



Knight Foundation School of Computing and Information Sciences

Knight Foundation School of Computing and Informational Sciences Spring 2023 Capstone II Project NuMom (Keeping Moms & Infants Healthy)



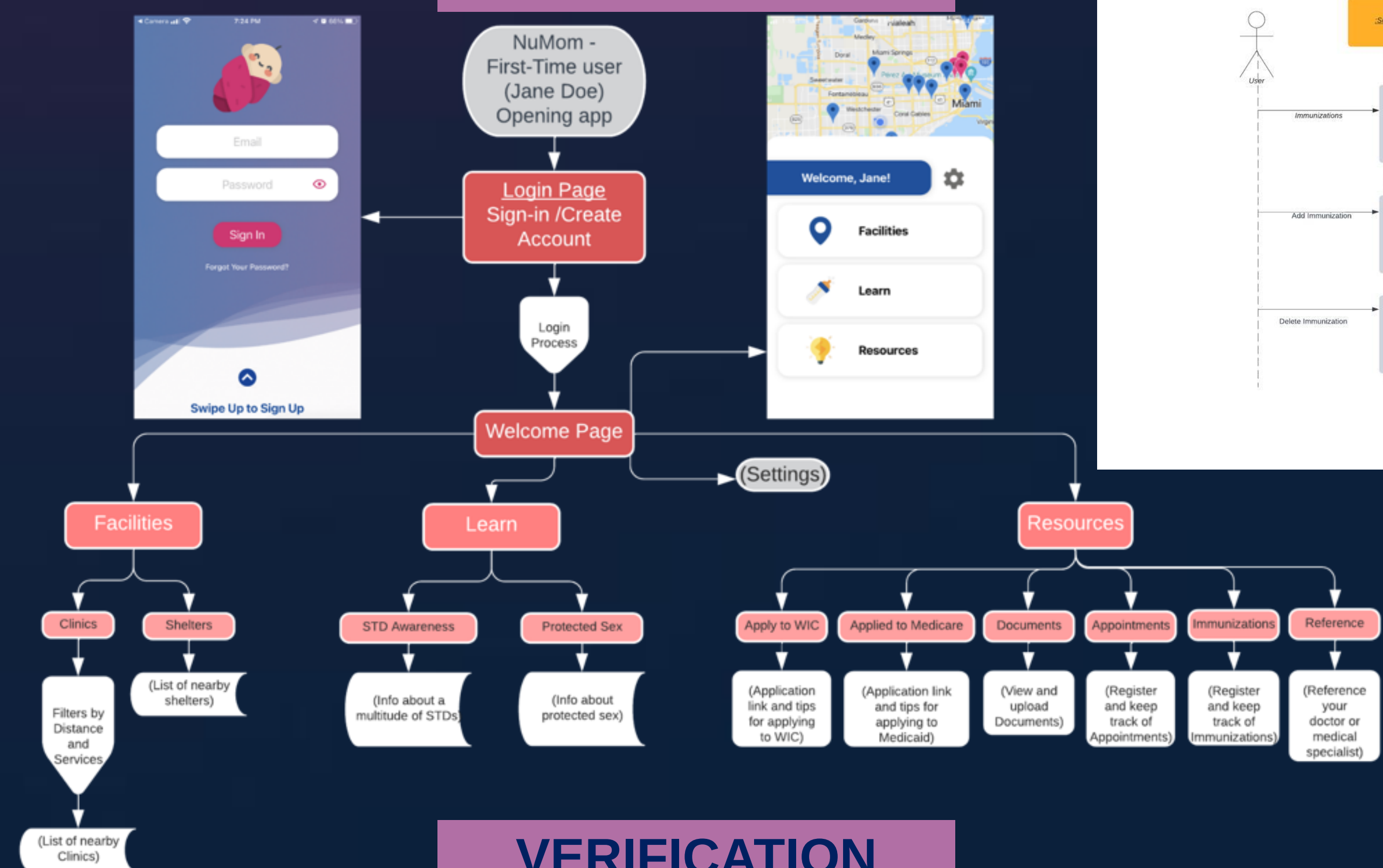
Student: Samuel Pellot

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

PROBLEM

New and upcoming mothers with low income often face difficulty in accessing resources and education necessary in order for a mother to care for both themselves and their children. Often, these resources can either be out of reach or completely unknown to a new mother. This problem is especially prevalent in minority mothers, whose first language may be something other than English. NuMom however aims to remedy this issue. With support for 3 languages (English, Spanish, and Haitian Creole) NuMom is accessible to mothers of different backgrounds and languages. Through NuMom, mothers may learn and read about sexual health and motherhood. NuMom also allows users to find local facilities, like clinics, or family centers where they may reach out to local professionals and receive equal access to resources and education needed for them and their families.

SYSTEM DESIGN



VERIFICATION

Testing of NuMom is done with Expo GO and the command line. A local host for expo can be launched through the command line, providing a QR code able to be scanned by Expo GO. This would then launch an experimental build of NuMom. Through this testing system, we were able to test and run changes we made on our machines to the source code of NuMom in real time, making debugging and updating the app quick and accessible. This is how we would tackle issues that were present on the NuMom Github. Once we feel we have successfully made a version of NuMom with the target issue resolved, we would open a pull request and have two peers review our proposed update. With two approvals and no merge conflicts, our code would successfully be merged into the current latest build of NuMom.

ACKNOWLEDGEMENT

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CURRENT SYSTEM

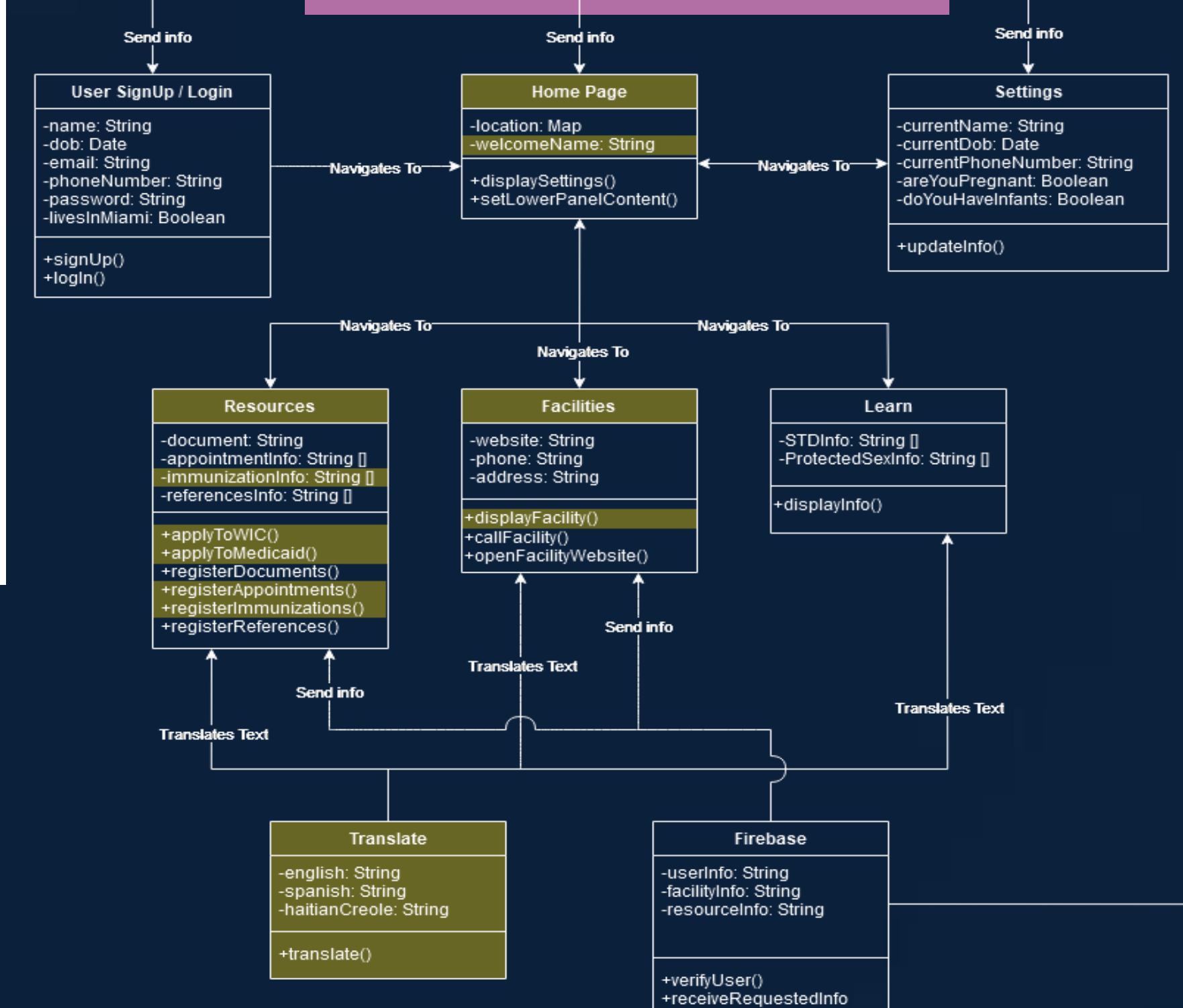
NuMom's current version features the following to users.

- English, Spanish, and Haitian Creole language support.
- Articles and references about STD, safe sex practices, parenthood, and pregnancies.
- Appointment scheduler functionality.
- Location tracking to provide local facilities like clinics and family centers.

Features currently available to developers

- Expo support (updated to latest version)
- Firebase support (updated to latest version to work with expo)

OBJECT DESIGN



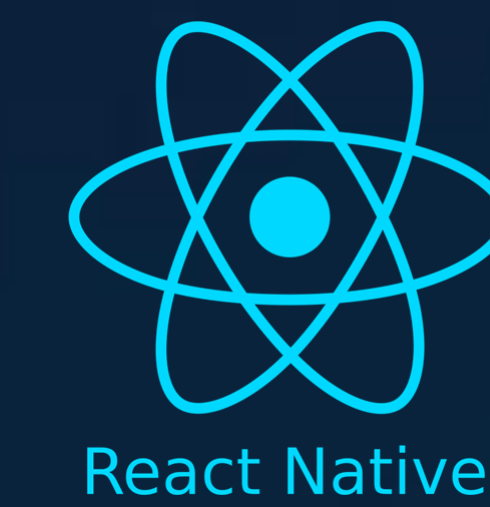
SUMMARY

The current version of NuMom is updated to the latest Expo and Firebase versions. Meaning that the functionality and connectivity of the user databases used by NuMom and the method of software testing used by active developers is currently future proofed. Next semesters shouldn't face any trouble with making an account in NuMom or performing testing on the app. This means that in future semesters, the next teams will immediately be able to make progress on whatever Github issues they choose to work on as NuMom's backend is up-to-date now.

REQUIREMENTS

This semester objective was to focus on targeting issues on Github to improve the usability of the app and also to update it to a new expo version. Expo is the service in which we could test builds of the app, however as it came out with new updates, it would become harder to work with in the future. We would have to update libraries and functions within the source code of NuMom to function properly with the latest Expo version. Other updates we made to NuMom were centered around the Github issues. Such as making the UI more readable and more accessible..

IMPLEMENTATION



SCREENSHOTS

