

Knight Foundation School of Computing and Information Sciences

Fall 2022 Capstone II Project

Stress and Anxiety Self Management App



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PROBLEM

Mental health affects all of us, it's what regulates our behavior, emotions, and thoughts. Therefore, it's important that we maintain and cultivate a state of mental wellbeing, particularly in recent troublesome times which has induced a widespread effect on the human population. For instance, according to the latest Global Burden of Disease study, the pandemic has disproportionately affected the mental health of young people and women, inducing a greater risk of stress and anxiety filled behavior [1]. In fact, in 2021 four in 10 adults worldwide said they experienced a lot of worry, stress, physical pain, sadness, and anger [2].

SUMMARY

The HowRU.life app aims to help ease or provide guidance to such adversity by creating an accessible way for anyone to log their mental state, with the ultimate goal of reaching a greater understanding of what induced such emotions in an in-depth and constructive manner. Consistent use of the application could ease stress and anxiety through mental exercises, measurable progress and constructive reflection.

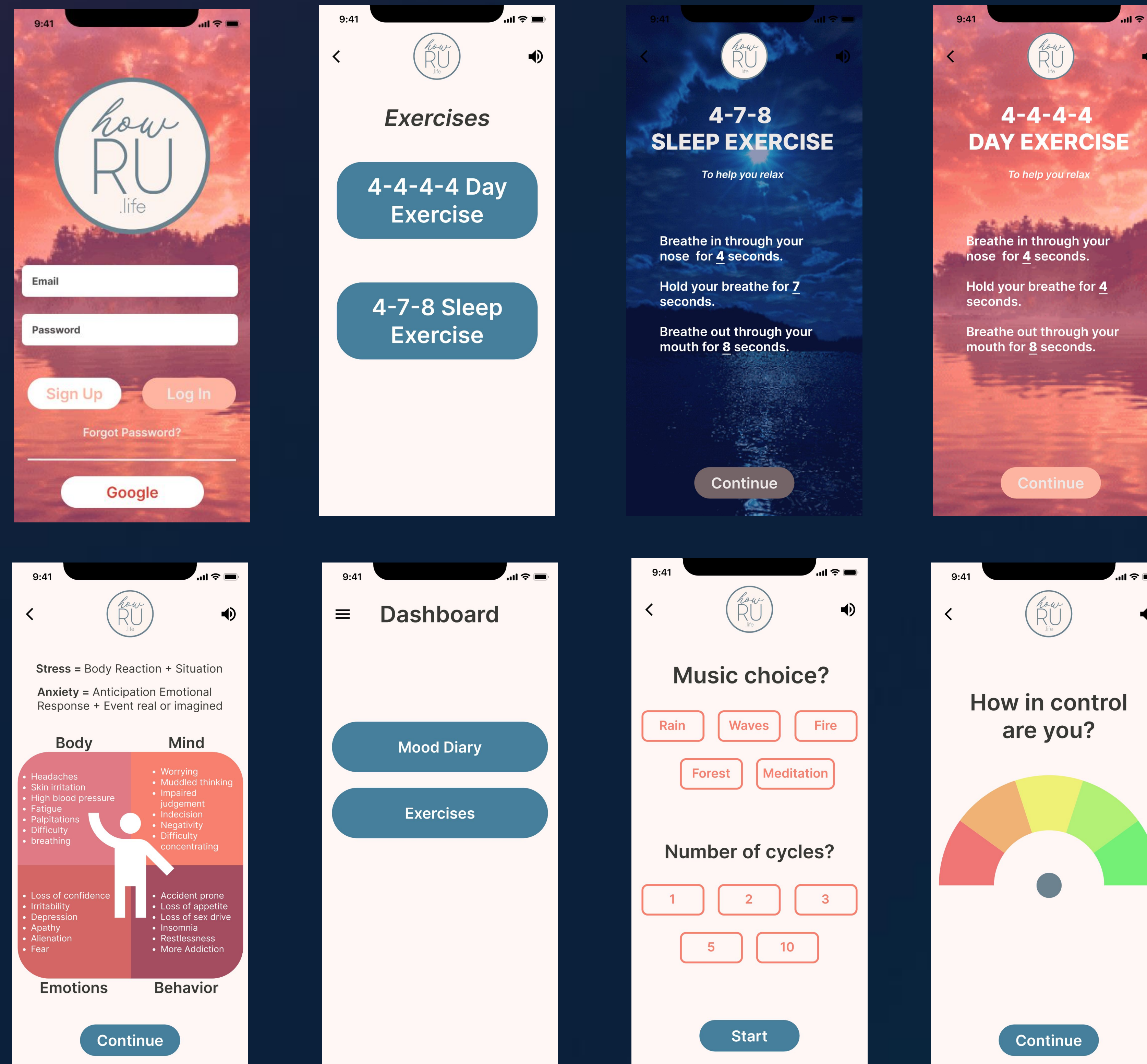
SYSTEM & OBJECT DESIGN

HowRU's backend system is comprised of a React-native framework and a MongoDB database platform. The Reactive native framework and MongoDB allows us to develop and scale the application seamlessly to various platforms such as iOS, Android and web applications if needed. To support front end development, HTML, CSS and React Javascript library is utilized.

VERIFICATION

Android Studio and Xcode (iOS) was used to test and run the application, these tools gave us the ability to quickly implement changes and receive feedback on runtime errors and points of failure.

IMAGES



CONTRIBUTION/IMPLEMENTATION

- Complete revamp to the prototype design of the application (figma), providing a more user friendly experience.
- Changes to the user experience with added sounds and visuals to deepen involvement of the user's senses.
- Enhancements to the daily user log, providing a more user friendly design and trackable progress.

REQUIREMENTS

Various software and tools are required to successfully test and run the application when using a Windows OS or macOS machine.

- Figma
- Visual Studio Code
- Android Studio (android)
- Xcode (iOS)
- React Native
- JavaScript
- GitHub
- MongoDB

CURRENT SYSTEM

The current system utilizes a React-native framework which provides great function to both the iOS and Android version of the application. MongoDB handles the backend, which includes user logins, dependencies, and any API calls.

REFERENCES

- [1] "New Global Burden of Disease analyses..."
<https://www.healthdata.org/acting-data/new-ih-me-analyses-show-depression-and-anxiety-a-mong-top-causes-health-burden-worldwide>
- [2] "World Unhappier, More Stressed Out Than Ever" Gallup
<https://news.gallup.com/poll/394025/world-unhappier-stressed-ever.aspx>



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