



KEJIAN VR

Interactive Virtual Reality
Game/Video Interface
Design

Team Member
Qi Sun | Luo li
Xu Gong

Duration
2016.10~2016.11

My Role
UI Designer

Project Background

Kejian VR is an iOS App which provides tons of 3D/VR videos. In 2016, EICO Inc. helped Kejian with its UX/UI design. Being a crucial part of its experience, the design for VR player and video/game components required extra attention. Different from the 2D video player, the input and output in the 3D world rely more on eye and body movement. We finally created an interactive user interface and a set of control components for Kejian VR's original interactive VR video game.

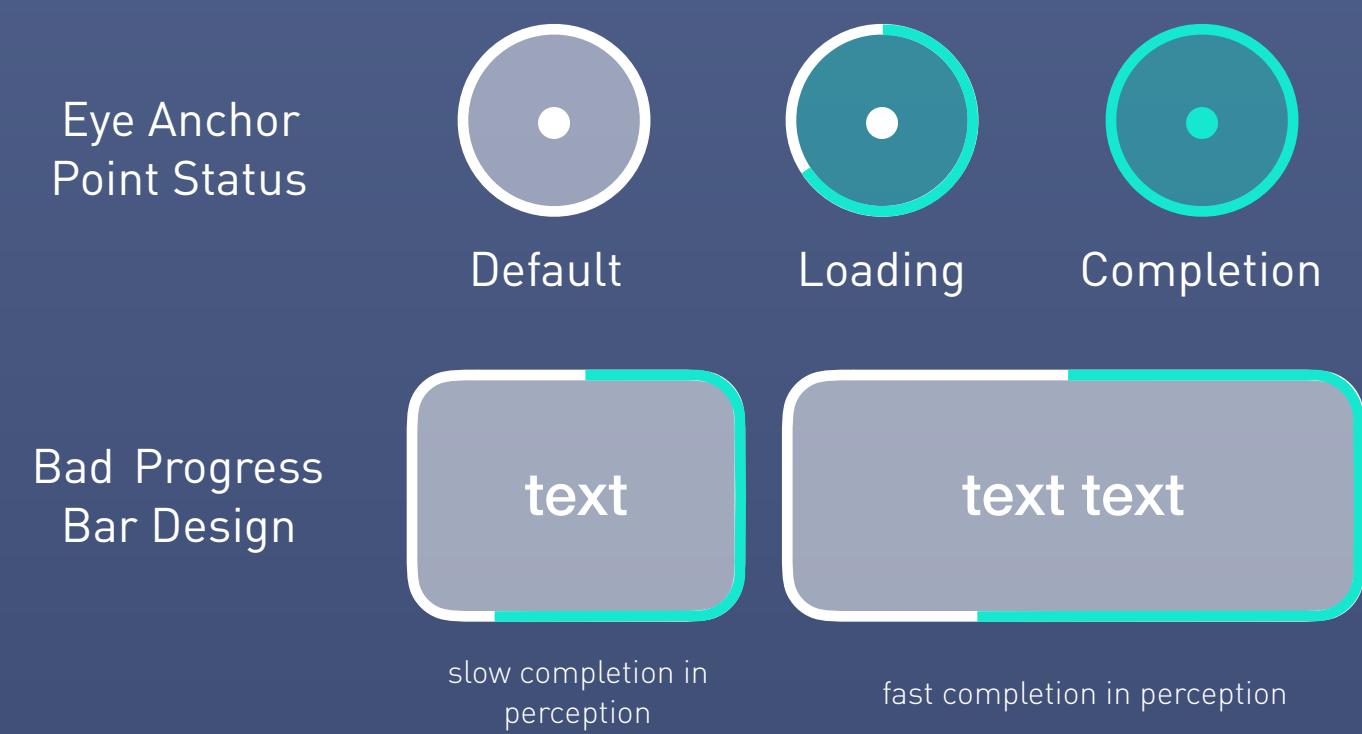
My Contribution

I collaborated in the exploration of user task flow with Qi Sun and the motion design of the VR interactive control components with Luo Li. I presented the sketches and Hi-Fi UI design independently.

Design Challenge

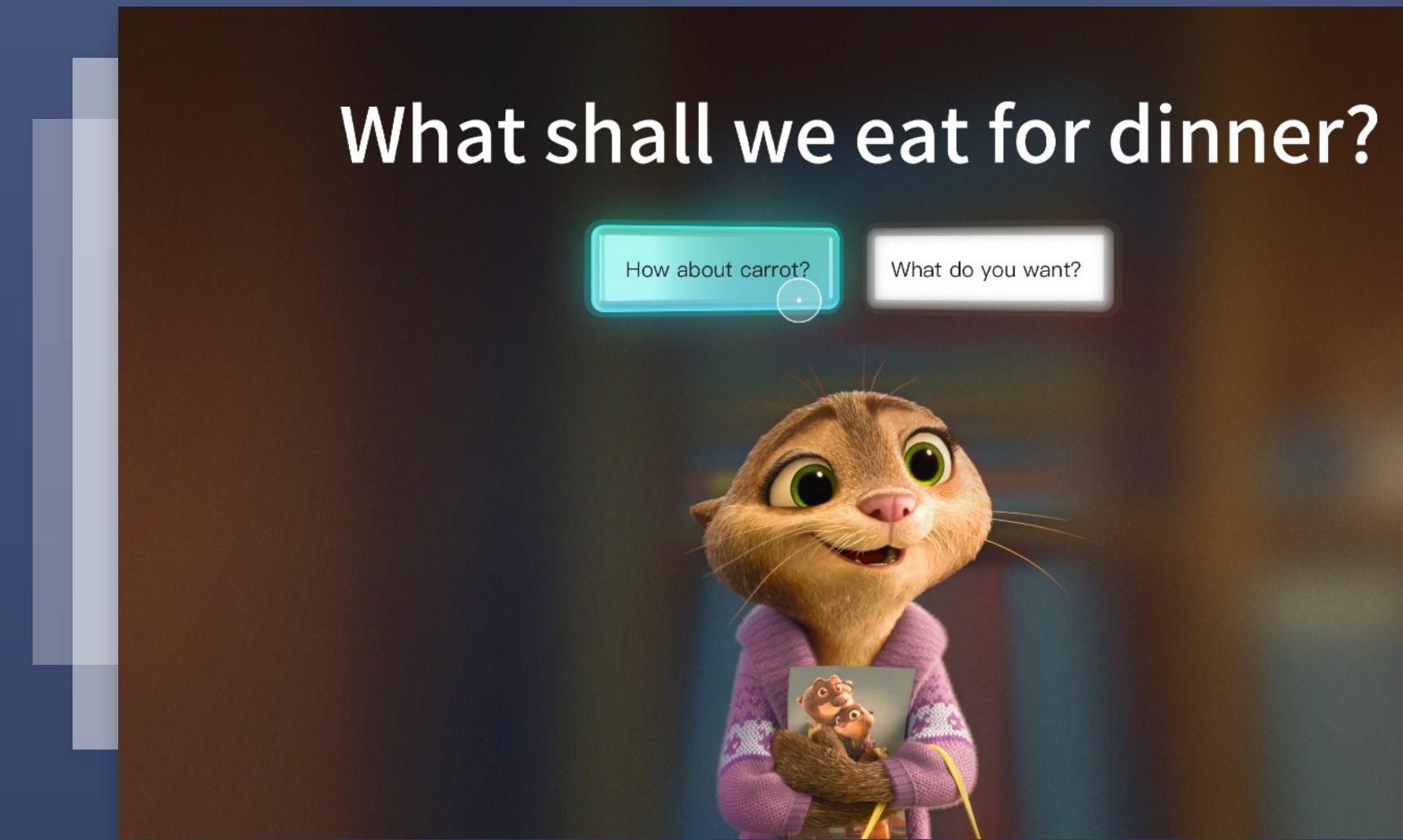
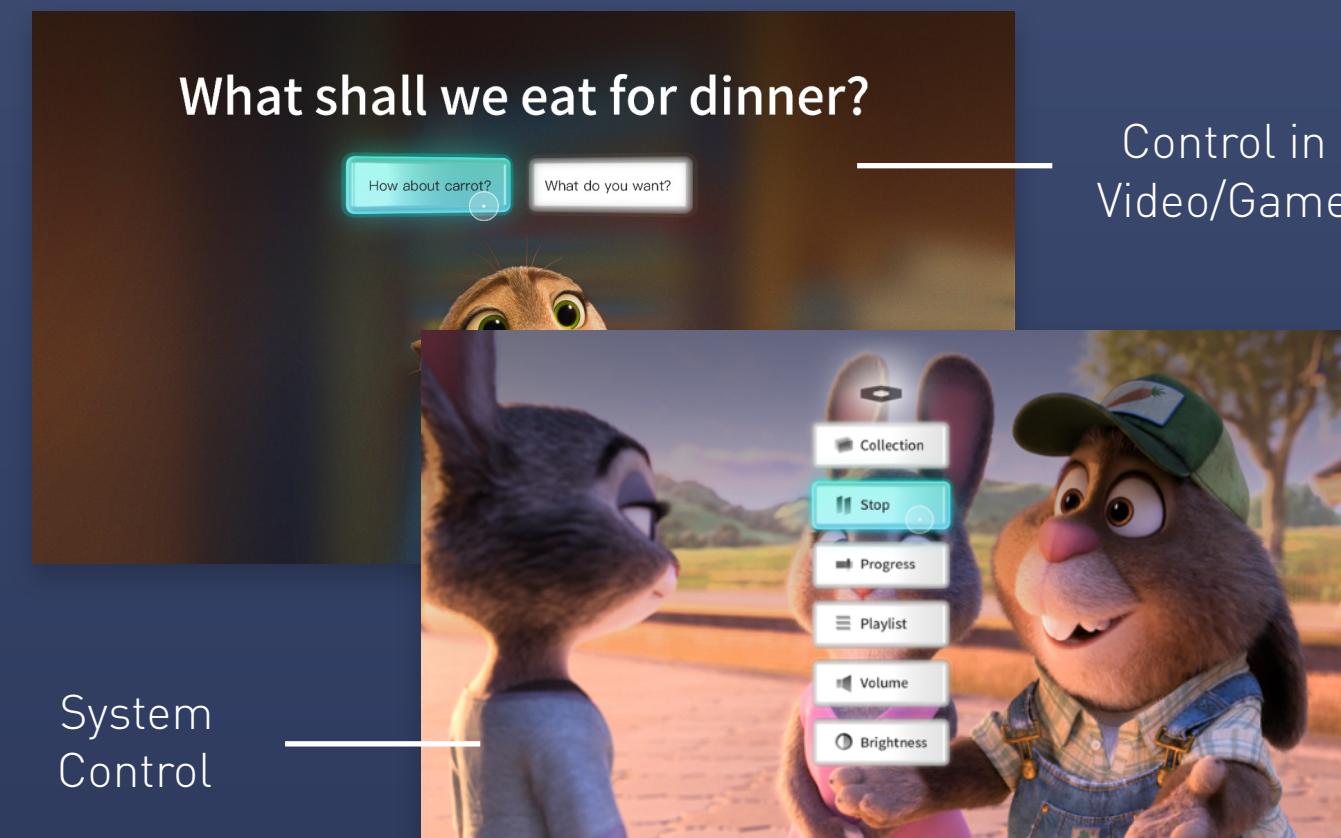
Eye anchor should not be the interaction state signifier

Most VR interactive videos/games signify the interaction progress by the eye anchor point. While considering the interaction happens between the video components and the users, that signifying process is not intuitive. While if we simply apply the same design as the eye anchor point progress bar to the video/game components, the changing size of the components may cause the varied speed of task completion in perception. Thus, the new design should be able to fit all sizes of components to provide uniform perception in interaction progress.



Distinguishable from system control component

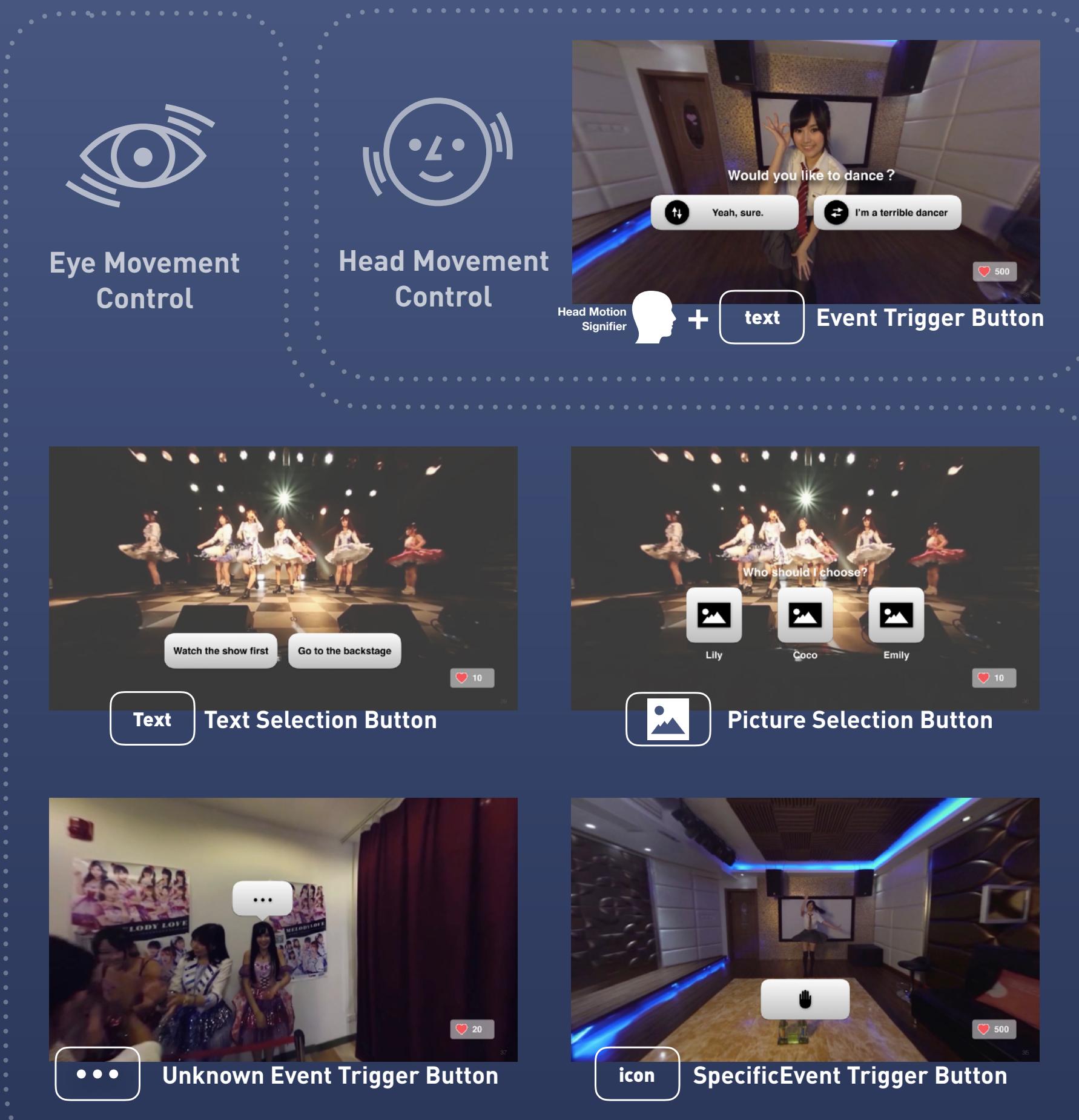
In our concept design, the level of control components is unclear. The system control could be called up to stop/continue the video, adjust the volume etc. without affecting the video/game content. While the VR interactive control is related to how the story in the VR video/game goes. Thus, the design for the VR control components should be distinguishable from the system control to let users know the information level.



Picture: Our Concept Design for Kejian interactive VR video/game

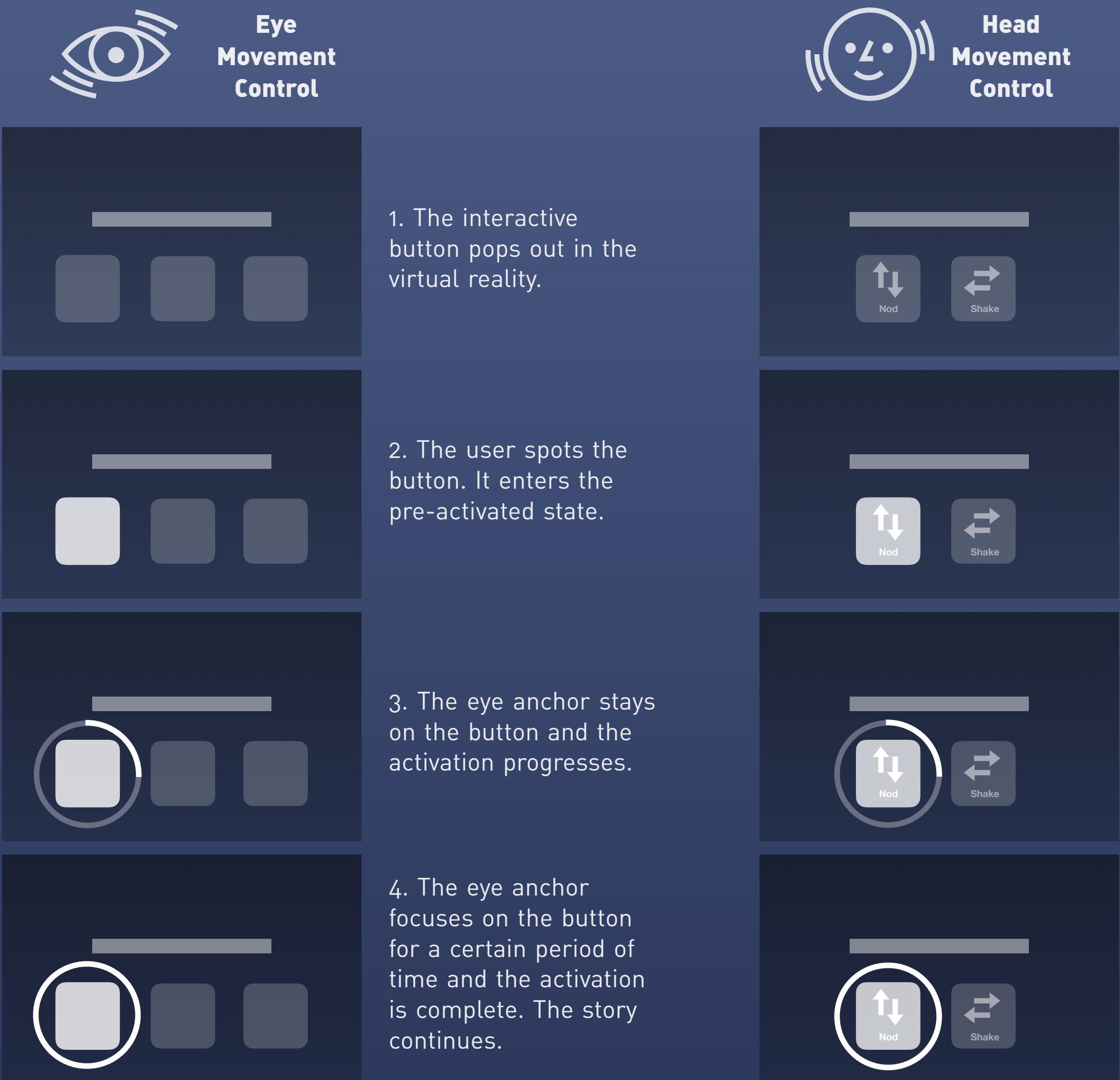
Interaction Pattern Storyboard

According to the VR video sample provided by our client, we explore all the possible interactive opportunities by creating our storyboard (some of them are shown on the right). By doing this, we apply the most natural control mode to each interaction. Most interactions are controlled by eye movement. The rest of them are controlled by the head movement. All of them are classified into 5 main categories shown on the right side.



User Task Flow

We identified the task flow for each interaction by which we figured out each status in the interaction. The task flows for eye movement control interaction and head movement control interaction are shown below.



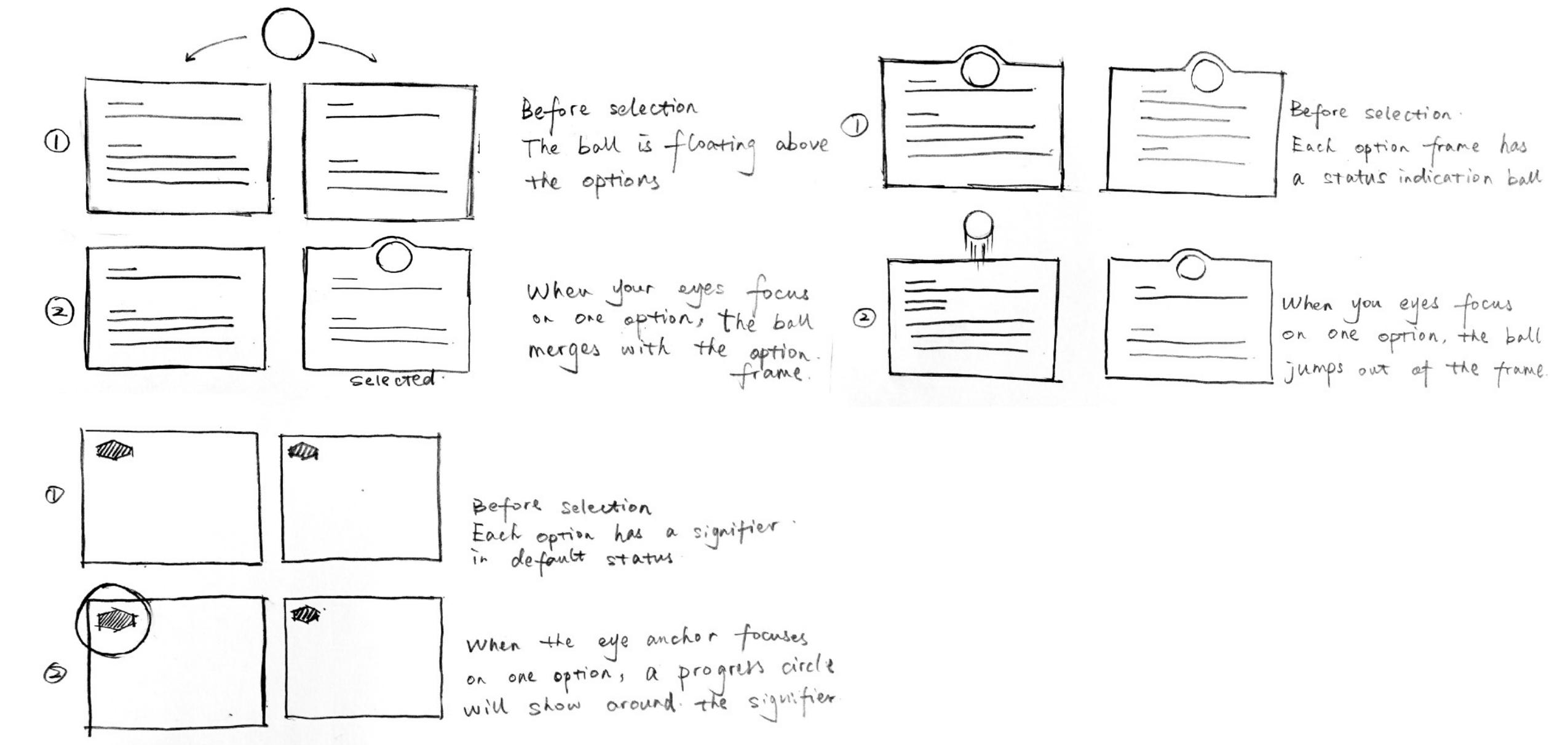
Sketching Exploration

We sketched out the concepts to explore the best plan for the interaction pattern. Sketches also helped us further determine the detailed criteria for designing button patterns, state signifying process and head movement indicator.

Button Pattern

Compatibility & Scalability:

The design of the button should be applied to all five categories of buttons. It should also be scalable to fit in different scenarios.



State Signifying

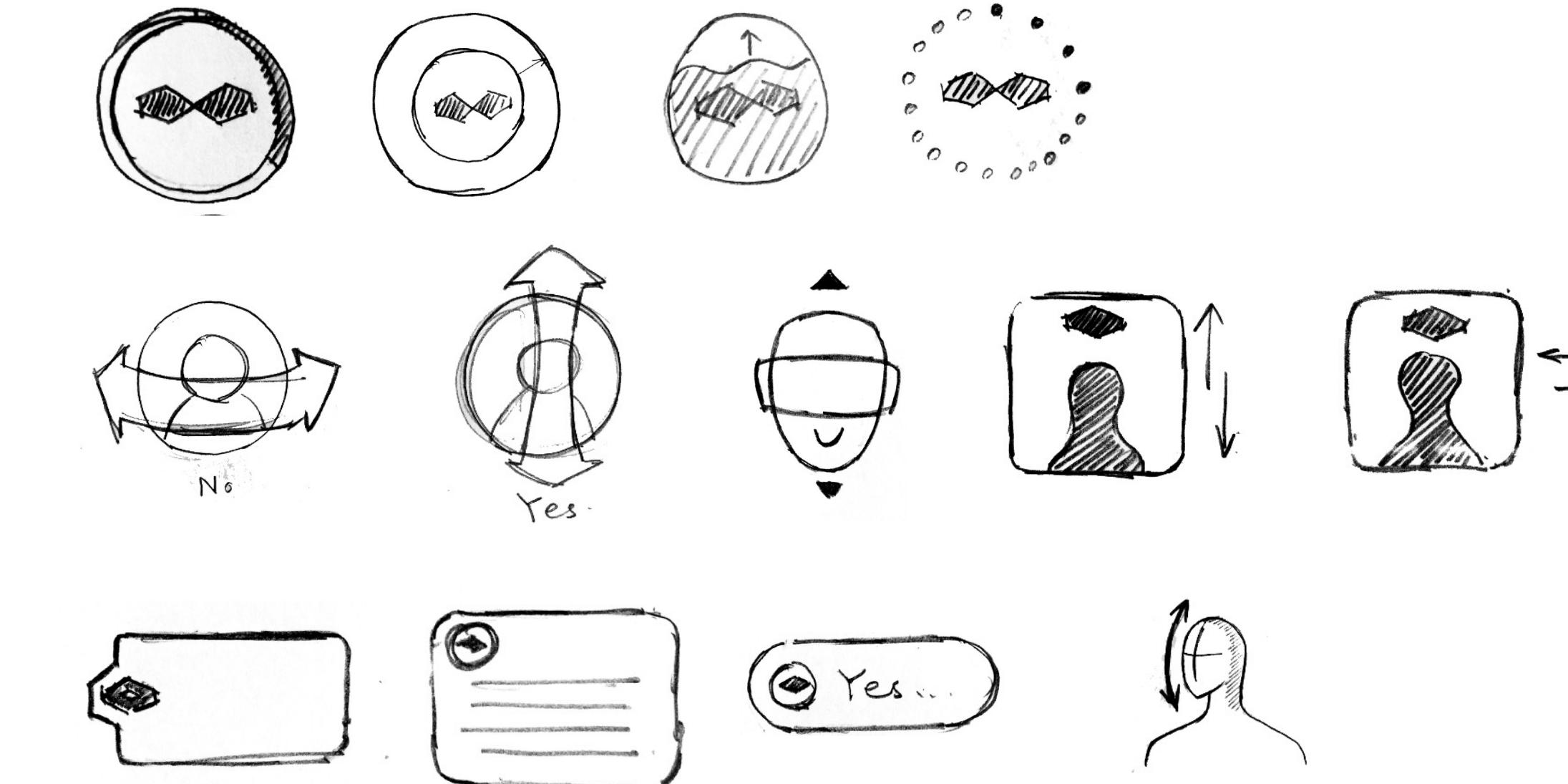
Accurate Signalling:

There are 4 button states: Default/Selected/Loading/Activated. The signaling of each state should be clear. Remember dramatic animation might lead to irritation.

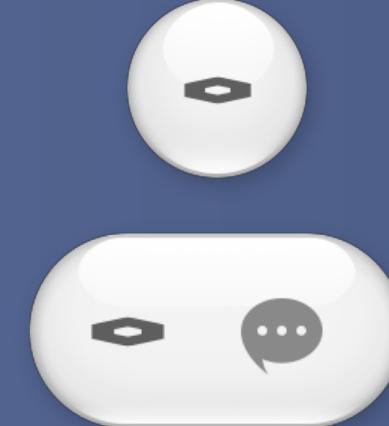
Head Movement Indicator

Accurate & emotional instruction

The instruction for head movement should be easy to perceive. To create an immersive experience, emotional design is preferred.



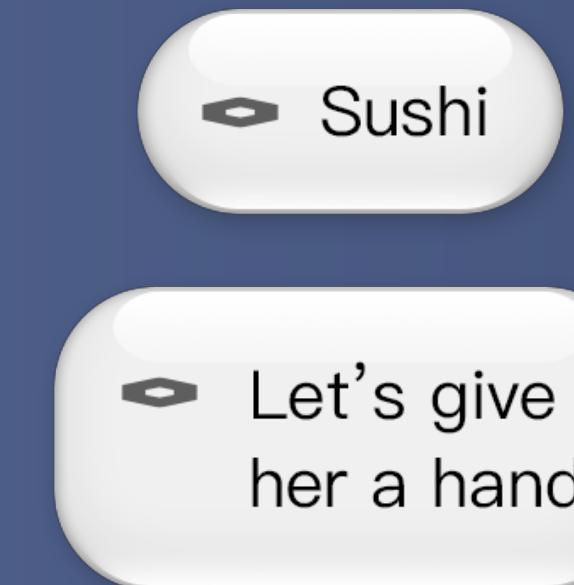
Final Design



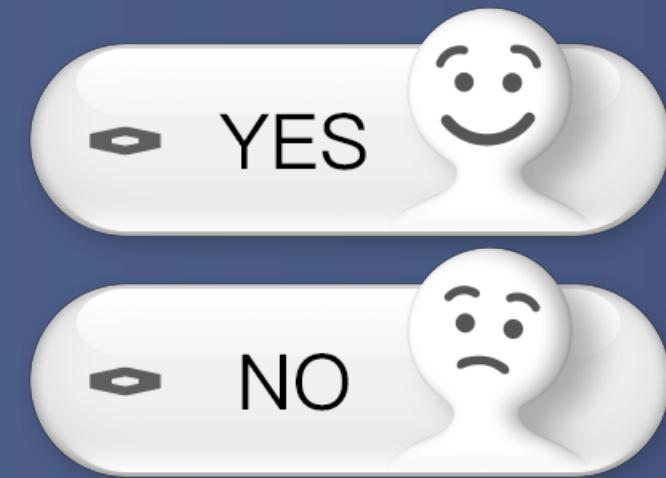
Event Trigger Button



Picture Option Button



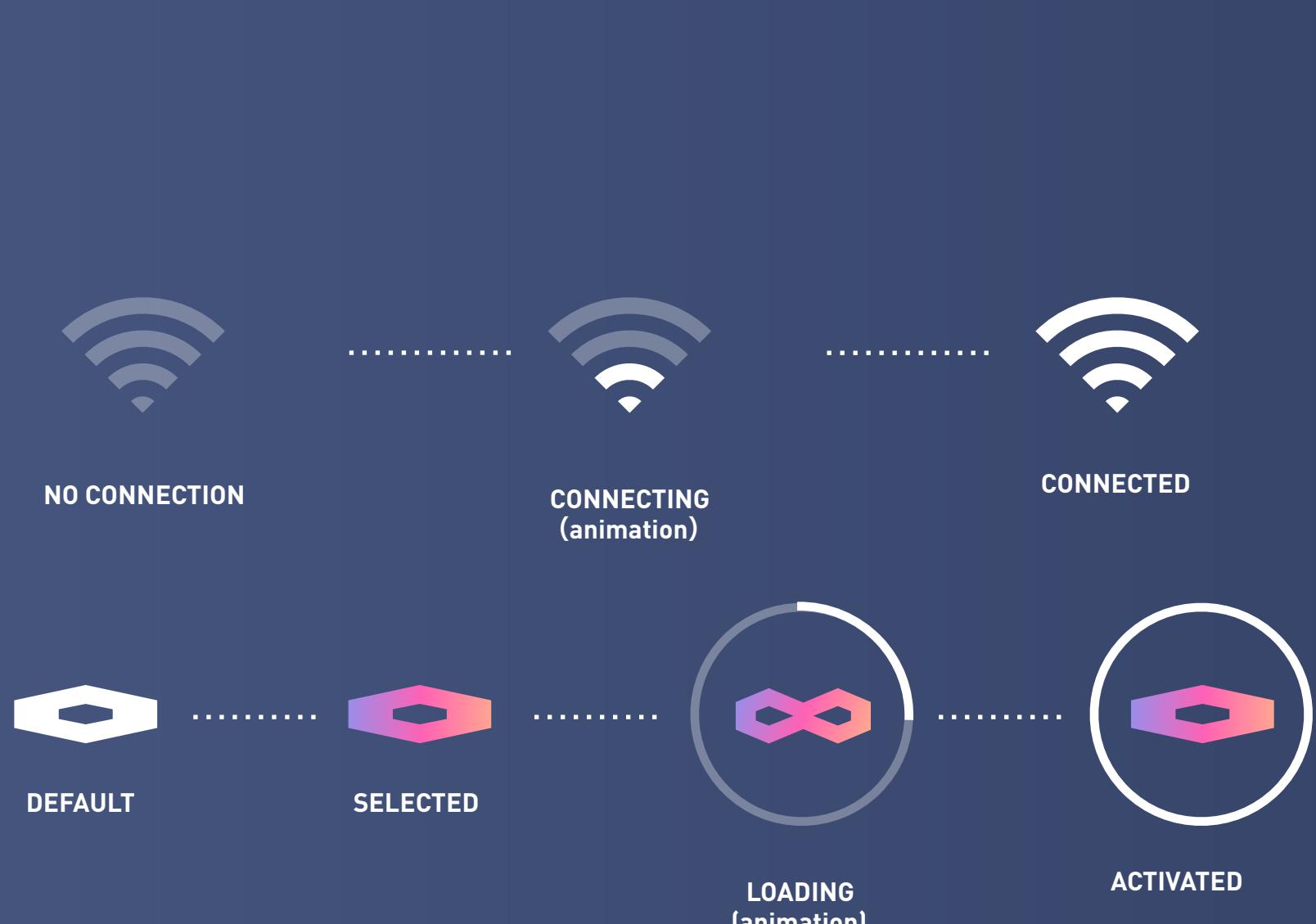
Text Option Button



Event Trigger Button
Head Movement Controlled

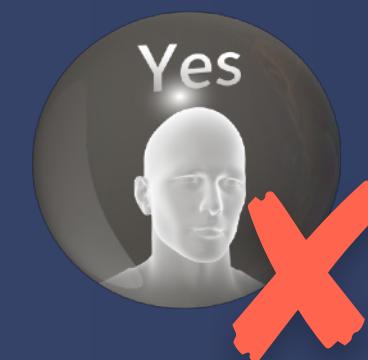
Button Style

All of the button are materialized design. The round corner radius is fixed. The size of the button can be adjusted according to the text length, icon or picture size.



State Signaling

Inspired by the state of Wifi connection, we visualized each state in a interaction process. By applying the brand logo, we also strengthened the branding.



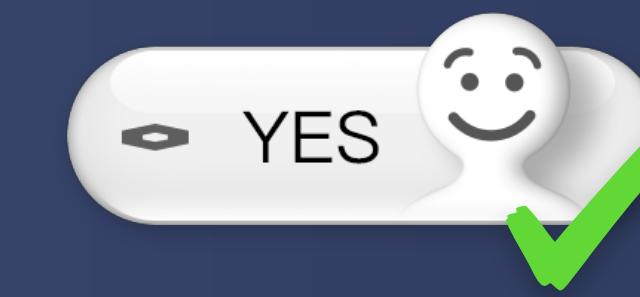
Too emotional/humanoid
Uncanny Valley



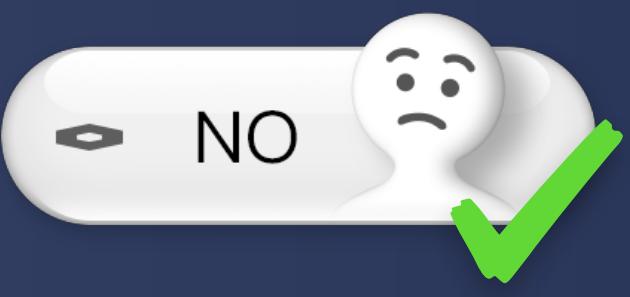
Indirect perception. The head movement instruction is indicated by the arrow animation



Too plain



We animate the face expression to instruct user's head movement



NO

Head Movement Indicator

Finally, we designed a cartoon human face and applied nodding/shaking head animation to indicate head movement.

Final Design

