

Capstone II/Senior Project Final Project Fall 2022

NuMom (Keeping Moms & Infants Healthy)

Team Members: Lisabeth Roche, Daniel King, Hanane Mbarki, Eden Sasson, Aqib Shah, Micheal Ferrer, Elijah Khazzouh, David Martinez, Justin Venegas

Product Owner(s): Dr. Jean Hannan

Mentor(s): Eduardo Morales

Professor: Masoud Sadjadi



Problem Definition

- About the Project:
 - NuMom is a mobile-based application for both Android and iOS devices originally developed by FIU alumni Eduardo Morales for Fall 2019 Senior Project, with Jean Hannan as the Product Owner.
 - There exists a disparity in access to healthcare resources for low-income, minority single mothers compared to other populations.
- Purpose:
 - This app was made to bridge the gap and provide these mothers with the information they need to take care of themselves and their children.
 - This includes prenatal and postnatal care, fully translated in three languages (Spanish, English, Haitian Creole). For now, the application is focused on South Floridian mothers.

Introduction

- Features:
 - Map and location searching for nearby clinics and shelters.
 - Prenatal learning resources about infant care like feeding and milestones.
 - Postnatal learning resources about mother's sexual health, like STDs.
 - Recording system for appointments, immunizations, and important documents.
 - Full support for English, Spanish, and Haitian Creole.
- Progress:
 - Throughout this semester, there was a large focus on preparing the app for even larger changes in the versions to come. Some of our progress includes of:
 - Implemented filtering for locations
 - Updated icons and added links to more relevant sources
 - Modified menus and made text changes for readability
 - Fixed several minor and major bugs
 - Etc.!

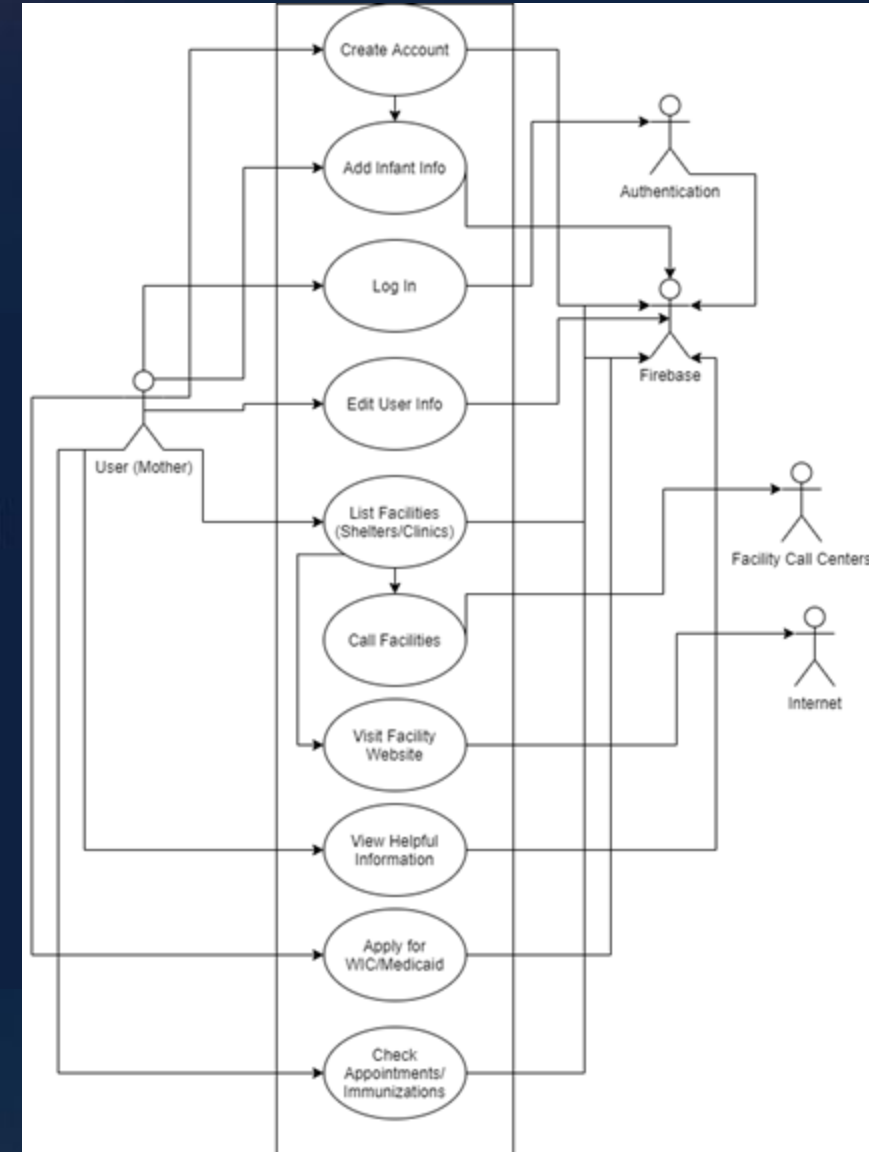
Project Management

User Stories Completed	August	September	October	November	December
1:#518	Sprint 1	Sprint 1			
1:#523, 2:#502		Sprint 2			
1:#001, 3:#486, 5:#543		Sprint 3	Sprint 3		
1:#001, 2:#451			Sprint 4		
1:#001, 4:#446			Sprint 5	Sprint 5	
1:#001, 2:#566				Sprint 6	
In Progress				Sprint 7	Sprint 7

User Stories

User Story ID #	Description	Name
#001	Review pull requests of issues in other user stories	All Capstone I
#518	Task #1: Welcome Fall 2022	All Capstone II
#523	Task #2: Password Strength Checker	All Capstone II
#502	Update Icons for food in WIC section	Lisabeth Roche
#486	Menu component goes off screen bug fix	Lisabeth Roche
#543	Text not visible during sign up/login process	Hanane Mbarki
#451	Add a filter for Shelters, as well as WIC/Medicaid Location	Lisabeth Roche
#446	Add Website Button for STD List	Lisabeth Roche
#566	New Immunization page has unusable dropdowns	Lisabeth Roche
#540	Birth Control subsection within Learn section	Aqib Shah
#496	Change the Search logo	Eden Sasson

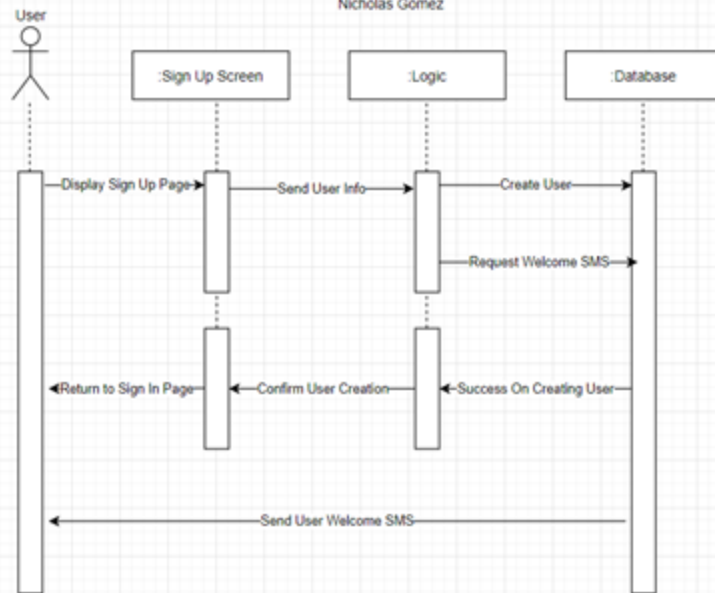
Use Case Diagrams



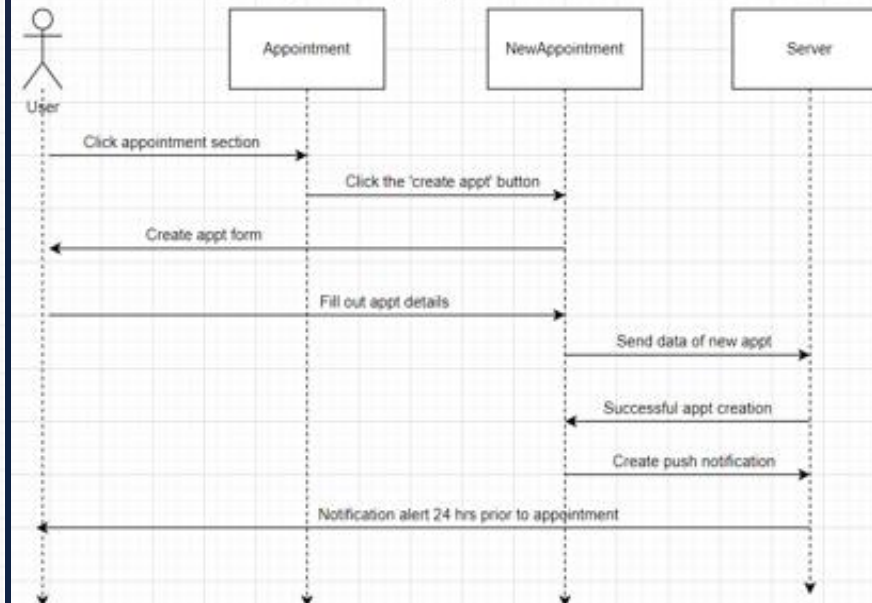
Sequence Diagrams

Sequence Diagram SMS Notification Enrollment System

Nicholas Gomez

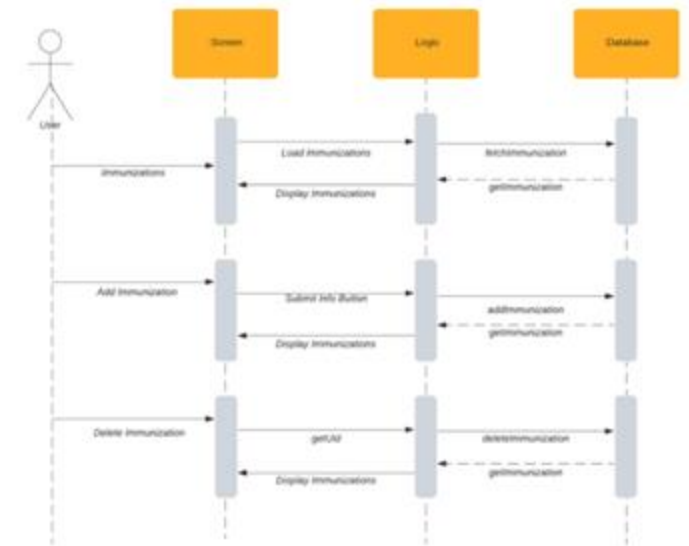


Sequence diagram for creating an appointment w/ notifications - David R.

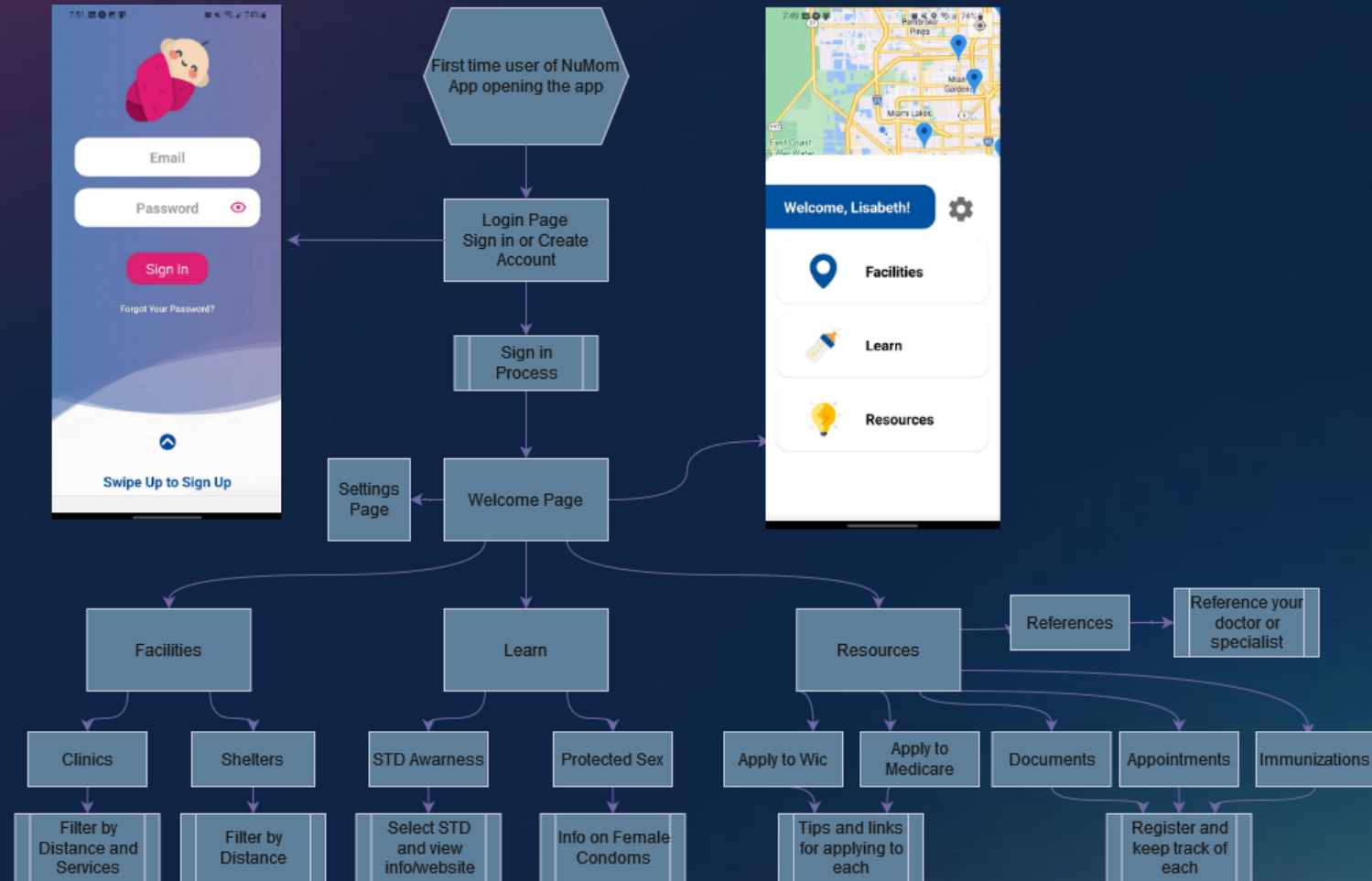


Nullom Sequence diagram

Nullom | July 10, 2022

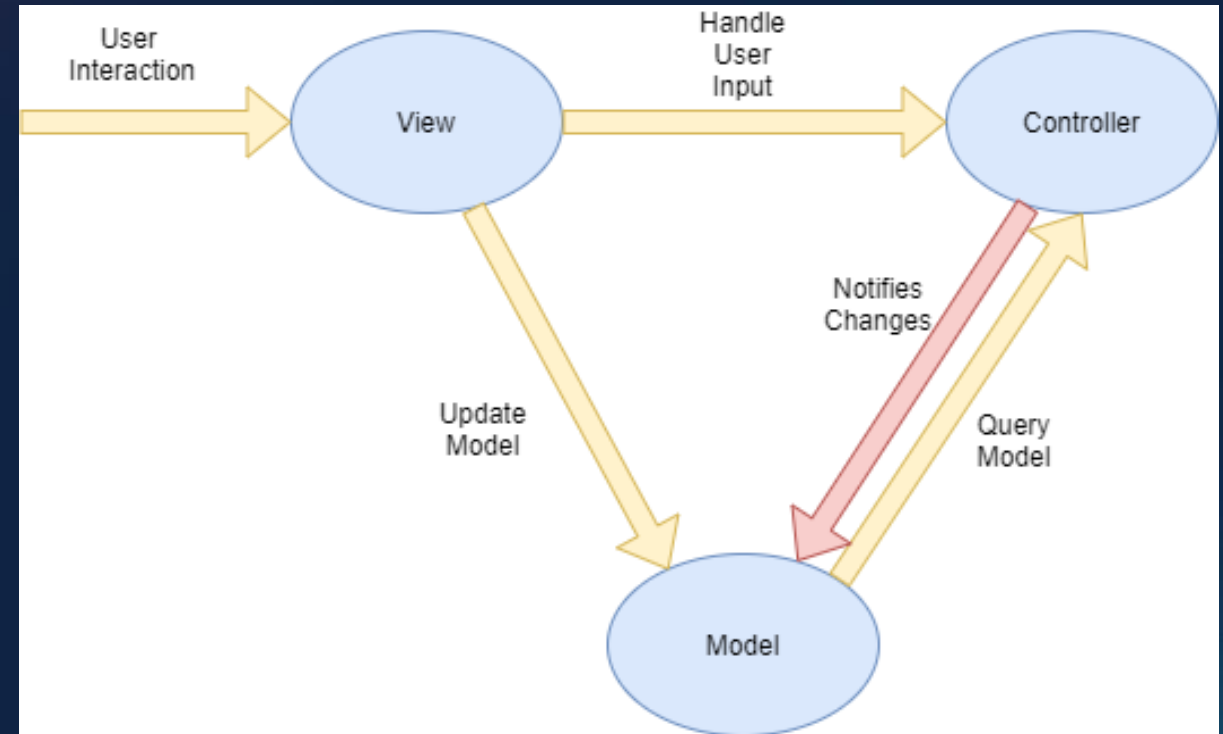


System Design: Navigation

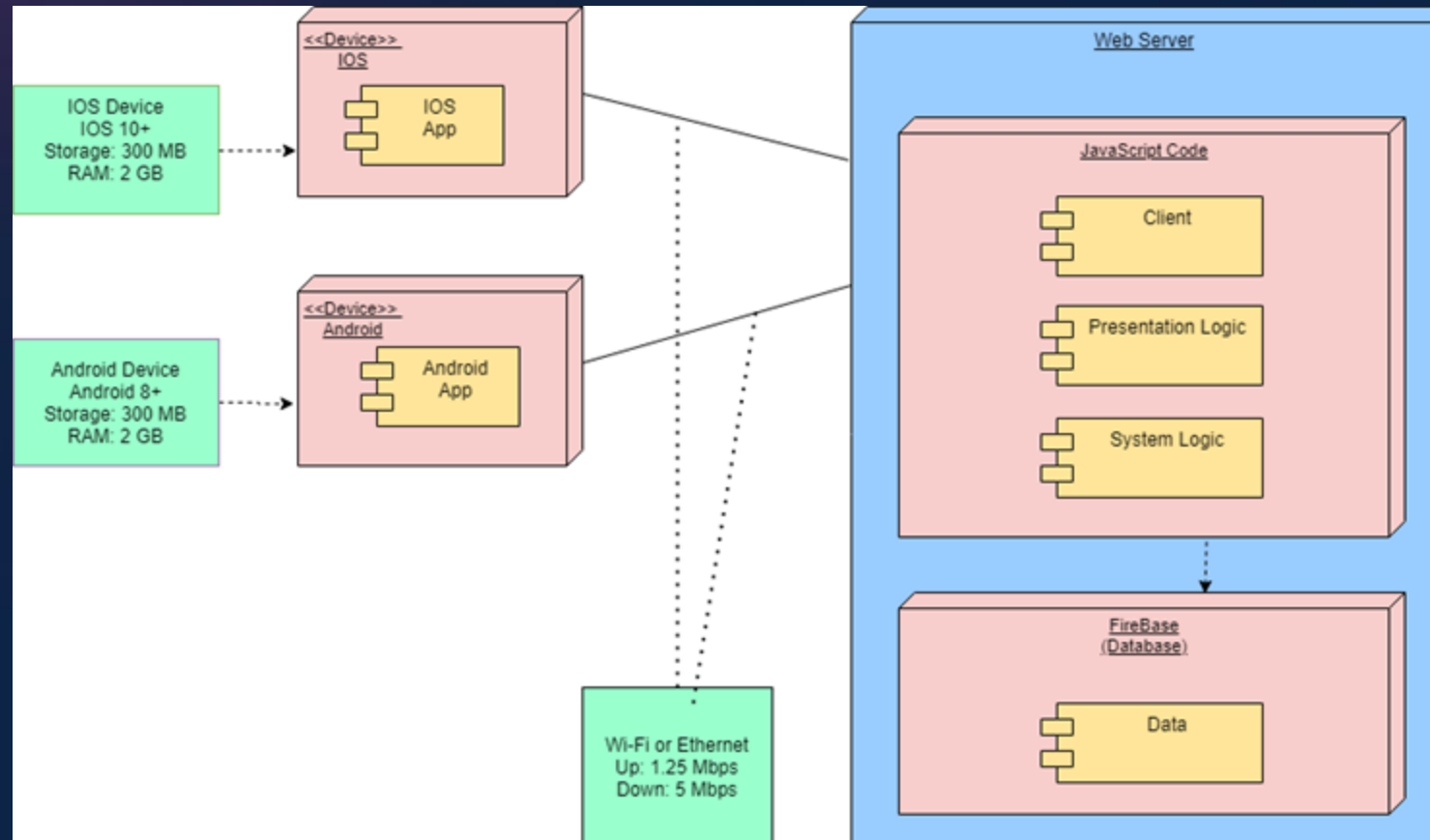


System Design: Architecture

- View - displays the information to the user, the UI
- Controller - handle the user input
- Model - Contains the core functionality and data



System Design: Deployment



Minimal Class Diagram

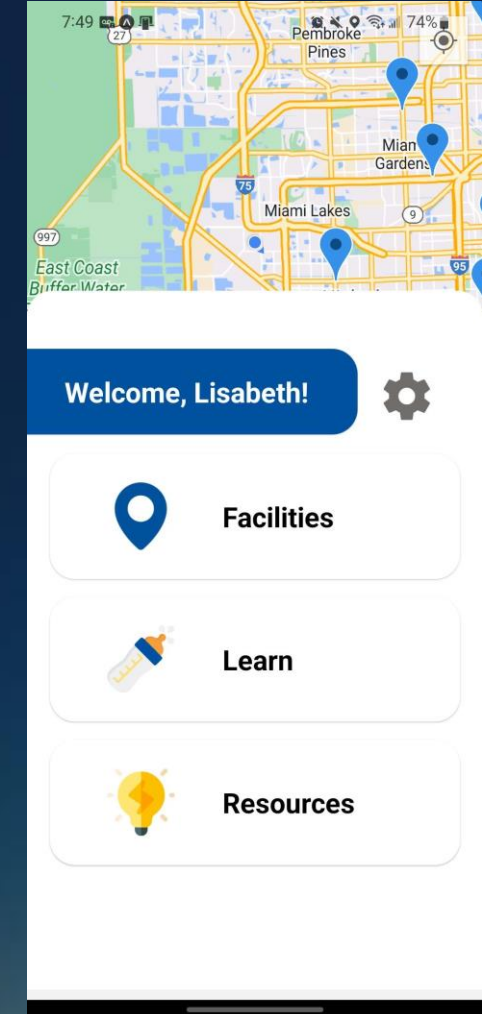
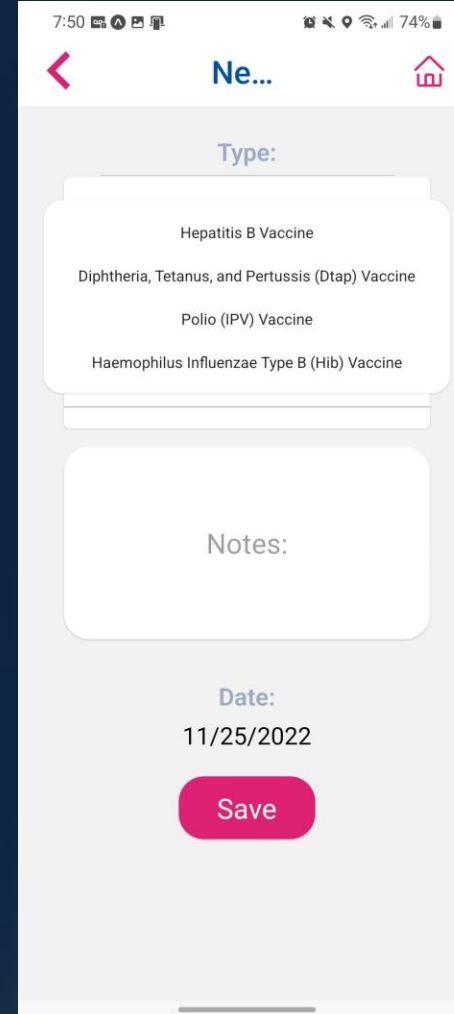
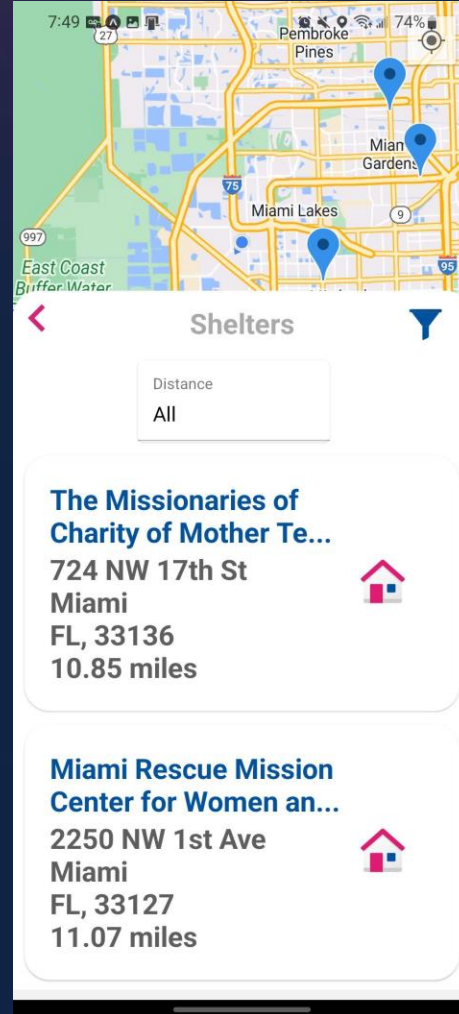
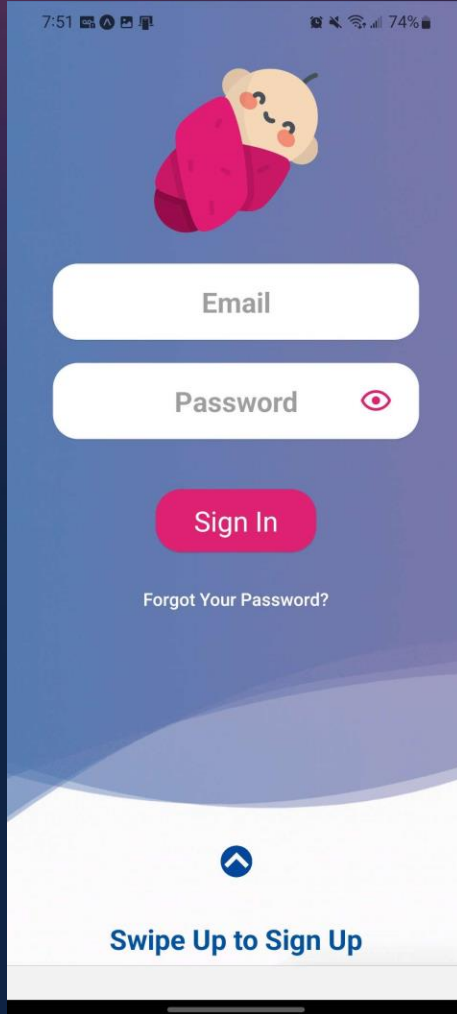
- Design Patterns:
 - Facade
 - Singleton
 - Iterator
 - Chain of Responsibility



Key NuMom App Functionalities:

- Provides important information about safe sex practices, STDs.
- Shows timelines of childhood development milestones for feeding and immunizations.
- Provides locations, contact information, and a description of services for important facilities, such as clinics and shelters.
- Provides information information and resources to aid in applying for WIC and Medicaid
- Allows the ability to record documents, appointments, immunizations, and references for doctors
- Gives reminders for recorded appointments
- Provides support for three languages: English, Spanish, Haitian Creole

Screenshots



Summary

- With our application, we hope to assist mothers from all backgrounds with the resources and information they need to successfully nurture their babies during their prenatal and postnatal periods.
- If you have any questions, please feel free to contact us at the following emails:
 - Lisabeth Roche: lroch019@fiu.edu
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- Thank You!