

Cook Book

Final Report Package

Course CS4850

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SP 5 Green

Professor Perry

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Website

<https://ryeonnaderi.github.io/grocery-list/>

Source Code

<https://github.com/ryeonnaderi/CookBook.git>

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Project Plan

■ Project Plan.docx.pdf

Gantt Chart

■ Project Plan Work (Gantt) Template.xlsx - Progress Planning and Tracking.pdf

System Requirements Specification

■ SRS.docx.pdf

Requirements and Testing

- The testing process involved running a series of tests on the app to identify bugs, glitches, and areas that needed improvement.
- It was important that we test the app on different platforms, both iOS and Android (primarily Android), to ensure that it functions consistently and correctly across both platforms and devices.
- The testing process consisted of both manual and automated testing to try and cover, if not all, then most, of the possible scenarios and identify any other potential issues.
- Manual testing consisted of
 1. **Feature testing:** This was done physically by testing each feature of the app individually, which consisted of literally pressing buttons to ensure their functionalities were correct. For example, testing the functionality of adding an item to the list, deleting an item, updating an item, etc.
 2. **User interface testing:** This was done by testing the user interface of the app by checking if all the buttons, fields, and menus are in the right places (location of buttons on screen), that they are easy to use, and functional.
 3. **Compatibility testing:** Tested the app on different devices and operating systems to ensure that it works well across multiple platforms and versions.
 4. **Performance testing:** Tested the app's performance by adding different ranges of items and different amounts of items to the list and checking how quickly the app responded.
 5. **Security testing:** This was implemented by incorporating a login system that enforces the security measures such as user authentication, data encryption, and access control.
 6. **Usability testing:** Test the app's usability by having group members interact with the app and provide feedback on the app's ease of use and user experience.
 7. **Error handling testing:** Tested how well the app handles errors such as network failures, invalid input, and unexpected behavior.
- Automatic Testing consisted of
 1. **Unit test:** Separate test files were created to ensure that certain parts of the code work efficiently and effectively. This ensured that any changes to the code don't introduce new bugs or break existing functionality, which leads into integration testing
 2. **Integration test:** Conducted these tests to verify that different parts of the app can work together correctly, such as the interface between the app and the database and was used to ensure that any changes to the code don't cause issues with other parts of the app.

3. **End-to-end test:** These tests were implemented to simulate user behavior and interactions with the app from start to finish, including the navigating menus, entering data, and verifying the results. This helps to measure just how functional the overall app was at the time of each test and make sure the UX was satisfactory.
 4. **Performance test:** These tests were implemented in order to measure the app's performance under different conditions, such as heavy loads or network connectivity issues.
- Feedback from user testing outside of the group can be used to make improvements and address any issues or concerns that other users may have, that we did not consider.
 - It was important to test the app before “launch” to ensure that it meets the needs of users and functions as intended.

Test Plan

Whenever a new feature would be implemented, we would run the program from scratch to see if anything would break from it, including the design of the app, the other functions, if those were going to be called or not from implementing the new feature. All that is needed is a mobile device that the app can run on to test the app. When running the Expo app, if trying to run the app on Android, download the Expo Go app, if trying to run the app on an iOS device, use the camera on the phone, and it will bring up the app.

Version Control

Git

Development

- Programming Languages: we used Javascript and TypeScript
- Integrated Development Environment (IDE): VSCode
- Libraries or Frameworks: React Native
- Database: Firebase Firestore

Narrative Discussion

We used react native expo as the front end because it already made the ios as well as the android version for us so we didn't have to create two different codes for the same thing. As for the backend we used firebase firestore because all we had to do was get the user information and put it in the firebase. The firebase did everything for us.

Challenges

- We were at first going to use SQL for the backend, but then we thought that we were going to do a lot more work such as encrypting the data, storing the data on a SQL server, making sure that the server is secure from vulnerabilities such as an SQL Injection and other attacks
- We also wanted to be able to let the user sign in/signup with other methods besides just email and password, such as Google or Facebook, or even Apple Id, and we were having trouble figuring that out, so we decided to use Firestore from Firebase.
- when creating the user, the user data was not being stored in the database.

Analysis

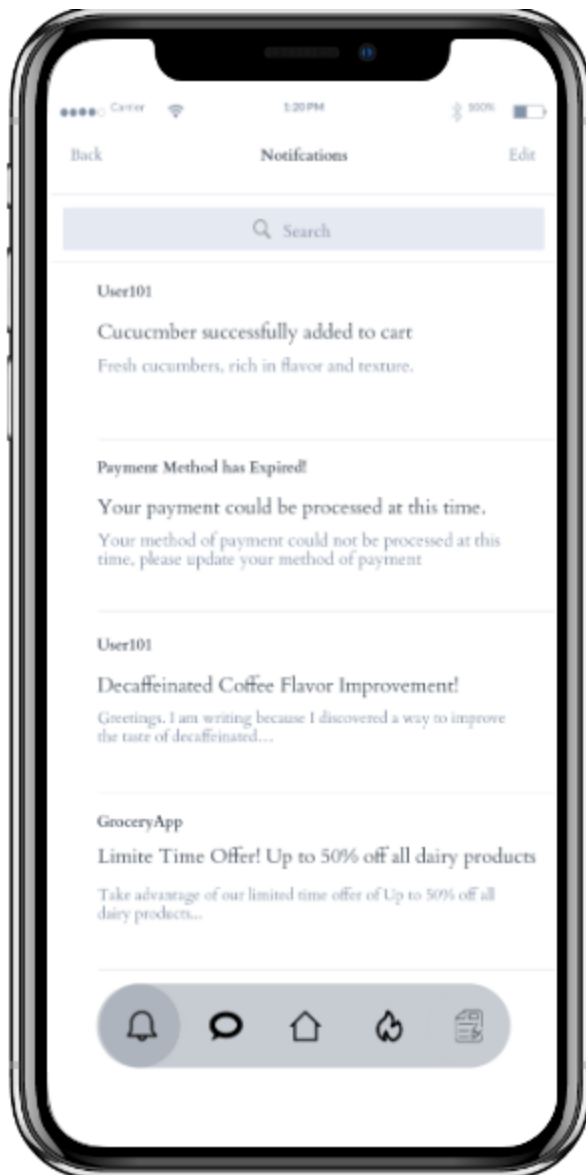
For the app, we knew we were going to need some sort of authentication method, as well as some way of storing that information. We also needed some way to keep the users data and make sure that only authorized people could see it and with that, we had to figure out a way to make sure that a person was authorized to see specific data of other people.

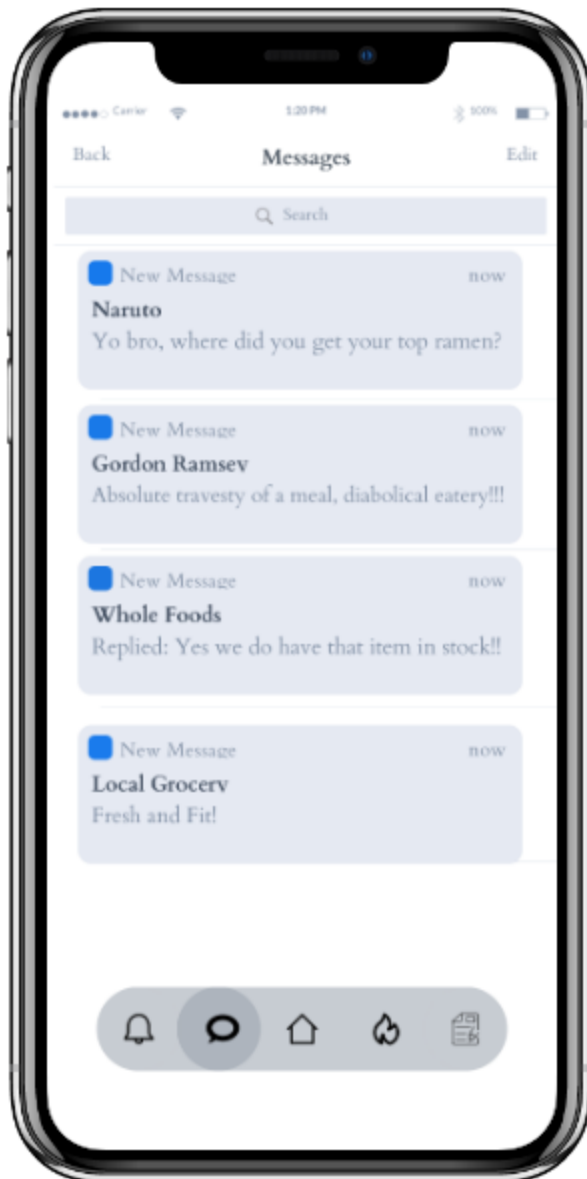
Screen Mockups (Previous)

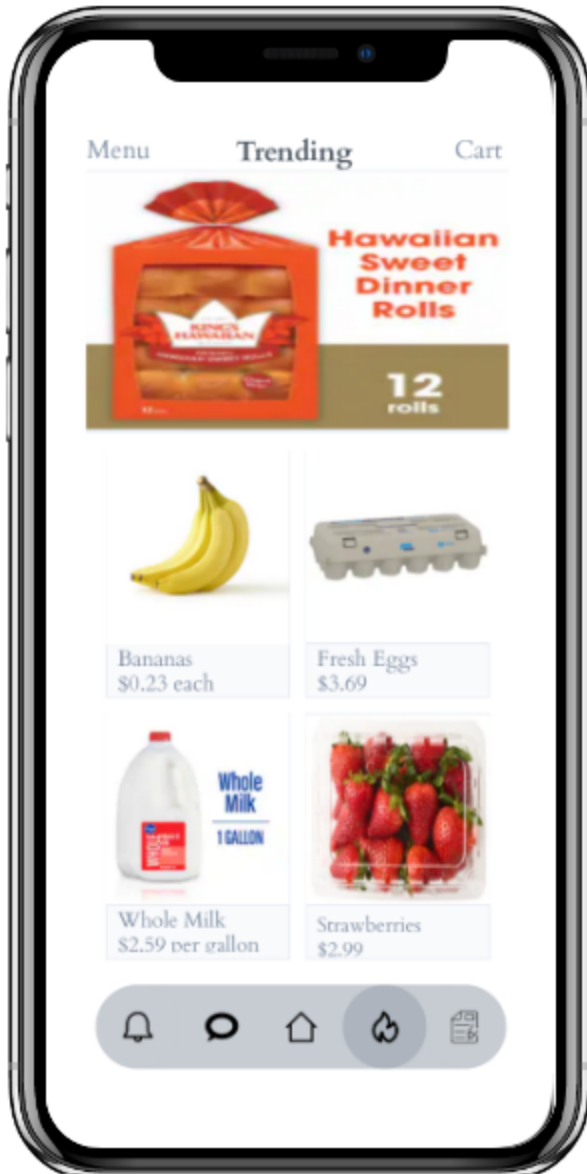


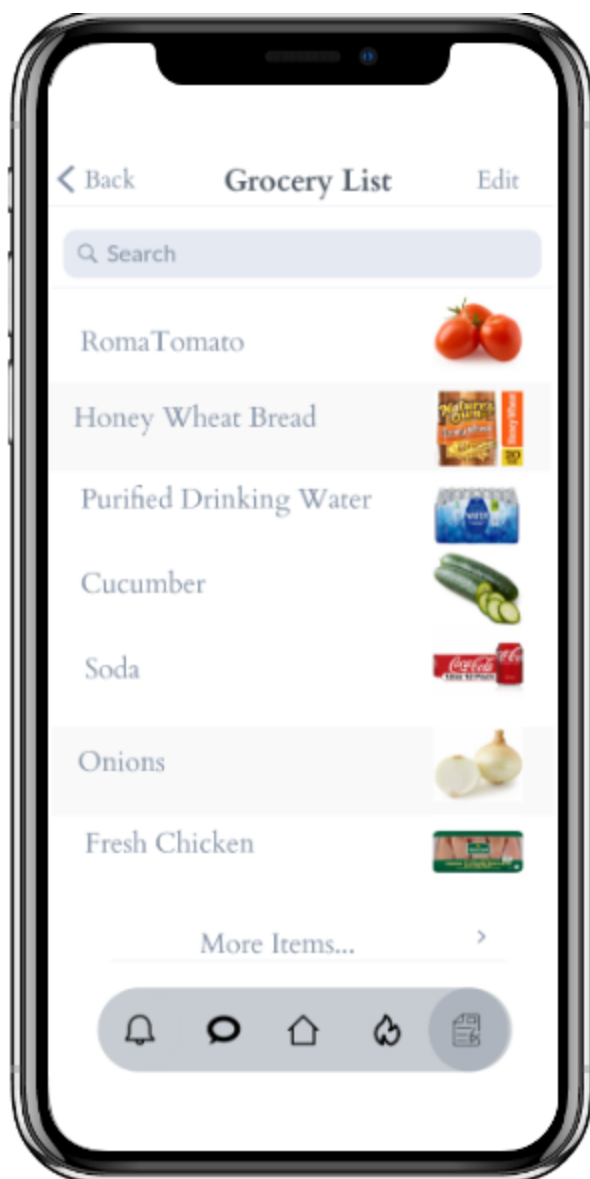






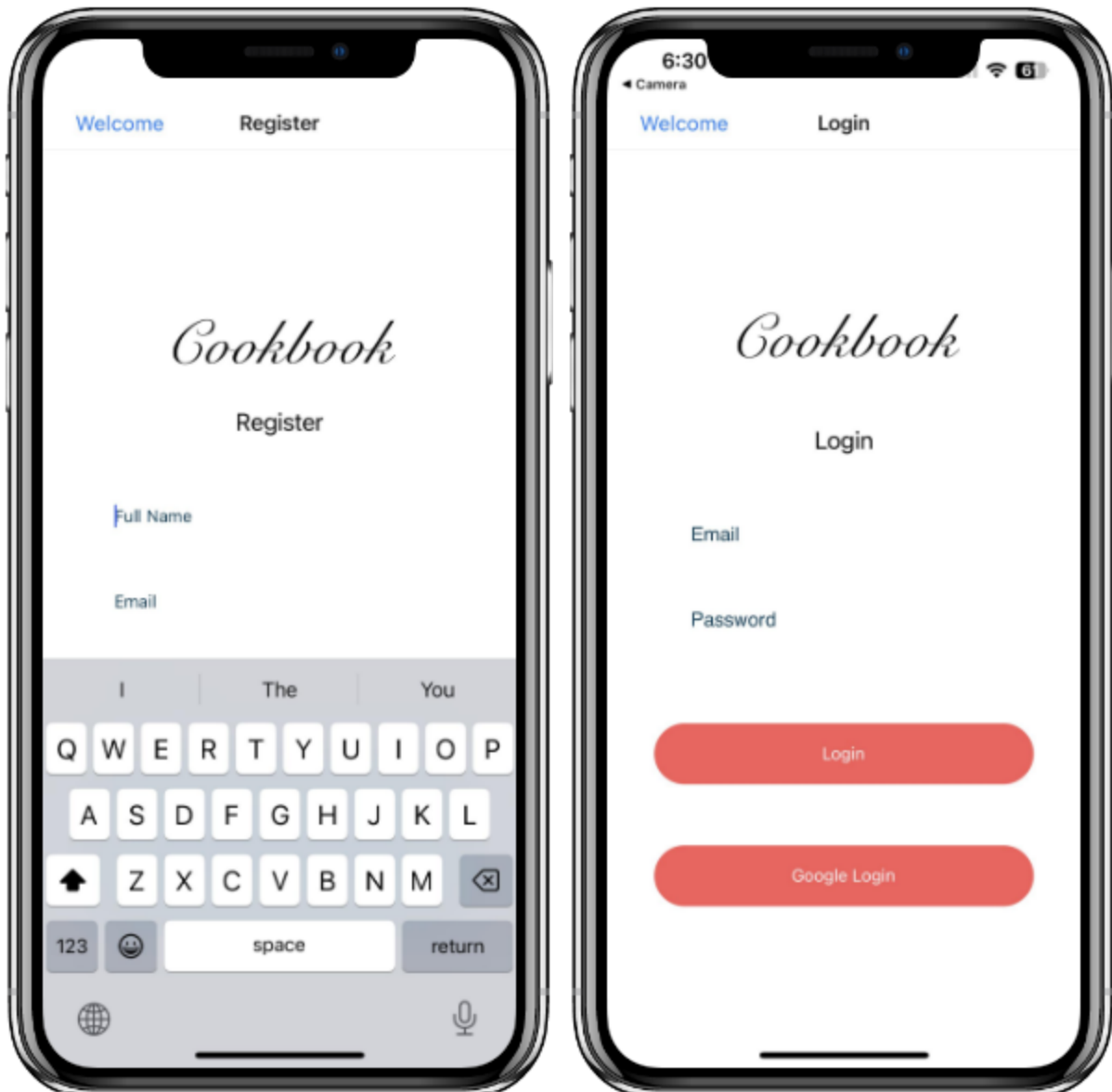


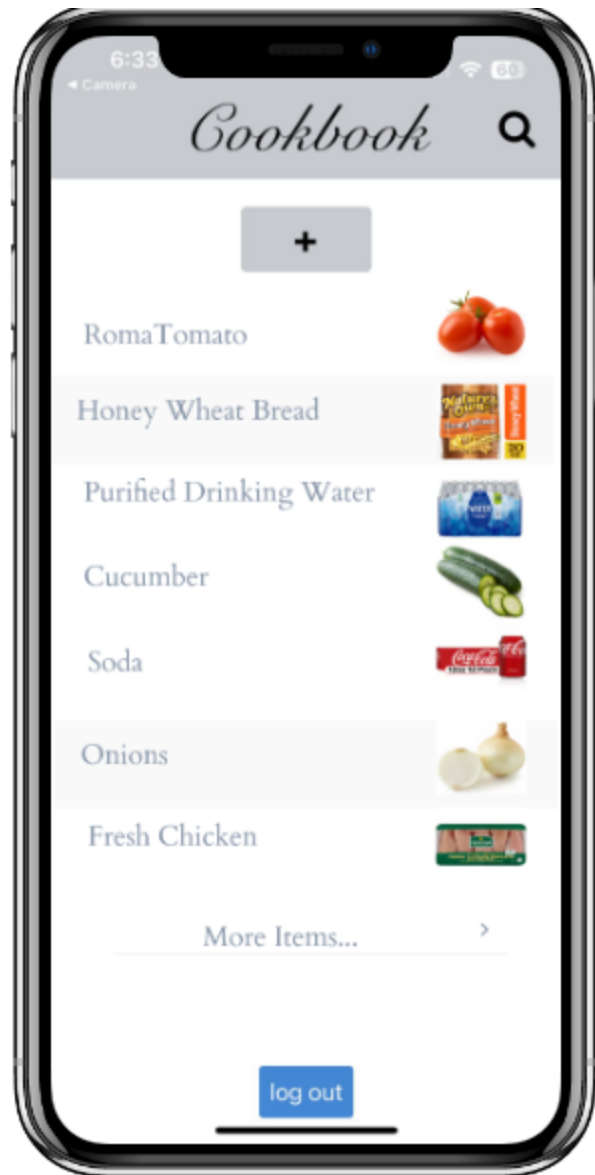




Screen Mockups (Final)







Website

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