Team Shining Sky

ARORA Community Mentor Portal

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Mentor: Felicity Escarzaga
Sponsor: Dr. Morgan Vigil-Hayes

Introduction and Our Client

Key findings https://www.cdc.gov/nchs/products/databriefs/db419.htm

Data from the National Health Interview Survey

- In 2020, 20.3% of adults had received any mental health treatment in the past 12 months, including 16.5% who had taken prescription medication for their mental health and 10.1% who received counseling or therapy from a mental health professional.

www.canis-lab.com

CANIS

Dr. Vigil-Hayes and CANIS Lab:

- Research lab at NAU's SICCS department
- Currently working on the ARORA Project to address lack of mental healthcare for young people at Hopi reservation
- Needed a development team to help expand the ARORA Project to support new Hopi Mentorship Program

Problem Statement

- Rural location of many Indigenous communities limits access to mental health services.
- 26.6% of Indigenous people in America live in poverty.
- Indigenous people in America report feeling psychological distress 2.5 times more than the general population per month.
- Indigenous youth have the highest suicide rate of any group in the US.
- Youth risk factors: poverty, violence, substance abuse, trauma, trafficking, homelessness, high rates of anxiety and depression.

https://www.mhanational.org/issues/native-and-indigenous-communities-and-mental-health

https://youth.gov/youth-topics/american-indian-alaska-native-youth/physical-mental-health

Solution Overview

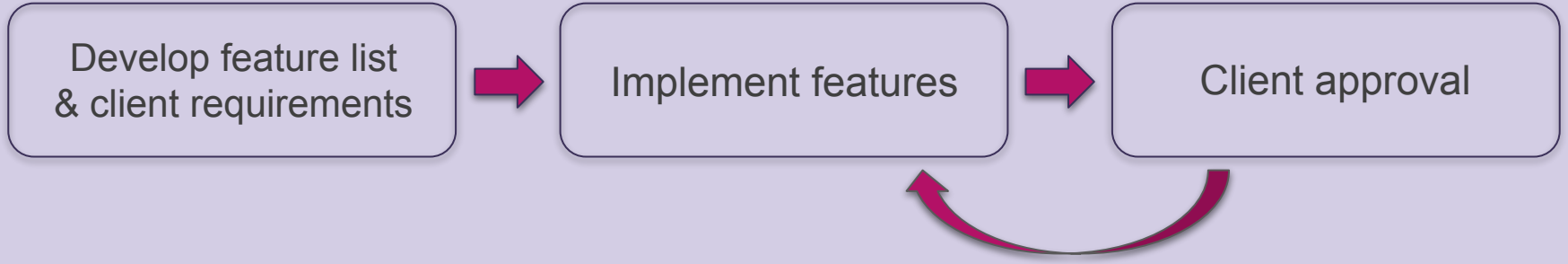
Solution Specification:

- Mobile app support for the Hopi Community Mentorship Program
- Designed to be a self-contained starting point to establish a platform for future development
- Focuses on functionality and usability

State of the ARORA Project:

- Our Community Mentor Portal app is seeing final tweaks and testing
- CANIS Lab is expecting a $2.5 million grant in July to fund further development
- Further development will focus on low-connectivity network code and integration

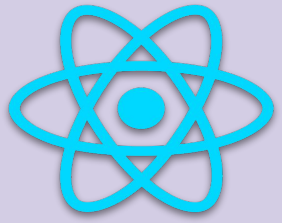
Requirements Acquisition



Key Requirements

- Question Feed
- Calendar Window
- Authority Levels
- Chat Window
- User Lists

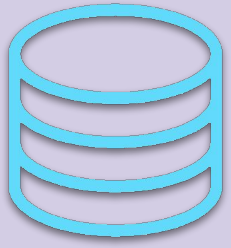
Frameworks and Packages



React Native

development framework

- Platform Support
- Large Community
- Existing Packages



Async Storage

data storage

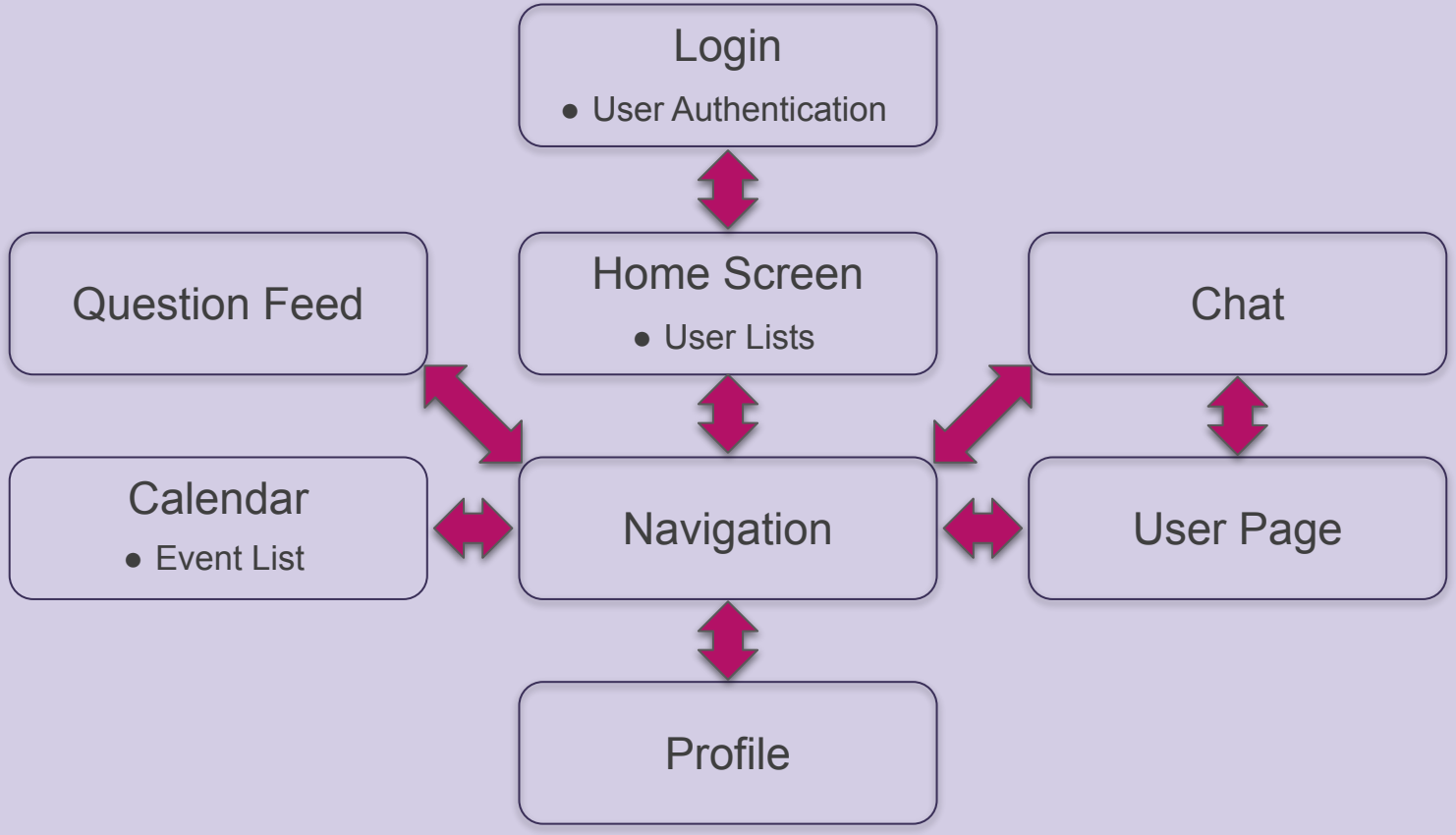
- Platform Support
- Utilize local storage with React

Expo

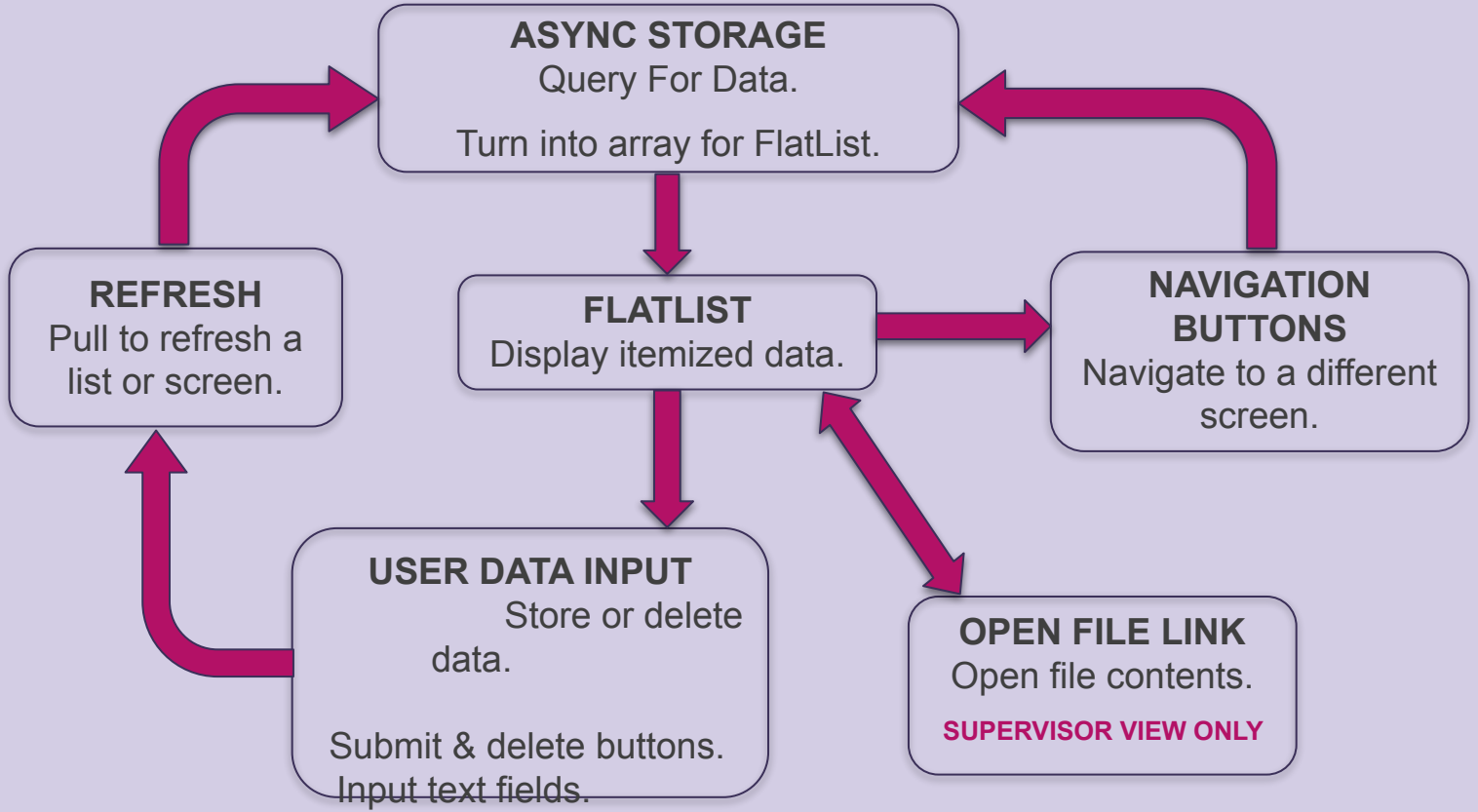
deployment framework

- Platform Support
- Designed for React Native

Front End Implementation



Back End Implementation



Prototype

Admin User

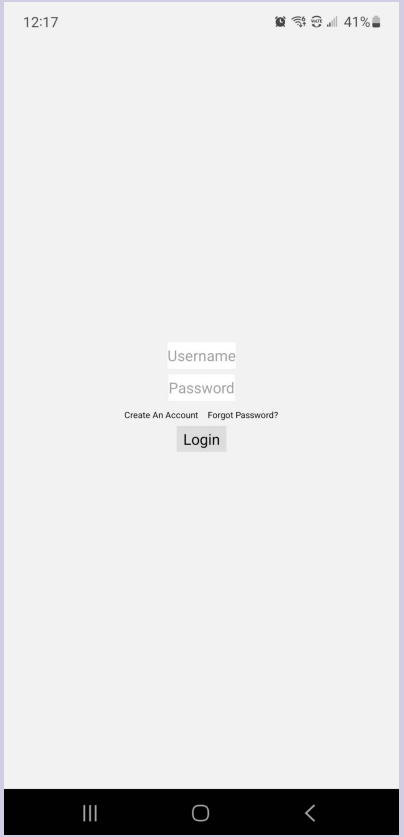
Unique utility user of the app
Gives ability to create supervisors.

Supervisor User

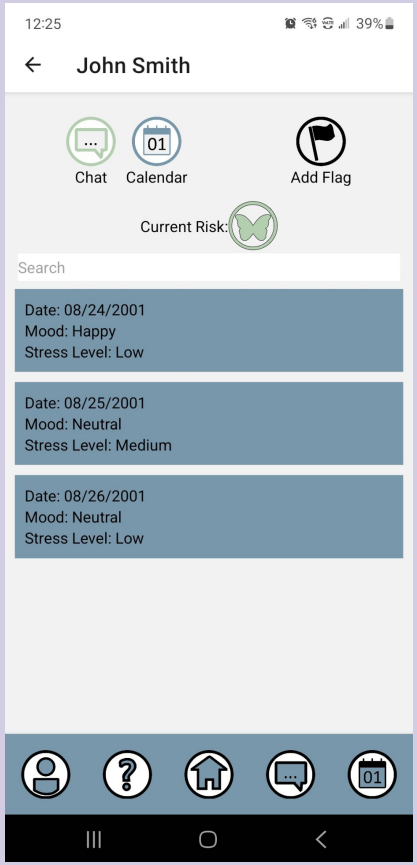
Secondary user of the app.
In charge of mentors.

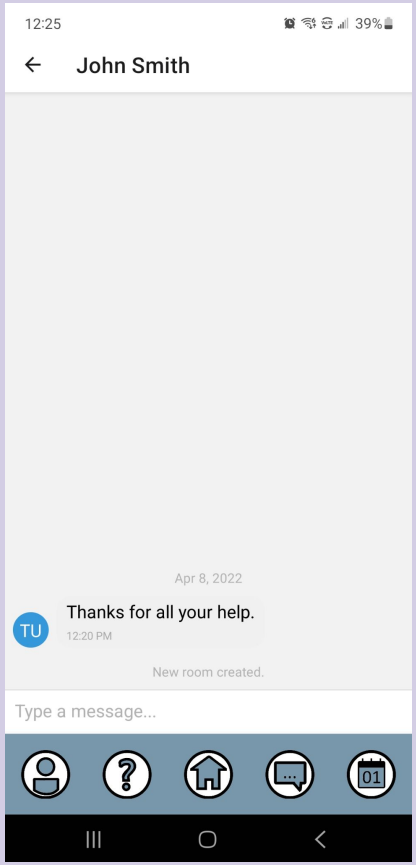
Mentor User

Main user of the app.
Direct communication with mentees.



Mentor View

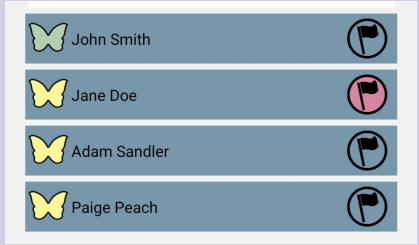




NAVIGATION BAR

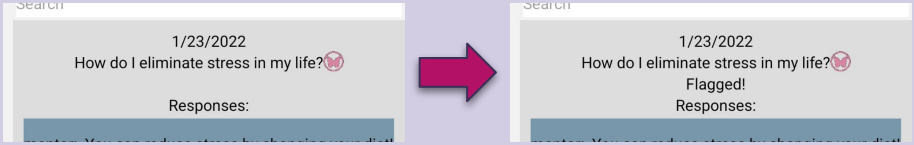
SEARCH BAR

BUTTONS



Mentor View

FLAG QUESTION



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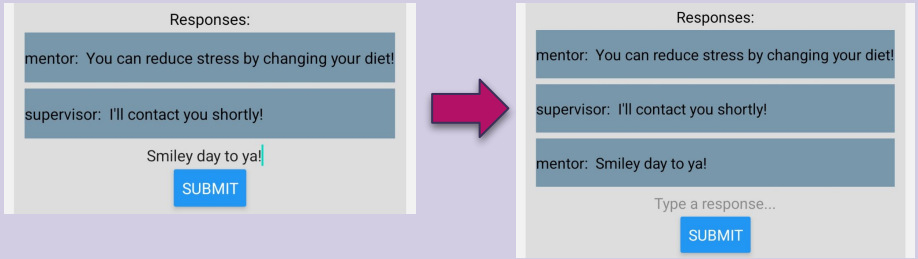

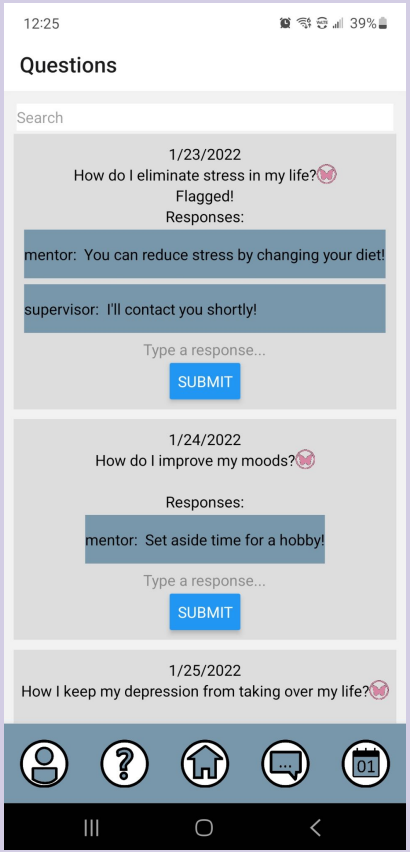

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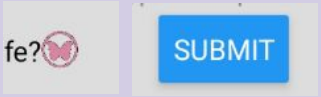

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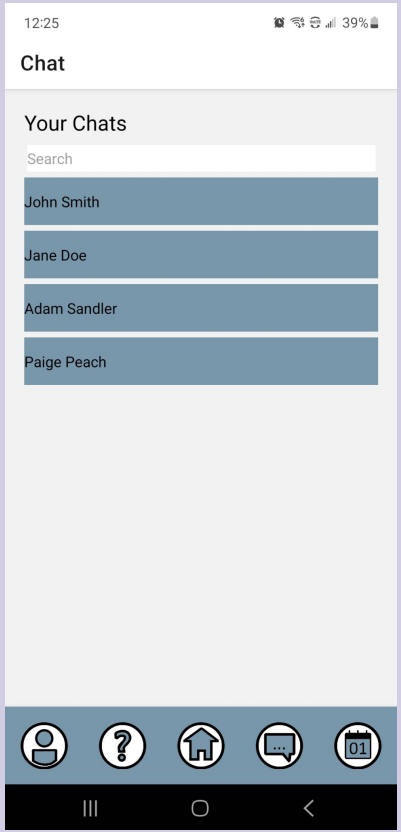
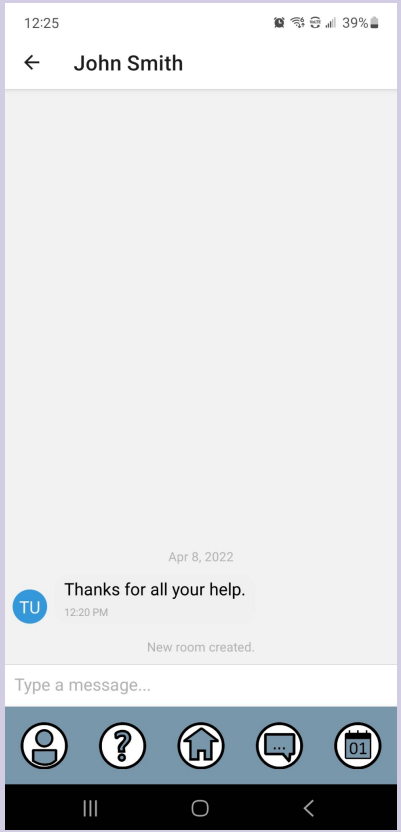
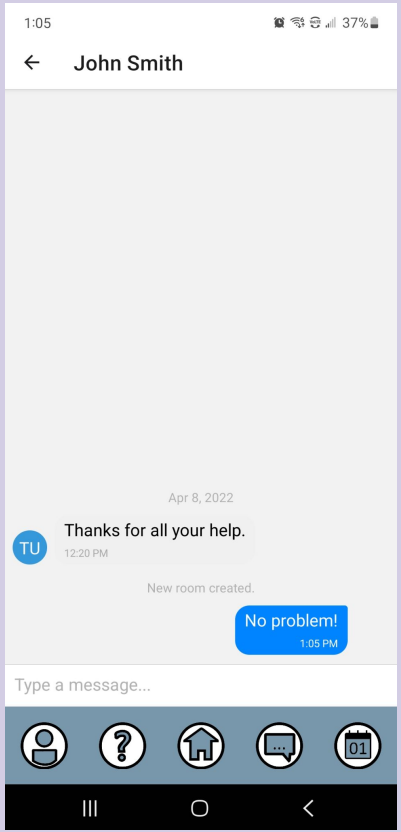
Mentor View







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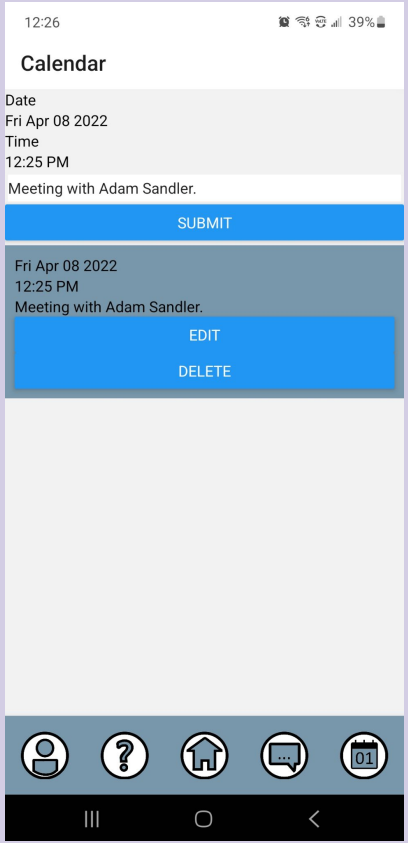

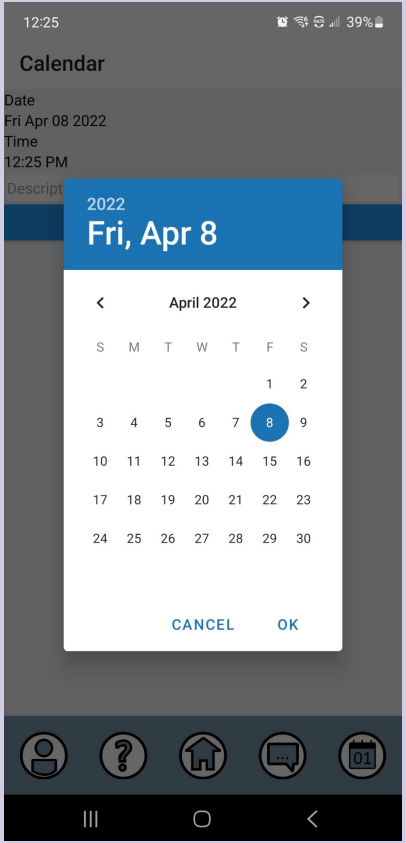

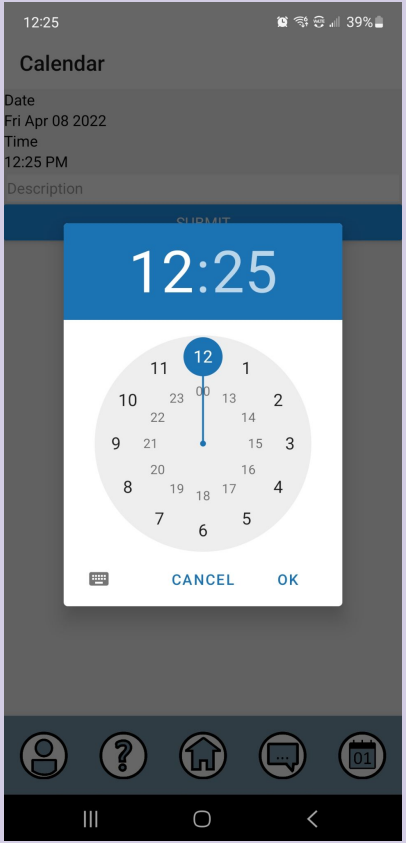

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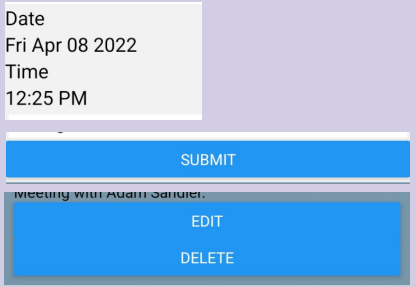

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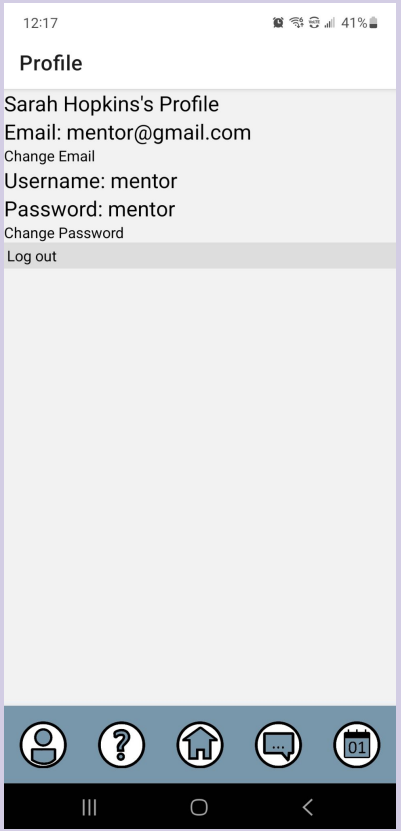
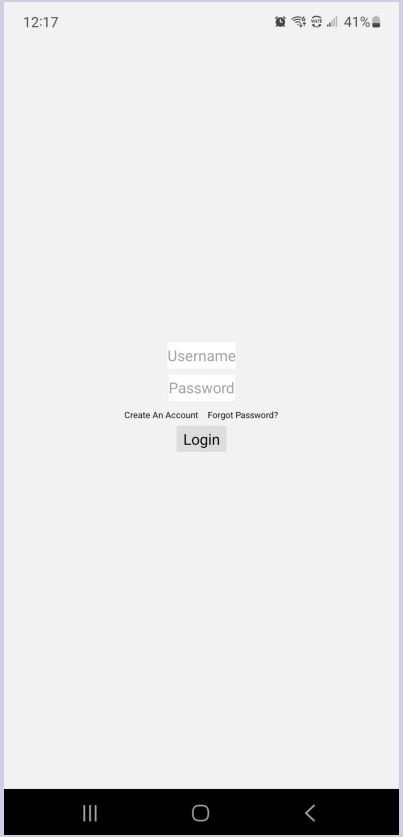
Mentor View





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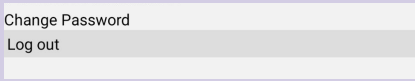

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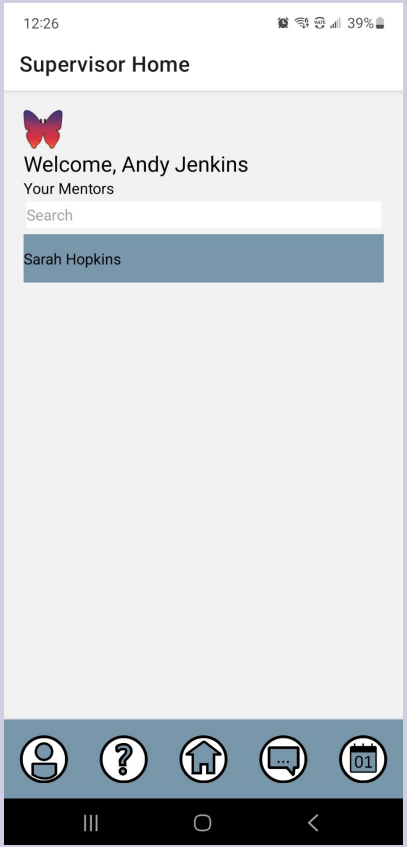
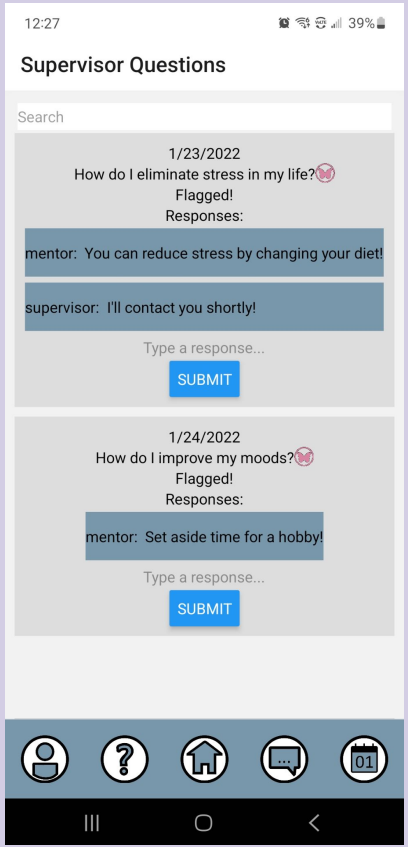
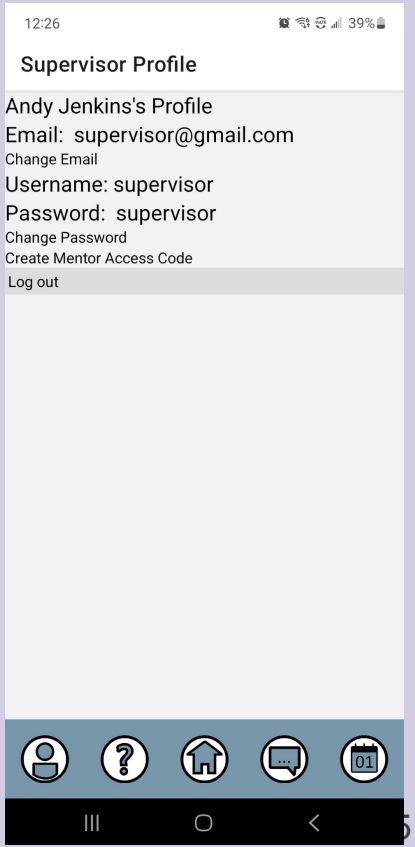
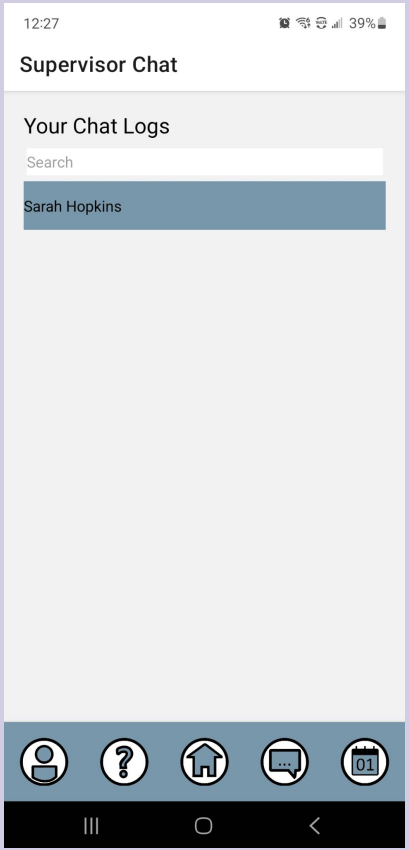
Supervisor View Differences

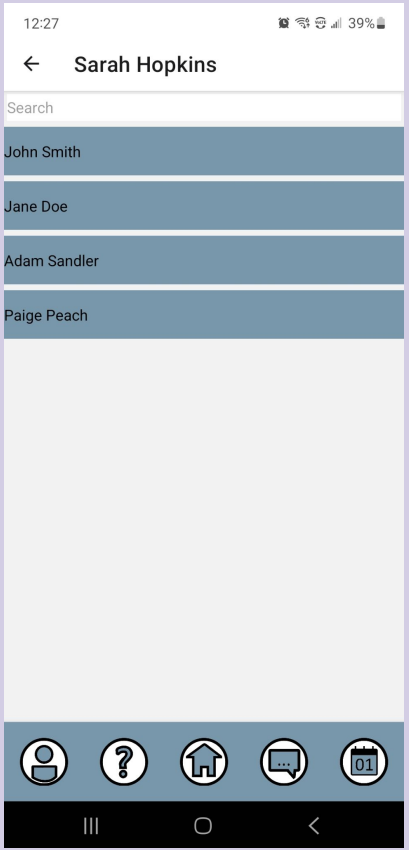


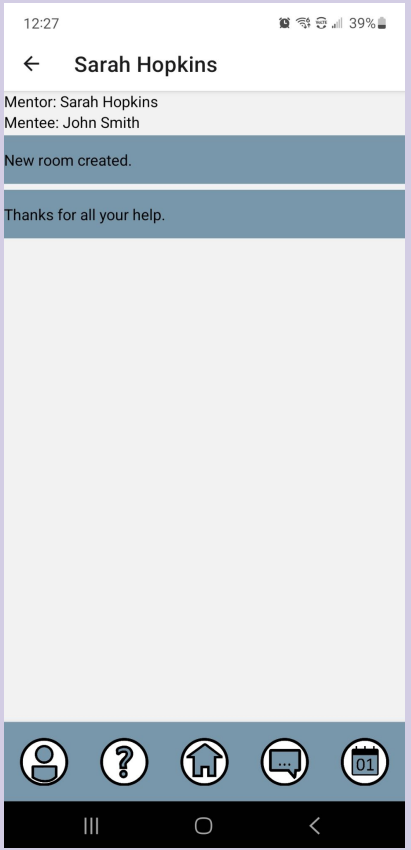




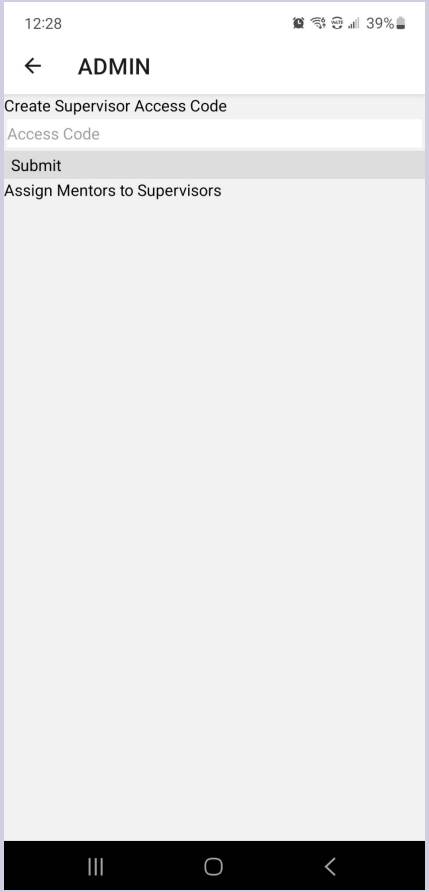
Supervisor View Differences







Admin View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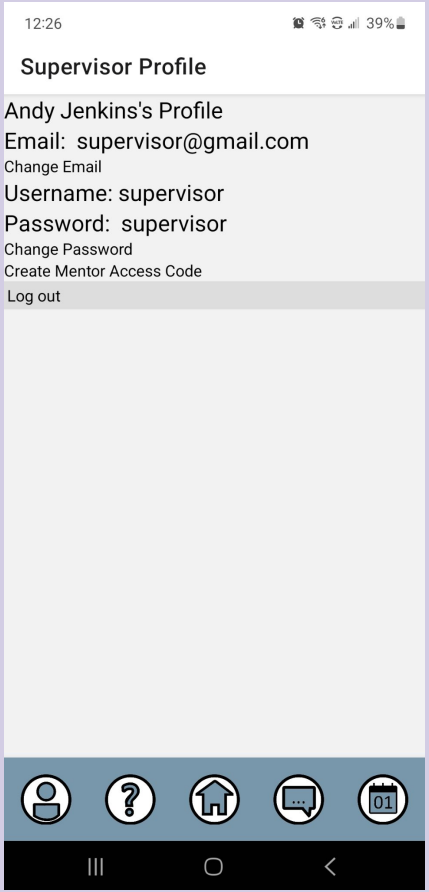
39%
ADMIN
Create Supervisor Access Code
Access Code
Submit
Assign Mentors to Supervisors


12:26
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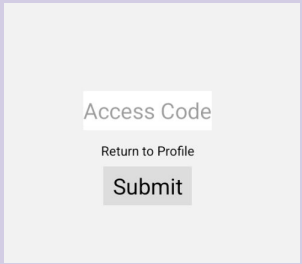
Supervisor Profile
Andy Jenkins's Profile
Email: supervisor@gmail.com
Change Email
Username: supervisor
Password: supervisor
Change Password
Create Mentor Access Code
Log out


Access Code
Return to Profile
Submit

Challenges and Resolutions

Data Storage

Challenge

Local storage

CANIS in charge of remote storage

Resolution

MySQL with node.js

SQLite

Async Storage

Refresh

Challenge

Show updated data

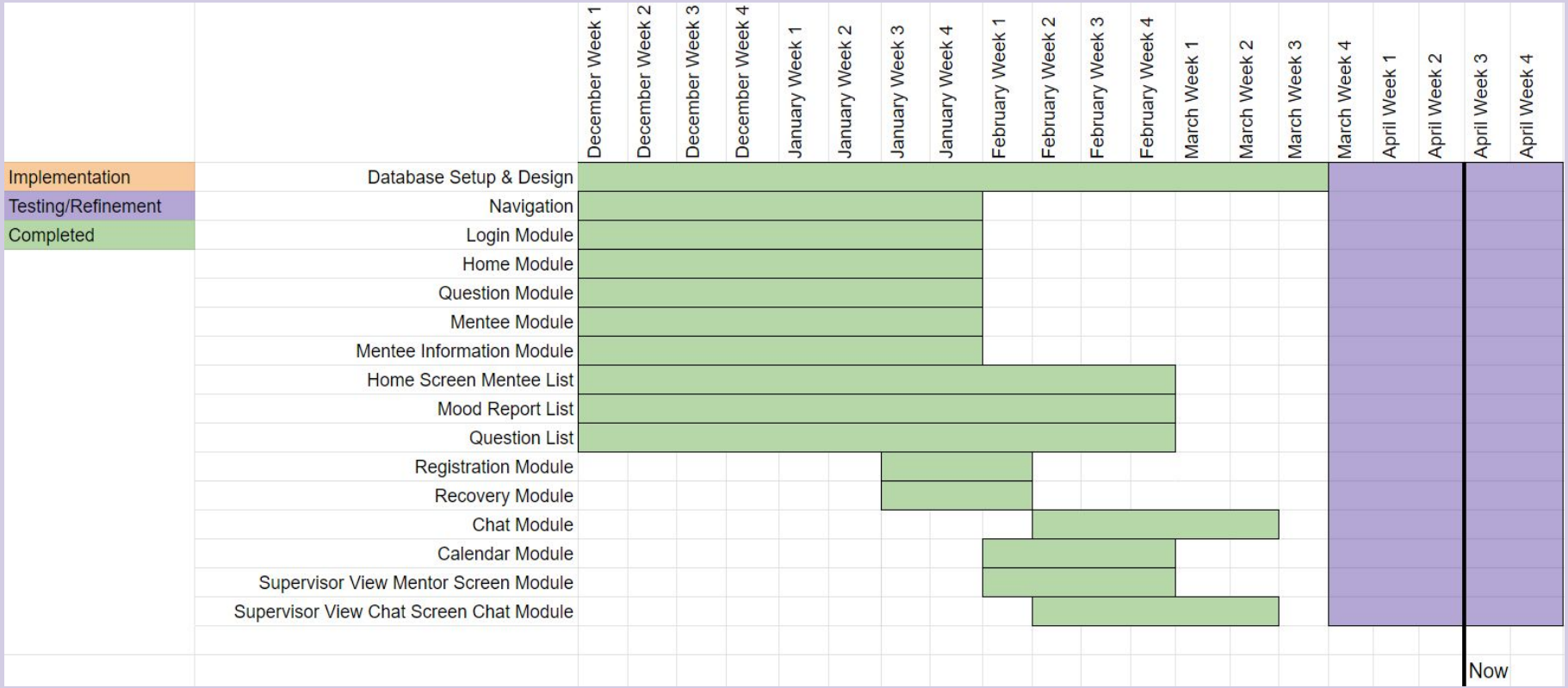
Refresh screen or element

Resolution

React Native Flatlist Usage

Implementing pull to refresh

Schedule


December Week 1
December Week 2
December Week 3
December Week 4
January Week 1
January Week 2
January Week 3
January Week 4
February Week 1
February Week 2
February Week 3
February Week 4
March Week 1
March Week 2
March Week 3
March Week 4
April Week 1
April Week 2
April Week 3
April Week 4
Implementation
Testing/Refinement
Completed
Database Setup & Design
Navigation
Login Module
Home Module
Question Module
Mentee Module
Mentee Information Module
Home Screen Mentee List
Mood Report List
Question List
Registration Module
Recovery Module
Chat Module
Calendar Module
Supervisor View Mentor Screen Module
Supervisor View Chat Screen Chat Module
Now

Testing Plan

- Sample Users
- Expert Review
- Real Users

- Simple Tasks
- Open-ended Questions
- Using the Feedback

Conclusion

- Team Shining Sky is working with CANIS Lab to address mental health among Hopi youth with the ARORA Community Mentor Portal app
- We developed a strong platform for future development to our client's specification
- Currently testing, tweaking, and preparing for final handoff
- CANIS Lab is expecting a $2.5 million grant and plans to expand ARORA further in the future