



Panther Buddy Mental Health App

Aidan Lewis-Grenz, Alex Joseph, Jackson Stephen, Jessie Le, Maddye Ta, Shelby Groussman

Our Grand Challenge

Mental health issues in college students have drastically increased since the beginning of Covid-19, with social distancing regulations limiting treatment options⁵. We have created a mental health app to help college students manage their mental health.

Introduction

- Previous mental health apps had issues surrounding validity and patient confidentiality, making it especially difficult dealing with such a broad and unfamiliar topic.
- We approached the app as a method to cope with mental health issues and as a resource for getting proper help, especially in times of a crisis.
- We've created an app that helps Chapman students connect with one another and help others find ways to deal with their mental health issues with specific modules.

Survey and Mindmap Results

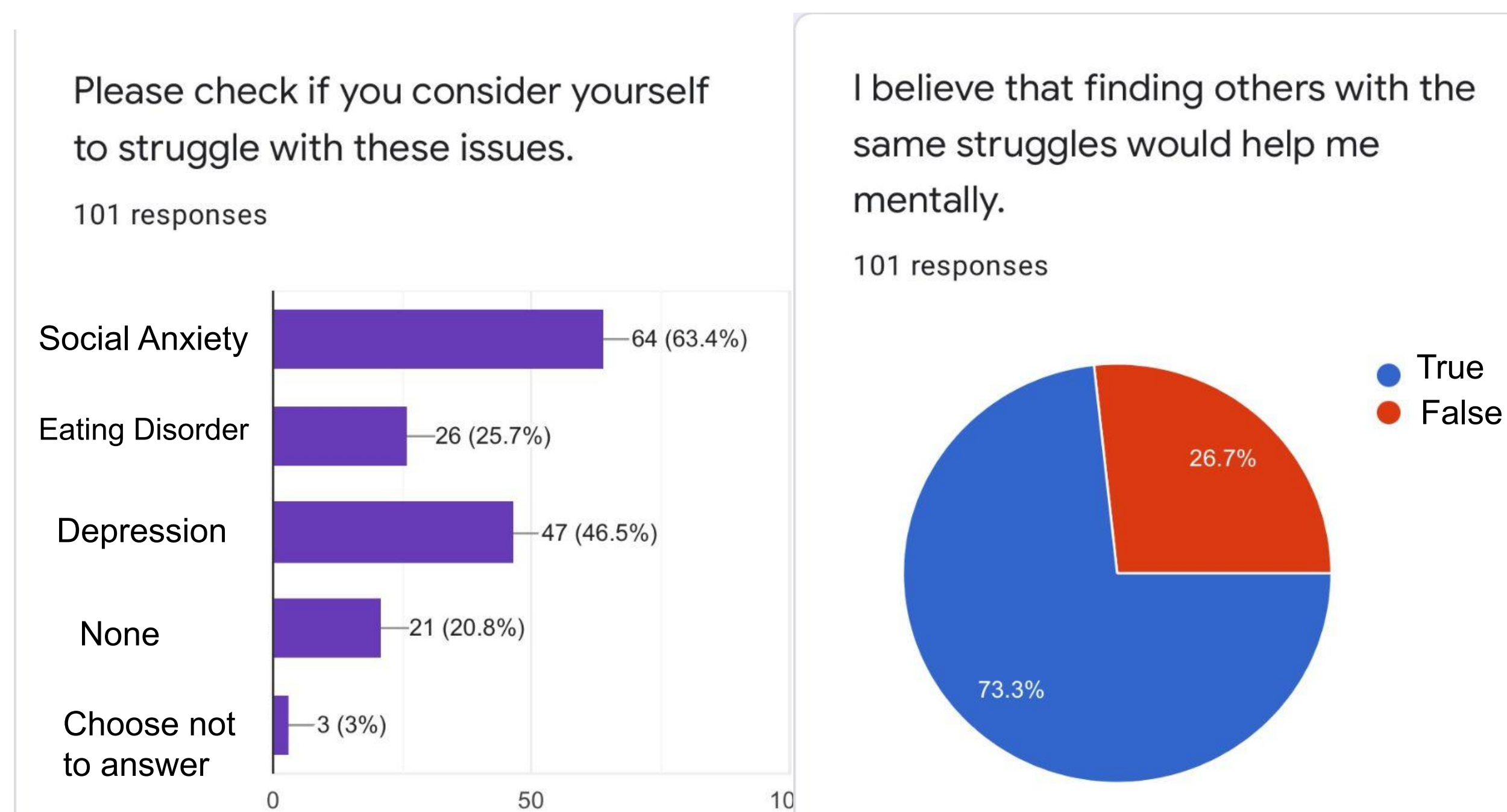


Figure 1

Results from a survey that we created and sent out to the Chapman community. We surveyed 101 Chapman students to best cater to the needs of the Chapman community. The survey helped us determine which mental health issues to target.

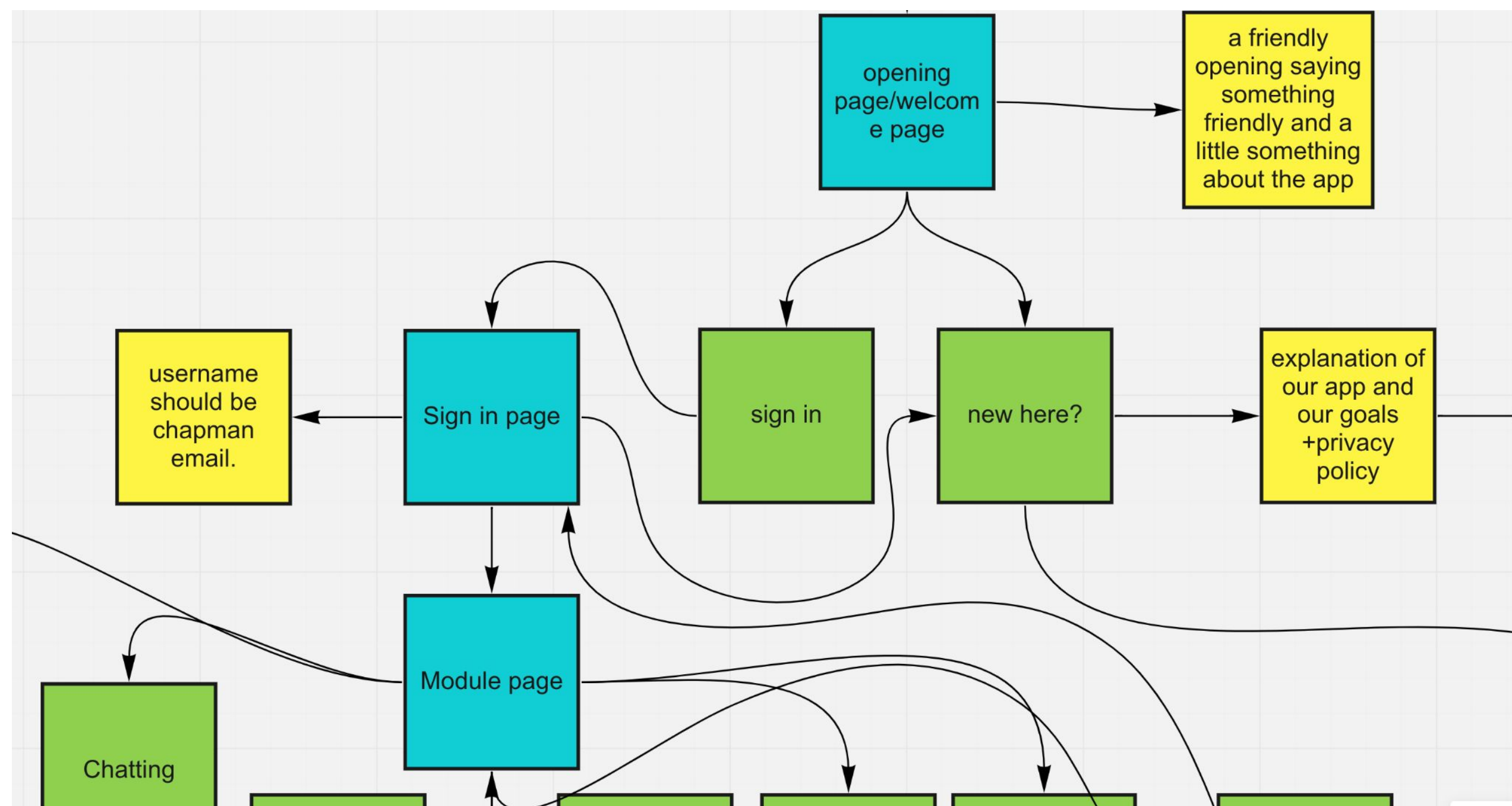


Figure 2

Our team created a miro mind map in order to map out all of our visions for the app. We mapped out each app page in blue with each of the options on each page in green and all of the notes in yellow.

Figma and Application Results

We decided to create an App that includes words of affirmation, meditation, chatting, and games as we found studies that supported these improving mental health.^{1,2,3,4} We also wanted to make the app customizable for each user so that they could feel as though the app was catered directly towards them. We added a resources page as well so that if the user felt like they needed any form of additional help with their mental health, they would be able to find it.

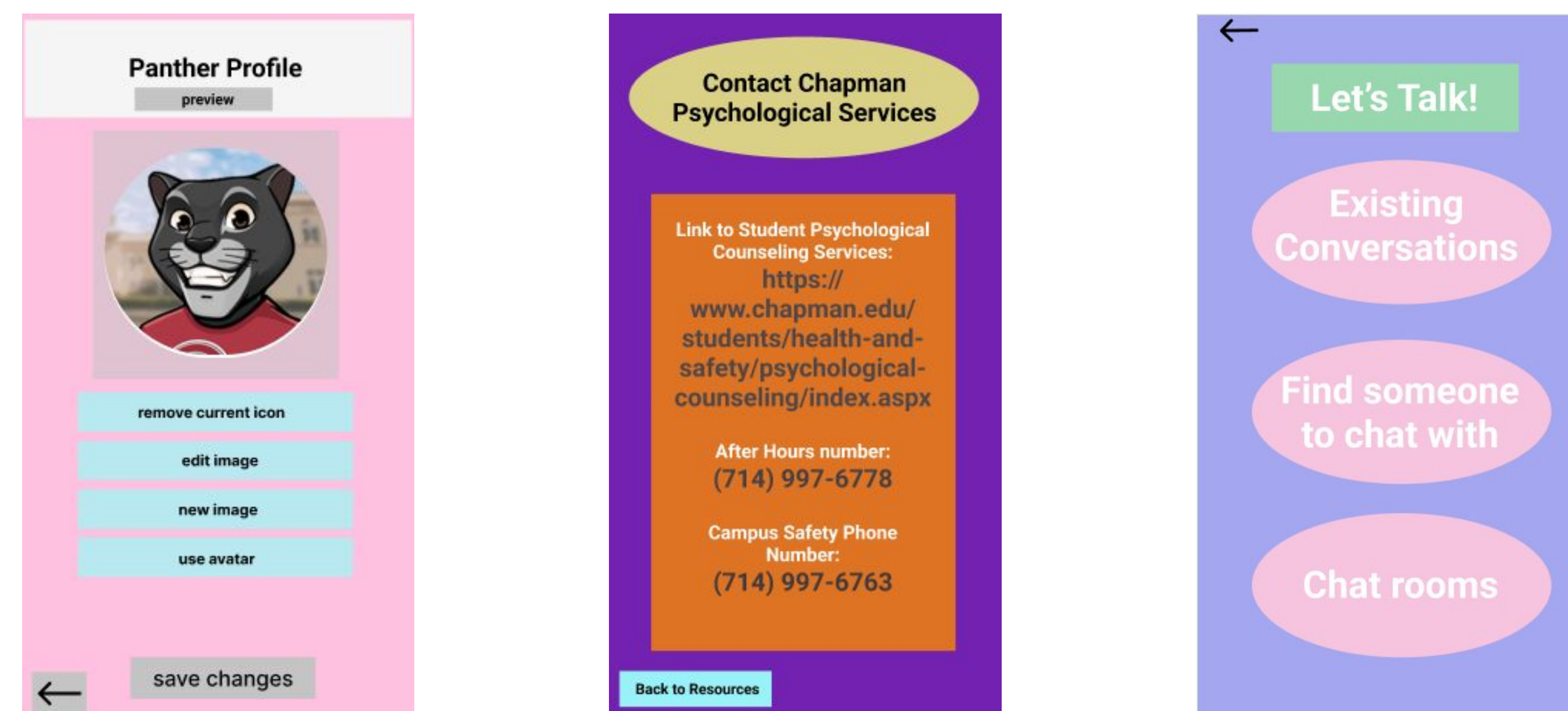


Figure 3

Figma mockup was used to plan out the specific design of the app. Simple interactions were also included, and the Figma was used as the template for the final app.

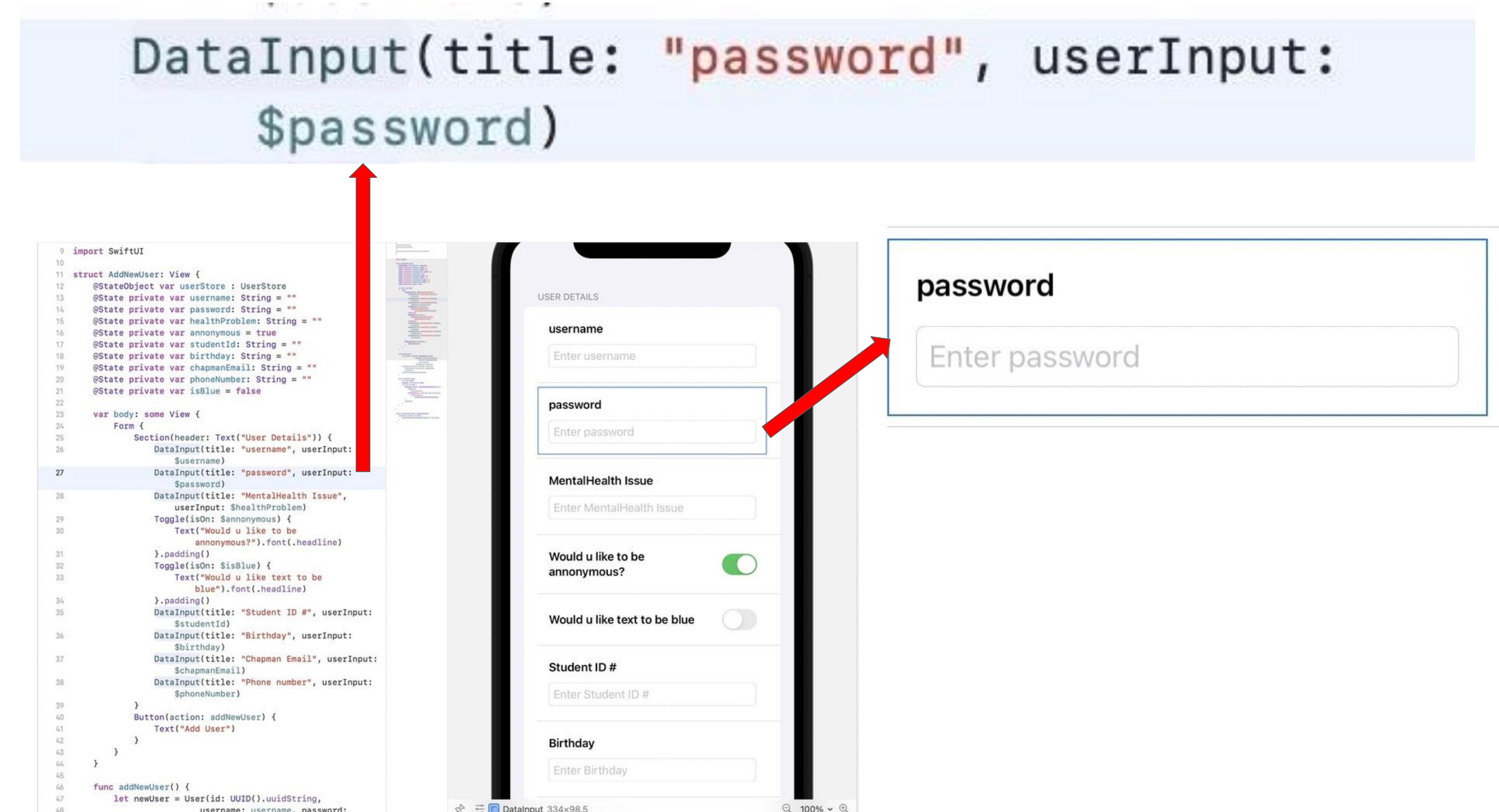


Figure 4

Picture of our code for the profile set up and how it translates into the application on an iPhone. Here, the code for inputting a user password is enlarged.

Conclusion & Future Directions

We conducted a survey to determine the most common mental health struggles among Chapman University Students, and during these four semesters we found the following solutions to each struggle in the form of modules for our Mental Health App.

- Social Anxiety
 - Meditation and Chatting Modules^{1,4}
- Depression
 - Words of Affirmation and Games Modules^{2,3}

We believe that our Modules have a high probability of allowing Chapman University to have a safe space in terms of mental health and to create less of a stigma around it. This app could allow for a healthy community to be created and for a conversation to be started.

We hope to continue to develop our app by creating a professional relationship with Chapman University to get our app into the hands of the students. We also want to work with Chapman University professionals to develop this app technically so that the app can be fully created. With the help of these professionals we hope to have a fully functional app in terms of having an app that can interact with other users as well as having the system to make this a Chapman University only login application.

Acknowledgements

We would like to acknowledge Dean Nunis, Dr. Cibrian, Professor Leonard, Dr. Kami, Dr. Thammavongsy, Dr. Gray, and Dr. Gormally for helping us with our project.

Literature Cited

- Koszycki D, Benger M, Shlik J, Bradwejn J. Randomized trial of a meditation-based stress reduction program and cognitive behavior therapy in generalized social anxiety disorder. Behaviour Research and Therapy. 2007 [accessed 2022 Apr 18];45(10):2518–2526. <https://www.sciencedirect.com/science/article/pii/S0005796707001003>. doi:10.1016/j.brat.2007.04.011
- O'Brien KA. Self-affirmation and social anxiety: affirming values reduces anxiety and avoidance. 2017 [accessed 2022 Apr 18]. <https://mspace.lib.umanitoba.ca/xmlui/handle/1993/32498>
- Cheng VWS, Davenport TA, Johnson D, Vella K, Mitchell J, Hickie IB. An App That Incorporates Gamification, Mini-Games, and Social Connection to Improve Men's Mental Health and Well-Being (MindMax): Participatory Design Process. JMIR Mental Health. 2018 [accessed 2022 Apr 18];5(4):e11068. <https://mental.jmir.org/2018/4/e11068>. doi:10.2196/11068
- Mahone IH, Farrell S, Hinton I, Johnson R, Moody D, Rifkin K, Moore K, Becker M, Barker MR. Shared Decision Making in Mental Health Treatment: Qualitative Findings From Stakeholder Focus Groups. Archives of Psychiatric Nursing. 2011 [accessed 2022 Apr 18];25(6):e27–e36. <https://www.sciencedirect.com/science/article/pii/S0883941711000550>. doi:10.1016/j.apnu.2011.04.003
- Pietrabissa G, Simpson SG. Psychological Consequences of Social Isolation During COVID-19 Outbreak. Frontiers in Psychology. 2020 [accessed 2020 Oct 24];11. <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.02201/full>. doi:10.3389/fpsyg.2020.02201