably.

Affordance of Fidject

Existing fidget toys have the advantage of being free to move in a singular form, however, at the same time, they have the disadvantage of being easily lost. By its frame, fidject enables people to put the fidget toy back which avoids the losses.



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Type 1

Fidget toy that supports clicking-type of fidgeting

Type 2

Fidget toy that supports rotating-type of fidgeting with small vibrations.

Type 3

Fidget toy that supports knocking-type of fidgeting.

Fidject is significant in that it adds visual value to the use-oriented fidget toy, but it has limitations in terms of accessibility and materials. Since fidget is an act that occurs unconsciously in everyday life, there is a critical logic that the fidget toy should be easy to access by users. Deploy fidject on the wall in order to make it as an interior object is satisfying, but further research for a new space is expected. Also, the prior fidject is made of plastic only. Using various materials could be another opportunity that encourages a new type of fidget experience in terms of touching and interactions between fidject and users.

Epilogue

“It is importatnt to start designing with an amusing topic”

How do you feel about finishing your graduation exhibition?
As my graduation exhibition title TRANSITION means, I feel like I'm preparing for a new journey of my life. Now I've got rid of a big duty, but at the same time, I'm carrying a new burden of my future career.

How could you work on your graduation exhibition for a long time?
Do something that you really want is the most important thing. During my time in bachelor courses, it was easy to get depressed when the project theme is not fit with my interests. As you know, graduation exhibition comes only once in your life, and you can do anything you want to. You must find what you want. That is one and only one way you can hold your passion for the project.

Do you have any know-how to deal with feedbacks from professors?
Design is always objective. In 2018 and 2019, three professors were charged in creative design courses and I heard some of the seniors had a hard time since the feedbacks from each professor was different. One of them once said 'Even professors are not professional in every field.' Just take it for reference only. The best way is to maintain your preference, your idea, and your design.

What is the design that you think of?
Obviously say, design is a problem-solving process. But the important thing is how you define the 'problem.' When I ask about a problem with peers, they usually take it too seriously; for example, 'Lack of music-related opportunities for hearing-impaired people' or 'High rate of industrial disaster in construction worksite.' These sentences feel so humdrum. Defining the problem determines the feature and direction of the design, and I hardly believe that it should be interesting which attracts others. The problem that I suggested in the graduation exhibition was 'Product losses their value when not in use', and I've heard many comments that the approach was striking. Again, design is a problem-solving process, but it's important to start designing with an amusing topic.

“Fun and attractive design starts from a creative question”

What kind of design do you want to do?
My basic design idea is 'creating fun.' Not only the result, but I also hope to hold fun in every design process. We say design starts from the problem but I believe fun and attractive design starts from a creative question; for example, the design background of a vertical mouse could be very different from the problematic approach that 'Conventional computer mouse causes wrist pain' or from the curiosity that 'Why is the computer mouse always horizontal?' I think such informal questions begin a new and fun design. Like above, recently I'm interested in how to apply a new type of interactions to ordinary products which gives pleasant experience to users, breaking the formal way.

What is your future plan?
Although the demand for UX/UI has increased recently, I still like to design physical products based on data from user research. Hope to be work in design studios such as Cloudandco, BKID and SWNA or major company LG.

Last words?
Many feel pressure about graduation exhibition. Indeed, it's a big and important event, but I think the essence of the exhibition is to enjoy together. Take it easy and try to enjoy every process. To do that, it is essential to put effort and affection into the work. I hope you do what you like and can have fun with.

Gratitude to professor Seungho Park-Lee for leading the creative design course and preparing the exhibition, professor Youngwoo-Park for guiding the work, Gicheol Yuk for providing technical and prototyping advice, and the members of SSID/IIDL/DECS labs for heated supporting.

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* All other visual contents were created by Dabin Lee, the author of this issue.