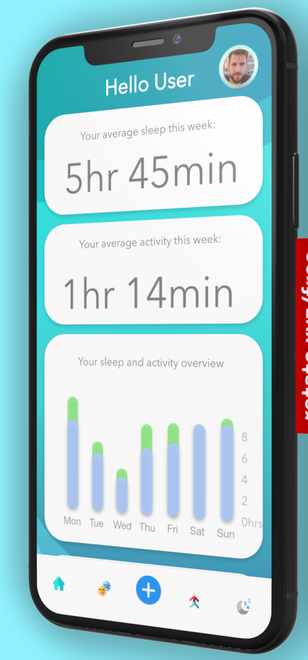
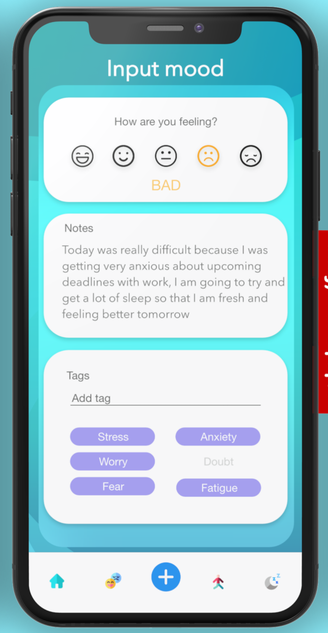
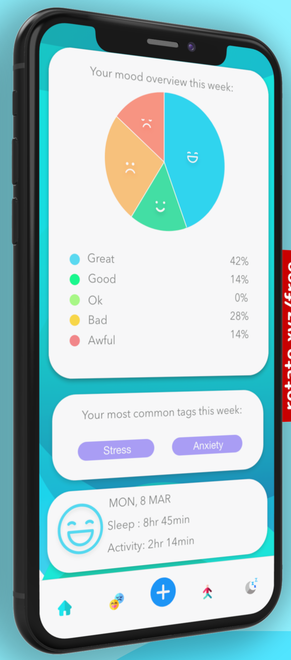






WAVE

An Apple Watch companion mobile app to help users understand their physiological state

Technology

Currently there exists a handful of devices and software that propose to be used for mental health treatment, one of these devices is TouchPoint, a twin neuroscientific setup worn on both wrists in the morning or night, they intend to induce calmness in the body before going to sleep, they can also be used before, during or after a stressful situation. Another is an application developed by Awake Labs to be used on the Samsung watch which can be used to monitor the emotional state of adults with intellectual disabilities. Other apps that exist include Moodnotes, Daylio, and Jour, these all contain similar features however they do not incorporate the use of automatic watch data such as sleep and activity patterns therefore they exist solely as therapeutic means of maintaining mental health but also do incorporate any features for maintaining physical health.

Features

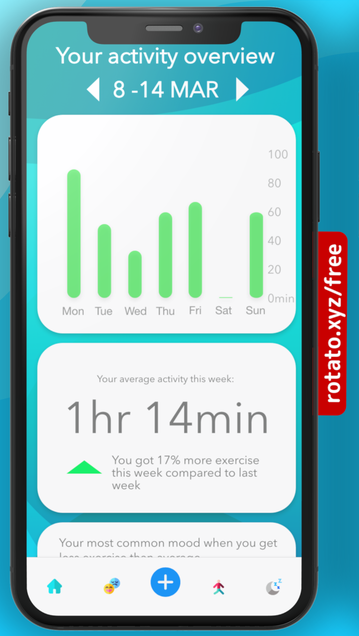
- Use apple WatchKit to display sleep and activity data
- Provide the user with the ability to input mood data
- Provide a comprehensive overview of mood, sleep and activity
- Get useful tips on how to manage and improve mood, sleep and activity
- Analyse data patterns and view the relationship between fluctuations in sleep or activity and mood.

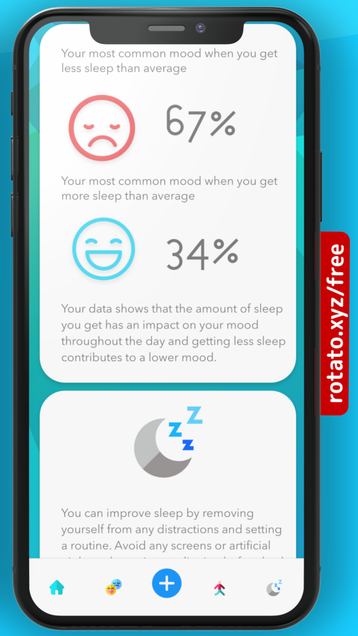
Problems

- 76% of people surveyed said that their mental health had been negatively impacted by the covid-19 pandemic, with isolation and lockdown being the most common factors.
- 43% of people said that they struggled to stay motivated and proactive, both mentally and physically and when asked what they would do differently, the most common answers involved more exercise or better sleep management.
- Many mental health services have been or currently are disrupted, preventing access to support for those who need it most, potentially responsible for the 59% increase in daily suicides and attempted suicide incidents from the previous year.

Solutions

- Create a mobile app and a smart watch companion app that uses watch data and user input data to create overviews and charts that allows the user understand, manage and improve habits to help the user stay mentally and physically healthy. The app will use automatic sleep and activity data along with user input data such as mood and tags to provide the user with a general overview of their physiological state





Aims

- I aim to create an app that can be used on mobile in combination with a wearable health device such as an apple watch.
- I aim for this app to be used to help detect physiological changes and keep the user up to date with any negative trends in their behaviour that may correlate with certain conditions or mental states.
- To create a system anyone can use to help track and maintain their mental and physical health.

Objectives

- To explore underlying factors that can cause a decline in mental or physical health.
- Identify whether the use of wearable health devices can reduce or mitigate these factors.
- To explore the relationship between use of health tracking devices and mental and physical state in wearable users and non-users.
- Evaluate public attitudes to the use of wearable health devices .
- Explore attitudes to COVID 19's impact on mental/physical health.
- Evaluate attitudes towards the potential impact of wearable health trackers during isolation.
- Identify and assess any health risks involved.
- Identify any privacy and security risks.
- Assess the most viable way the app can be used in conjunction with wearable health trackers.
- Identify the most viable language and interface to be used.
- Investigate the correlation between an improvement in physical health and mental state.