

Peak Visualization Second Iteration

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Client Information

Alicia Mckoy - Peak Mind
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Mentor Feedback

- Beginning/Mid Iteration:
 - Advised us to connect our Unity and web app for this iteration
- Before Client Meeting
 - Gave us advice on how to get better test coverage
 - Offered strategies on adapting our webapp to fit the client's environment

Client Feedback

- Beginning of Iteration
 - Client planned to connect us with their data team so we could manipulate data collected from real simulation
 - After meeting with Spencer, decided to work on our own AWS backend
- End of Iteration
 - Offered those that live close to Indianapolis to visit their lab and see the software in action
 - Asked for data exporting and ways to aggregate data of multiple users in web app

Sending and Retrieving Data from AWS

- Created lambda functions to store data from Unity in S3 Buckets then retrieve that data from the web app
- Created an AWS CDK project that programmatically sets up the backend so the client's data team can replicate it
- Lambda functions are called via HTTP request to an AWS ApiGateway.

Webapp Dashboard

PEAKmind®

Sign In

User ID:

LOGIN

Simulation Results

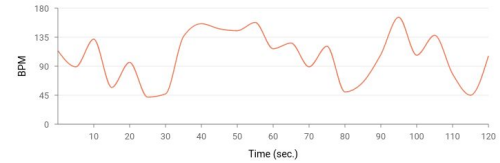
Mock Data 2

Heart Rate

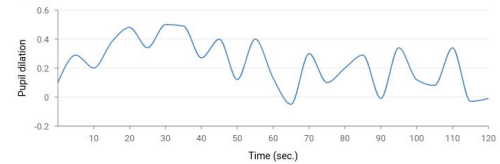
Pupillometry

Cognitive Load

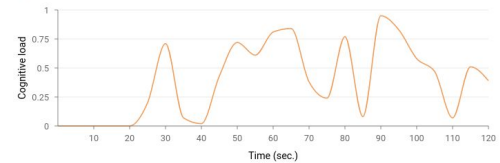
Heart Rate



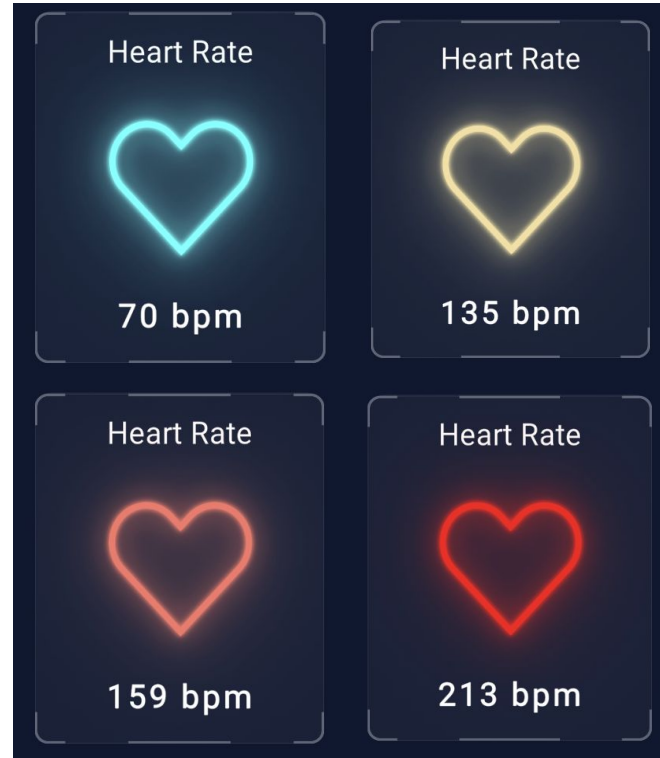
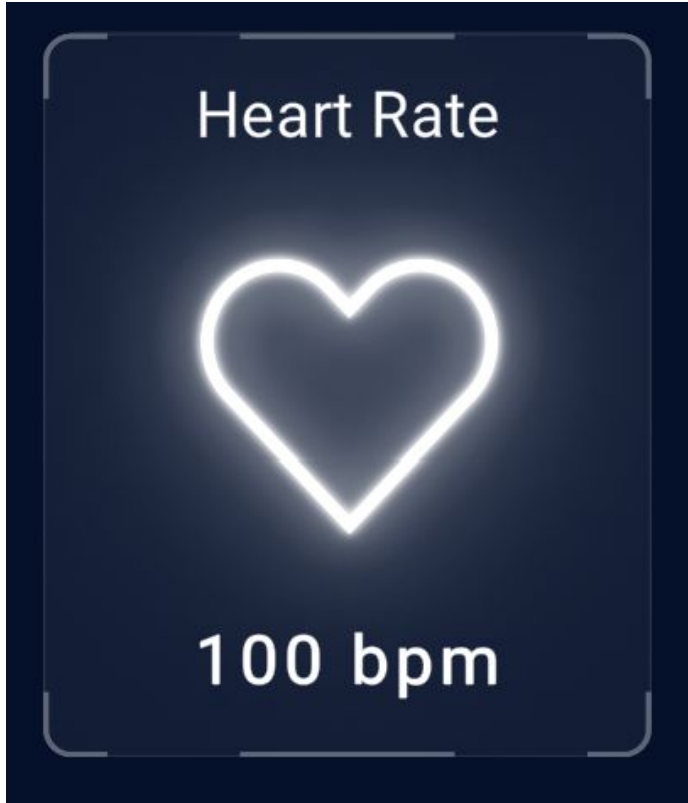
Pupillometry



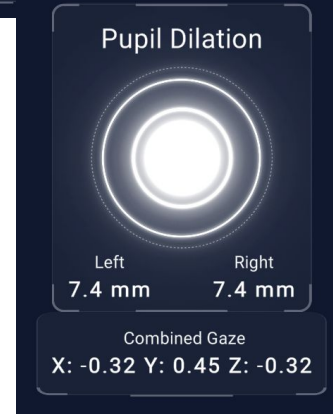
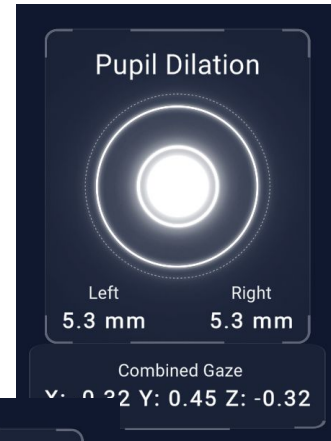
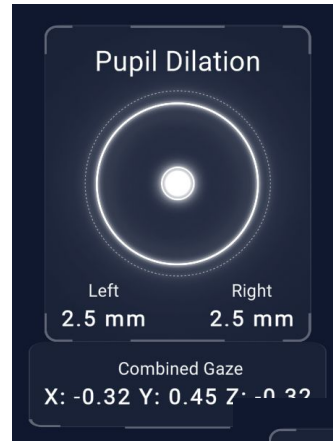
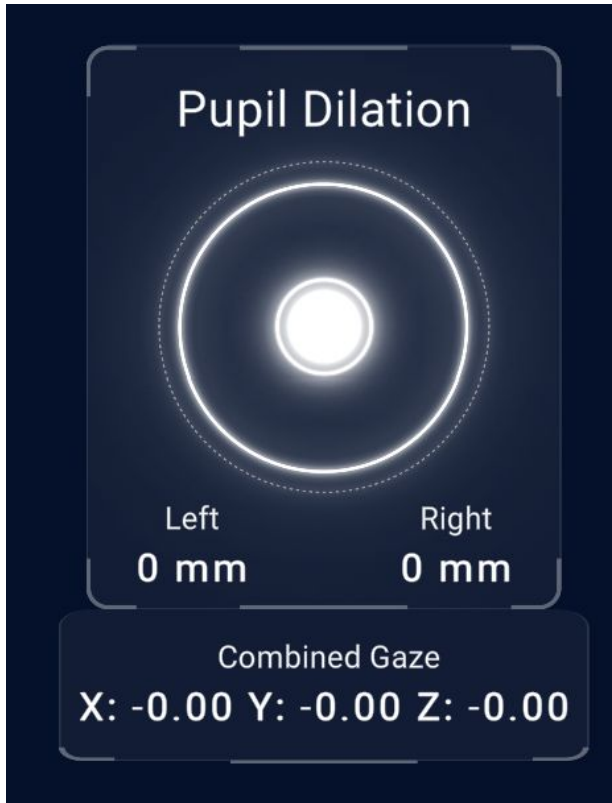
Cognitive Load



Updated Visualization of Heart Rate data



Updated Visualization of Pupillometry



Updated Visualization of Cognitive Load



Planned Third Iteration Features

- Adding exporting for both the web data and/or the the data sets. This data export should come from the webapp and be understandable to the layman.
- Integrating our web app with the Peak Mind software.
- Enhancing Unity dashboard UI
 - Make the background more appealing in the Unity dashboard
 - Add menu scene to allow for program flow and full user experience
- Ability to view different people's data in the same graphs for comparison.
- Visualize aggregate data in web app (like average Heart Rates for all simulations on a Tuesday)

joke

a unity developer walks into a bar and makes a scene

