

KENDŌ GAKKŌ

剣道学校

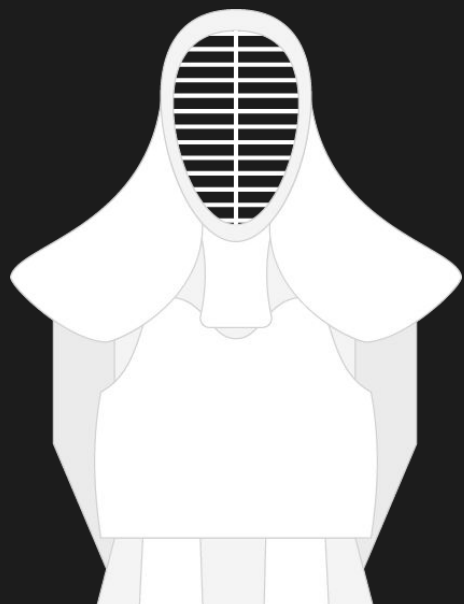
CULTIVATE YOUR SPIRIT

ALPHA PRESENTATION

OVERVIEW - ABOUT THE PROJECT

Kendō Gakkō (Kendo School)

a two-player multi-platform experience where users can learn about basic Kendo techniques, learn basic Japanese terminology, and test their memory skills.

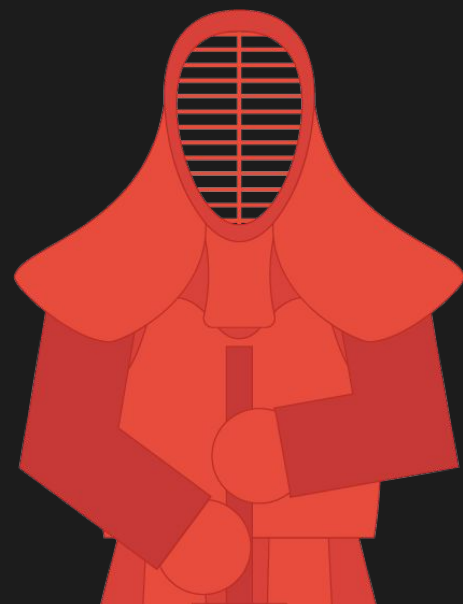


MASTER (MOBILE)

provides the student with a sequence of actions to perform on the training dummy

STUDENT (OCULUS RIFT)

performs the sequence of actions provided by the master on the training dummy



NETWORKING PROGRESS

- » Socket.IO is being used to send arrays of information between web pages
- » Networking framework has been implemented
- » User presses numbered buttons to create/match sequence
- » Sequence is displayed in web page console

Master

Press the 3 numbered buttons to create a sequence

1 2 3 Send Sequence Clear Sequence

```
connected master.html:24
red_button master.html:30
green_button master.html:34
blue_button master.html:38
green_button master.html:34
send_button master.html:43
Response : master.html:52
true,true,true,true
```

Student

Press the 3 numbered buttons to match the incoming sequence

1 2 3 Accept

```
connected student-test.html:23
connected student-test.html:50
Incoming student-test.html:54
Sequence: 1,2,3,2
red_button student-test.html:29
green_button student-test.html:33
blue_button student-test.html:37
green_button student-test.html:33
accept_button student-test.html:42
Response : student-test.html:58
true,true,true,true
```

INTERACTION PROGRESS

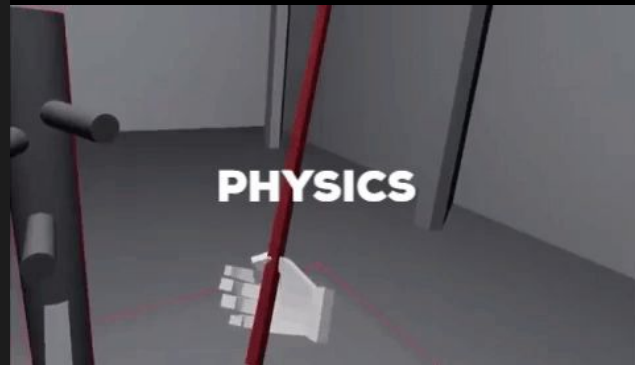
- » Automatically enter VR with connected Oculus Rift
- » Responsive Oculus Rift Motion Tracking (Firefox)
- » Intuitive Oculus Touch Hand States & Animations
- » Dynamic & static body physical interactions

Oculus Controls



OCULUS TOUCH

PHYSICS



DESIGN PROGRESS

General visual theme established:

- » Flat colours
- » Dark / light neutrals (i.e., greys, whites) for general theme elements
- » Bright red-orange for accent elements (used less liberally than greys / whites, as a pop of colour)

Theme established in Lander Page design (see image on the right), currently in the process of being implemented in HTML, CSS, and JavaScript



PRODUCT DEMO

WHAT WE'VE LEARNED

Challenges we've faced so far:

- » Implementing physics to get it to properly control object interaction
- » Oculus Rift support in Firefox versus Google Chrome
- » Finding balance between “too serious” and “too playful” in visual style

How our idea has evolved from the original proposal:

- » Visual style has become more simplified and flat-colour based, while still trying to stay playful
- » New ideas for ways to present menu items / sequence instructions in VR environment

NEXT STEPS

INTERACTION

- » Implement dynamic user-to-object interaction
- » Implement physical menu selection in VR environment
- » Implement Oculus Rift gesture recognition



NETWORKING

- » Integrate networking functionality into VR and mobile environment
- » Add signals that indicate the end of the user interaction
- » Add signals that indicate the state of each user, such as; waiting, ongoing actions, a user leaving the session, and connection issues



UX & DESIGN

- » Create responsive templates for mobile GUI
- » Style mobile GUI to match established visual style
- » Create UI assets for both platforms in accordance with the established visual design

THANK YOU