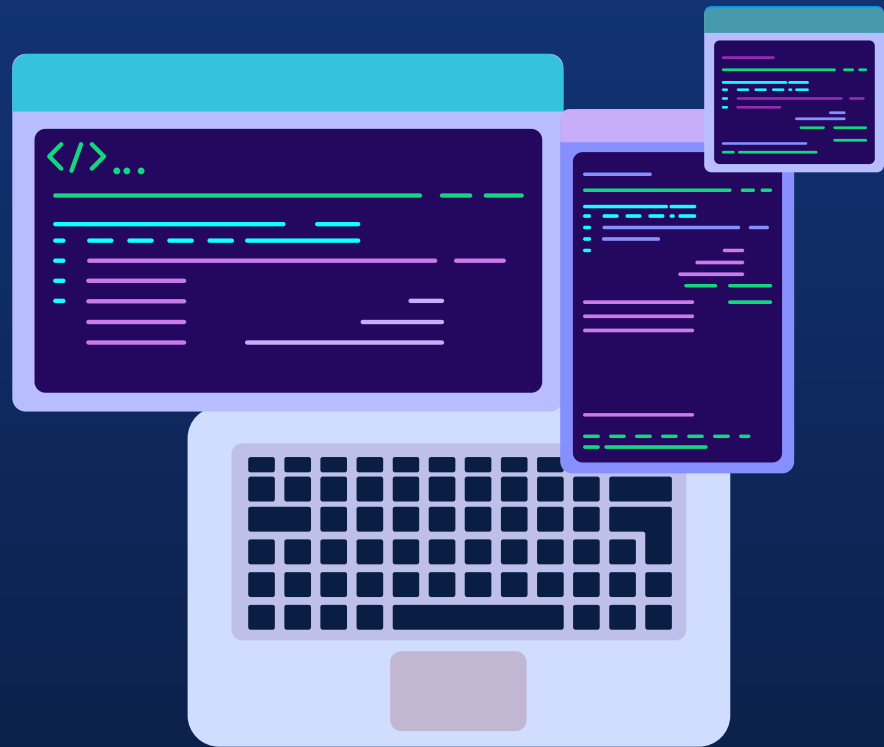


YAWN-ALYTICS





PROBLEM:

Fatigue causes safety issues in personal life and the workplace but it is difficult to track and quantify.

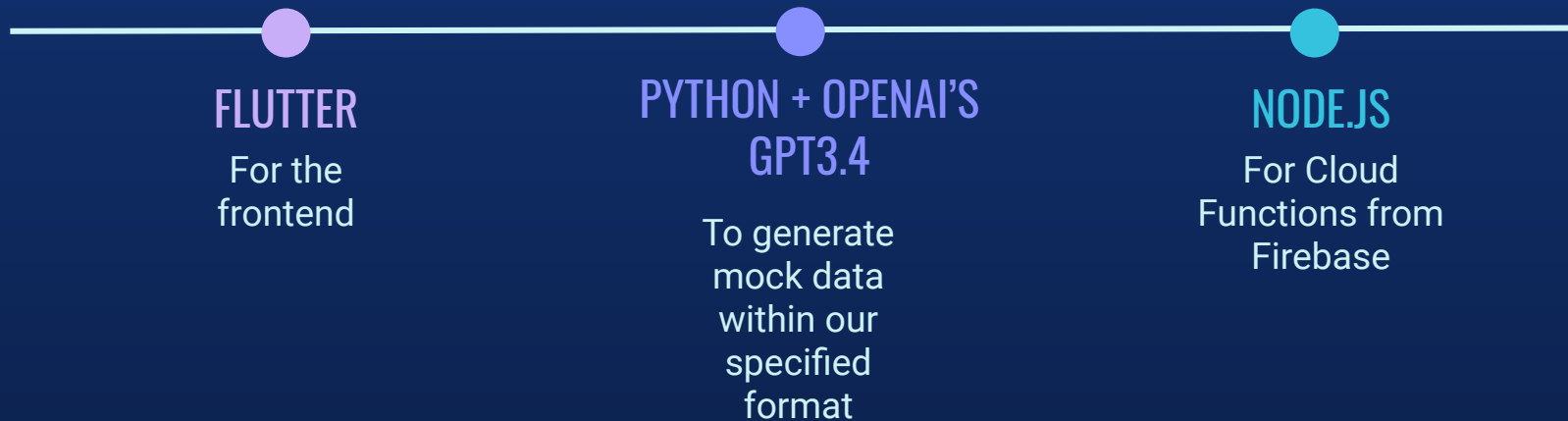


SOLUTION:

A fatigue detection and tracking application that delivers personalized insights.



HOW WE BUILT IT





MARKET SIZE

ERIN


Devised an implementation of the Psychomotor Vigilance Task using Flutter and an image

RUCHI

Worked on all aspects of the product cycle and the Self-Assessment page

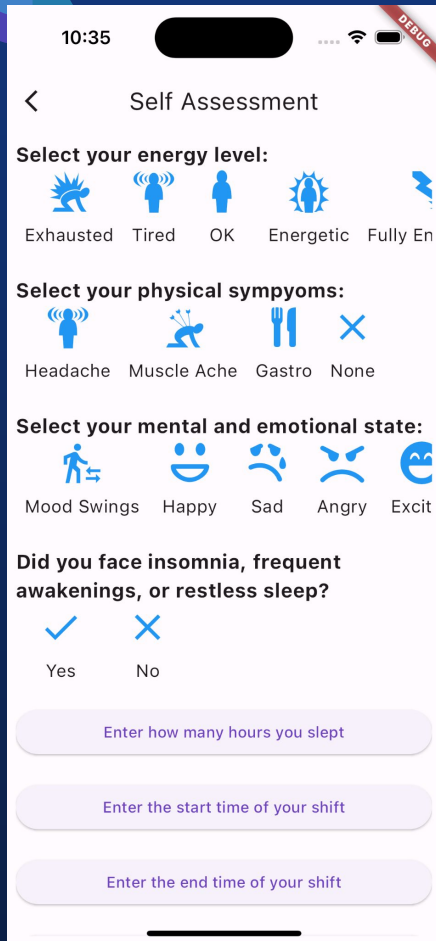
STACY AND ARUSHI

Stacy came up with the initial idea, worked together with Arushi to come up with app features and specify the data format, preprocessed data to convert Mock Data into human-readable text, and generated mock data using OpenAI GPT3.5. Arushi wrangled with Firestore and FL_Charts to generate beautiful charts in our reports.





DEMONSTRATION



10:35

Self Assessment

Select your energy level:

Exhausted Tired OK Energetic Fully En

Select your physical sympyoms:

Headache Muscle Ache Gastro None

Select your mental and emotional state:

Mood Swings Happy Sad Angry Excit

Did you face insomnia, frequent awakenings, or restless sleep?

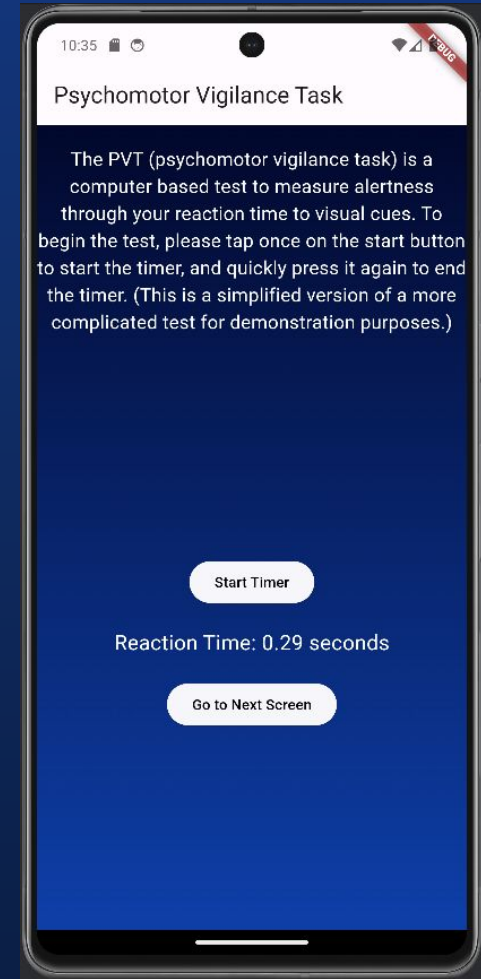
Yes No

Enter how many hours you slept

Enter the start time of your shift

Enter the end time of your shift

THE SELF ASSESSMENT + THE TEST



10:35

Psychomotor Vigilance Task

The PVT (psychomotor vigilance task) is a computer based test to measure alertness through your reaction time to visual cues. To begin the test, please tap once on the start button to start the timer, and quickly press it again to end the timer. (This is a simplified version of a more complicated test for demonstration purposes.)

Start Timer

Reaction Time: 0.29 seconds

Go to Next Screen

CHALLENGES

New languages!

Most of us did not have experience using Dart or Flutter! We learned as we went

Self-Assessment Time

too long and making the components responsive was also another challenge

Firebase/Flutter App

Because of the M1/2 chip there were problems integrating Firebase with the Flutter app

Windows Rendering

Windows rendering was taking 5-10 minutes slowing down the development

The Game

It was challenging to make a game, but Erin adapted by simplifying the scope of the game to make accomplishable within the timeframe

WHAT WE LEARNED

STACY



Learned about how different components exist and integrate within an application.

ARUSHI



Learned about Flutter and how to frontend. Also, how to do an end-to-end integration with the frontend and backend. Her day job is just being a researcher.

ERIN



Learned a lot about the Dart language

RUCHI



Learned a lot about Dart and Flutter, and UI. Learned how to use the full scope of knowledge existing on the web since nothing is cheating, in fact reinventing the wheel is a waste of time

A stylized icon of a code editor window with a teal header bar and a dark purple body containing colorful horizontal lines representing code.

THANKS

Questions?

A stylized icon of a code editor window with a light purple header bar and a dark purple body containing colorful horizontal lines representing code.

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon**, infographics & images by **Freepik**