

vr onboarding



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01

Project Overview

A quick look at what the project entailed, who the output was for and what was done.

The Guwahati Planetarium is planning to launch a dedicated Virtual Reality zone for children aged 13-17 years for extended reality space experience using Oculus Quest and Oculus Go headsets.

02

Prompt

What was the design brief? What challenges were there?

**A vast majority of the students visiting the VR
Zone would be first-time users**

They need to learn how to use the headset's controls, which have high learning curves.

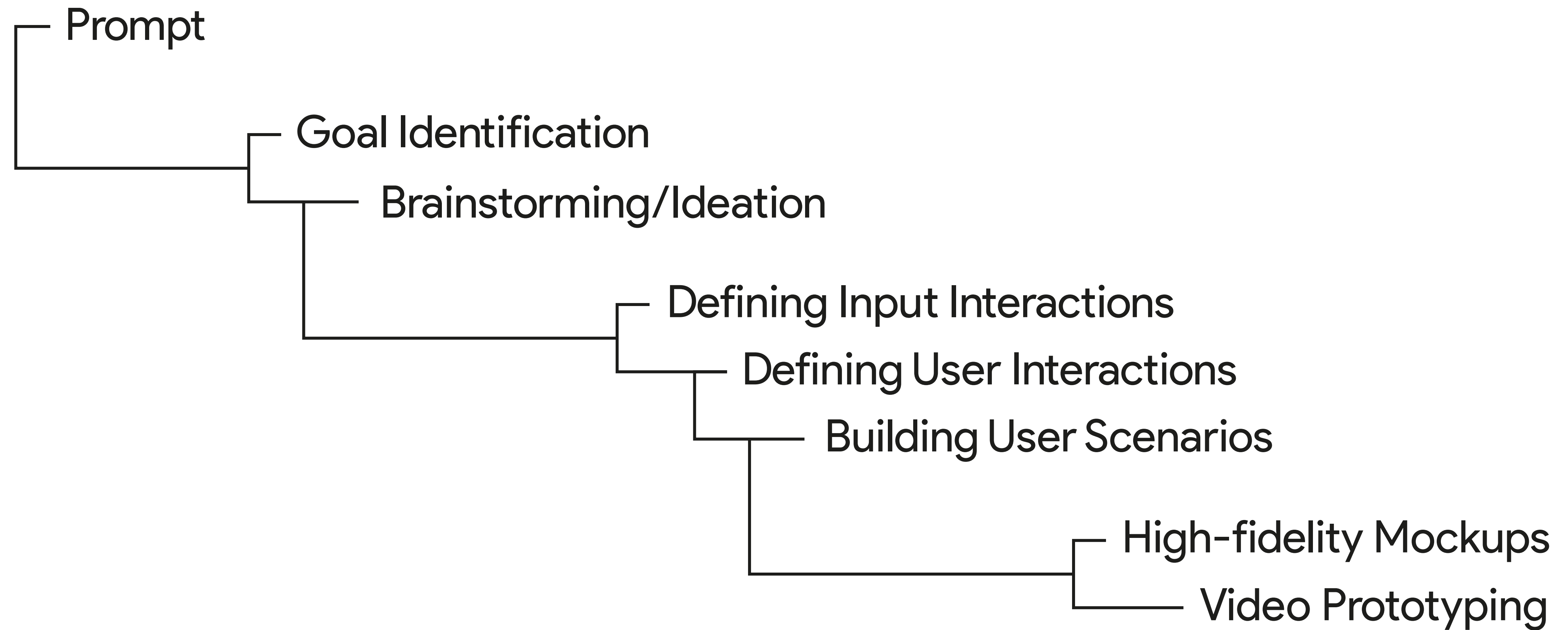
The challenge is to onboard any child to Oculus Go, in an engaging and playful manner.



Design Process

A glance at the process that I followed while going about this problem.

I followed a linear step-by-step approach to this project, tackling one aspect after another.

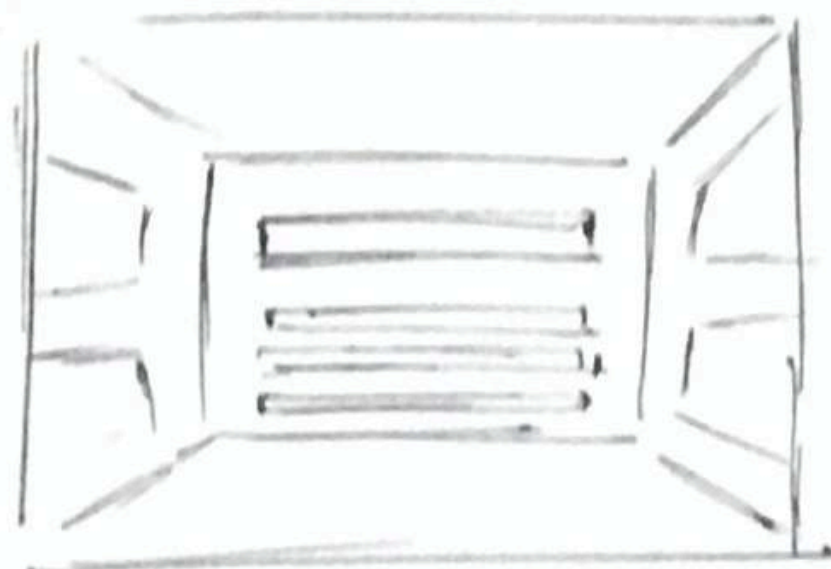


04 Initial Brainstorming

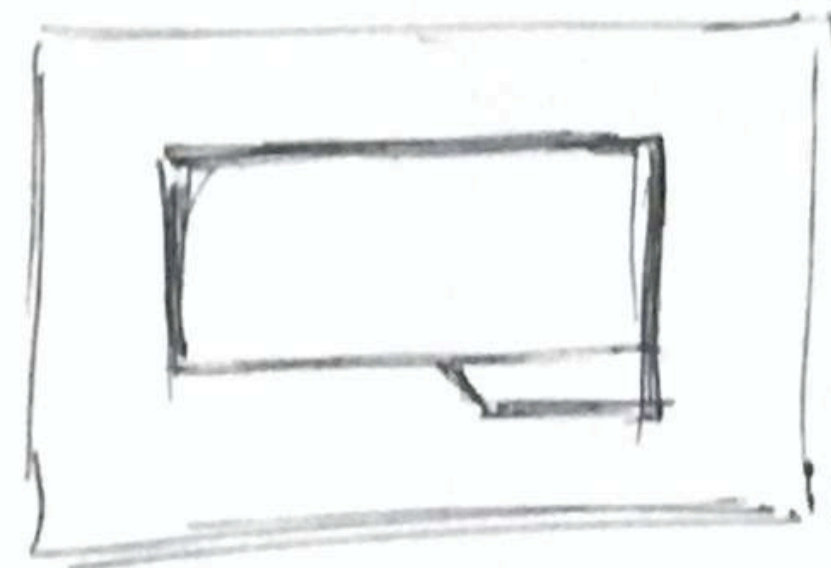
The first few ideas that occurred to me when I established my goals.

I first looked to onboard a child using a video game interface and appropriate controls.

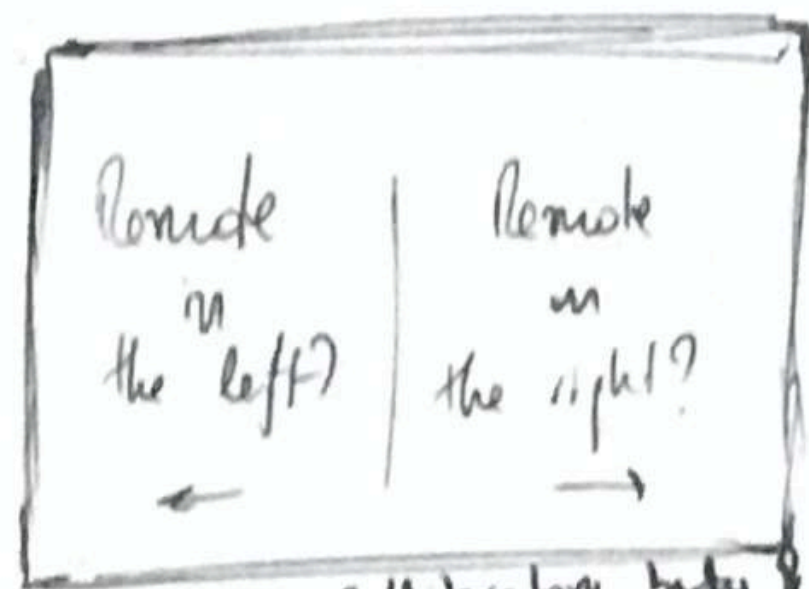
This iteration makes the user go through each consecutive step, while playing a game.



Quick, check if your headset's comfortable.



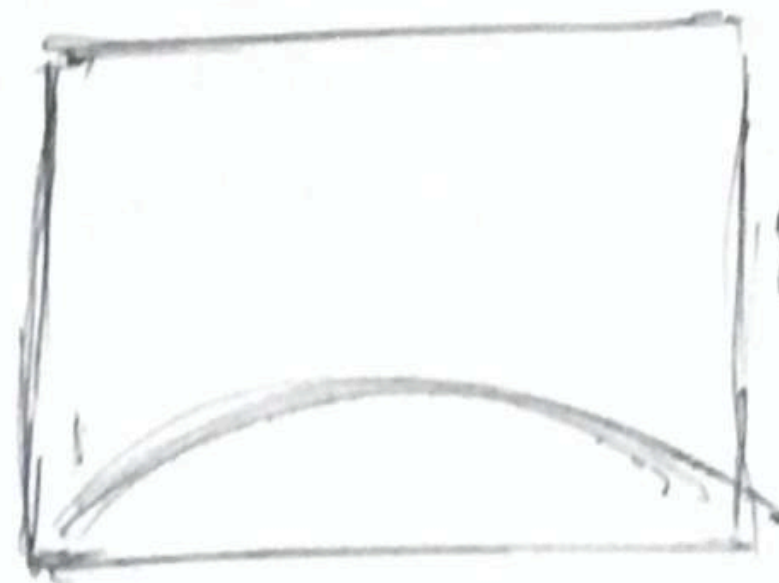
10 seconds.
Dots for time indication
(Clear message on how & what)



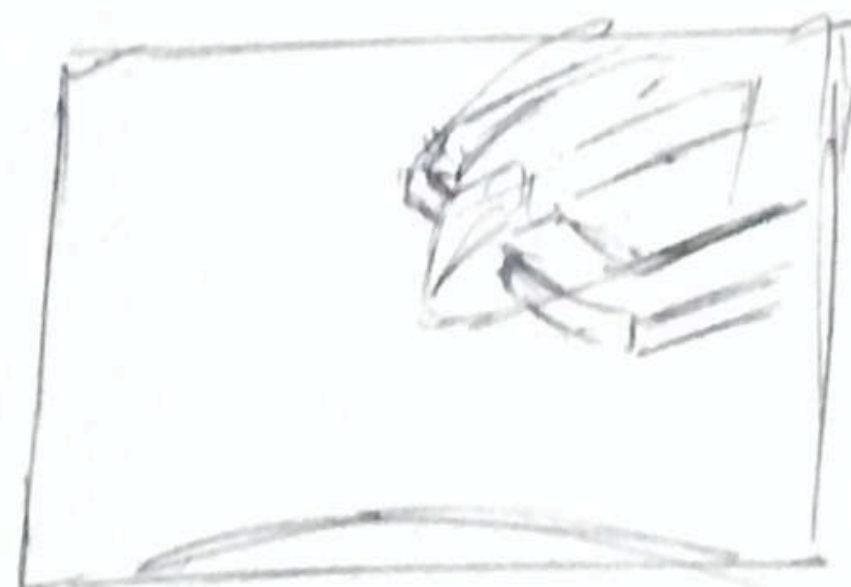
Calibrating body & not hand position controller.



Look around you! the space beckons!



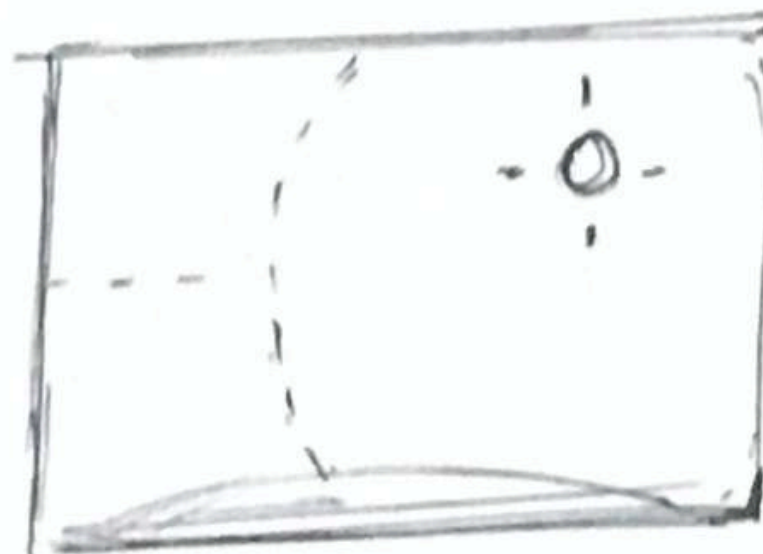
But be wary, you can't move too much.



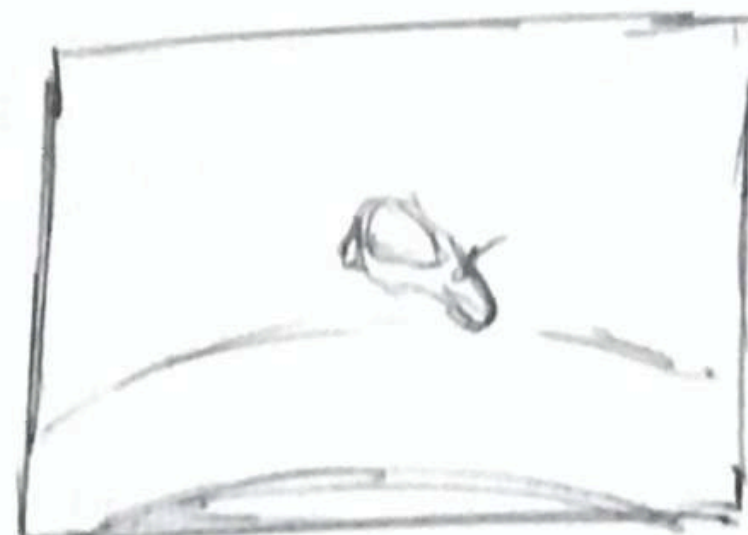
Explain remote trigger.

Whoa! Watch out! It's the enemy! Shoot! Use the remote!

Explain touchpad / zoom & scroll



Cool around! you! Want to zoom in? Scroll away! Shoot the intruders!



Mission accomplished! You've learnt how to use the remote! Let's get back now.

1. headset
- 2. left/right
3. trigger
4. the touchpad
5. back

Needs to be familiar with env. along with VR.



120-150 sec

What worked?

01

Highly engaging, keeps the child busy at every step of onboarding.

02

Relies and adds onto what the child already intuitively knows.

What didn't work?

01

Distracts the child from the learning aspect itself

02

Instills a certain mental model which isn't universal

03

Disrupts gameplay due to its limited time period

04

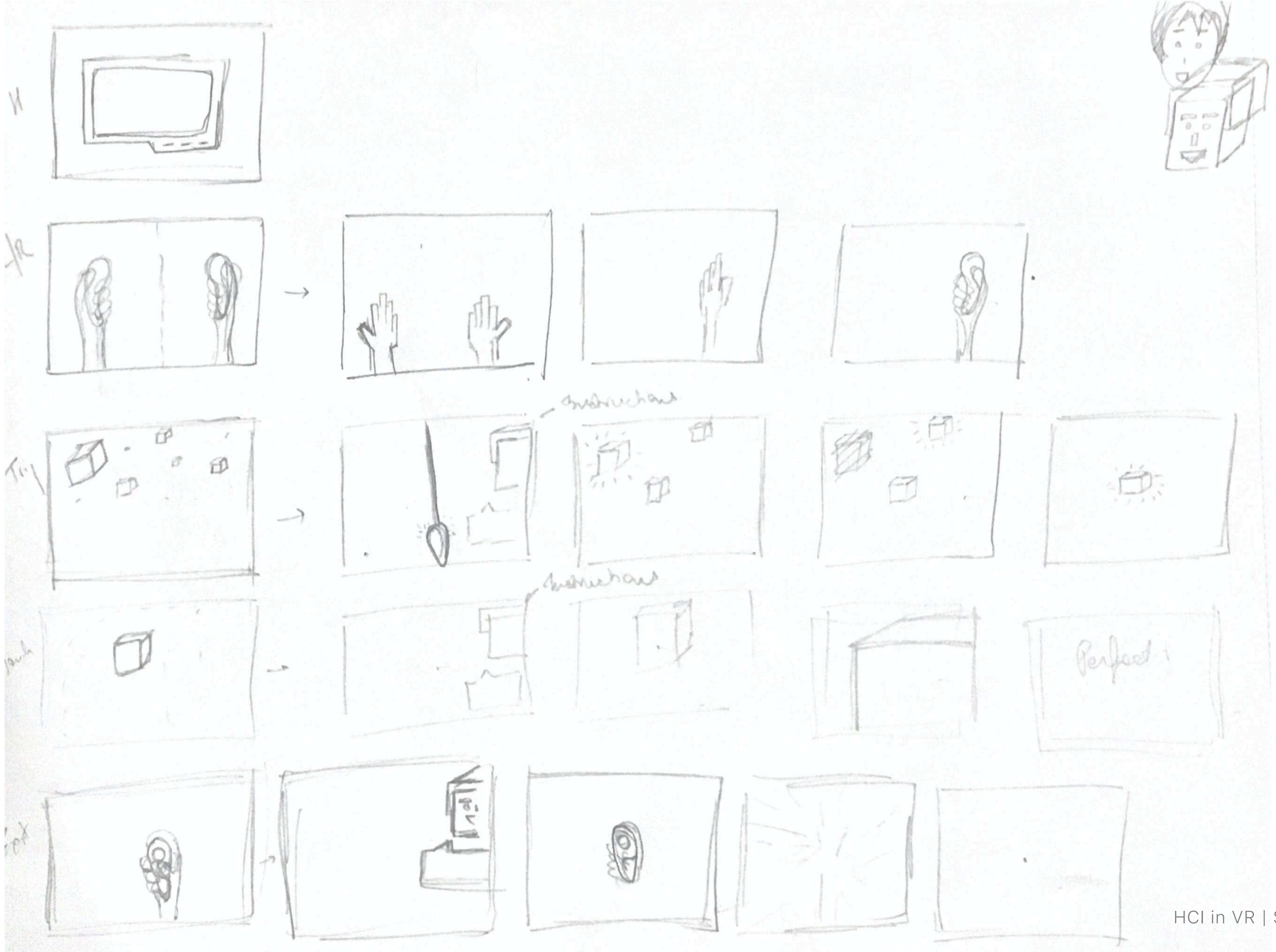
Improper mapping will lead to confusion



The Improved One

The chosen concept which was refined based on the feedback received.

A toned down version of a game, with a focus on teaching the required user interactions.





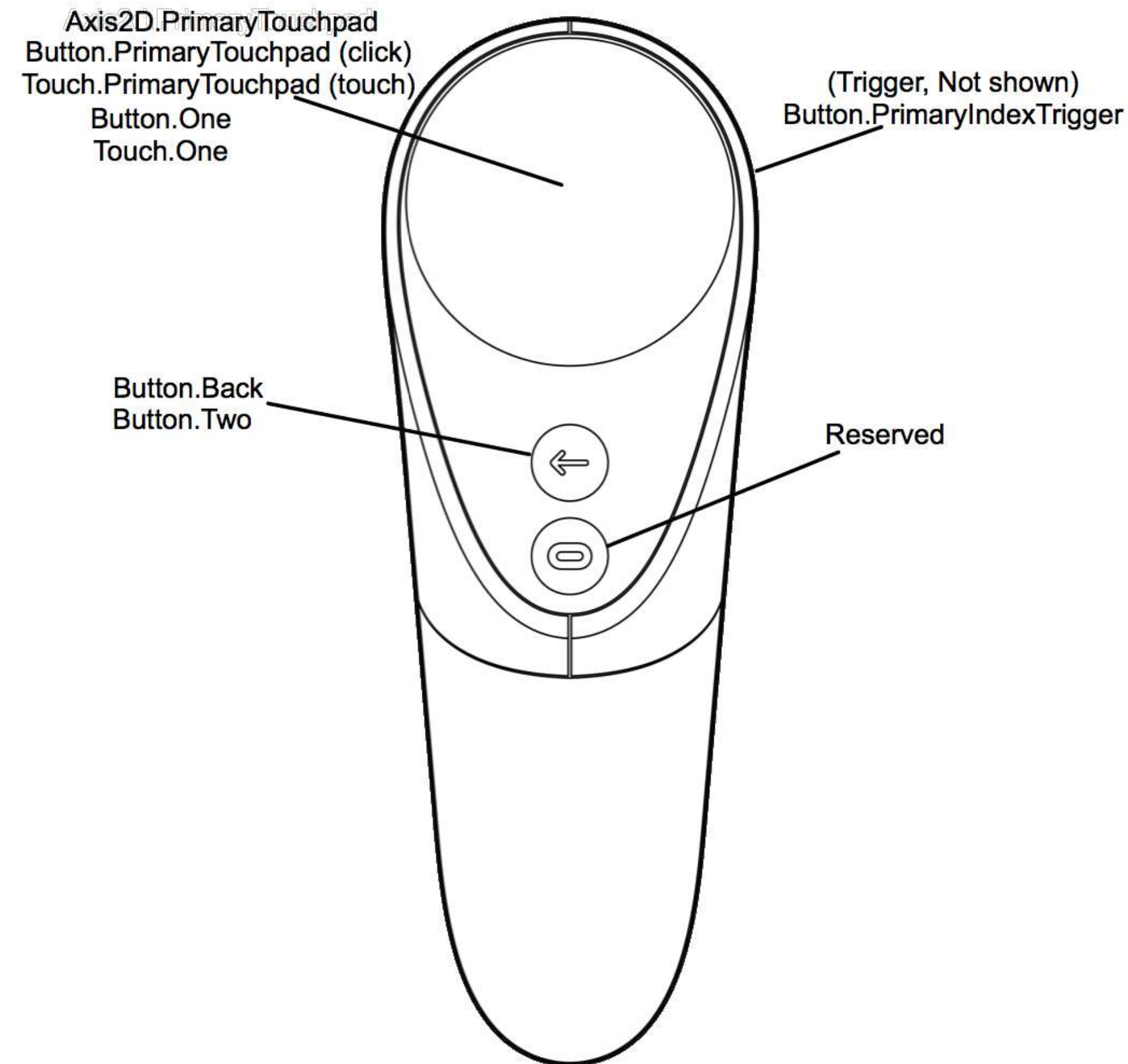
Interactions for Input

What input interactions were chosen for the device onboarding?

The headset uses a **tracked hand controller**, namely the Oculus Go Controller.

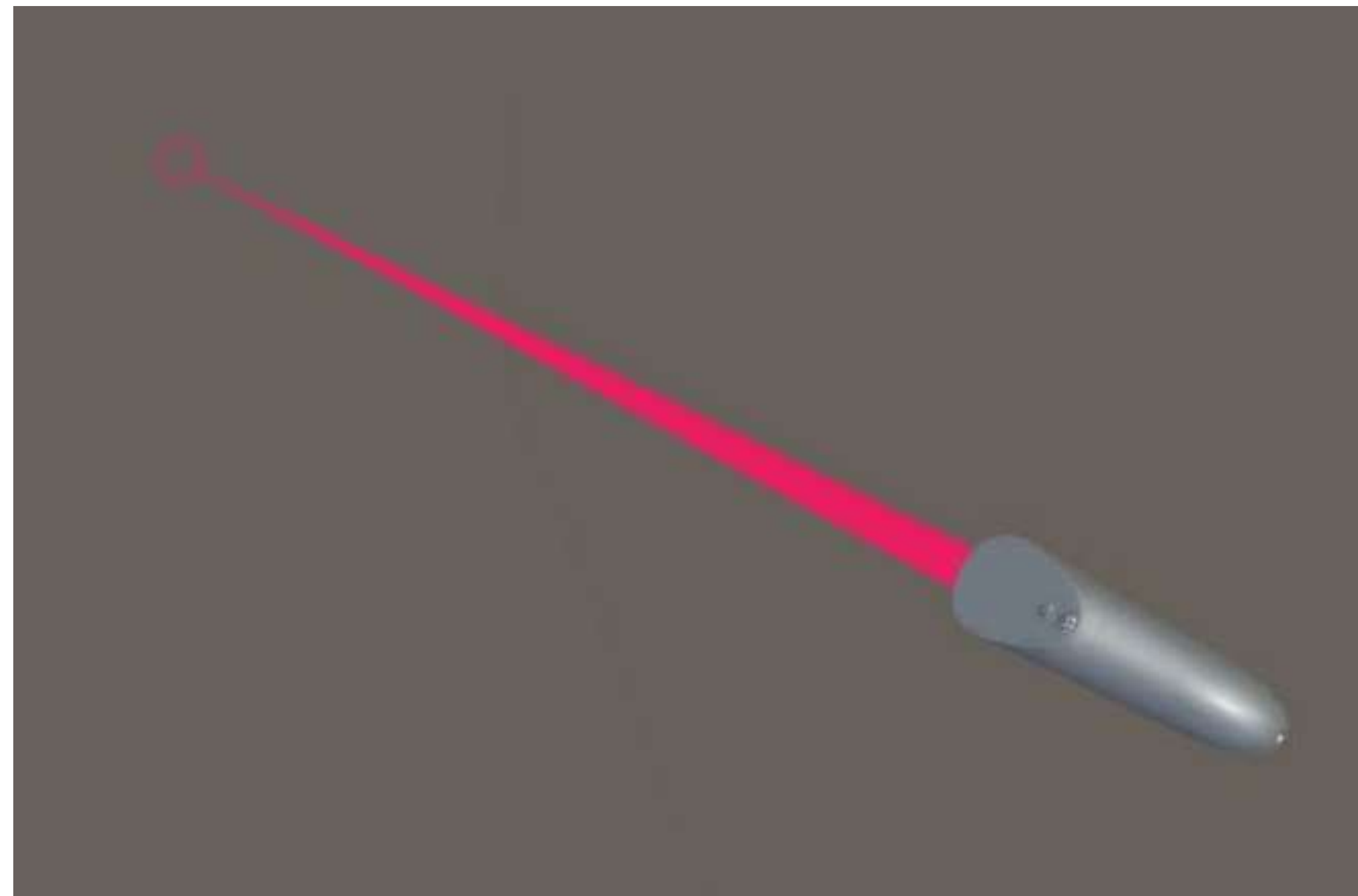


Of all the input options available, this onboarding focuses on three options, the **trigger**, **touchpad** and **back**.



The onboarding uses **non-realistic interactions** simulating how a child would interact in a space-based VR application.

Oculus Go
Ray Casting Control

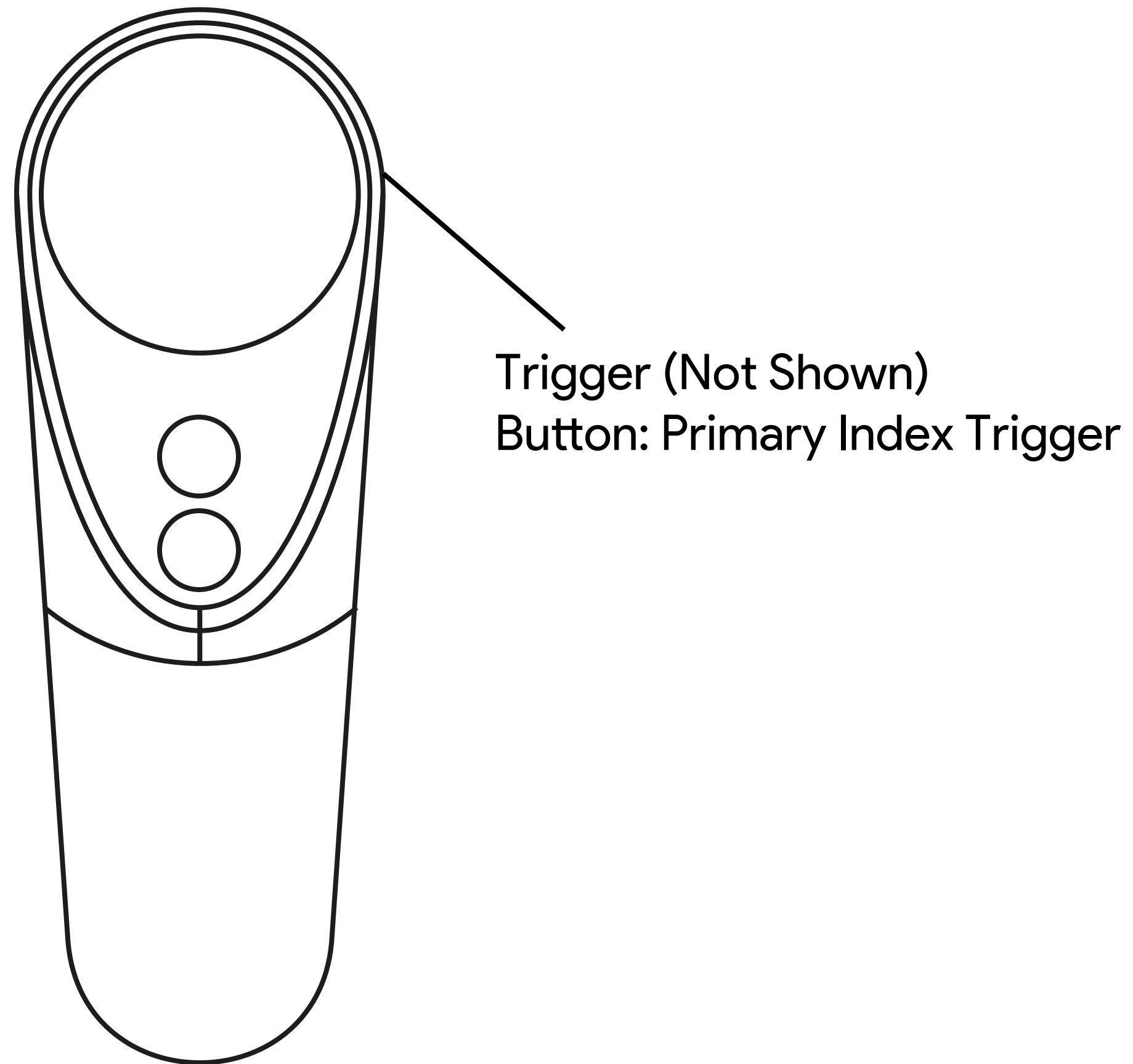


A large, dark gray, stylized number '7' is positioned on the left side of the slide, partially overlapping the title.

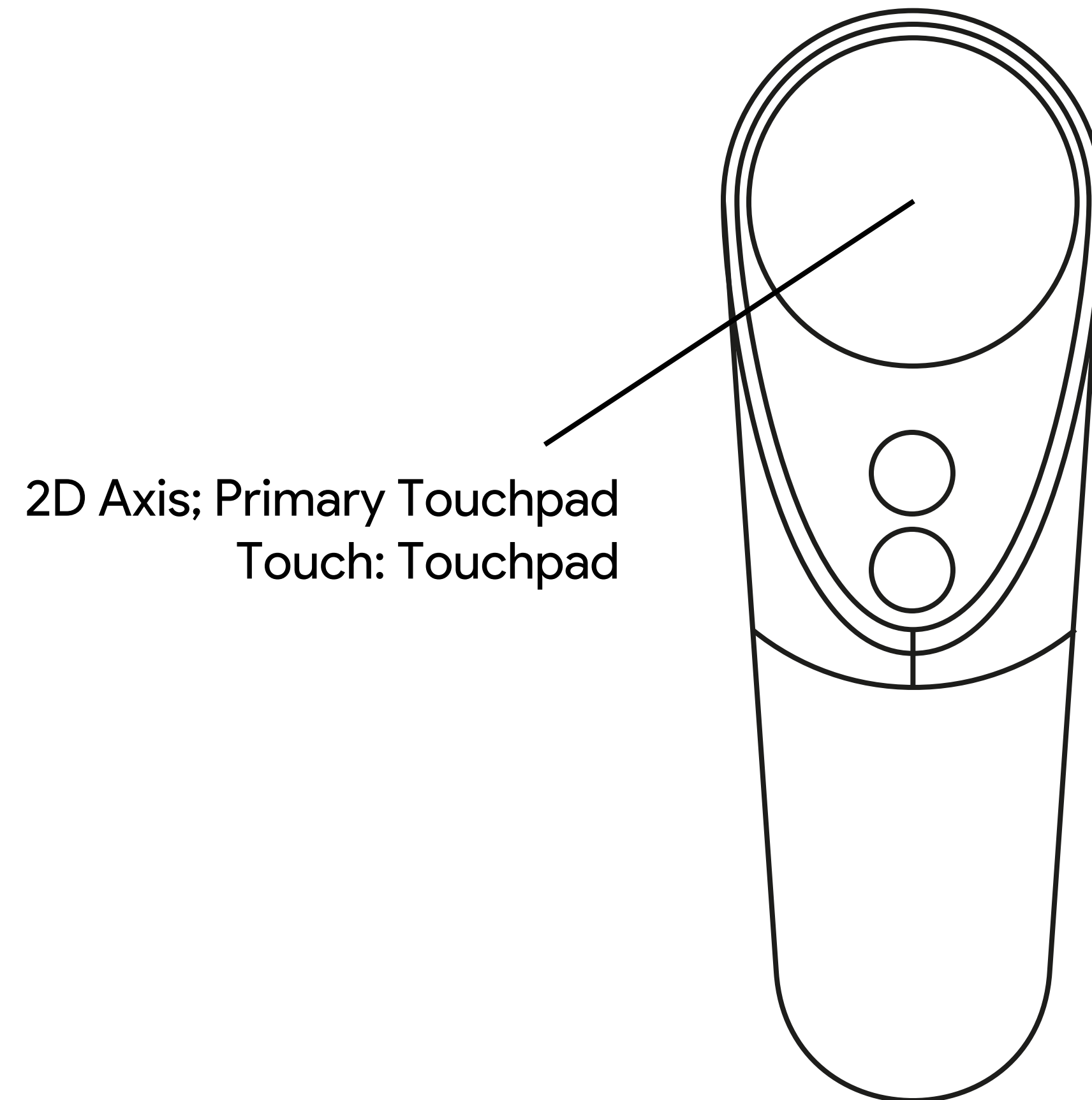
Interactions for Users

What user interactions were chosen for the device onboarding?

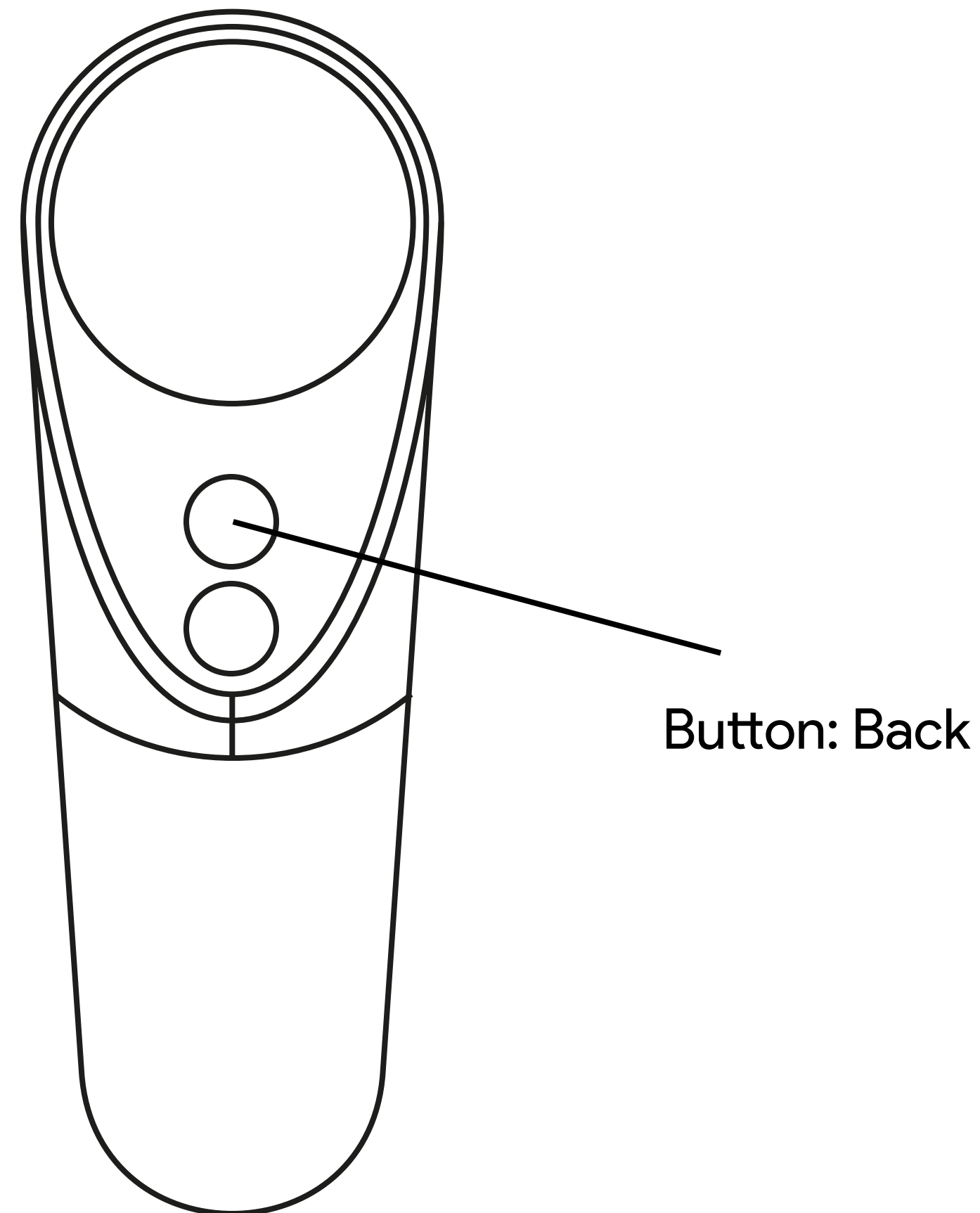
The **trigger** is used to select objects in the virtual environment



The **touchpad** is used to zoom into the virtual environment



The **back button** is used to exit the current stage of the virtual environment





User Journey

A step-by-step breakdown of the entire onboarding steps.

A step-by-step journey of what the user is expected to do is mapped out.

Note: It proved to be extremely difficult to adhere to the equirectangular map. Currently, the storyboard follows a flat map. I will work towards getting better at equirectangular mapping.

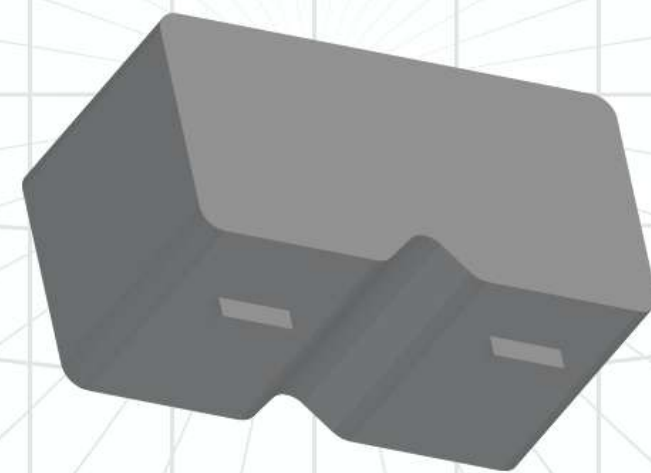
There are a total of 5 stages.

1. Headset fit.
2. Controller calibration.
3. Trigger check.
4. Touchpad check.
5. Exit check.

1. Headset fit.

The user is prompted to check the straps and the lens position to ensure a comfortable fit.

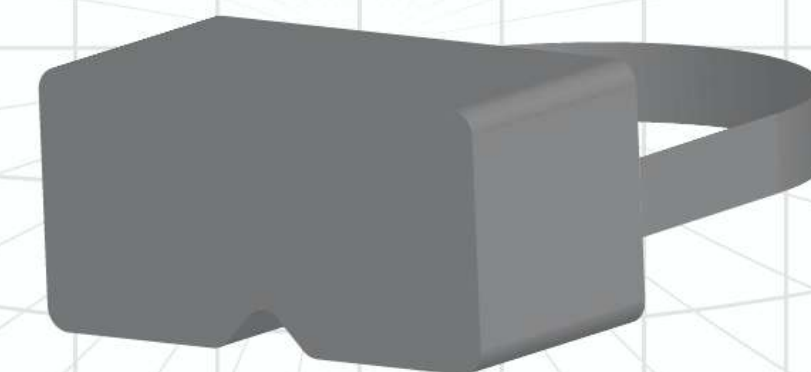
The screen includes simple instructions and visuals aiding the user.



Before we begin, check if your headset is comfortable.

First, adjust the straps for a sturdy fit.

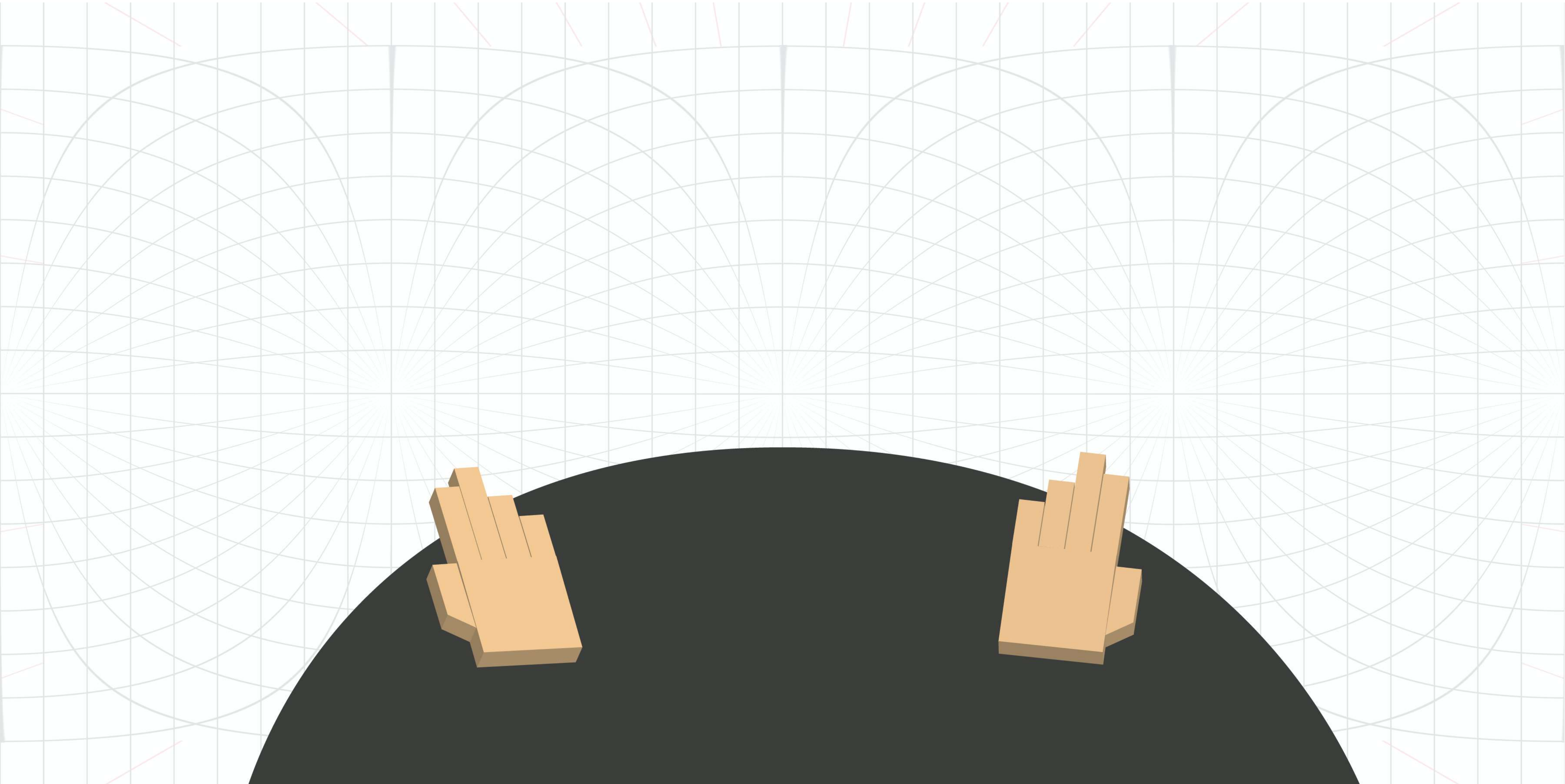
Next, adjust the lenses using the knobs at the bottom of the headset for a clearer image.

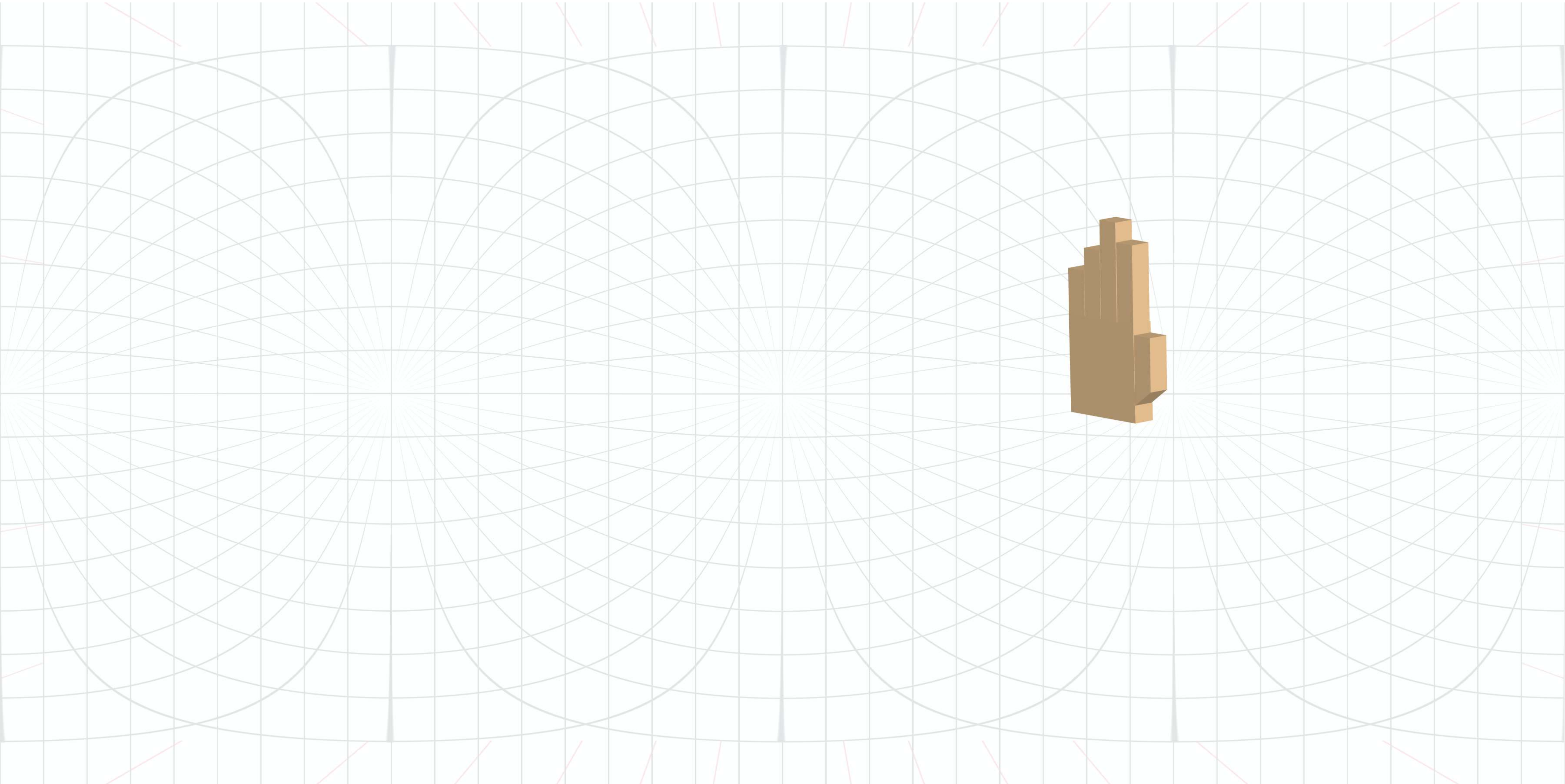


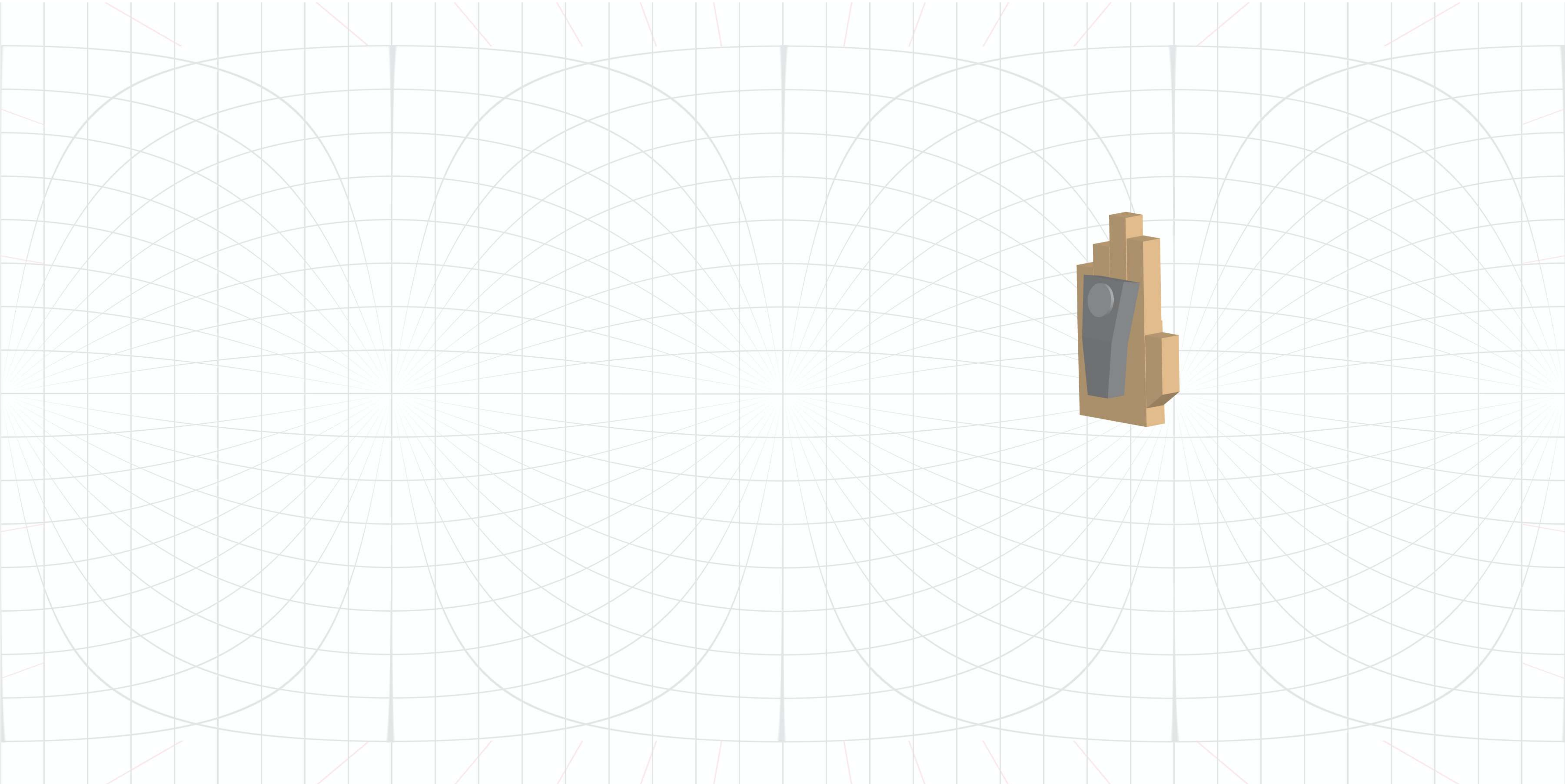
2. Controller calibration.

The user is instructed to place the controller in her dominant hand and raise it above her head.

The controller senses this movement and calibrates the controller accordingly.

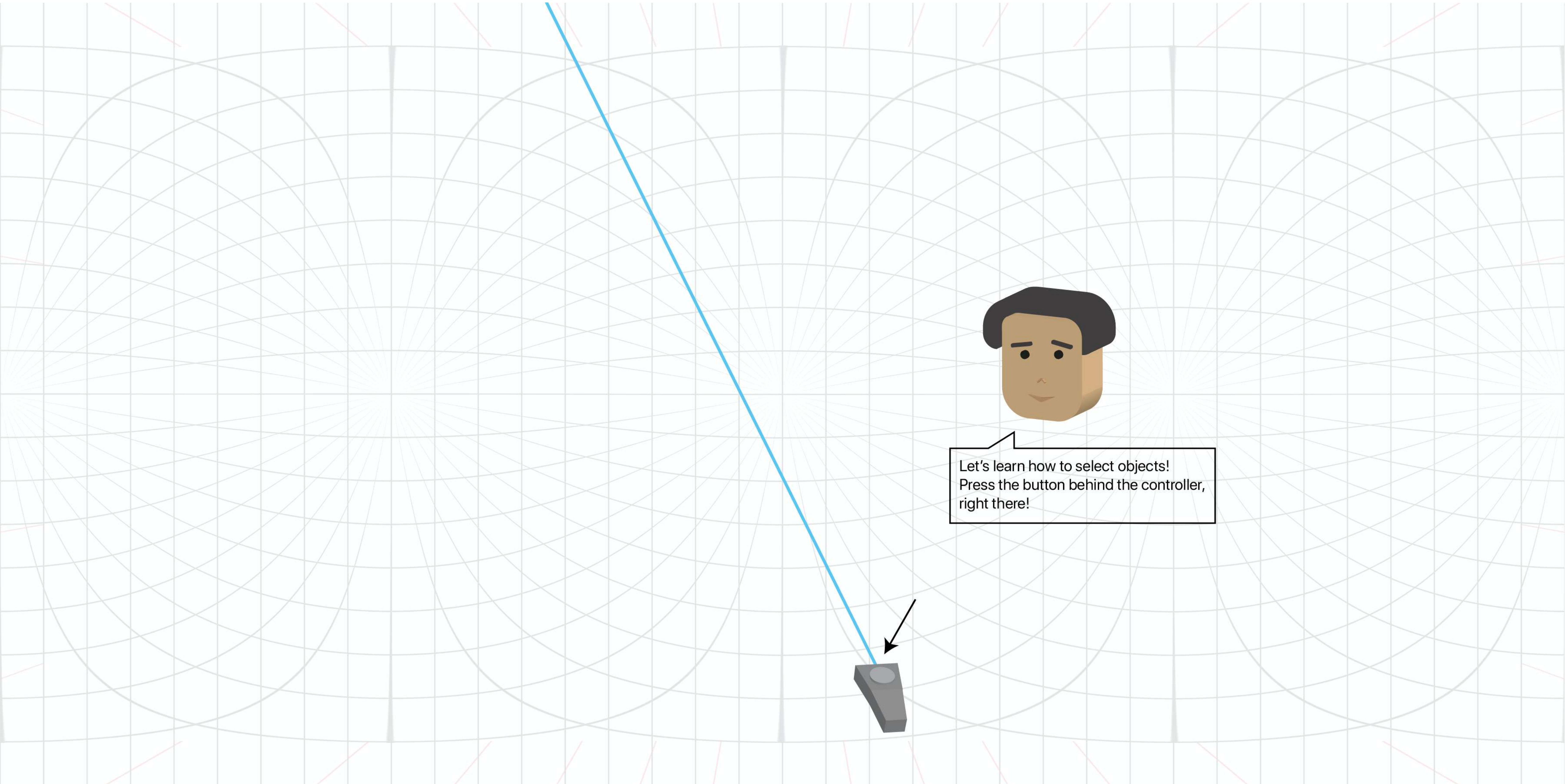


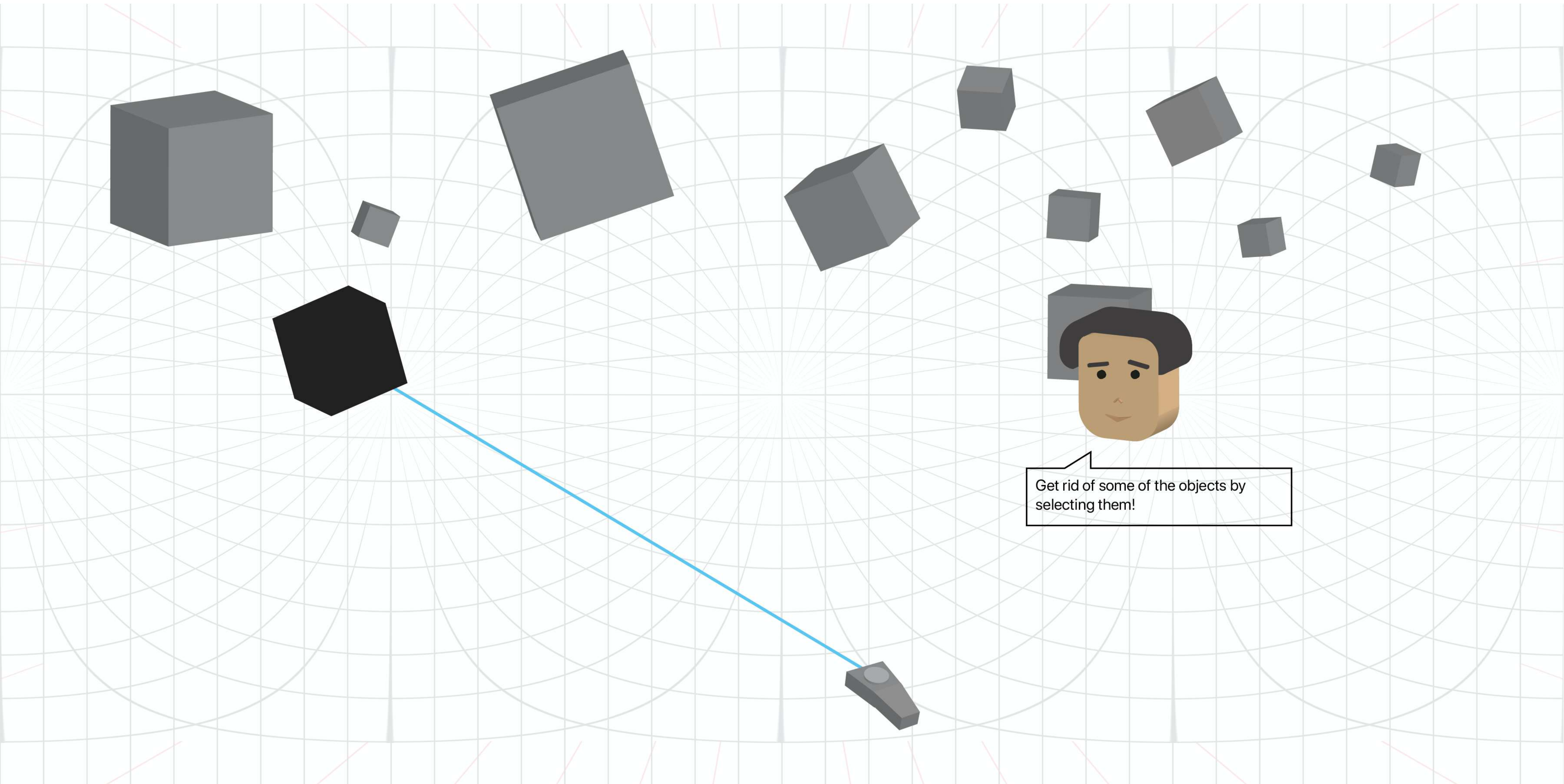


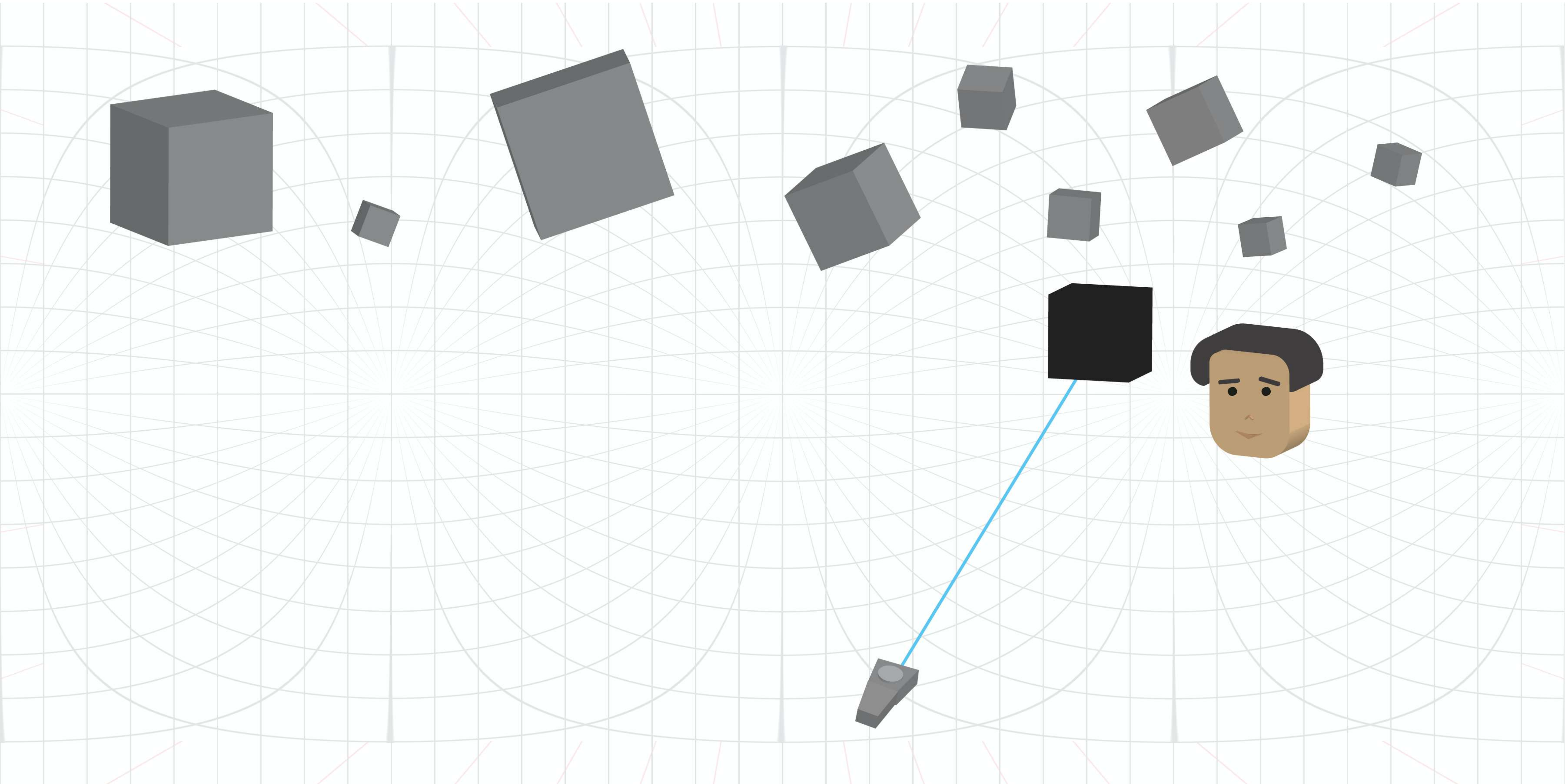


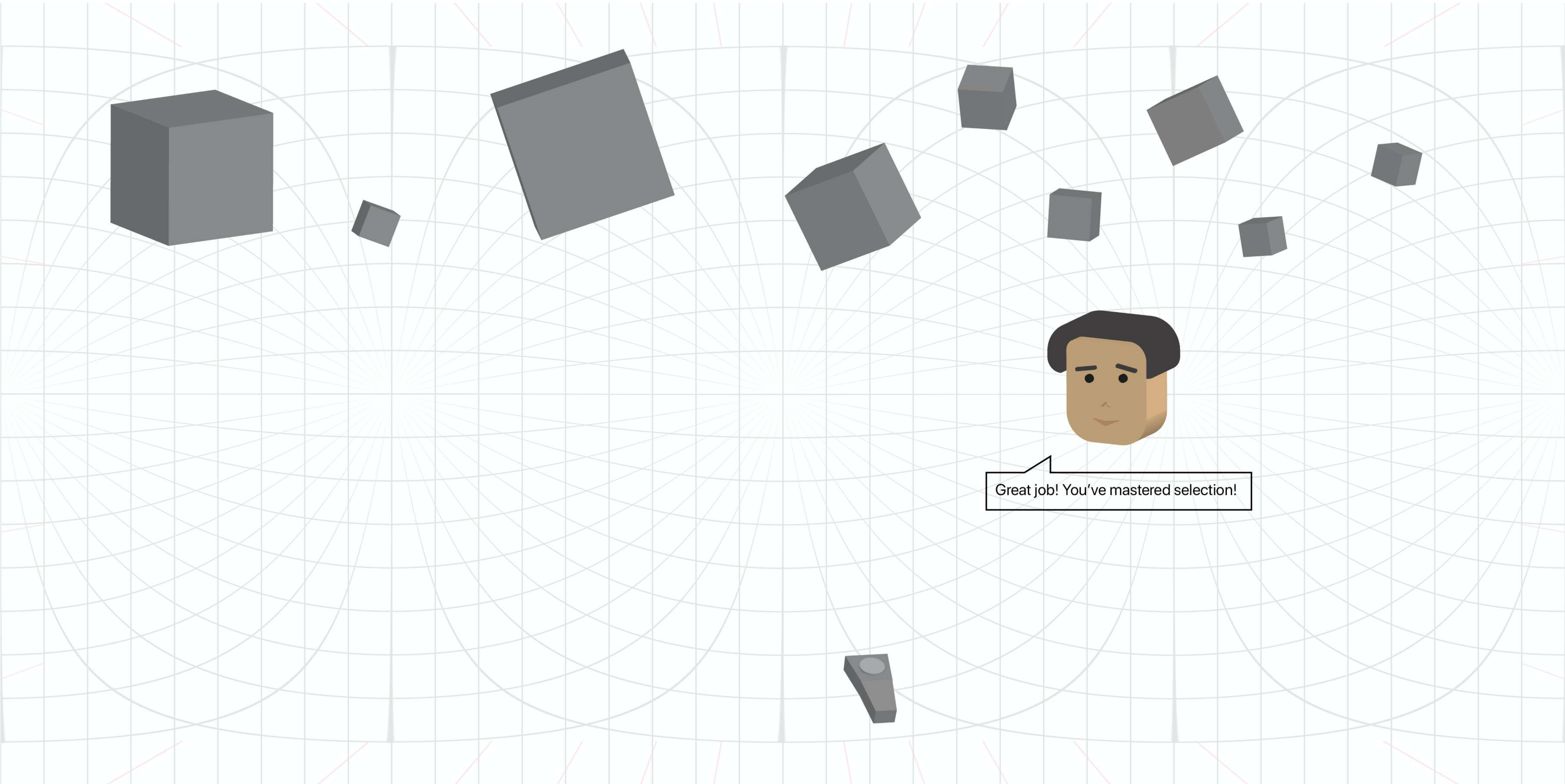
3. Trigger check.

The user is shown how to select objects in front of her, and is then instructed to select objects in front to remove them from the environment.



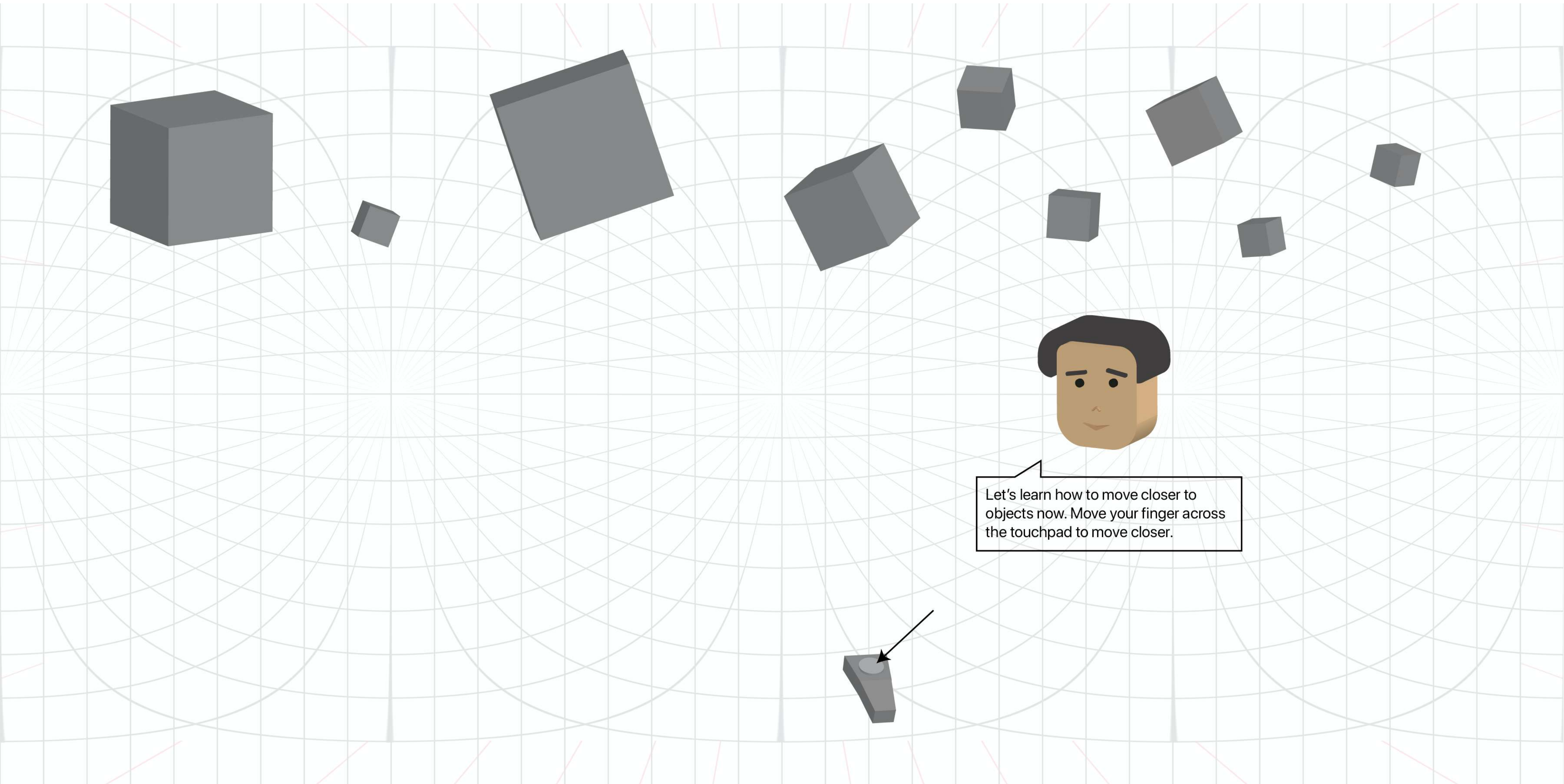




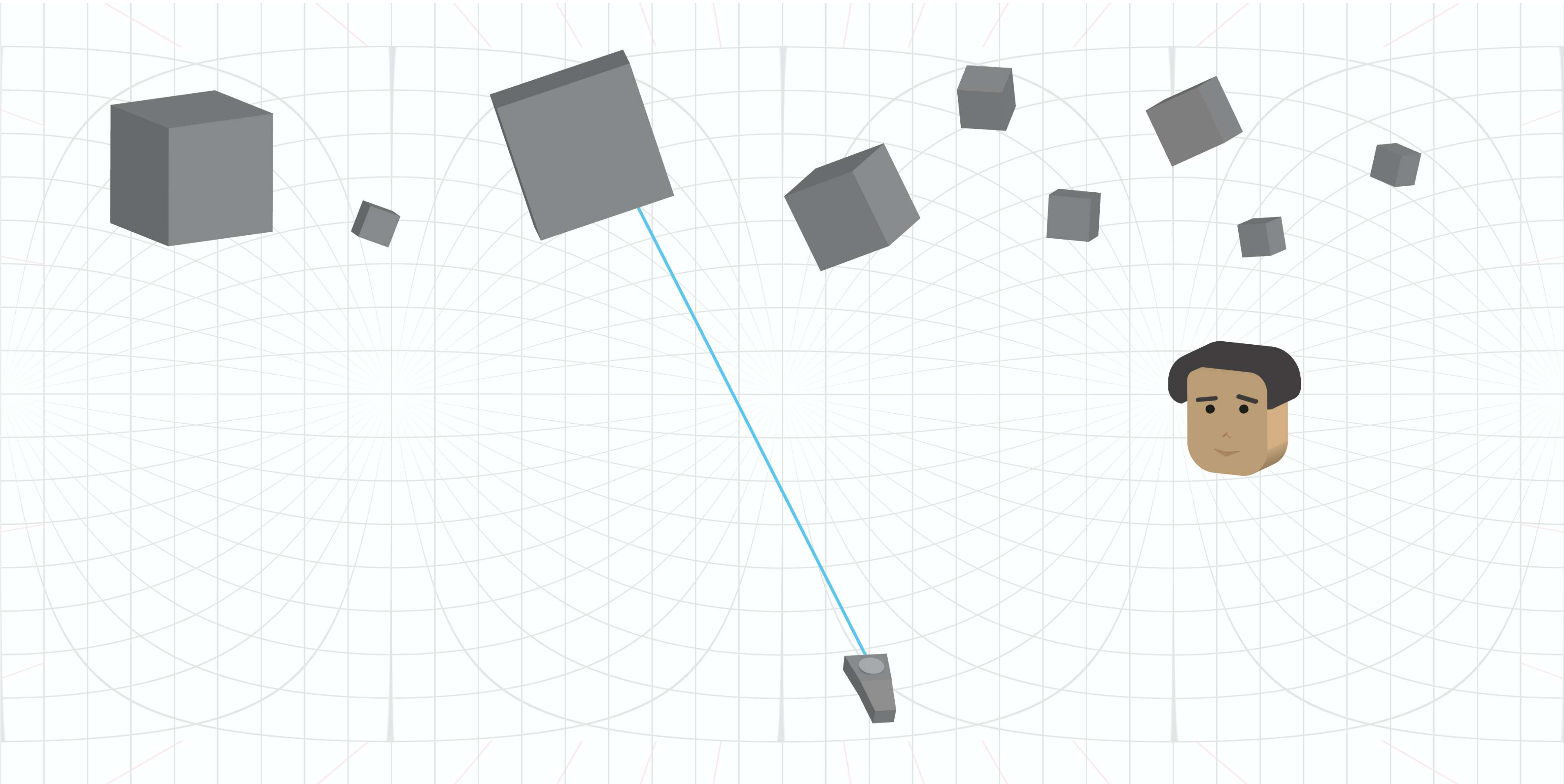


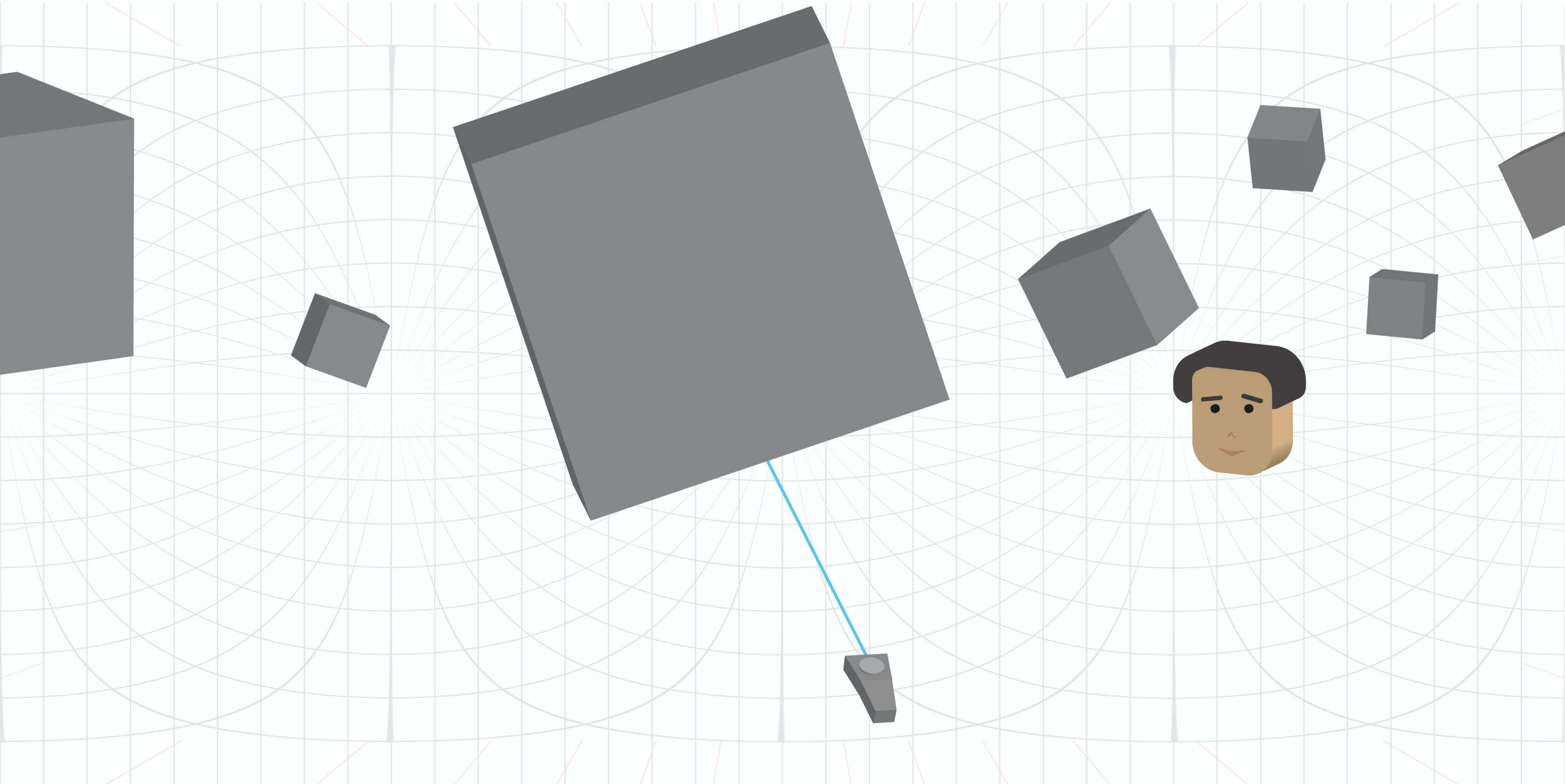
4. Touchpad check.

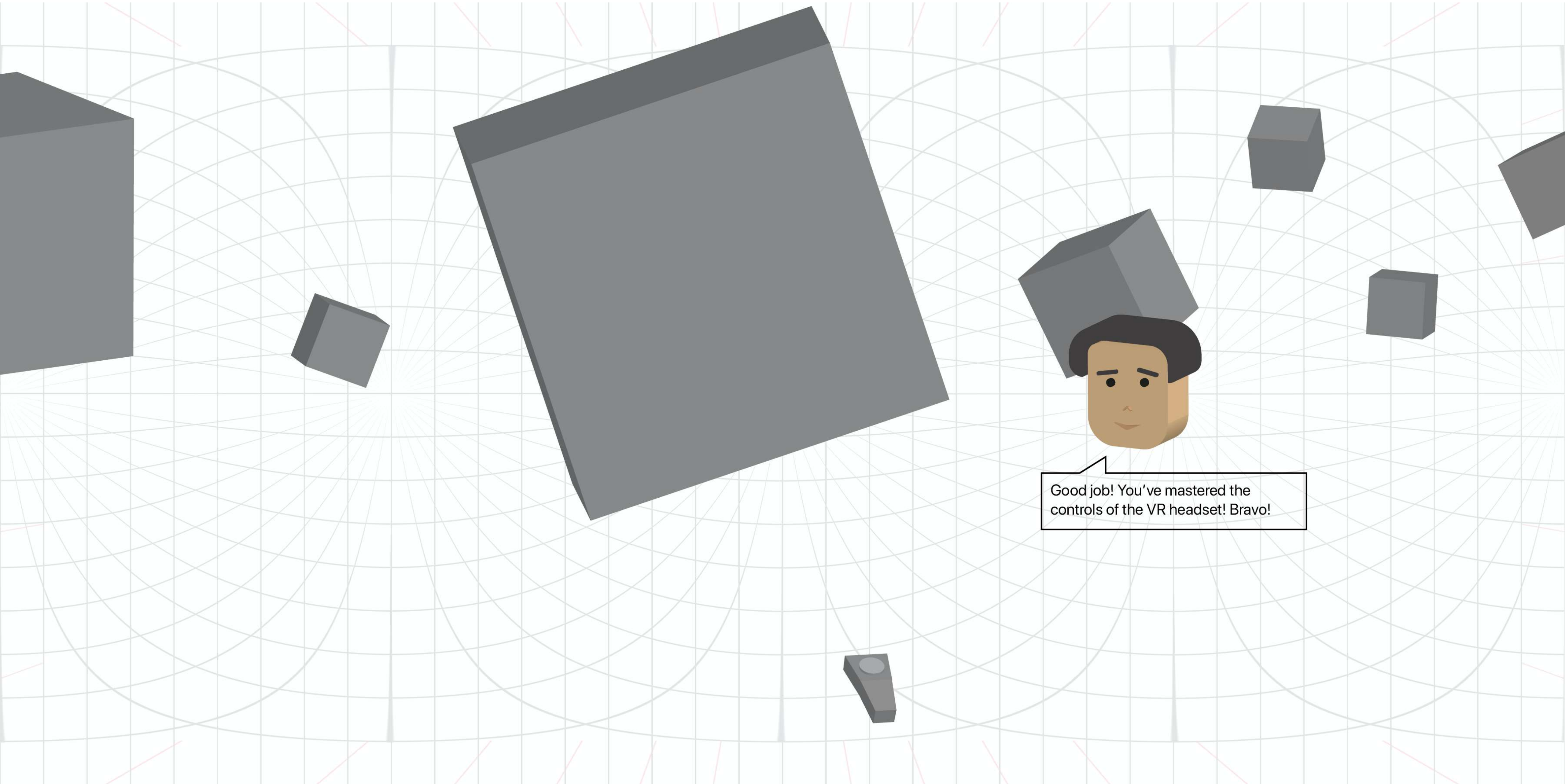
The user is shown how to use the touchpad on the controller. She is then prompted to zoom into the objects using the controller.



Let's learn how to move closer to objects now. Move your finger across the touchpad to move closer.

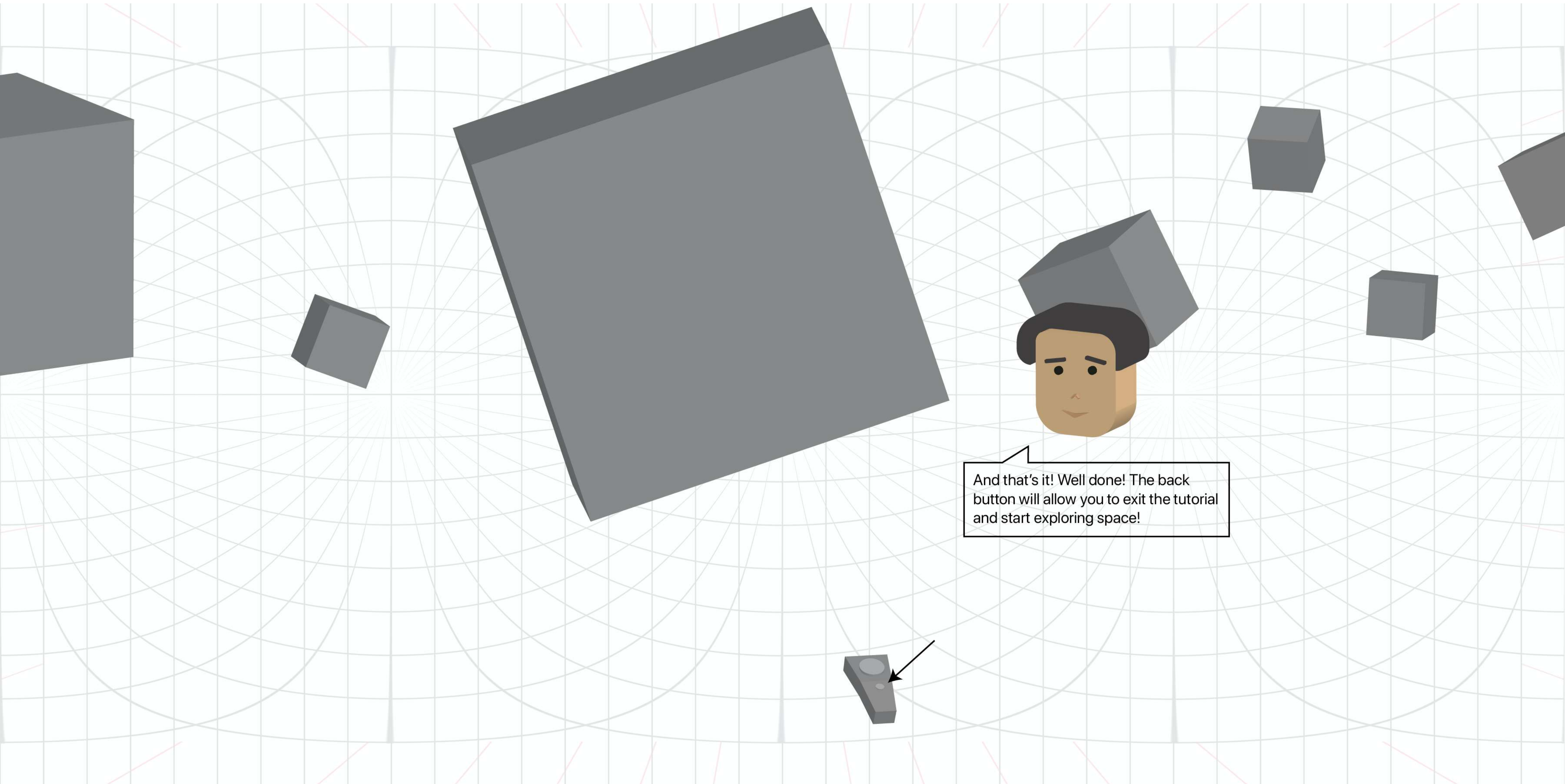


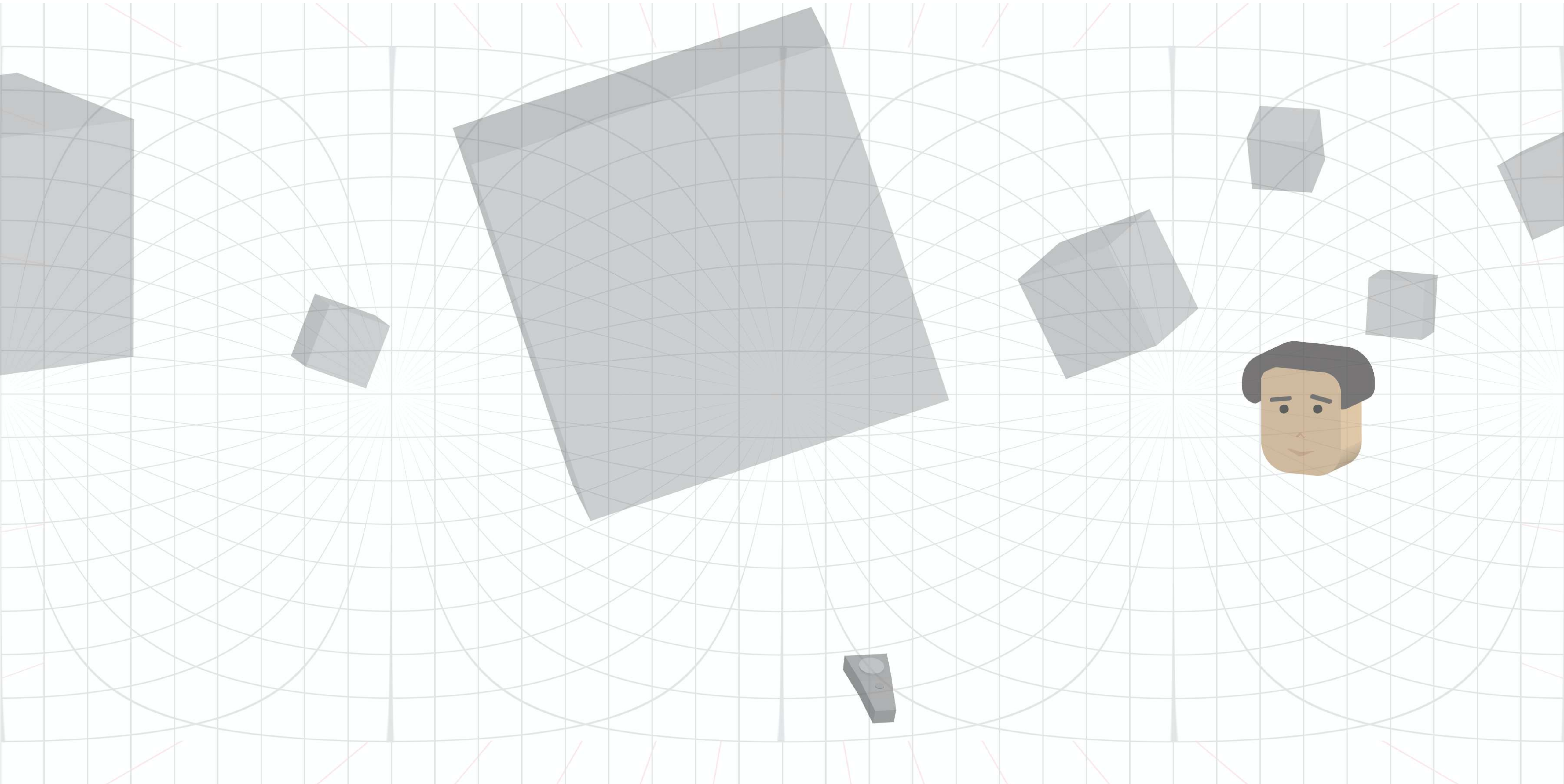




5. Exit check.

The user is then prompted to exit the tutorial using the Back button, which is highlighted.







Video Prototype

A crude video prototype highlighting the various steps in use.

The link below contains a video prototype of the proposed solution, with a complete user journey.

<https://vimeo.com/378312778>

Thank You!