

Second Increment Report-Fall 2016



TEAM - 6

- Kona, Lakshmi Nikitha – 22
- Ramesh, Sibi Chakravarthy – 45
- Natesan Arumugam, Bharath Kumar – 37
- Natarajan, Balaji - 36

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I. Introduction

Share up is a multi-platform application which saves the lot of bucks you spend in buying grocery items by searching for the cheaper and precise deals, for the people who want to shop together. Most of the groceries people tend to buy will probably be similar. So, if they buy those things in bulk they are likely to save a lot of money. They likely to face problems in sharing household expenses due to lack of understanding. In order to overcome these problems, we planned to create this application which significantly overcomes the above mentioned problems in an efficient way. Each person who signs up has the credentials to create a group and add members to it. Each group will have a shopping list which any member can access and modify. So, for all the common things you can find cheaper deals, as our idea is to find one in bulk. The unnecessary portion which is yet to be bought can be shared with other members of any group by posting in a common forum visible to all other users who can contact the user to buy. The application also contains features to keep track of the money people owe each other, their monthly expenses and prediction of monthly as well as yearly expenses.

II. Project Goal and Objectives

Overall goal

The goal of this project is to create an android application which is useful for people living together in shared rooms/apartments for spending money smartly and share wisely.

Objectives

- To reduce cost of buying items by smart spending feature.
- To get price of grocery items using API call(s).
- To provide common shopping list for all the members in a group.
- To test the application before deploying in order to uncover bugs.

Specific Features

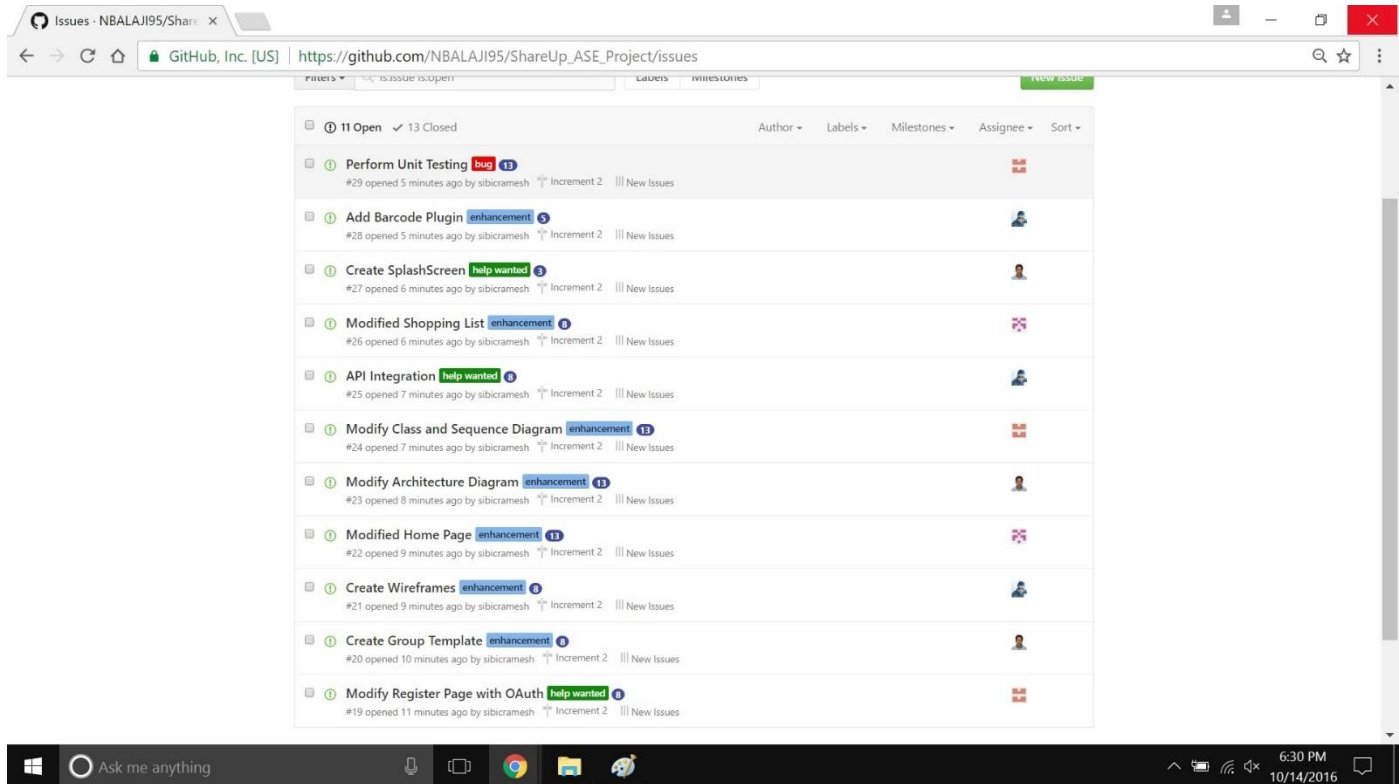
- Smart spending feature - which finds match for the required product with required quantity.
- Shopping list - which contains things that need to be purchased in the near future.
- Expense Manager - to manage bills and shared expenses among roommates.
- Common forum for sharing the product to be bought (quantities specified by the hosting group).
- Scanning items with barcode plugin.

Significance

Smart spending and sharing will definitely change the way people spend for buying grocery items and manage their expenses. There may be many applications which offer similar features, but this application performs these tasks in a single user interactive application.

III. Project Plan

Stories(Issues)



Project Timelines

The screenshot displays the GitHub interface for the repository `NBALAJI95 / ShareUp_ASE_Project`. The 'Milestones' tab is selected, showing a list of four milestones. Each milestone includes a progress bar, completion status, and a list of open and closed issues. The milestones are:

- Increment 2**: Due by October 14, 2016. 8% complete, 11 open, 1 closed.
- Increment 1**: Past due by 21 days. 100% complete, 0 open, 12 closed. Description: Revised project proposal, login page credentials and shopping list layout.
- Increment 4**: Due by December 2, 2016. 0% complete, 0 open, 0 closed.
- Increment 3**: Due by November 4, 2016. 0% complete, 0 open, 0 closed.

The bottom of the image shows a Windows taskbar with the time 6:32 PM and date 10/14/2016.

Task Responsibility

Issues · NBALAJI95/ShareUp_ASE_Project

GitHub, Inc. [US] | https://github.com/NBALAJI95/ShareUp_ASE_Project/issues

Filters: All issues is:open Labels Milestones Assignee Sort

11 Open 13 Closed

Perform Unit Testing **bug** 13 #29 opened 5 minutes ago by sibiramesh Increment 2 New Issues

Add Barcode Plugin **enhancement** 5 #28 opened 5 minutes ago by sibiramesh Increment 2 New Issues

Create SplashScreen **help wanted** 3 #27 opened 6 minutes ago by sibiramesh Increment 2 New Issues

Modified Shopping List **enhancement** 8 #26 opened 6 minutes ago by sibiramesh Increment 2 New Issues

API Integration **help wanted** 3 #25 opened 7 minutes ago by sibiramesh Increment 2 New Issues

Modify Class and Sequence Diagram **enhancement** 11 #24 opened 7 minutes ago by sibiramesh Increment 2 New Issues

Modify Architecture Diagram **enhancement** 13 #23 opened 8 minutes ago by sibiramesh Increment 2 New Issues

Modified Home Page **enhancement** 13 #22 opened 9 minutes ago by sibiramesh Increment 2 New Issues

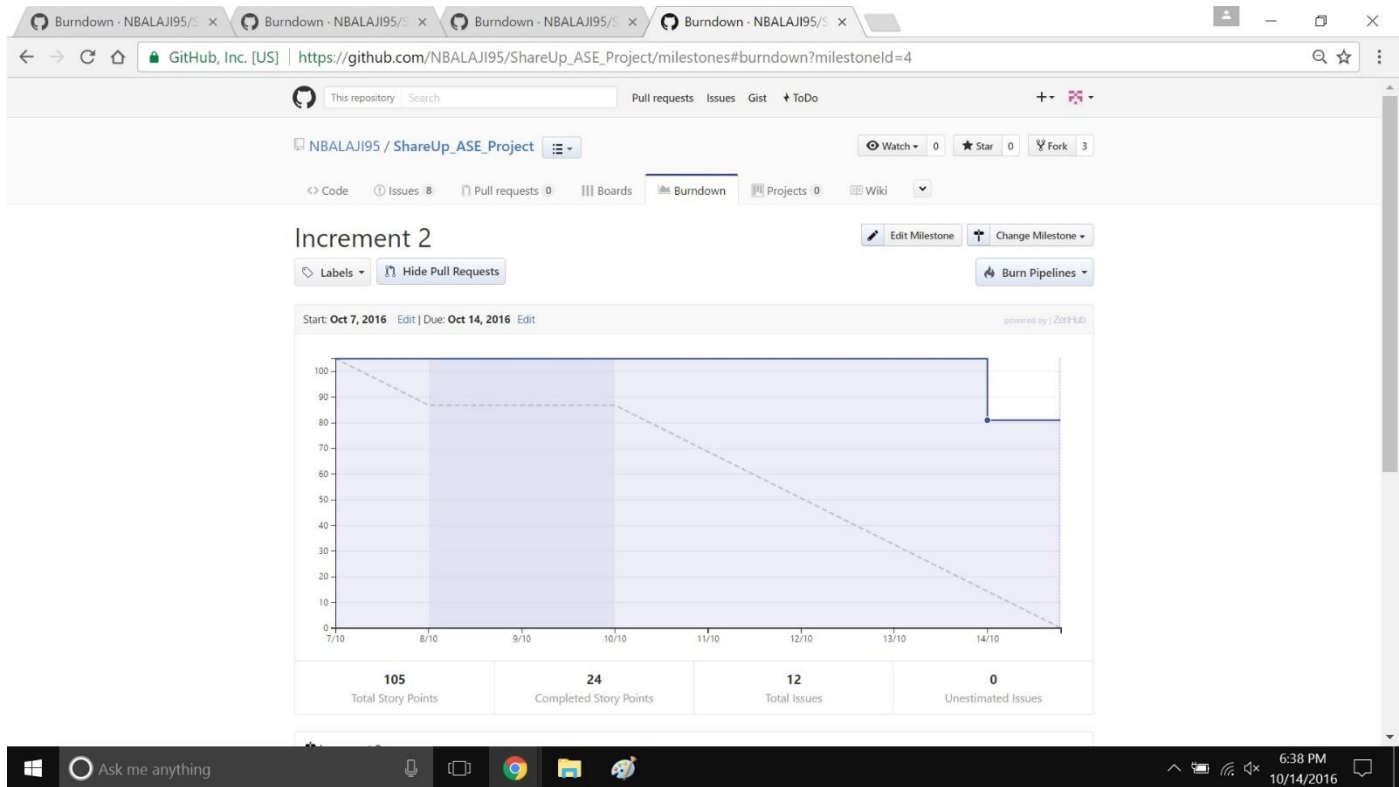
Create Wireframes **enhancement** 3 #21 opened 9 minutes ago by sibiramesh Increment 2 New Issues

Create Group Template **enhancement** 3 #20 opened 10 minutes ago by sibiramesh Increment 2 New Issues

Modify Register Page with OAuth **help wanted** 3 #19 opened 11 minutes ago by sibiramesh Increment 2 New Issues

Windows taskbar: Ask me anything, 6:30 PM, 10/14/2016

Burndown Chart



Board

The screenshot displays a GitHub project board for the repository `NBALAJI95 / ShareUp_ASE_Project`. The board is organized into columns representing different stages of the workflow: **New Issues**, **Icebox**, **Backlog**, **In Progress**, **Review/QA**, **Done**, and **Closed**. Issues are represented as cards within these columns, each with a title, a description, and a label indicating its priority or type (e.g., **help wanted**, **bug**, **enhancement**). The **New Issues** column contains five issues, including `ShareUp_ASE_Project #19` (Modify Register Page with OAuth) and `ShareUp_ASE_Project #26` (Modified Shopping List). The **In Progress** column shows two issues: `ShareUp_ASE_Project #28` (Add Barcode Plugin) and `ShareUp_ASE_Project #22` (Modified Home Page). The **Done** column has one issue: `ShareUp_ASE_Project #25` (API Integration). The **Closed** column lists several completed issues, such as `ShareUp_ASE_Project #21` (Create Wireframe) and `ShareUp_ASE_Project #24` (Modify Class and Sequence Diagram). The interface includes a search bar at the top right and a 'New Issue' button. The bottom of the screen shows a Windows taskbar with the time 6:36 PM on 10/14/2016.

IV. Second Increment Report

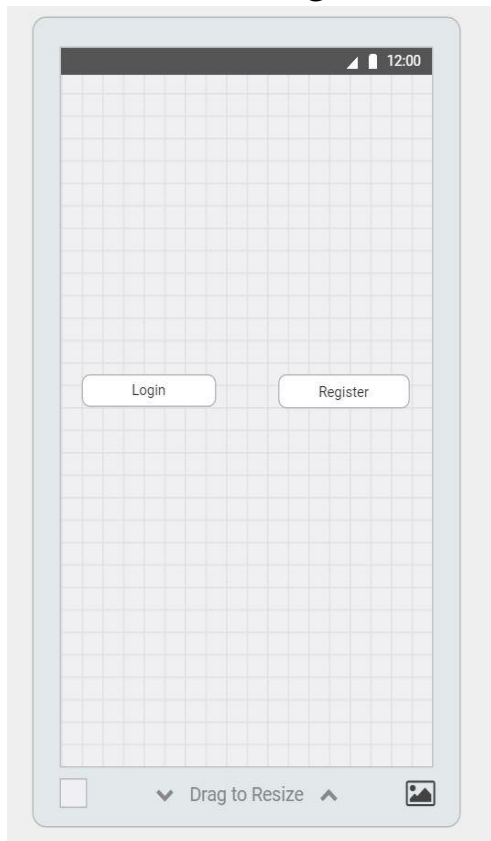
Existing Services/REST API

To get that particular product information, we use product lookup API from Walmart Open API by passing the barcode result as input. The product name and price are displayed.

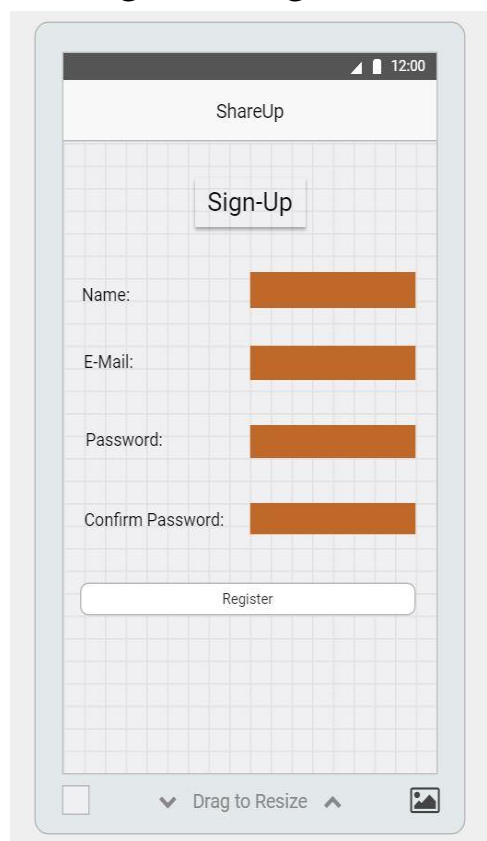
Barcode Plugin is included in order to scan the UPC (Universal Product Code) codes and result and format of the code are displayed.

Detail Design of Features (using tools) Wireframes

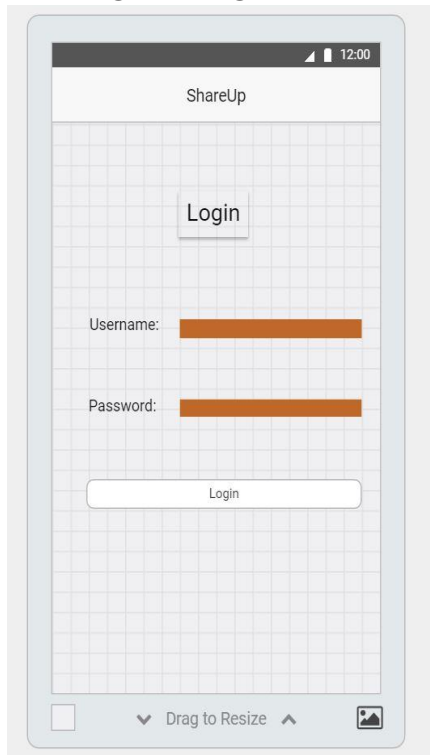
Welcome Page



Register Page



Login Page



ShareUp

12:00

Login

Username:


Password:

Login

Drag to Resize

This mockup shows a login page for an application named 'ShareUp'. At the top, there's a status bar with the time '12:00'. Below it is a header with the app name 'ShareUp'. The main content area has a grid background. It features a 'Login' button, followed by input fields for 'Username' and 'Password', and another 'Login' button at the bottom. A 'Drag to Resize' handle is visible at the very bottom.

Home Page



ShareUp

12:00

Grocery List

Deals

Forum

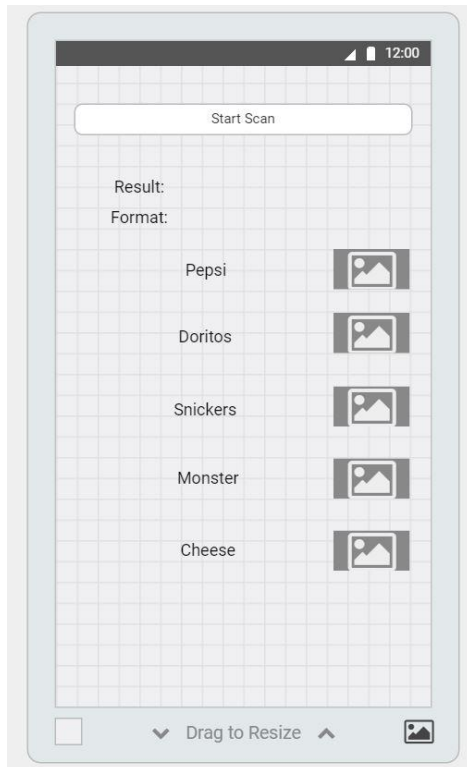
Expense Manager

Groups

Drag to Resize

This mockup shows the home page of the 'ShareUp' application. It has a similar header and status bar to the login page. The main area displays five menu items, each with a picture icon and a text label: 'Grocery List', 'Deals', 'Forum', 'Expense Manager', and 'Groups'. A 'Drag to Resize' handle is at the bottom.

Grocery List



Start Scan

Result:

Format:

Pepsi

Doritos

Snickers

Monster

Cheese

Drag to Resize

This mockup shows the 'Grocery List' screen. It features a 'Start Scan' button at the top. Below it, there are labels for 'Result:' and 'Format:'. A list of grocery items is displayed, each with a text label and a picture icon: 'Pepsi', 'Doritos', 'Snickers', 'Monster', and 'Cheese'. A 'Drag to Resize' handle is at the bottom.

Groups



Group Name

Address

Bharath Kumar

Sibi

Balaji

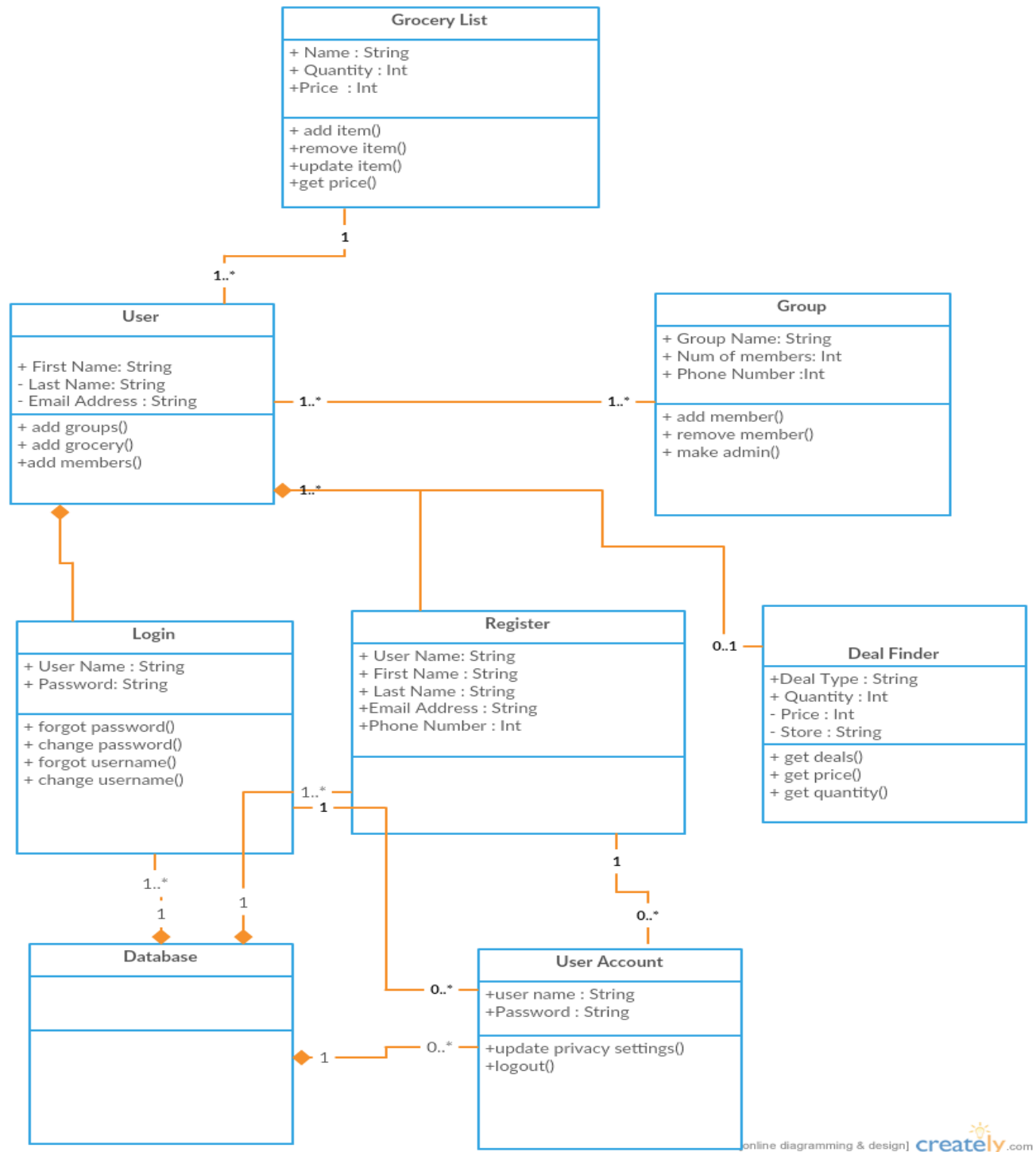
Nikitha

Create Group

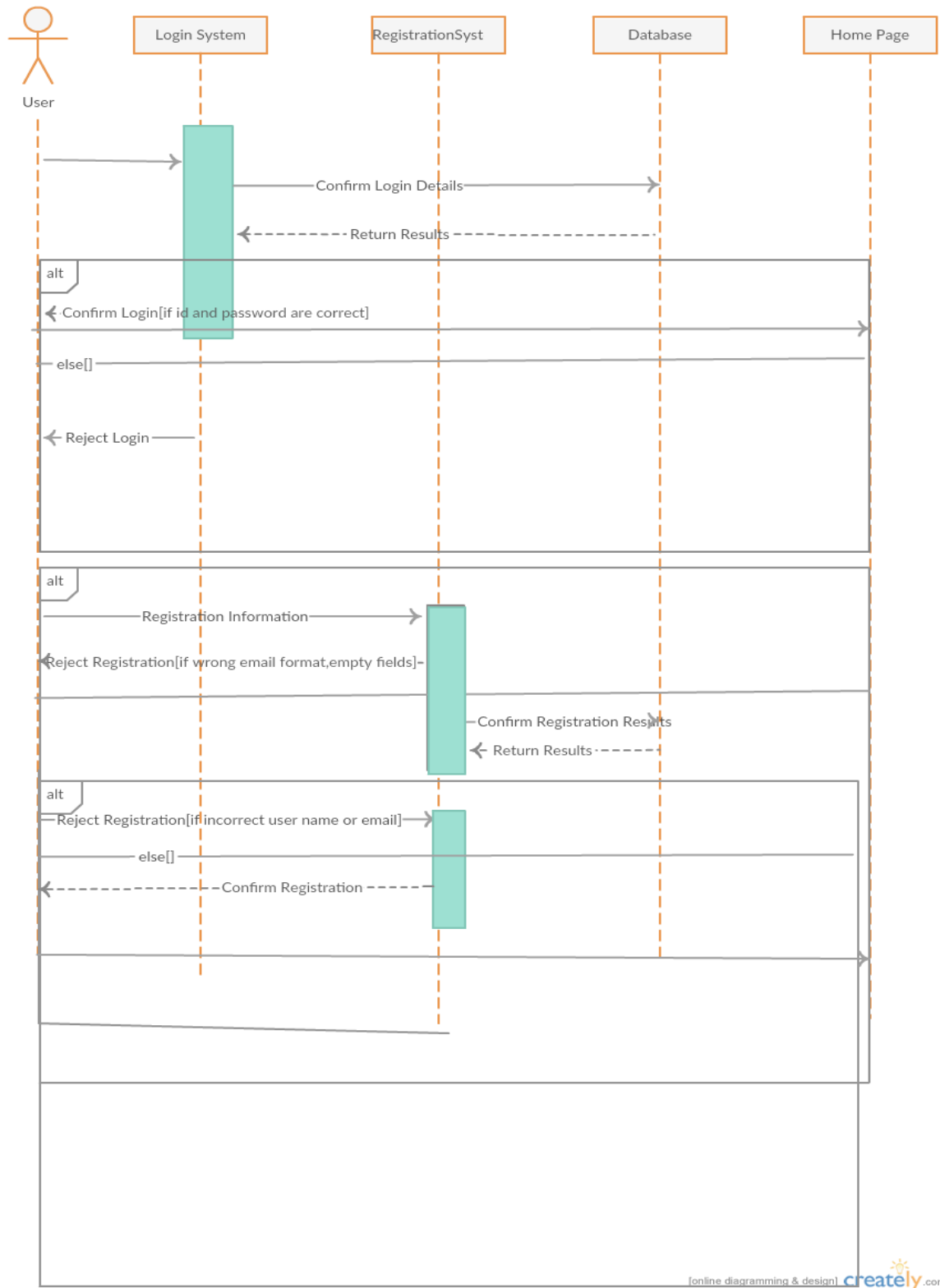
Drag to Resize

This mockup shows the 'Groups' screen. It has input fields for 'Group Name' and 'Address'. Below these, there is a list of group members, each with a name and a picture icon: 'Bharath Kumar', 'Sibi', 'Balaji', and 'Nikitha'. At the bottom, there is a 'Create Group' button. A 'Drag to Resize' handle is at the very bottom.

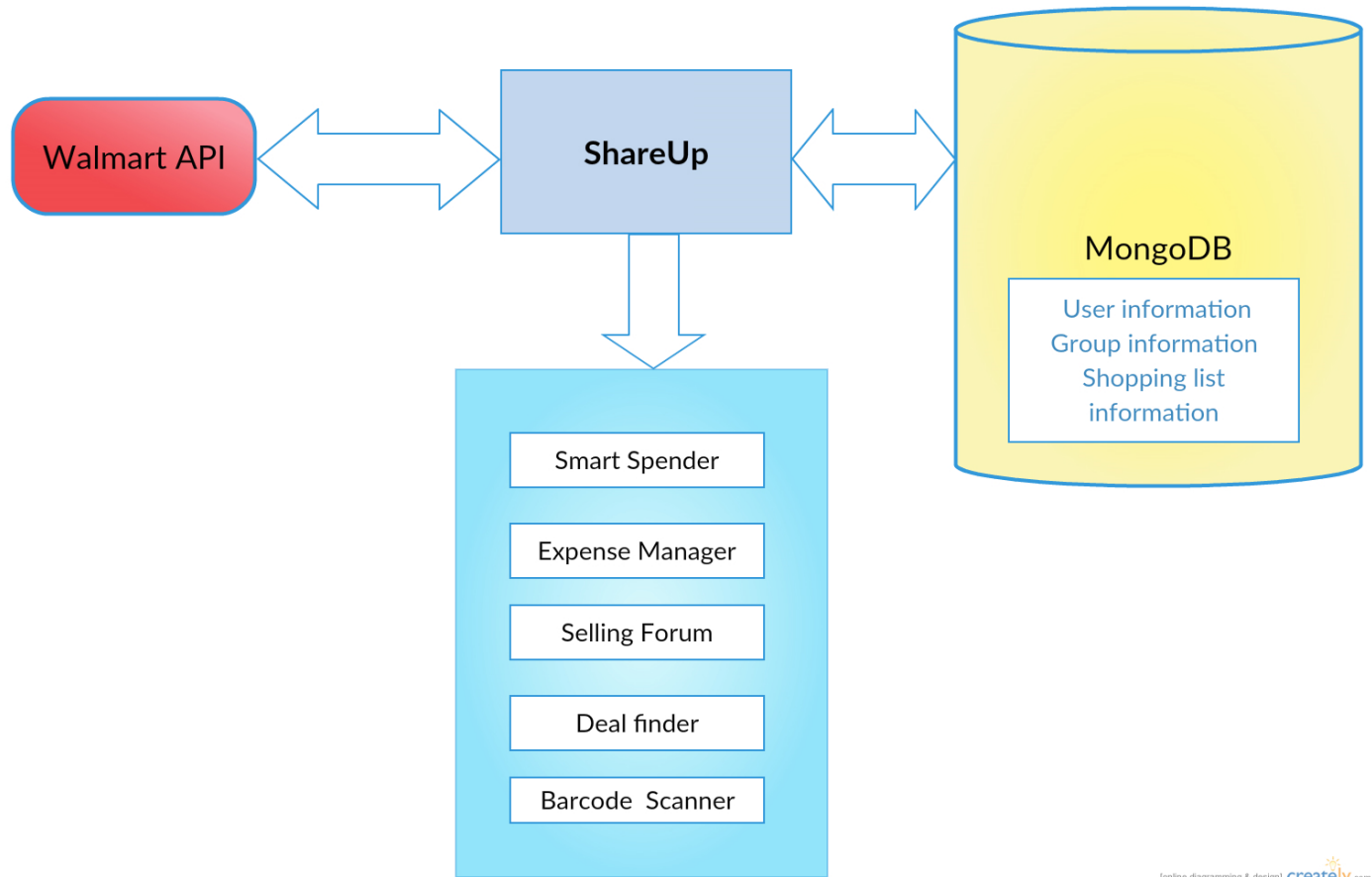
UML Class diagram



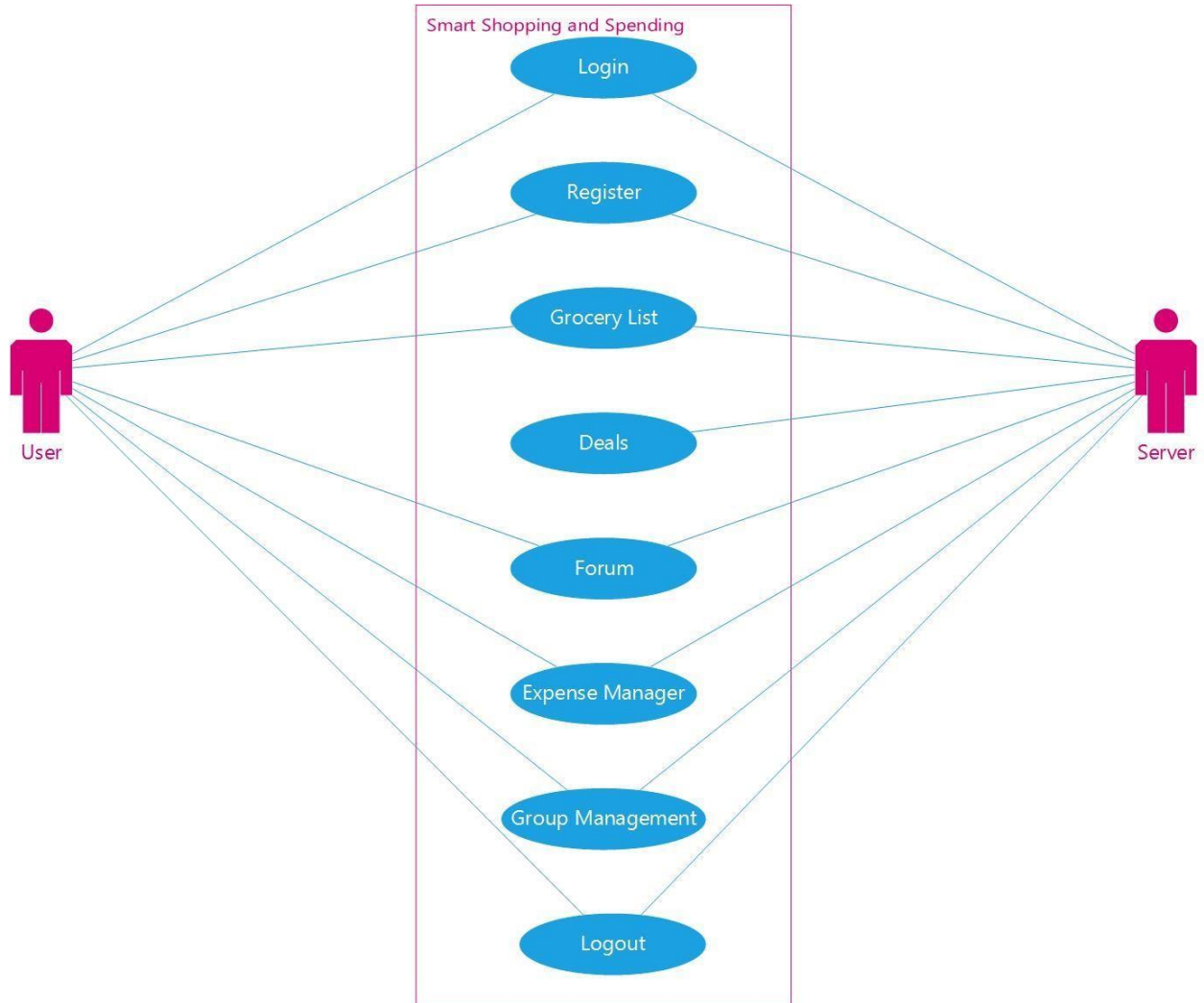
Sequence Diagram



Architecture Diagram



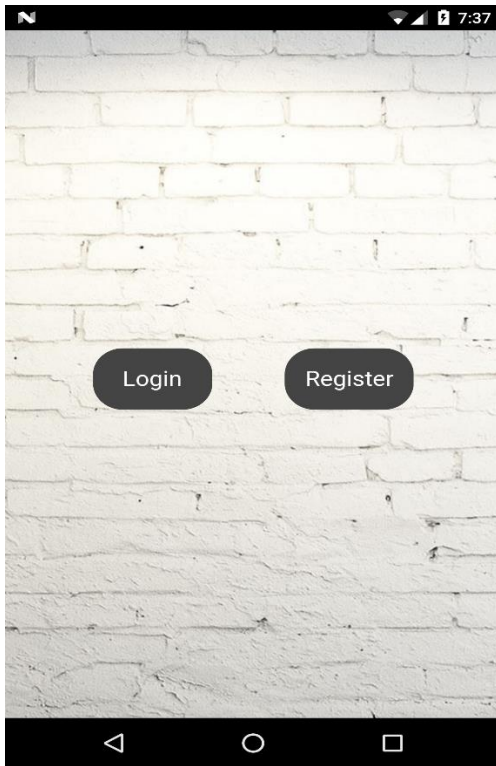
Use Case Diagram



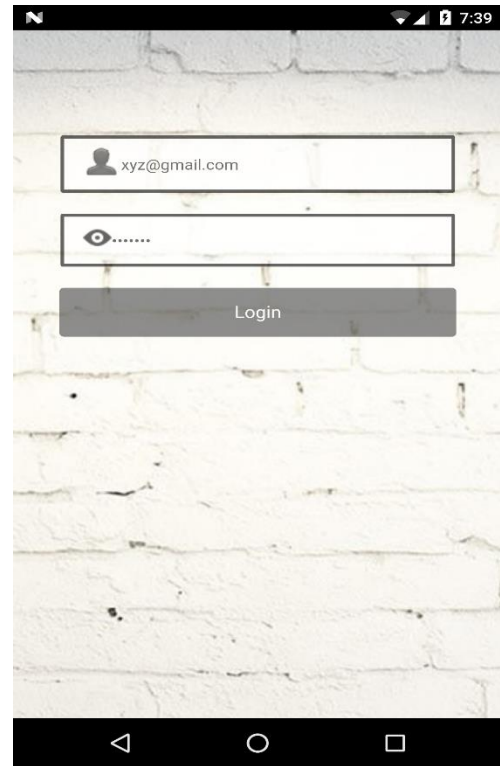
Implementation screenshots

Android:

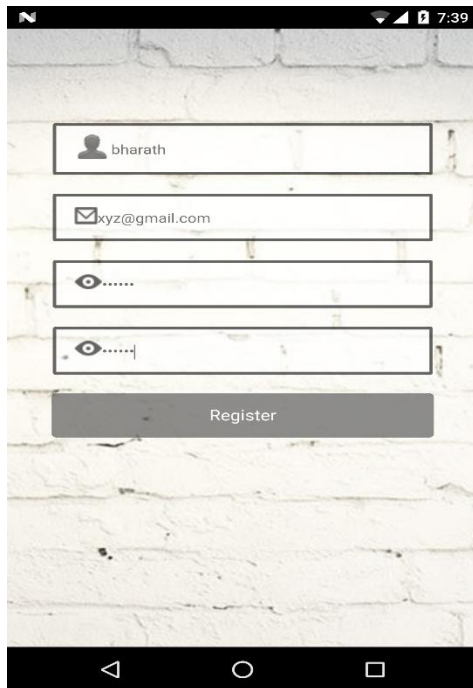
Welcome Page



Login Page

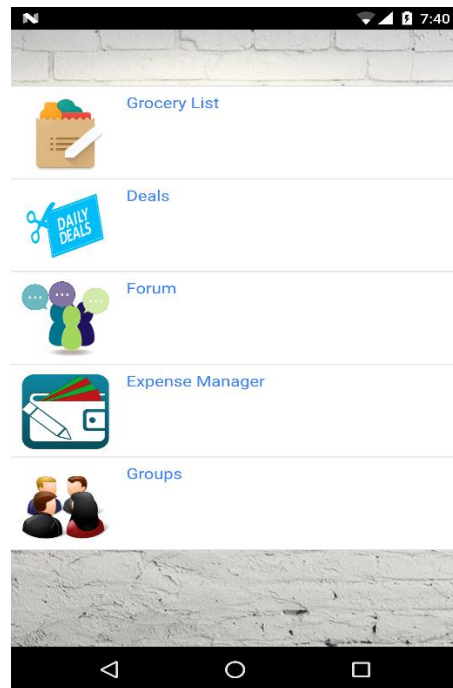


Register Page

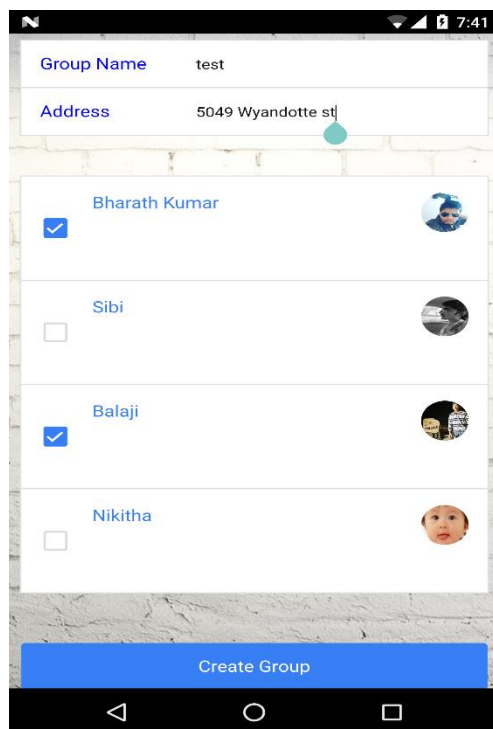


A screenshot of a mobile application's registration page. The background is a light-colored brick wall. The page contains four input fields: a name field with the text 'bharath', an email field with 'xyz@gmail.com', and two password fields, each with a small eye icon to toggle visibility. Below the fields is a grey 'Register' button. The Android navigation bar is visible at the bottom.

Home Page

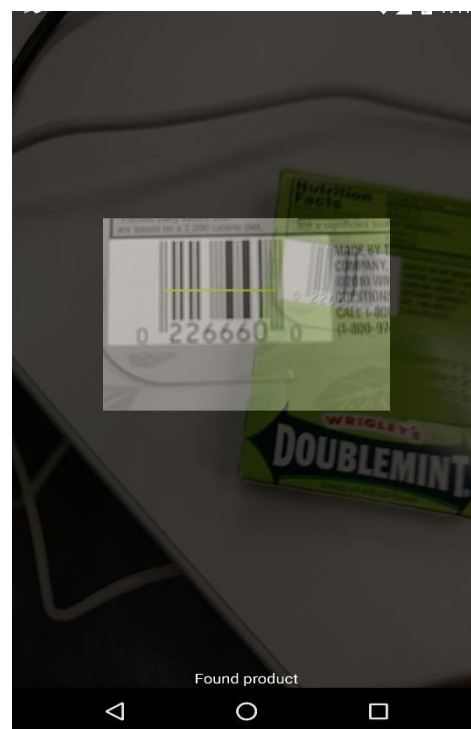


Groups

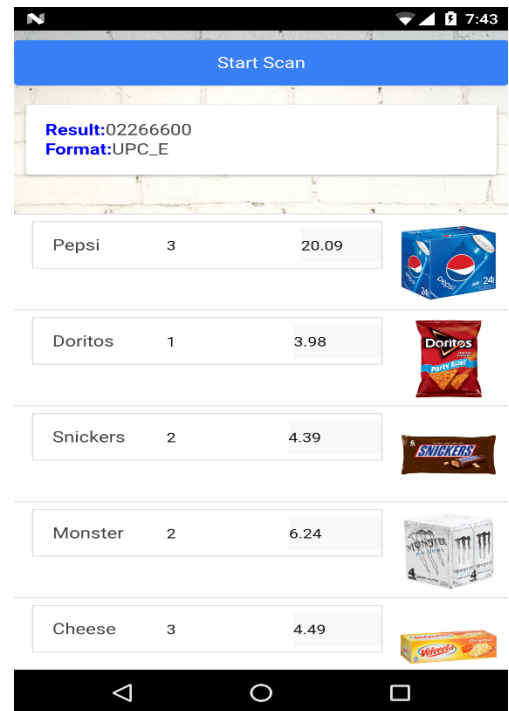
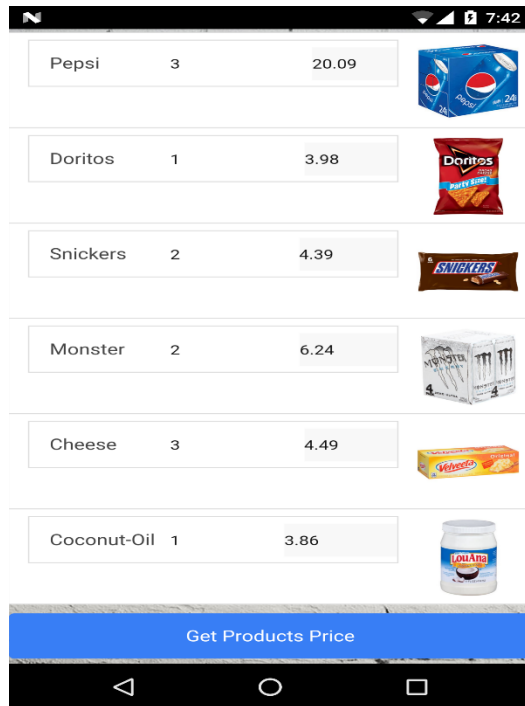


A screenshot of a mobile application's 'Groups' page. The background is a light-colored brick wall. At the top, there are two input fields: 'Group Name' with the text 'test' and 'Address' with '5049 Wyandotte st'. Below these is a list of group members, each with a checkbox, a name, and a profile picture: Bharath Kumar (checked), Sibi (unchecked), Balaji (checked), and Nikitha (unchecked). At the bottom is a blue 'Create Group' button. The Android navigation bar is visible at the bottom.

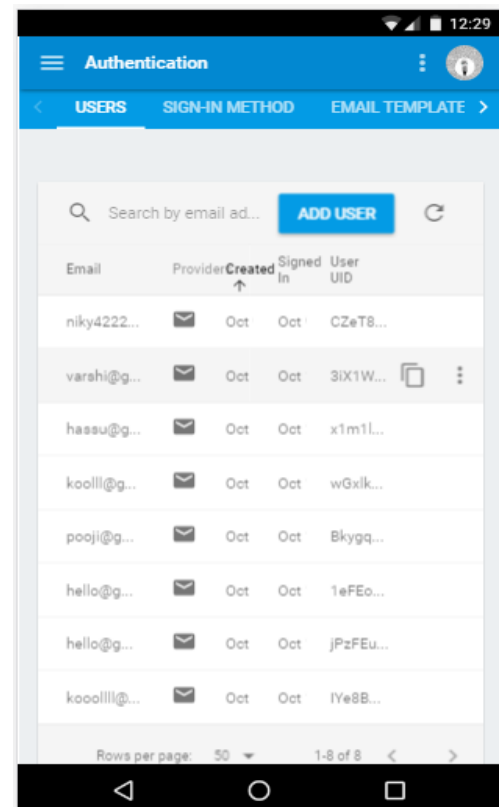
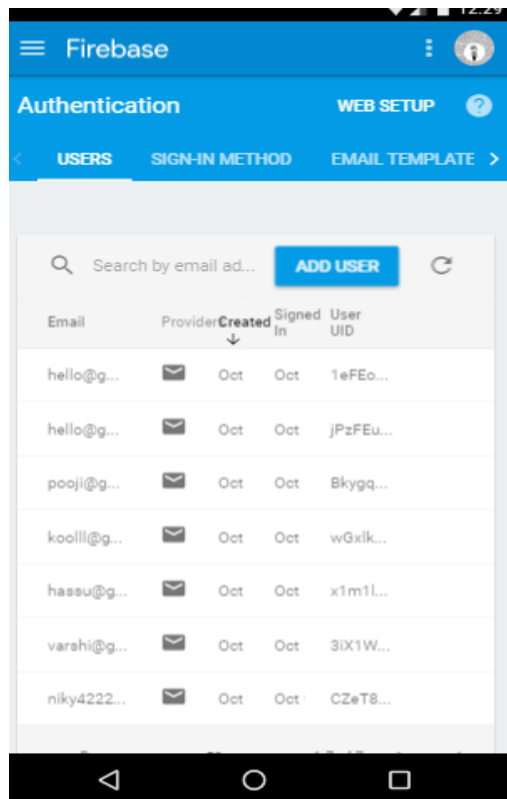
Barcode



Grocery List



Firebase Credentials



Unit Testing

S.No	Title	Description	Outcome Expected	Result
1	User Verification Successful	The user should login with his/her password and username	Login should be successful	Pass
2	User Verification Failed	Login to the system with wrong password/username	Login should fail with an error "Invalid Username/Password"	Pass
3	User Login Successful	The user logs into the system with password/username	Login should be successful and the user should enter into the Home page	Pass
4	New User Registration	The user should enter the details into the page and should be accepted by the admin	User should go to Home page	Pass

Project Management

Implementation status report

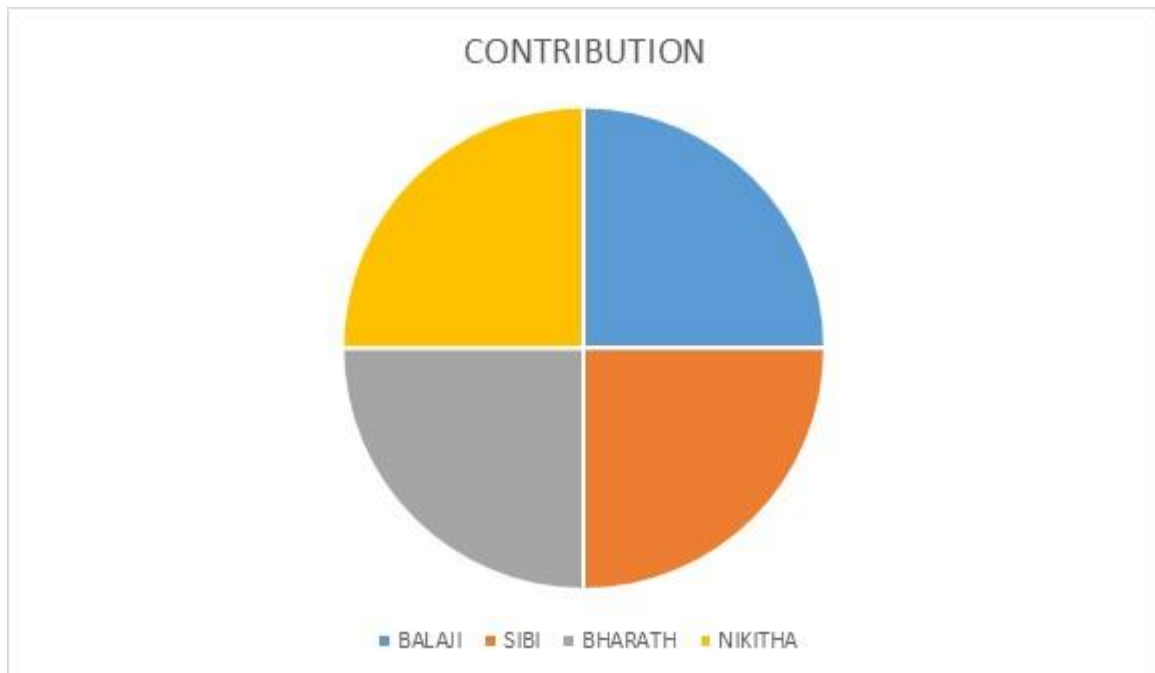
Technology Used: Ionic, HTML, CSS, JS, Walmart API and Angular JS.

Work Completed

- Login, Registration and home page updating
- Shopping list update with Product price obtained from Walmart API
- Barcode reader plugin to scan items
- Created group template

Contribution:

- Balaji Natarajan – 25%
- Bharath Kumar A – 25%
- Sibi Chakravarthy Ramesh – 25%
- Nikitha Kona – 25%



Bibliography

<http://ionic.io/developers>

<http://creatly.com/>

<https://mockingbot.com/>

<http://www.supermarketapi.com/Default.aspx>