



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)

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PROBLEM

Issues new mothers face today: The challenge for low-income new mothers is access to prenatal and postnatal resources. Without these resources, mothers cannot adequately care for or provide them with the necessary care for their children. There are also some knowledge that new mothers/planning mothers do not know about the needs of children and the inconveniences in life. That's why we thought of NuMom, an app that solves this problem by providing continuous and personalized access to support all stages of motherhood.

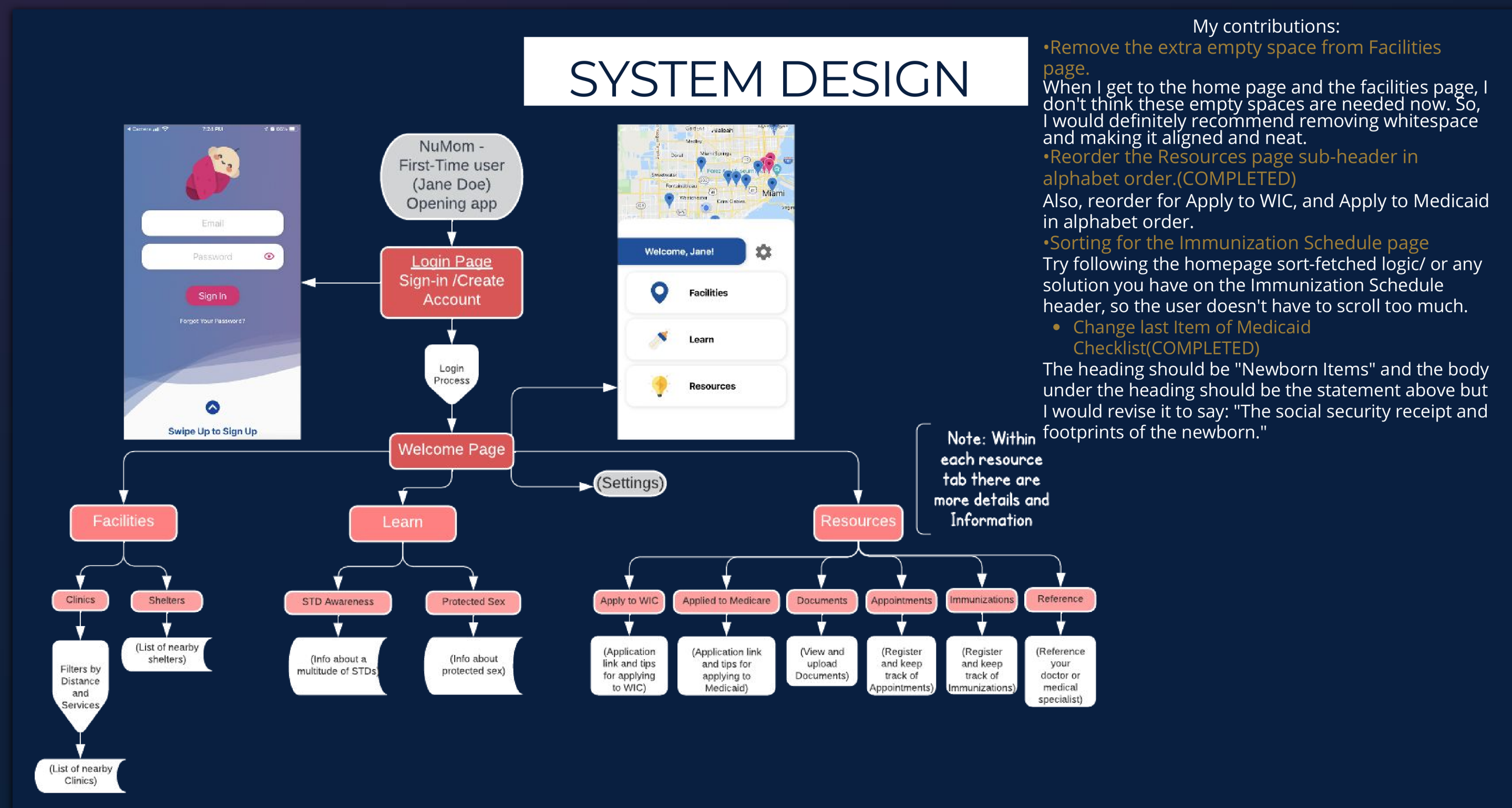
CURRENT SYSTEM

- NuMom currently provides support for the following functionalities:
- Important information about safe sex practices, STDs.
 - Timelines of childhood development milestones for feeding and immunizations.
 - Locations, contact information, and a description of services for important facilities, such as clinics and shelters.
 - Important information and resources to help apply for WIC and Medicaid
 - The ability to record documents, appointments, immunizations, and references for doctors
 - Reminders for recorded appointments.
 - Detects your password for your safety when sign up.

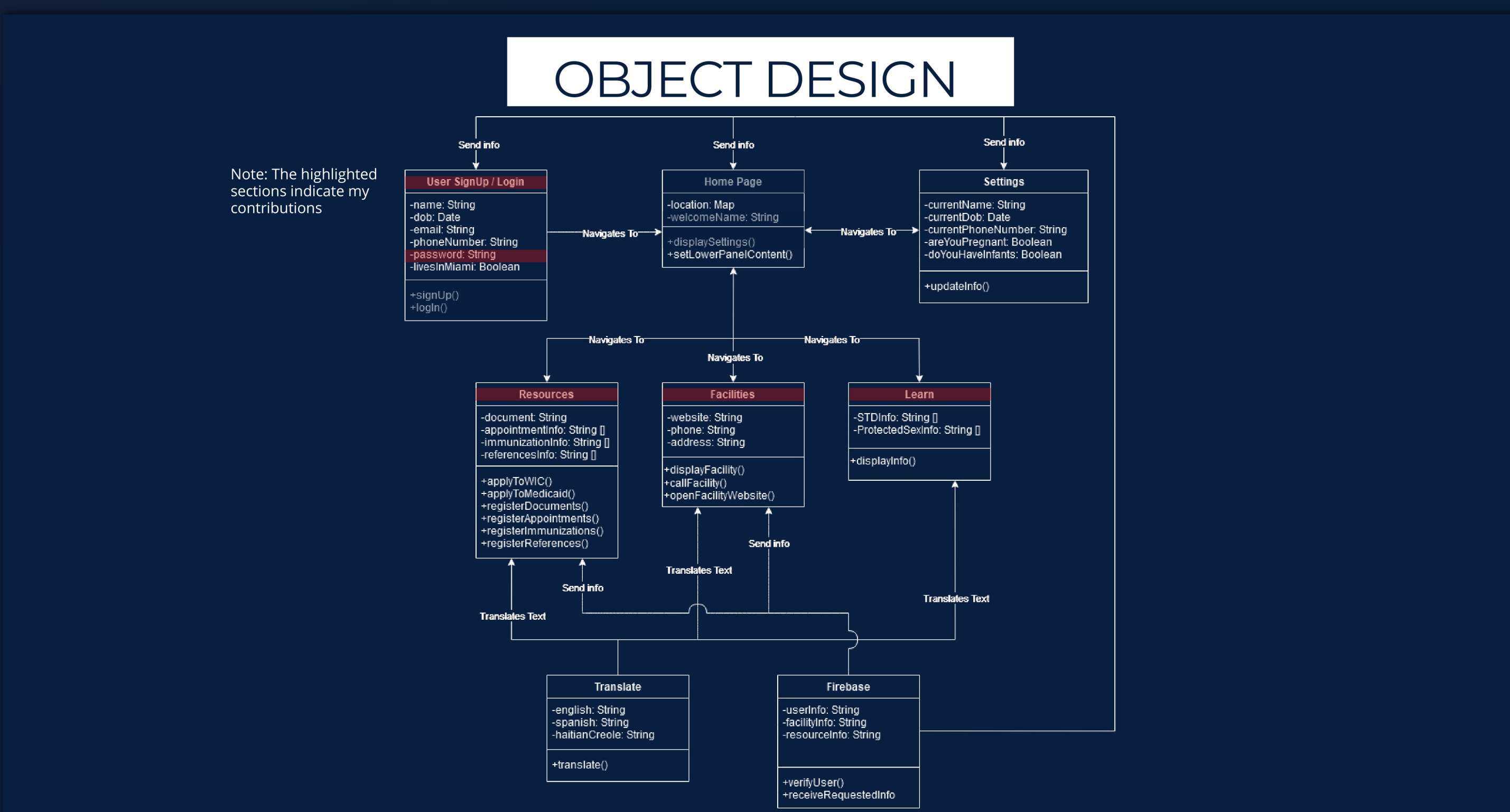
REQUIREMENTS

The main goal of this semester is to improve user interface design. The design has been refined to ensure that the user experience remains consistent throughout the app. Functionality has been refined and elements that were not working correctly have been fixed. Password restrictions for login have been updated to make user accounts more secure and to improve application accessibility. Our team also worked on several other issues, including correcting translation files, updating expo, fixing the Resources page, the Medicaid checklist page, improving the immunization checklist page, and updating the format of the Clinics Tab.

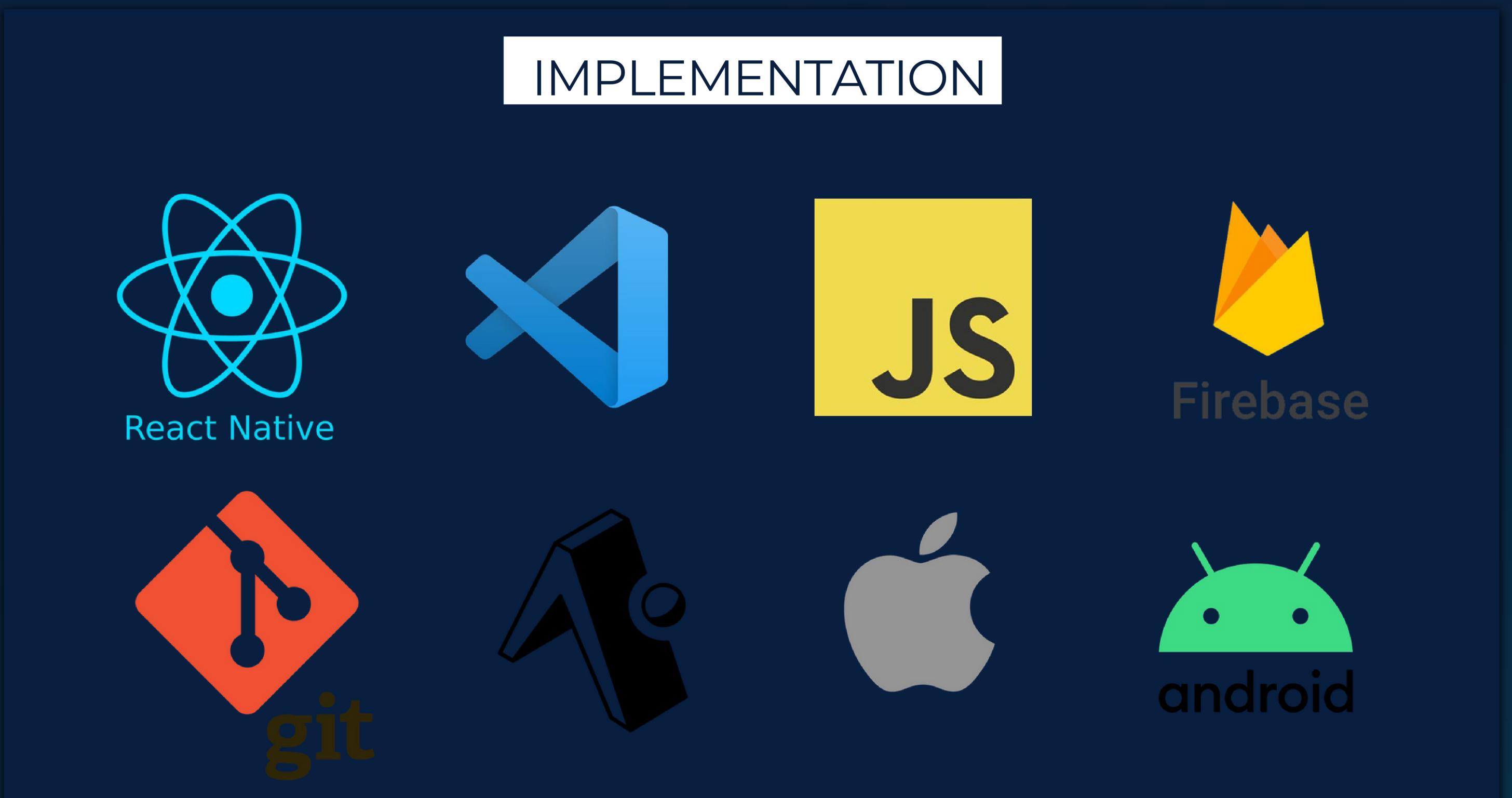
SYSTEM DESIGN



OBJECT DESIGN



IMPLEMENTATION



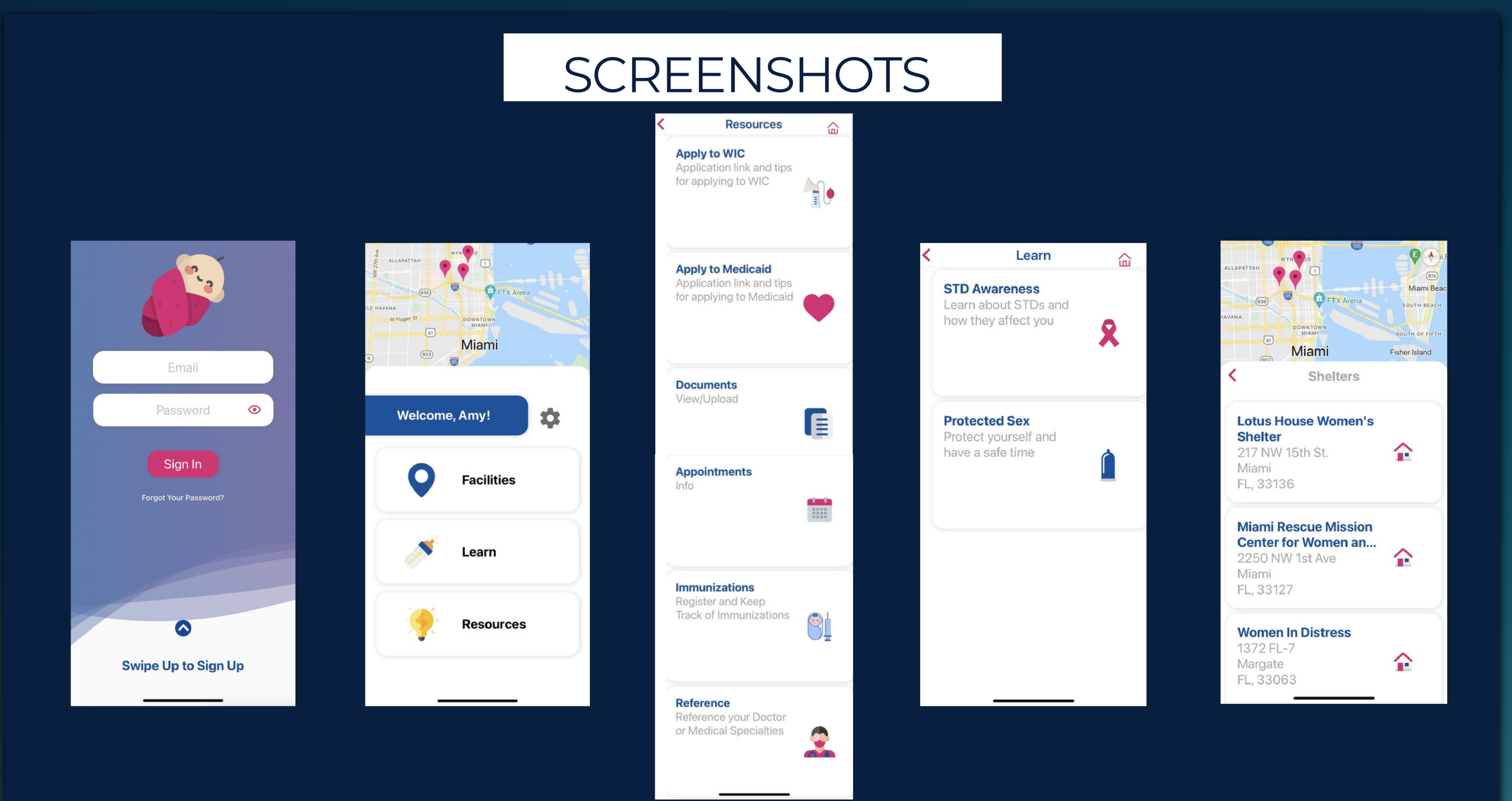
VERIFICATION

- Our team used two main software platforms to aid in testing the app: Expo and GitHub.
- The Expo framework allowed us to build and quickly iterate on iOS and Android. By using their set of tools and services, we were able to modify the code and immediately see the changes in real-time on our smartphones.
 - GitHub allowed us to manage the issues each team member found on the app. Our team used the Scrum methodology to efficiently distribute the workload. When a new functionality was added, or an issue was fixed, several team members verified the changes before the fix was accepted and pushed to the app.

SUMMARY

The current iteration of the NuMom application has been improved by refining the user interface design. Fixed several issues to improve functionality. The app currently supports a variety of features, including locating a facility, applying for WIC and Medicaid, saving documents such as immunizations, appointments and letters of recommendation, and checking infant development and milestones. Our NuMom team hopes these tools will provide every mother with the resources, convenience, guidance and knowledge they need to enjoy a healthy and happy pregnancy and motherhood.

SCREENSHOTS



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ACKNOWLEDGEMENT

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