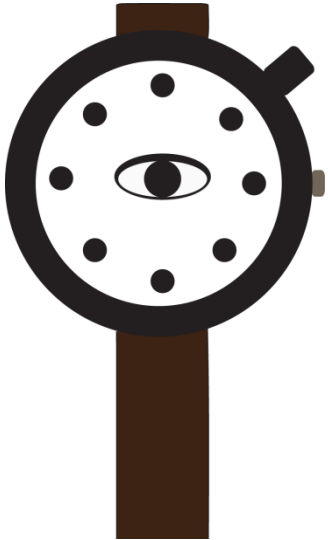




# Watch the Table

Gerry Alvarez  
Meisi Huang  
Mengyao Zhao  
Sangwoo In

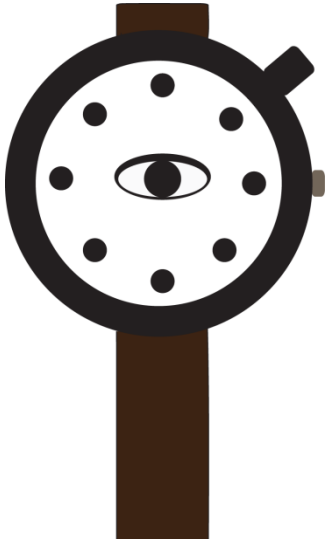
*HCI/d, Indiana University Bloomington*



## The Design Concept

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A portable place mat and a “watch” that can help blind people to more easily locate items on a table while eating outside of the home.

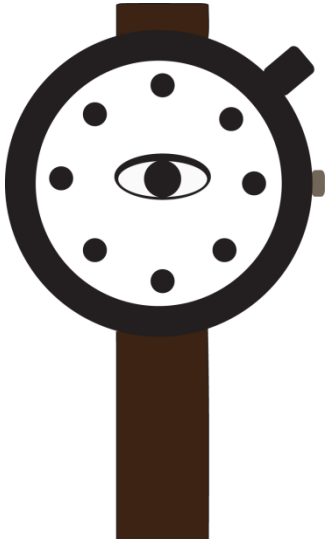


## The Design Concept

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A portable place mat and “watch” that can help blind people to more easily locate items on a table while eating outside of the home.

### Why this design?



## Research Findings

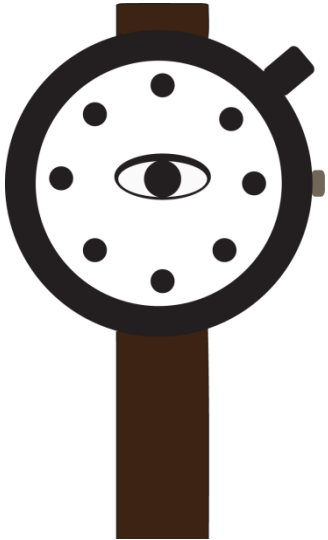
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*Location, Location, Location*

**“Location is often a problem when dining out.**

At home, eating is much easier so long as items are left in the **same place.**”

- Blind interviewee



## Research Findings

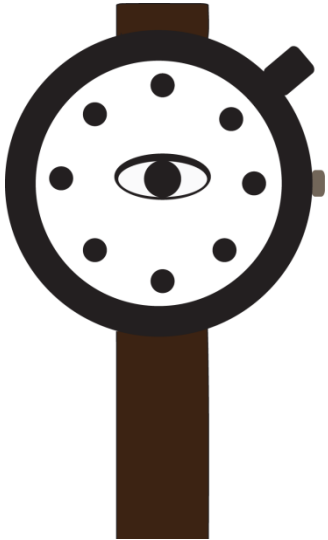
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*Location, Location, Location*

“The saying ‘a place for everything and everything in its place’ applies when it comes to organizing a dining table.

**Set your table the same way each time and encourage others to do the same.”**

- VisionAustralia.org



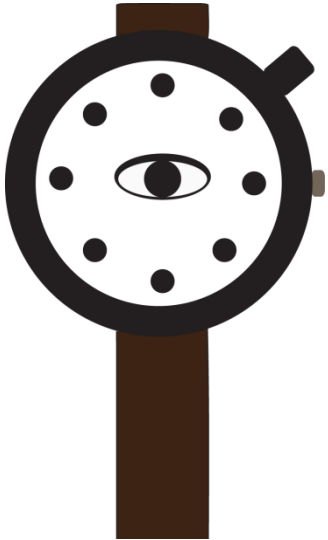
## Research Findings

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### *Help Me Help You*

“Sometimes **wait staff** will not announce when they set stuff like water in front of me. Sometimes it takes some searching or **a friend** saying, "BTW, did you know they brought that?" in order for me to figure it out.

- Blind Interviewee



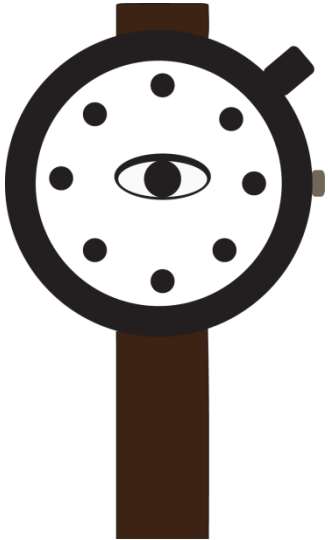
## Research Findings

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### *Help Me Help You*

“Sometimes **condiment containers feel similar**, so it is up to me to ask a sighted person if I am with them or test it by dabbing a bit on the plate in order to determine what it is.”

- Blind Interviewee



## Research Findings

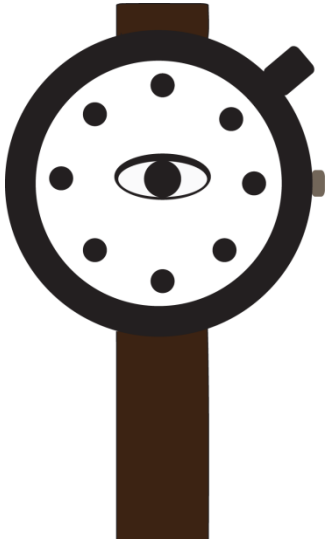
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### *Time is of the Essence*

“One way to tell what food is on your plate is to use the **clock reference system**. Think of your plate as a clock face with 12:00 at the top... and 6:00 at the bottom... This reference system can help you form a mental picture of where each food item is located on your plate.”

- VisionAware.com





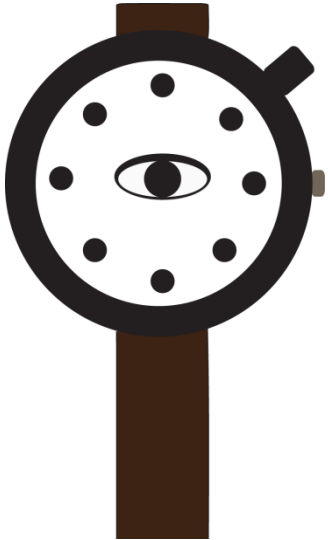
## Research Findings

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### *Time is of the Essence*

“Having someone tell me my meat is at 6:00, potatoes at 11:00, and carrots at 3:00 on my plate is very helpful.”

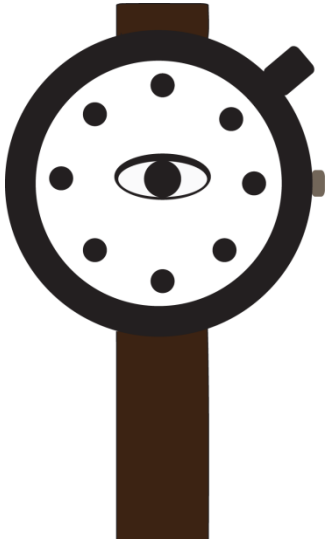
- Blind Interviewee



## Insights

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Better organization of table items could enhance the eating experiences of the blind.



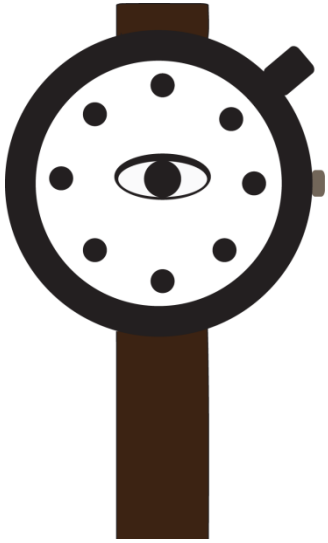
## Insights

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Better organization of table items could enhance the eating experiences of the blind.

Organization of table items often involves multiple people:

- Blind person
- Waiters
- Co-diners



## Insights

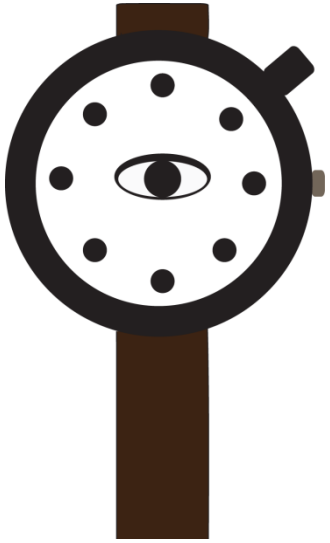
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Better organization of table items could enhance the eating experiences of the blind.

Organization of table items often involves multiple people:

- Blind person
- Waiters
- Co-diners

An elaboration of the clock reference system can be used to help blind people locate table items



## CORE

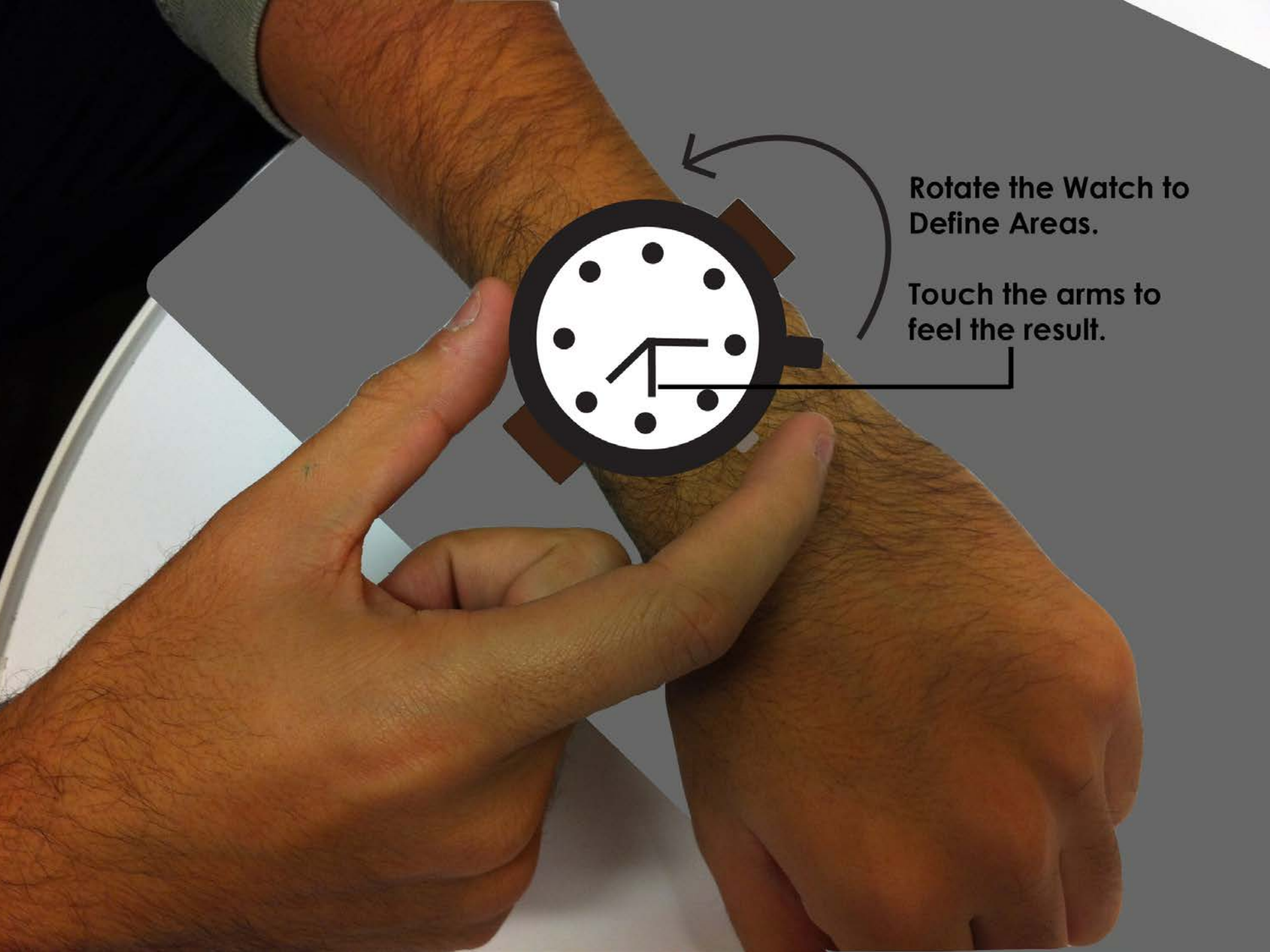
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**Bring domestic eating experience out side of home**



Voice User Guide

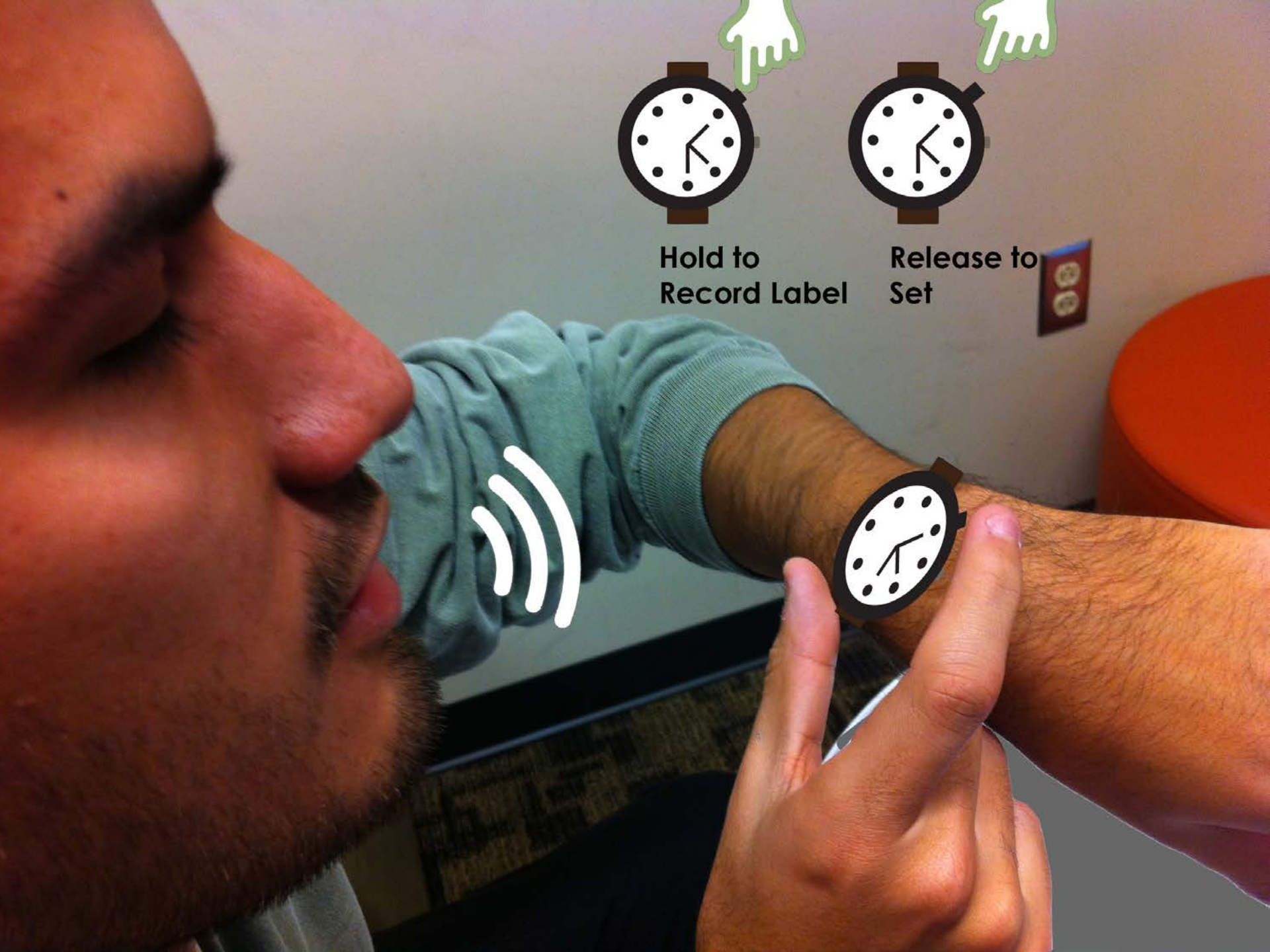




Rotate the Watch to Define Areas.

Touch the arms to feel the result.





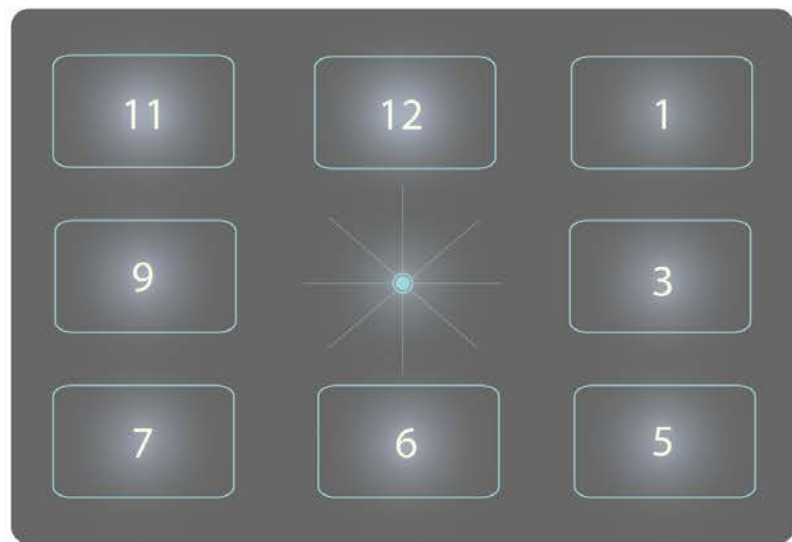
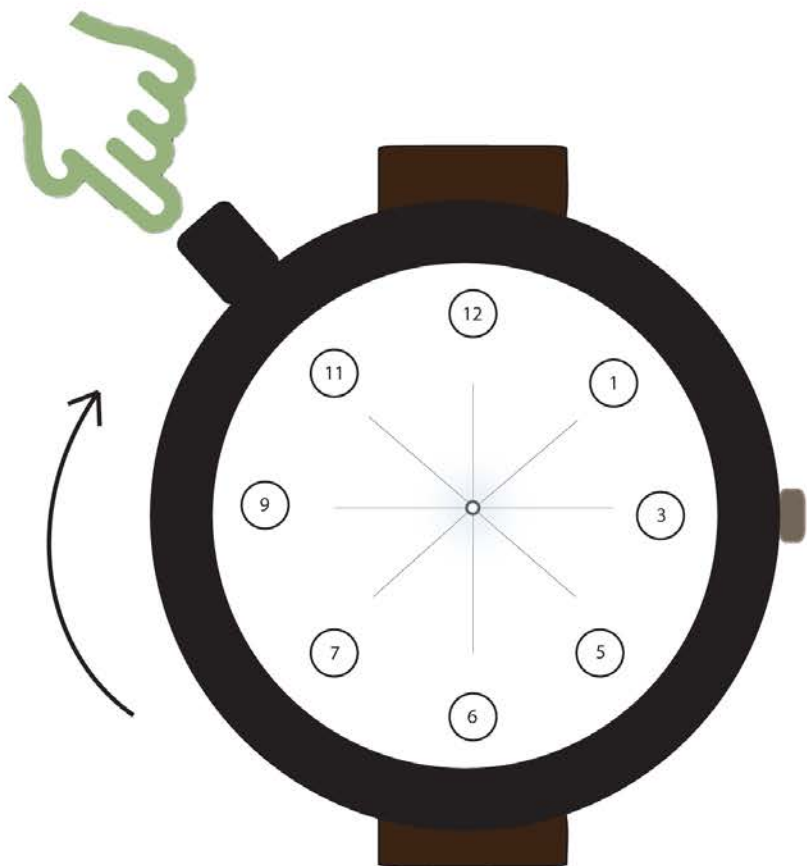
Hold to  
Record Label



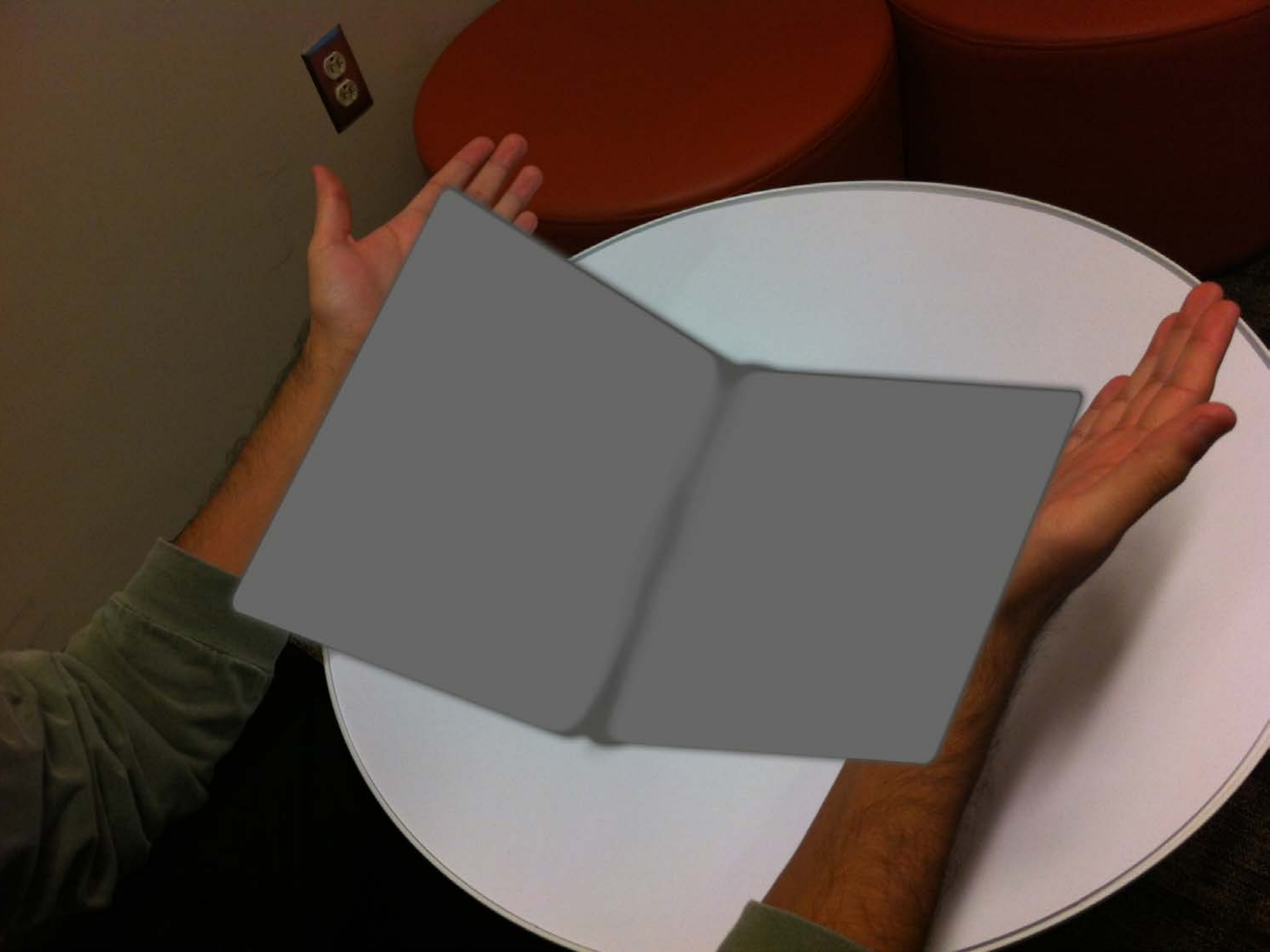
Release to  
Set

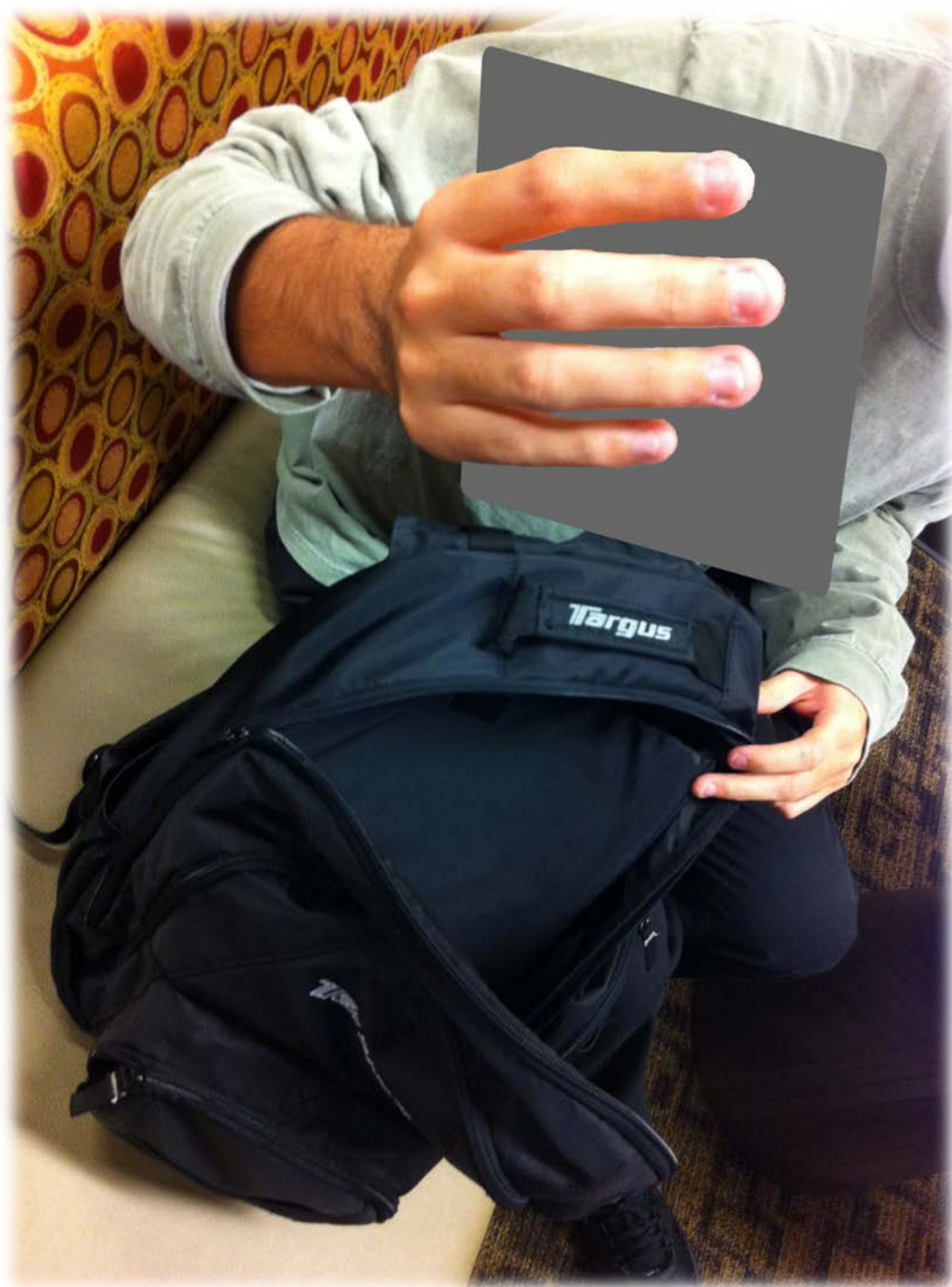




















**Hold the Button  
to Speak and  
Overwrite**

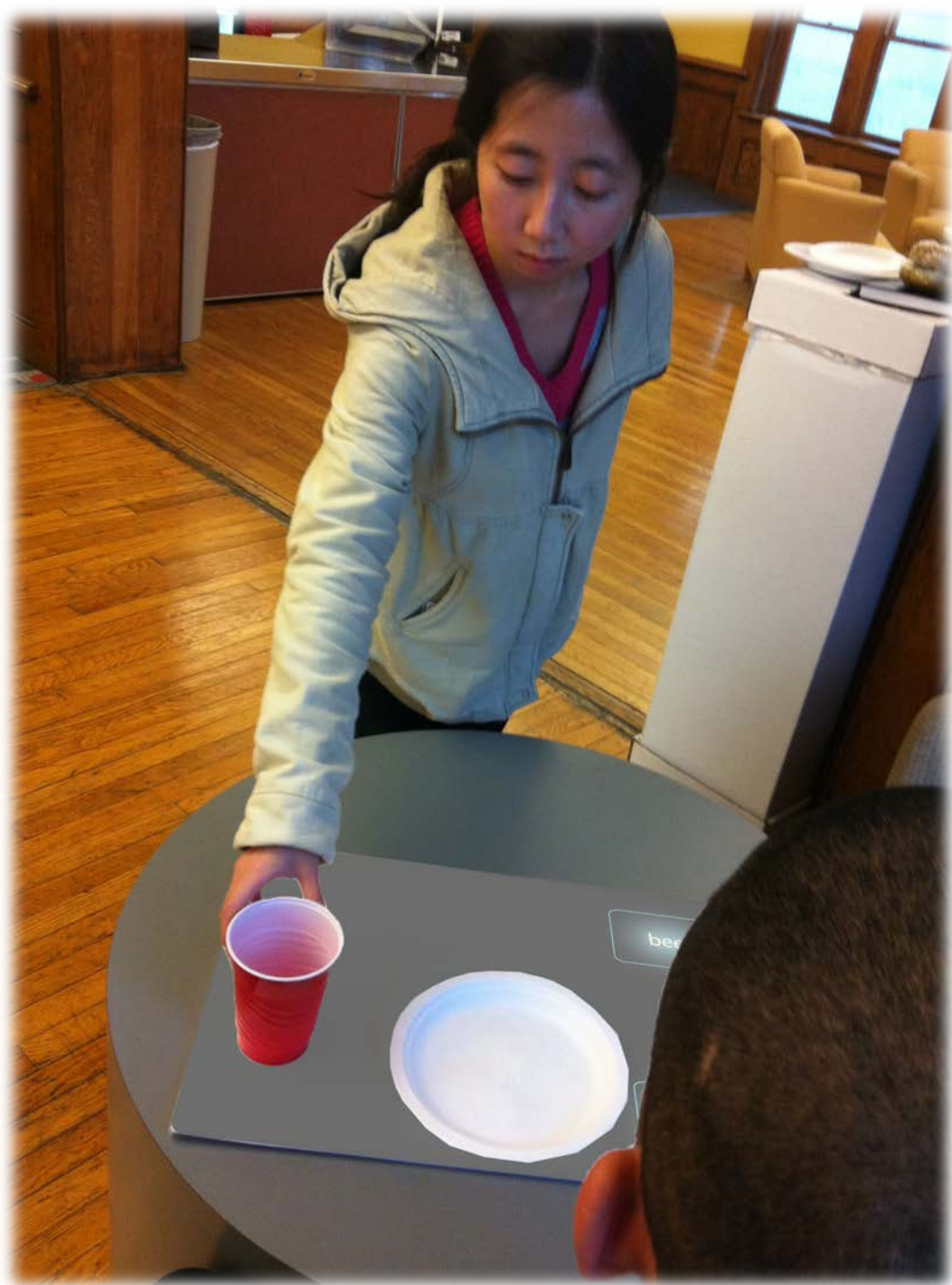
beer

maindish

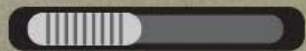
utensils







utensils



Sound/Vibration Switch





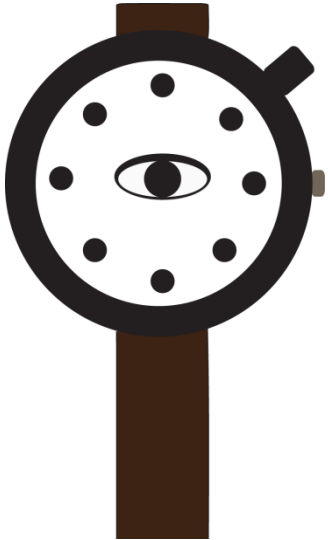












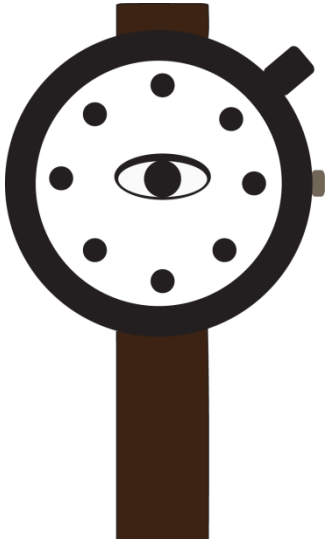
## Implications

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### *Place, Space, and Threshold*

For the blind, home is typically a **place** of comfort and control – including eating at home. This is because the physical **space** in the home is typically easier to control. Our mat is intended to reduce the **threshold** between home and outside the home so that outside the home is more comfortable and controllable.

- Expand home experience
- Organize the table
- Decrease threshold



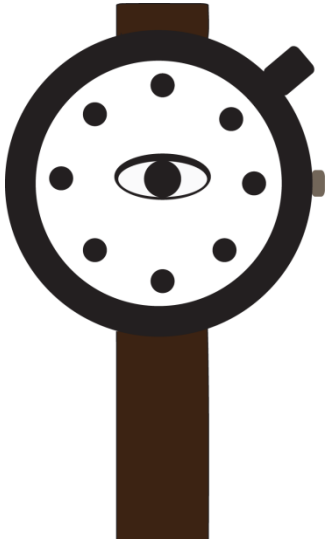
## Strategies

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### *Expand Target Group and Versioning*

Research and develop various functionalities for the visually impaired level





## Strategies

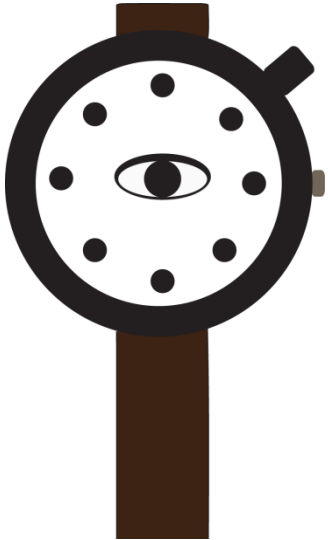
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### *Expand Target Group and Versioning*

Research and develop various functionalities for the visually impaired level

### *Complementary Designs*

Develop additional designs to address other eating needs of the blind



## Strategies

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### *Expand Target Group and Versioning*

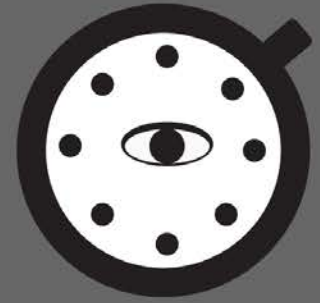
Research and develop various functionalities for the visually impaired level

### *Complementary Designs*

Develop additional designs to address other eating needs of the blind

### *Expand experience to other domain*

Expand organizational functionality to other home experiences



Thanks

Questions Welcome