



**Knight Foundation
School of Computing
and Information Sciences**

Knight Foundation School of Computing and Informational Sciences

Summer 2022 Capstone II Project

NuMom (Keeping Moms & Infants Healthy)



Student: Eric Campillo

Mentors: Jean Hannan, Product Owner & Eduardo Morales, NuMom Veteran
Instructor/Faculty: Dr. Masoud Sadjadi, Florida International University

PROBLEM

New mothers with low income face a huge amount of adversity when trying to gain access to important resources for mothers. Without resources, it is difficult for these mothers to take care of their children. NuMom aids mothers in acquiring resources to make it easier for them to learn information, find important facilities, book appointments, and stay on course with their child's needs. NuMom strives to provide all mothers with access to the best resources to provide proper care for themselves and their children.

CURRENT SYSTEM

The NuMom app provides users with the following features:

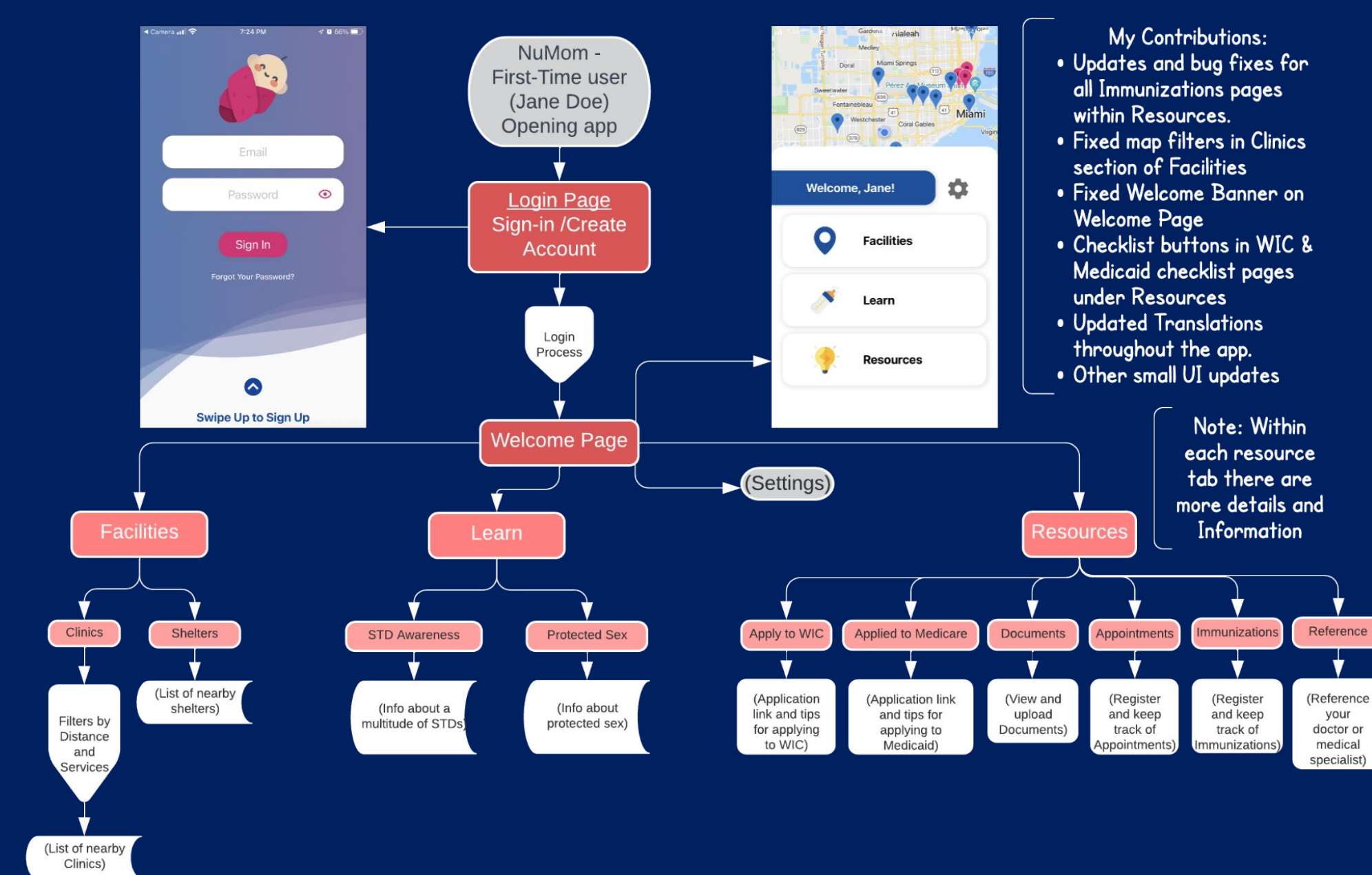
- Offered in three languages: English, Spanish, and Haitian Creole
- Provides information about safe sex practices, STDs, and child development milestones for feeding and immunizations.
- Locates important facilities like clinics and shelters.
- Provides resources to aid in applying for WIC and Medicaid.
- Records immunizations, appointments, documents, etc.

REQUIREMENTS

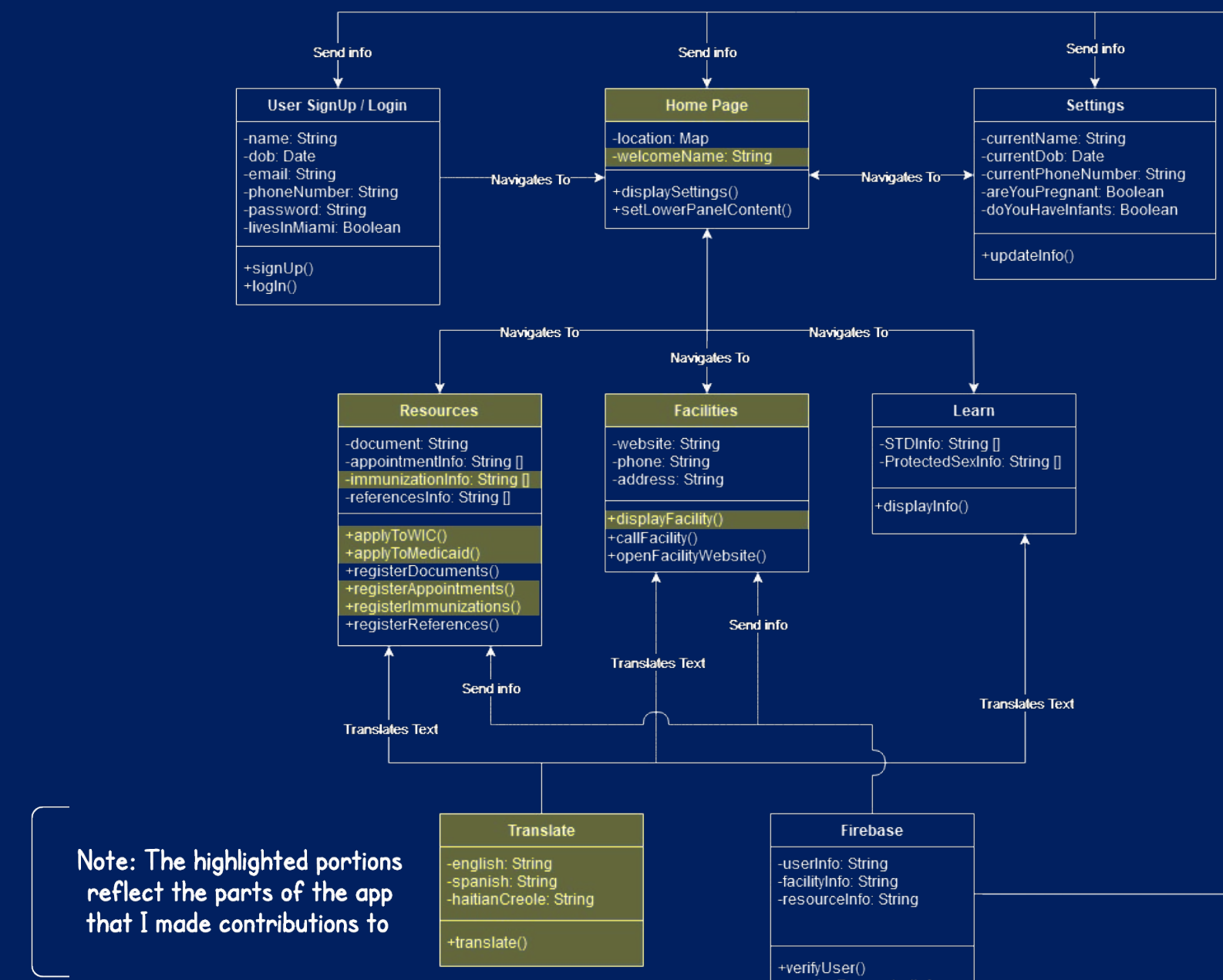
The main goal of this semester was improving UI/UX and removing as many bugs as possible. My personal contributions include fixing the following issues:

- Making information more concise for some paragraphs
- Created new icons to display for each food type under WIC
- Improved UI/UX of the last item in the Medicaid list due to a faulty title and description
- Created new issues after finding bugs
- Reviewed a myriad of pull requests and accepted them
- Other minor changes + polishing and commenting code.

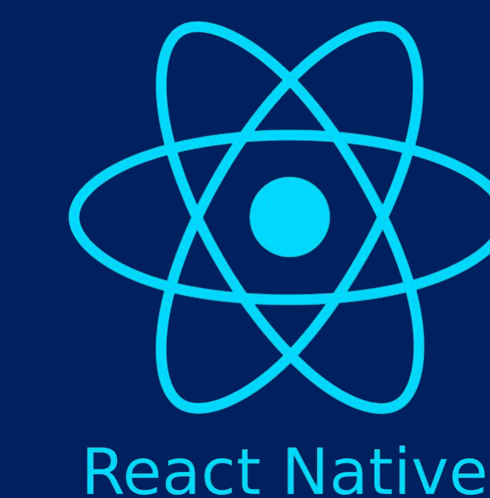
SYSTEM DESIGN



OBJECT DESIGN



IMPLEMENTATION



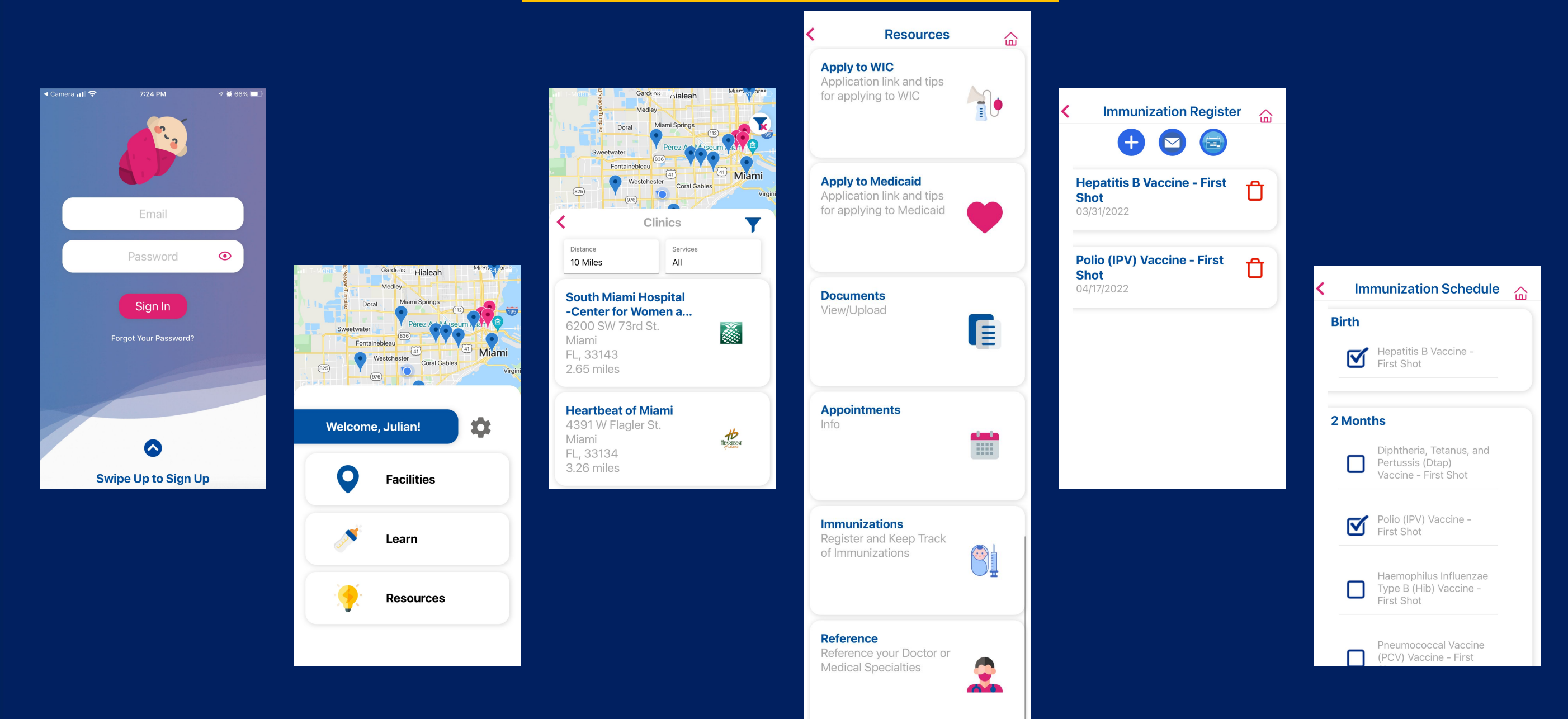
VERIFICATION

We tested the app by running an expo localhost tunnel through a terminal, which would run the temporary version of the app on a server. The tester could then connect to the application using the Expo Go app on their mobile device. This allows the tester to make changes to the code and see the effects on their mobile device. We used Git for version control. We would post new bugs/issues we found on the app to Github and distribute these issues amongst the group each sprint. We would fix these issues as soon as possible and post them to Github as pull requests, which would then be reviewed by 2+ members to ensure they met their requirements, before being merged.

SUMMARY

The current state of the NuMom app has been improved by refining the overall UI and UX as well as fixing lots of bugs. Towards the beginning of the semester, I worked on getting the new team members acquainted with the app and helped members install the app because I already had experience with NuMom from last semester. I helped out team members with any issues when possible and paid close attention to their progress each sprint, all the while fixing my own assigned issues along the way. I also reminded members to fill out their daily scrum.

SCREENSHOTS



**Engineering
& Computing**

ACKNOWLEDGEMENT

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