

Lab 4 - Refill.Me User Manual

Team Iron

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CS411W

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Version 1

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1. Introduction (*O: Colombini*)

Welcome to the Refill.Me user manual! Refill.Me is a revolutionary shopping application designed to promote package-free shopping and help reduce the amount of waste generated from single-use packaging. This application is designed to help both shoppers and store owners to make package-free shopping as seamless as possible, making it easier for everyone to do their part for the environment.

With Refill.Me, shoppers can easily find package-free stores in their area, browse their inventory, and place items into their shopping lists that will then provide them with a container recommendation. Store owners can manage their inventories and connect with eco-conscious consumers who are looking to reduce their environmental impact.

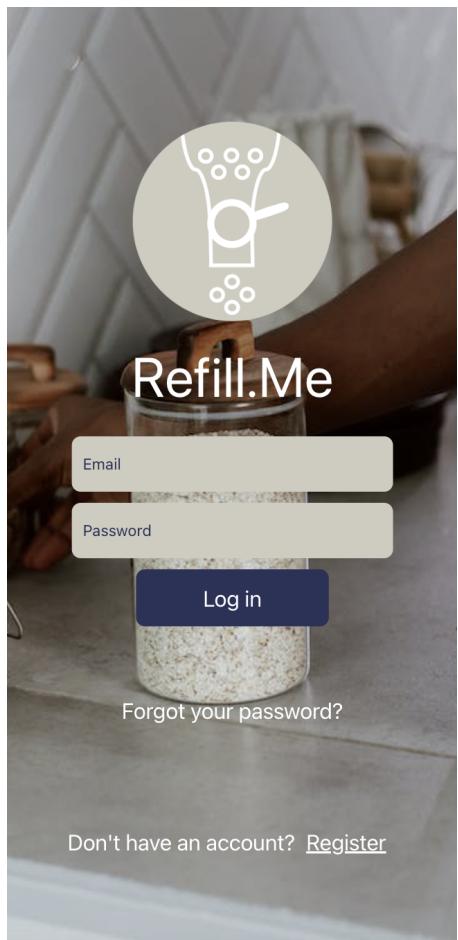
This manual is designed to provide you with a comprehensive guide using Refill.Me. Whether you are a shopper looking to start the package-free shopping journey, or a store owner interested in joining the Refill.Me community, this manual will walk you through all the features and functionality of the application.

We are excited to have you join us on this journey towards a more sustainable future. We hope this user guide helps you make the most of our application. Happy package-free shopping!

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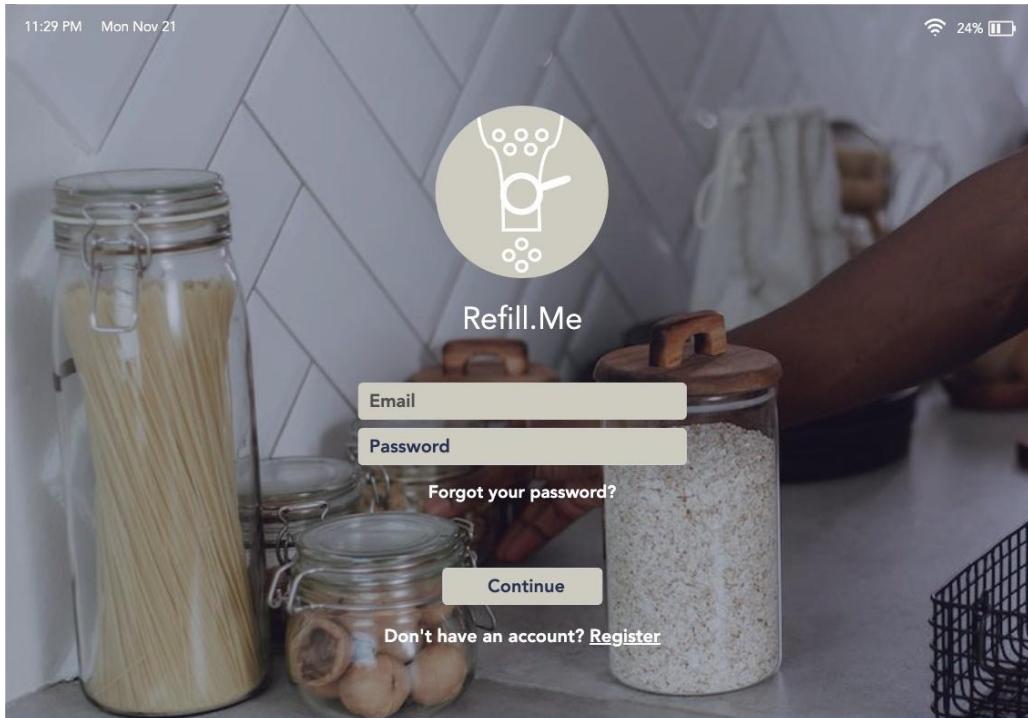
2. Getting Started

2.2 Logging into an Account (*O: Colombini, M1: Maximova, M2: Rios*)



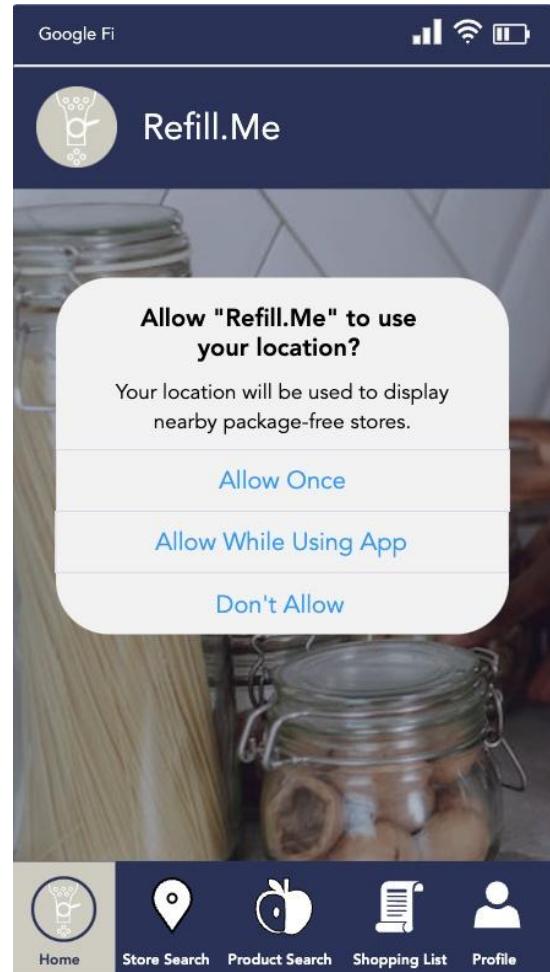
1. Email - Please enter the email address that was used during the registration process
2. Password - Please enter a password that was used during the registration process.
3. Login - Please click on the Login button after filling in the email and password fields above to log into your account
4. Forgot Your Password - Please select 'Forgot Your Password?' hyperlink to reset the password associated with your account.
5. Register - Please click on the "Register" hyperlink to set up a Refill.Me account if you don't already have one.

The store owner login page on a tablet:

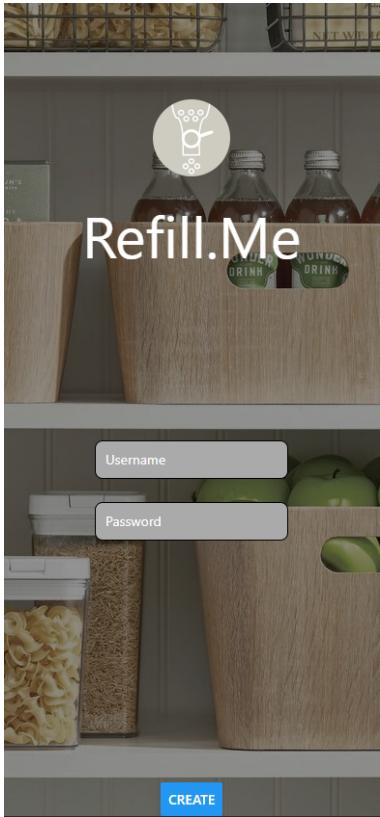


After logging in to the application for the first time, a prompt will allow you to choose your preferences regarding enabling location services. The application will offer you three options (depending on the operating systems settings):

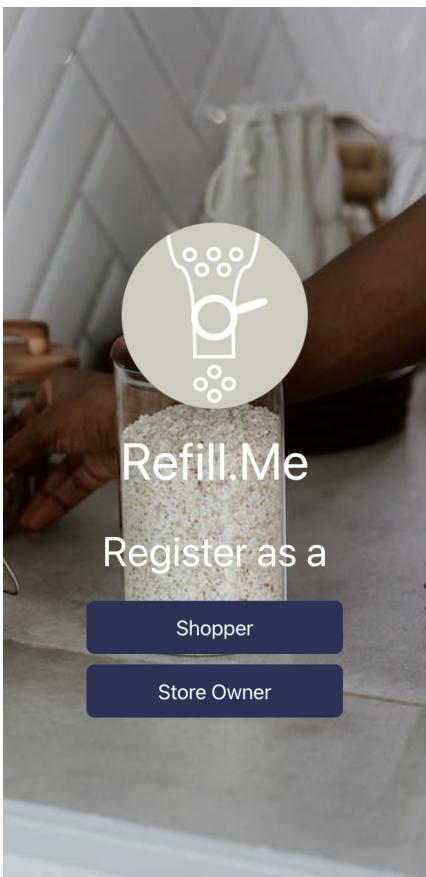
- Allow location services once
- Allow location services while using the application
- Don't allow location services



2.3 Register a new account (*O: Colombini, M1: Hull, M2: Maximova, M3: Chang-Horvath*)



1. Email address - Please enter a valid email address that you want to associate with a Refill.Me account. Any fake/existing email addresses will be rejected by the application.
2. Password - Please enter a password . Please re-enter the password to confirm it. If the password does not meet the security requirements, a helpful error message will tell you on how to correct it.
3. First Name - Please enter your first name.
4. Last Name - Please enter your last name.
5. Select the account type to create: Shopper or Store Owner account.
6. If Store owner account is chosen, please enter the following information on the form that is displayed:



- a. Store Name - Please enter the name of the store that you are affiliated with.
- b. Store Address - Please enter the store's physical address.
- c. Store website - Please enter the store's website (if applicable).
- d. Store hours - Please enter the opening hours of the store (optional, it can be updated later in the application).

7. Sign Up - Please click on the Submit button after the above fields have been filled in to create your account.

The image displays two registration forms side-by-side, set against a background of a white ceramic jar with a textured surface.

Registration Shopper

- First Name
- Last Name
- Username
- Email
- Password
- Confirm Password

Registration Store Owner

- First Name
- Last Name
- Username
- Email
- Password
- Confirm Password
- Store Name
- Store Address

Store Hours (Optional)

Day	Start Time	End Time
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

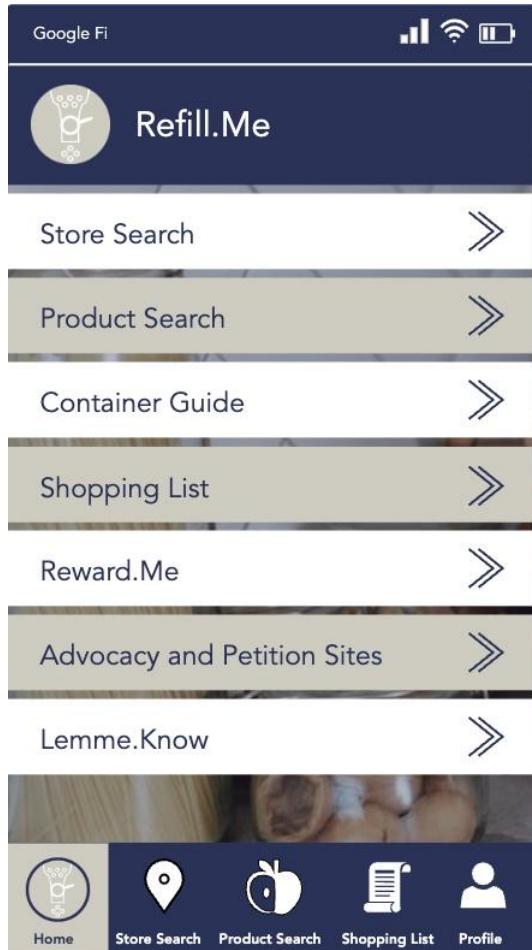
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3. Shopper Site Navigation

Upon logging into the application, user will land on the Home Page:

3.1. Home Page (Shopper) (*O: Colombini, M1: Chang-Horvath, M2: Maximova*)

1. Store Search - This feature allows users to find nearby package-free stores using Google Maps.



If you enabled location services, you can simply click on the “Store Search” button (spyglass icon), and nearby package-free stores will be displayed on a map. If you did not enable location services, you will be prompted to enter your zip code. Once submitted, the application will display nearby package-free stores on an online map.

2. Product Search - Looking for a specific product?

Use the “Product Search” feature to find it quickly and easily. This feature allows you to search for products in two different ways: ‘Search by Icons’ and ‘Search by Name’. Simply choose an icon, or type in the name of the product you’re looking for, and we’ll show you a list of stores that carry it.

3. Container Guide - Not sure which container to use for the package-free shopping? Refill.Me “Container Guide” provides you with information about the different types of containers

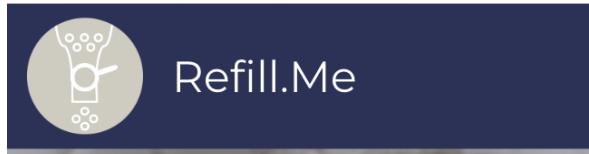
used in package-free shopping, so that you can get familiar with them, and make an informed decision.

4. Shopping List - Keep track of your shopping needs with the “Shopping List” feature. You can add products to it, or remove products from it, and you can edit the quantity of the products, so you won’t forget anything.
5. Reward.Me - Get the most out of your package-free shopping with the “Reward.Me” feature. You can see all of the reward points you have collected, as well as any discounts or promotions offered by nearby stores.
6. Advocacy and Petition Sites - Our goals are to promote passion about environmental issues, so we want to help you get involved too. Use our “Advocacy and Petition Sites” feature to find advocacy sites and petitions related to package-free shopping and other environmental issues.
7. Lemme.Know - We value your input, so we’ve created the “Lemme.Know” feature to allow you to provide us with information regarding new or closed stores, new products, products removed from a store’s offerings, or price changes.

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Current home page in prototype:

Note: *CustContRec* Temporary link will be removed later!



Store Search

Product Search

Container Guide

Shopping List

Reward.Me

Advocate With Us

Lemme.Know

CustContRec - TEMPORARY LINK

3.2. Navigation Menu (Shopper) (*O: Hull*)

After shoppers have registered an account and successfully logged in, a menu bar will be displayed on the bottom of the screen. There will be five items on the main menu:



1. The Home button
2. The Store Search button
3. The Product Search button
4. The Shopping List button
5. The Profile button

Each button on the navigation menu will direct users to the corresponding pages.

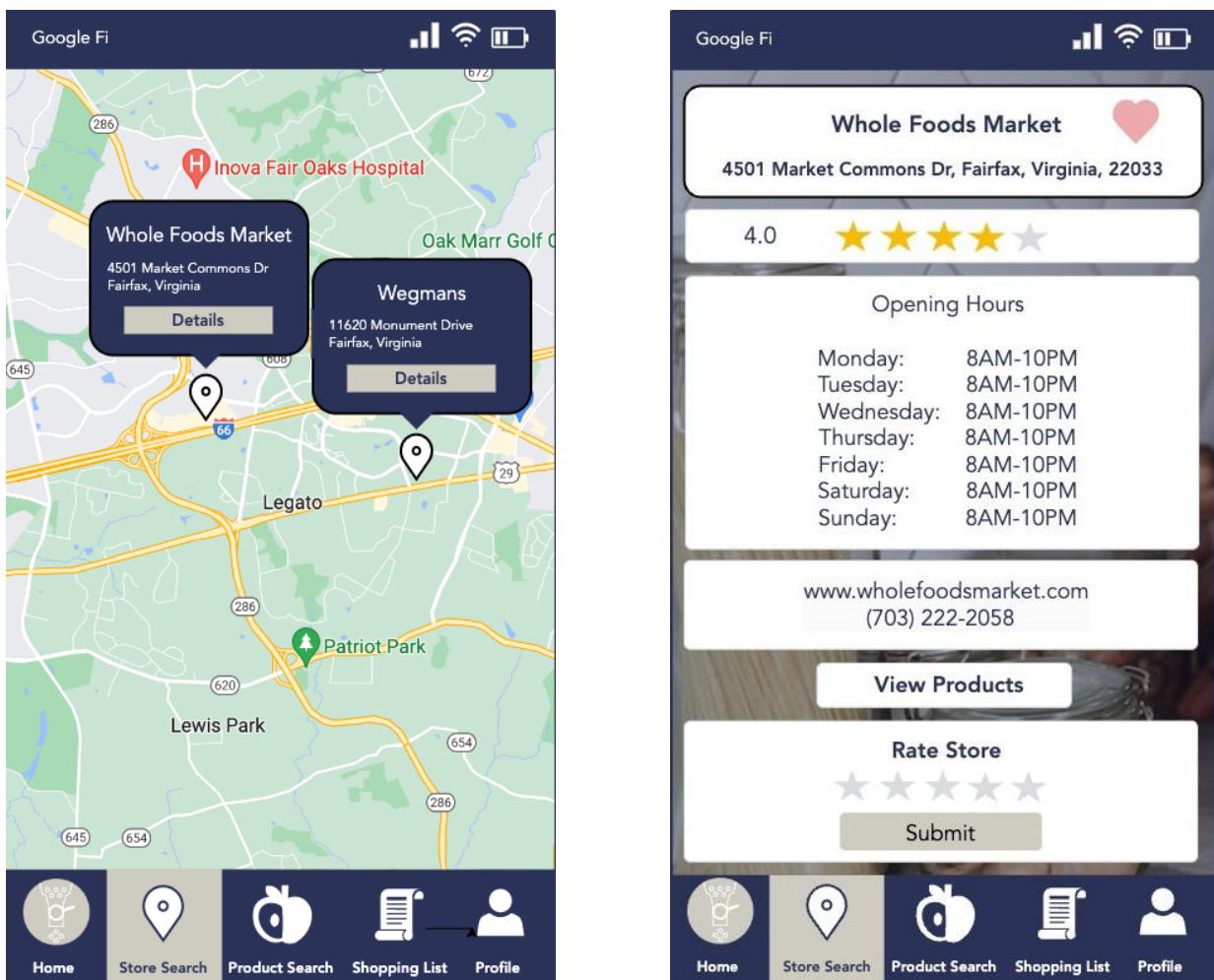
3.3. Store Search (*O: Colombini, M1: Chang-Horvath, M2: Maximova, M3: Hull*)

If you enabled location services when you first opened the application, then you can simply tap on the “Store Search” button, and nearby package-free stores will be displayed on a map. If you did not enable location services, and chose “Store Search”, you will be prompted to enter your zip code. Once this information is submitted, the application will display five nearby package-free stores on an online map powered by Google Maps.

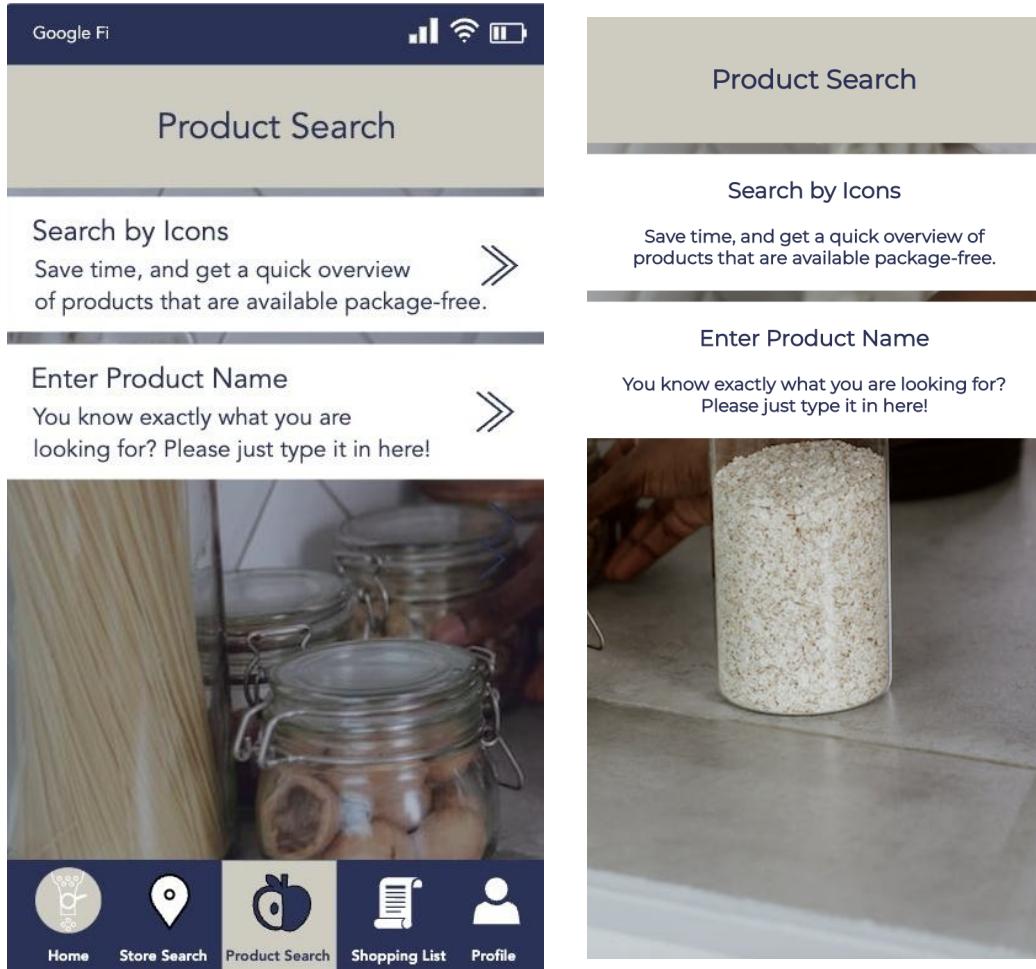
Each store found is marked with a pin on the online map. When you select the pin, a small popup opens that lists the following information: the store’s name, full address, and a “Details” button. Upon selecting the “Details” button, you will be redirected to the store’s page that displays the following:

1. The store’s name.
2. A heart icon, which when tapped saves the store in the “Saved Stores” list.
3. The current store rating.

4. The store's opening hours.
5. The store's website (if applicable).
6. The store's phone number (if applicable).
7. A "View Products" button, which when tapped, opens the product listing page of the corresponding store.
8. A "Rate Store" window with 5 gray stars that turn orange when tapped, and a "Submit" button below them.



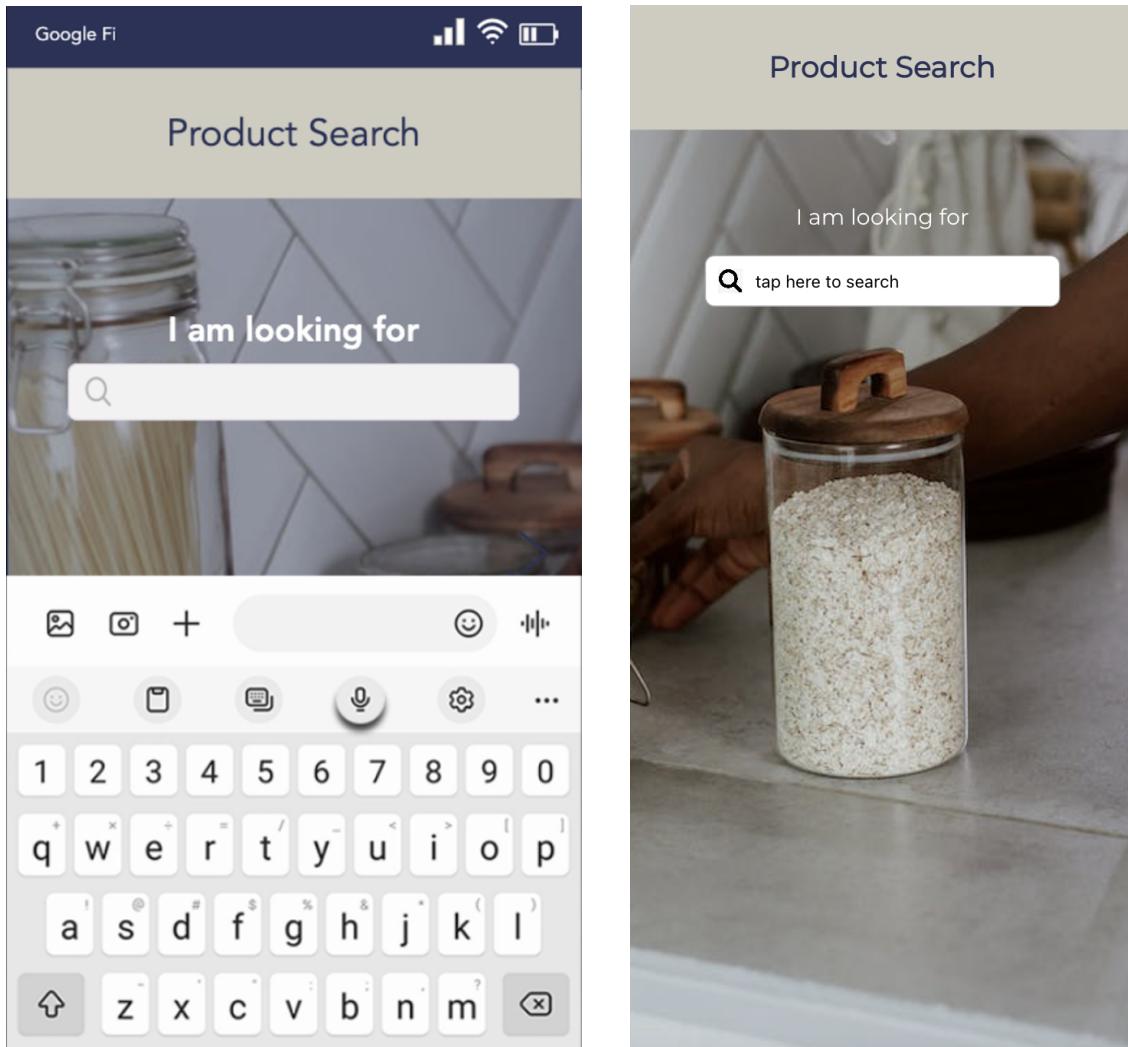
3.4. Product Search (*O: Hull, MI: Chang-Horvath*)



The Product Search will allow shoppers to search for package-free products in two ways:

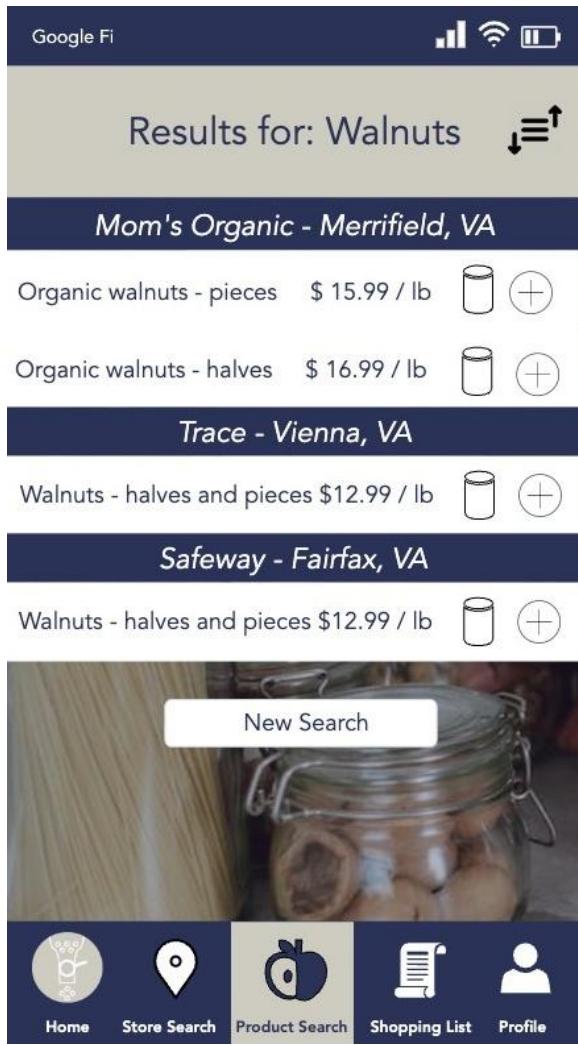
1. Search by Icons - choosing this option will allow you to search for products by tapping an icon that represents the desired product.
2. Enter Product Name - choosing this option will allow you to search for products by typing in the product's name.

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Once you have searched for a product, the app will redirect you to the product listing page, which will show the available products matching the search criteria from the five stores that are closest to your location.

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The screenshot shows the Refill.Me app interface. At the top, it says "Results for: Walnuts". Below this, there are sections for different stores:

- Mom's Organic - Merrifield, VA**
 - Organic walnuts - pieces \$15.99 / lb
 - Organic walnuts - halves \$16.99 / lb
- Trace - Vienna, VA**
 - Walnuts - halves and pieces \$12.99 / lb
- Safeway - Fairfax, VA**
 - Walnuts - halves and pieces \$12.99 / lb

At the bottom of the screen, there is a navigation bar with icons for Home, Store Search, Product Search, Shopping List, and Profile. A "New Search" button is also visible.

Results for: Walnuts

Trace - Vienna, VA

Walnuts, type \$0.00/lb

MOM's Organic - Merrifield, VA

Walnuts, type \$0.00/lb

Walnuts, type \$0.00/lb

Safeway - Fairfax, VA

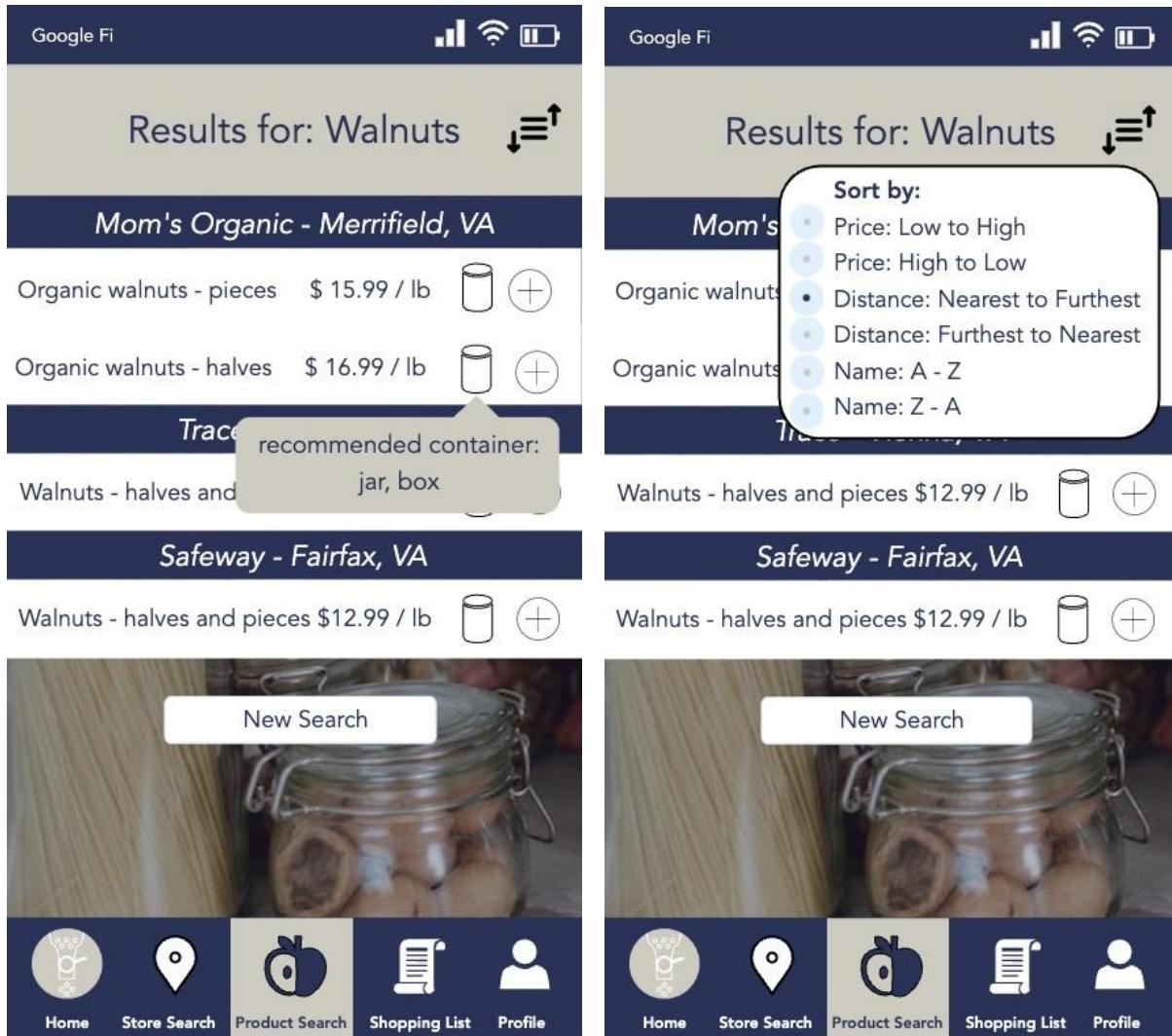
Walnuts, type \$0.00/lb

New Search



You will be able to:

1. Sort the list based on price, distance, or product name.
2. Add a product to the shopping list - if you would like to add a product to the shopping list, tap the “+” button next to the desired product.
3. Get Container information - if you would like to know what kind of container is the best suited for a specific product, tap the container button to the right of the product.
4. New Search - to perform a new product search, tap the “New Search” button at the end of the list.



3.5. Container Guide (*O: Hull*)

The Container Guide contains useful information regarding the kinds of containers you can bring to go package-free shopping. This information includes:

1. The name of the container.
2. The materials a container is made out of.
3. A list of the types of products that the container can store.



Container Guide

Familiarize yourself with the bags, jars, boxes, etc. that you can use at your next package-free shopping!

Tote bag
textile
for packing & for fruits, vegetables

Produce bag
textile
for fruits, vegetables

Jar
glass, plastic
for nuts, beans, pasta, spices, tea, coffee, etc.

Bottle
glass, plastic
for oil, vinegar, detergents, lotions, etc.

Container Guide

Get familiar with some of the containers you can use to shop package free!

Tote bag
textile
for packing & for fruits and vegetables

Produce bag
textile
for fruits and vegetables

Bag
textile, paper
for nuts, beans, pasta, spices, tea, coffee, etc.

Jar
glass, plastic
for nuts, beans, pasta, spices, tea, coffee, etc.

Bottle
glass, plastic
for oil, vinegar, detergents, lotion, etc.

Box
glass, plastic, paper
for nuts, beans, pasta, spices, tea, coffee, etc.

 Home  Store Search  Product Search  Shopping List  Profile

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3.6. Shopping List (*O: Hull, M1: Colombini, M2: Chang-Horvath*)

The Shopping List is where you will find all of the products that were added from the product listings page.



the product name.

- Customized Container Recommendation - To get the customized container recommendation for the entire shopping list, tap the “Container Recommendation for Entire Shopping List” button at the top of the Shopping List screen. To get a container

- Product Listing - The Shopping List will display all of your desired products along with their unit prices, grouped by store.
- Increase or Decrease Quantity - If you would like to increase the amount of a product in the shopping list, tap the up arrows to the right of the displayed quantity for the specific product. If you want to decrease the amount, tap the down arrows to the left of the displayed quantity for the product.
- Remove a Product - to remove a product from the shopping list, tap the “-” button underneath the product’s name.
- Container information - If you want to get the recommended container for a specific product, tap the container button underneath

recommendation for all products at a specific store, tap the “Container Recommendation” button in the corresponding store’s section.

3.7. Customized Container Recommendation (*O: Colombini, MI: Chang-Horvath*)

Customized Container Recommendation for one store (when all the products in the shopping list are from one store).

Google Fi

Customized Container Recommendation

For this shopping, you will need:

Total:

3 jars	(glass, plastic)	volume: 16 oz
1 produce bag	(textile)	volume: 2.5 lb
1 tote bag	(textile)	volume: 10 lb

Mom's Organic - Merrifield, VA

For steel cut oats (1 lb)
2 jars (glass, plastic) volume: 16 oz

For organic walnuts (0.5 lb)
1 jar (glass, plastic) volume: 16 oz

For Fuji apples (2 lb)
1 produce bag (textile) volume: 2.5 lb

For packing:
1 tote bag (textile) volume: 10 lb

[Home](#) [Store Search](#) [Product Search](#) [Shopping List](#) [Profile](#)

Customized Container Recommendation

For this shopping, you will need:

Total:

3 jars	(glass, plastic)	volume: 16 oz
1 produce bag	(textile)	volume: 2.5 lb
1 tote bag	(textile)	volume: 10 lb

Mom's Organic - Merrifield, VA

For steel cut oats (1 lb)
2 jars (glass, plastic) volume: 16 oz

For organic walnuts (0.5 lb)
1 jar (glass, plastic) volume: 16 oz

For Fuji apples (2 lb)
1 produce bag (textile) volume: 2.5 lb

For packing
1 tote bag (textile) volume: 10 lb

[Back to my Shopping List](#)



1. Table of Suggested Containers - The Container Recommendation will display a table of all the suggested containers based on the products in the shopping list. Each row in the table will display the following information:
 - a. The product name, including product specifications.
 - b. The product amount.
 - c. The number of containers needed for the product.

- d. The type of container recommended for the product.
 - e. The material of the recommended container.
 - f. The volume of the recommended container.
2. Total Container Recommendation - Above the table, the system will display the number and types of containers that are recommended for the entire shopping list, grouped by container types. Each entry in the table will include the following information:
- a. The number of containers recommended for the whole shopping.
 - b. The types of containers recommended for the whole shopping.
 - c. The material of the recommended containers.
 - d. The volume of the recommended containers.
3. Back to My Shopping List Button -

Underneath the tables, a “Back to My Shopping List” button will be displayed . Selecting this button will redirect you to the Shopping List screen.



The screenshot shows a mobile application interface for 'Customized Container Recommendation'. At the top, there's a header bar with 'Google Fi' and signal strength icons. Below it is a title card with 'Customized Container Recommendation' and a sub-section 'For this shopping, you will need:'.

Total:

3 jars	(glass, plastic)	volume: 16 oz
1 produce bag	(textile)	volume: 2.5 lb
1 tote bag	(textile)	volume: 10 lb

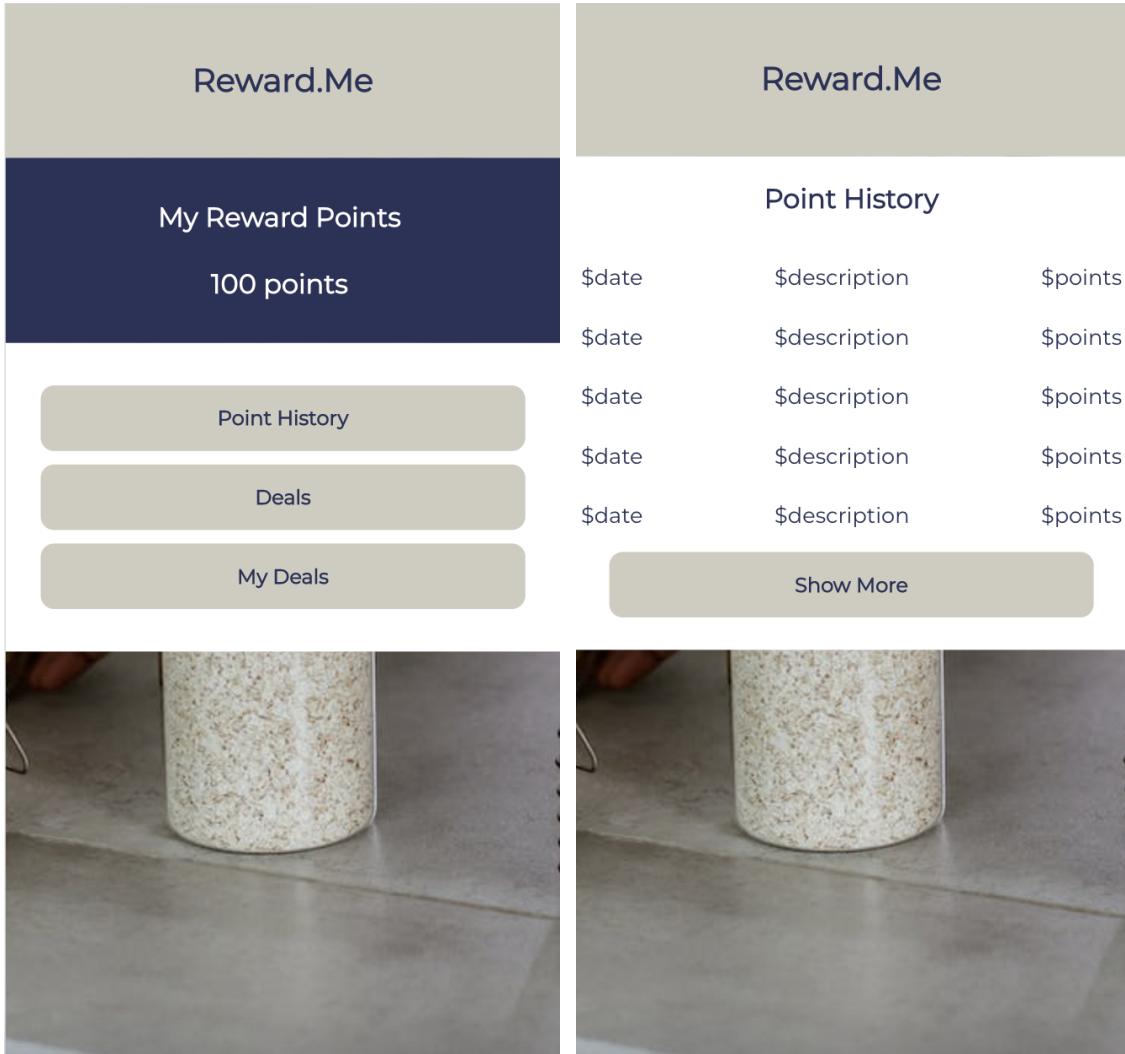
Mom's Organic - Merrifield, VA

For steel cut oats (1 lb)		
2 jars	(glass, plastic)	volume: 16 oz

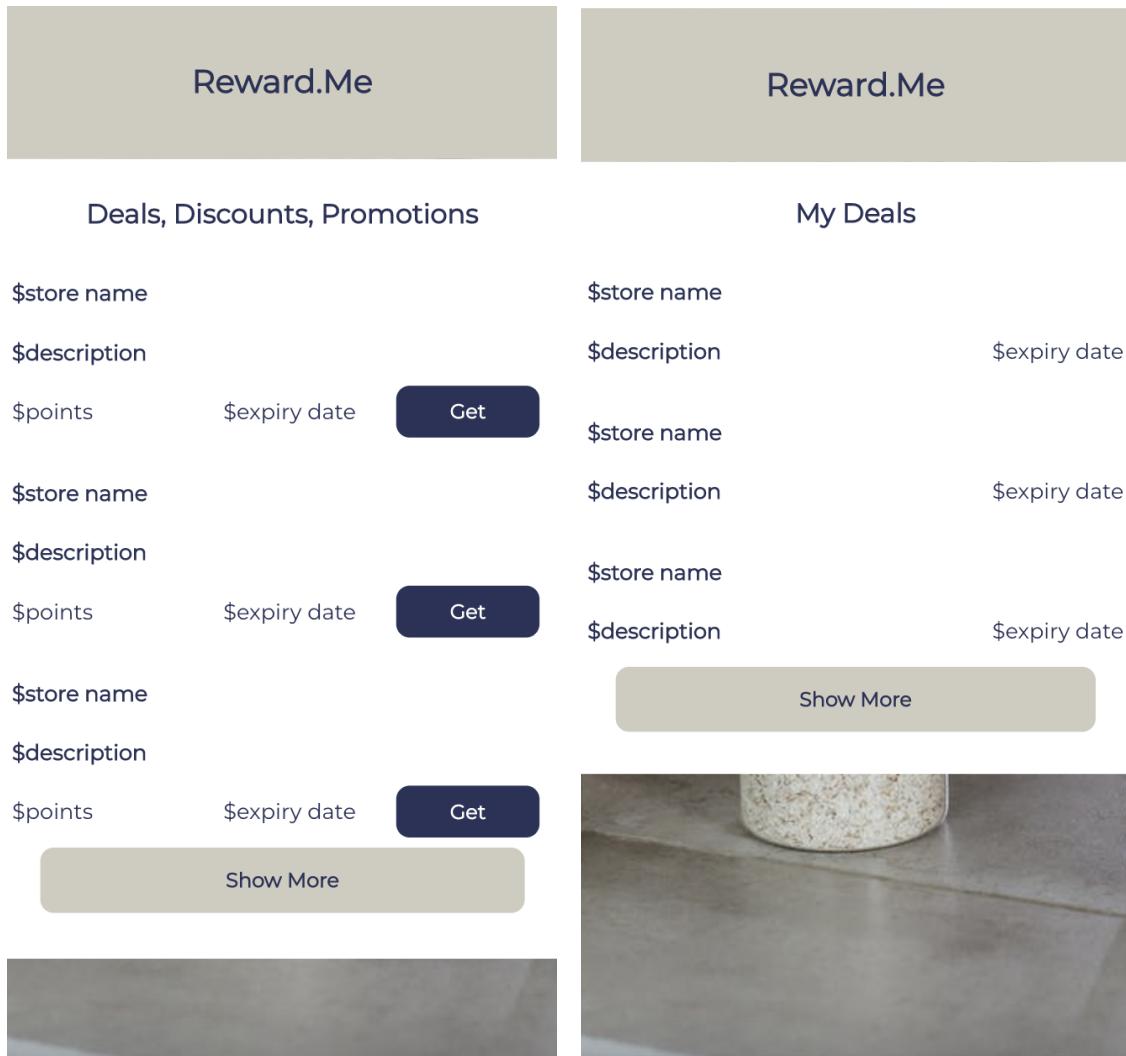
Safeway - Fairfax, VA

For Fuji apples (2 lb)		
1 produce bag	(textile)	volume: 2.5 lb

At the bottom, there's a navigation bar with icons for Home, Store Search, Product Search, Shopping List, and Profile.

3.8. Reward.Me (*O: Colombini, M1: Chang-Horvath, M2: Hull*)

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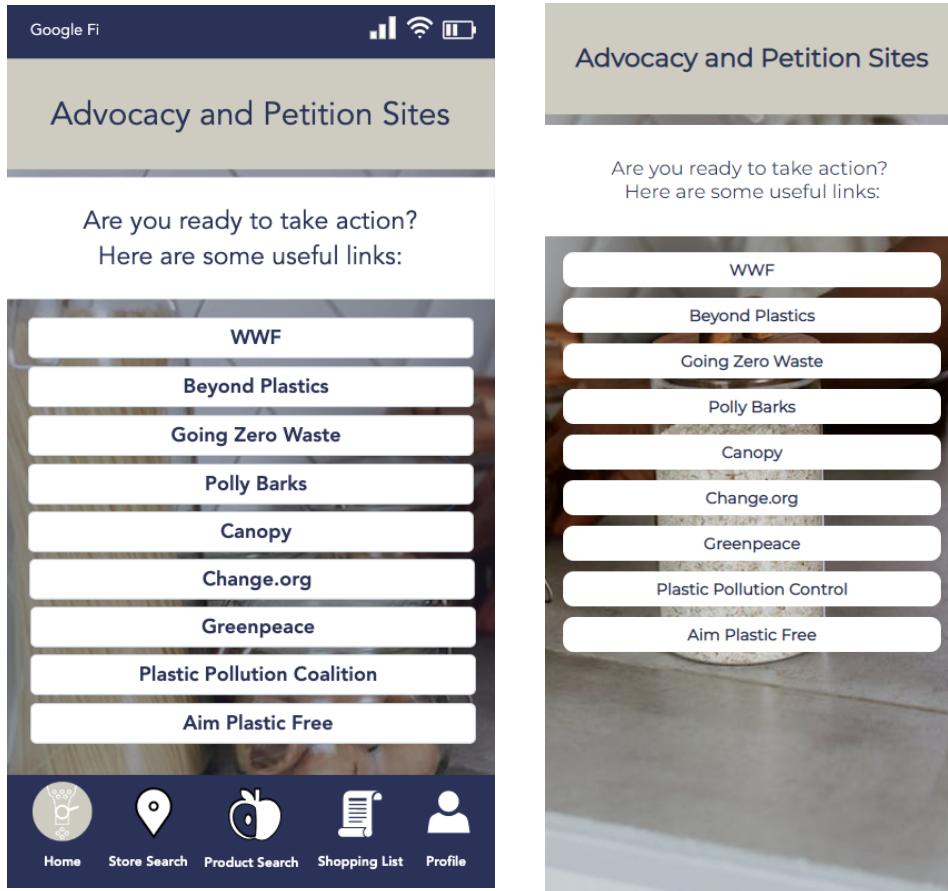


1. Reward Points Display - The Reward.Me screen will display your current number of reward points.
2. To view the reward point history, select the “Reward Point History” button.
3. The table on the “Reward Point History” screen shows the three latest entries in the reward point history. If the shopper wants to see more entries, they can select the “Show more” button to extend the table and display the entire reward point history.
4. Each entry in the table will display the date when the reward point was received, the type of activity that was rewarded, and the number of reward points earned.

5. To view the deals, discounts, and promotions offered by nearby stores, select the “Deals” button, which opens the “Deals, Discounts, Promotions” screen.
6. The table on the “Deals, Discounts, Promotions” screen will display the different deals and benefits available in the five nearest stores, along with the number of points needed to redeem them, the expiration date of each offer, and a “Get” button so that the promotion can be saved.
7. If there are no deals available in nearby stores, the system will display the message “No deals are found nearby”.
8. To view your deals, select the “My Deals” button.
9. The table on the “My Deals” page displays the store’s name that offers the deal, a short description of the deal, and the expiration date.

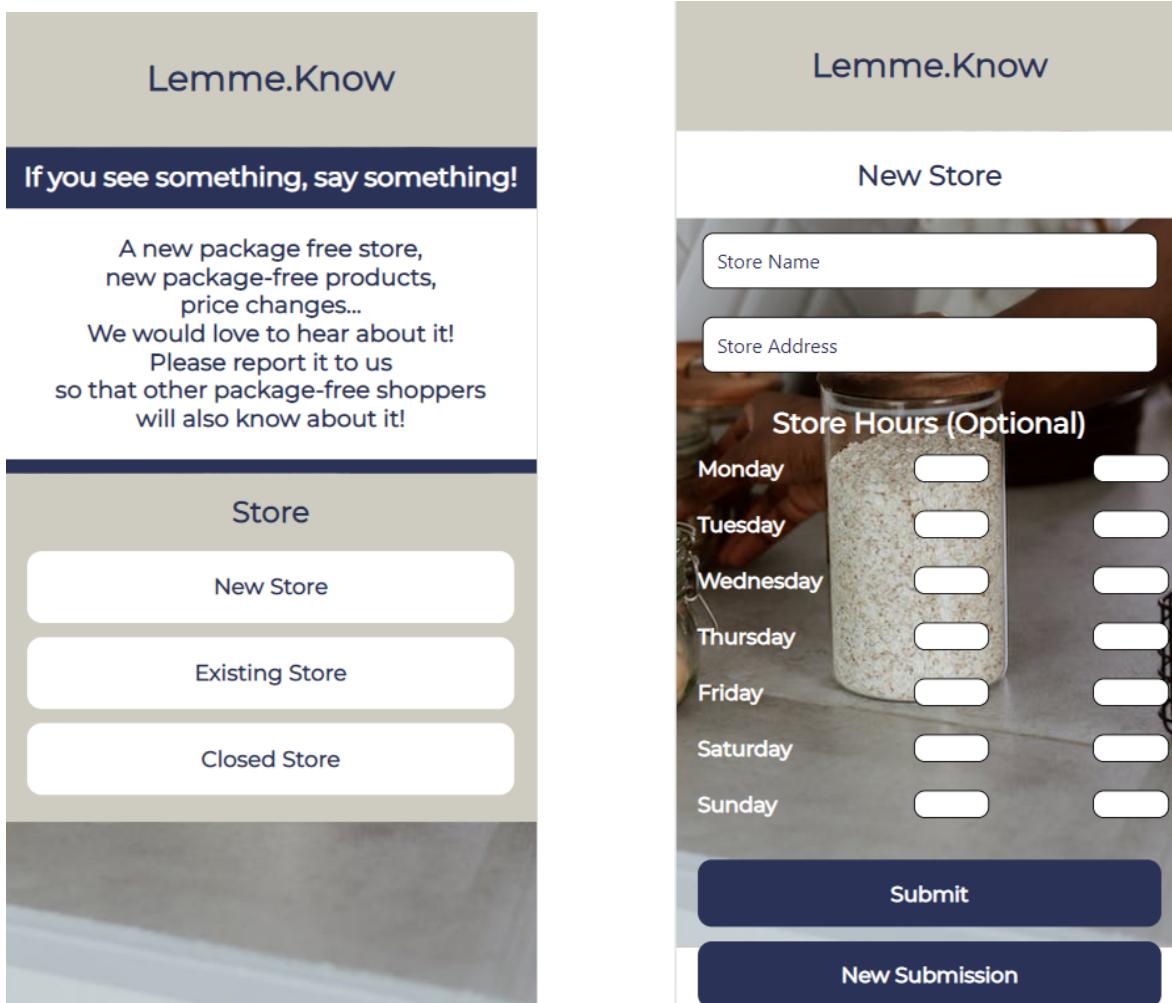
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3.9. Advocacy and Petition Sites (*O: Hull, M1: Chang-Horvath, M2: Maximova*)



The Advocacy and Petition Sites page, will redirect you to the websites of organizations dedicated to increasing awareness about environmental degradation, pollution, and the importance of the green movement. If you are interested in becoming involved in any of these efforts, tap on the button of the organization that interests you. Then, the corresponding website will open in a tab in your default browser.

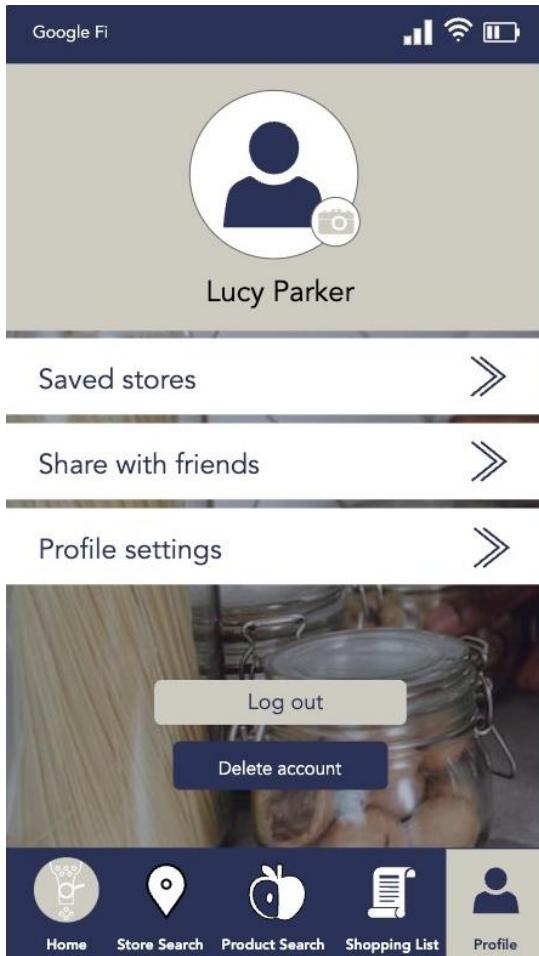
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3.10. Lemme.Know (*O: Colombini, MI: Hull*)

1. To access the Lemme.Know screen, select the “Lemme.Know” option from the home screen.
2. The Lemme.Know screen will display a message asking you to report any new package-free stores, new or removed products, or price changes.
3. To provide information about a new store, select the “New store” button under the “Store” section
4. Fill out the new store form with the store’s name, address, and opening hours (optional).
5. Tap the “Submit” button to submit the form.

6. To provide information about an existing store, select the “Existing store” button under the “Store” section.
7. Fill out the form with any changes regarding new products, products removed from store offerings, or price changes of existing products.
8. Tap the “Submit” button to submit the form.
9. To provide information about a closed store, select the “Closed store” button under the “Store” section.
10. Choose the store’s name from a drop-down menu.
11. Tap the “Submit” button to submit the form.
12. The system will confirm that the information has been submitted successfully.

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3.11. User Profile (Shopper) (*O: Colombini, M1: Chang-Horvath*)

1. To access the User Profile Screen, select the “Profile” option from either the home screen or the navigation toolbar at the bottom of the screen.
2. The User Profile screen displays the shopper’s name, which they used when they registered for the application, in the header of the screen.
3. To upload a photo as their profile picture, the shopper can tap on the person icon above their name in the header of the screen. A small camera icon is displayed right next to it. Tapping on the camera icon will allow the user to upload a photo from their device.

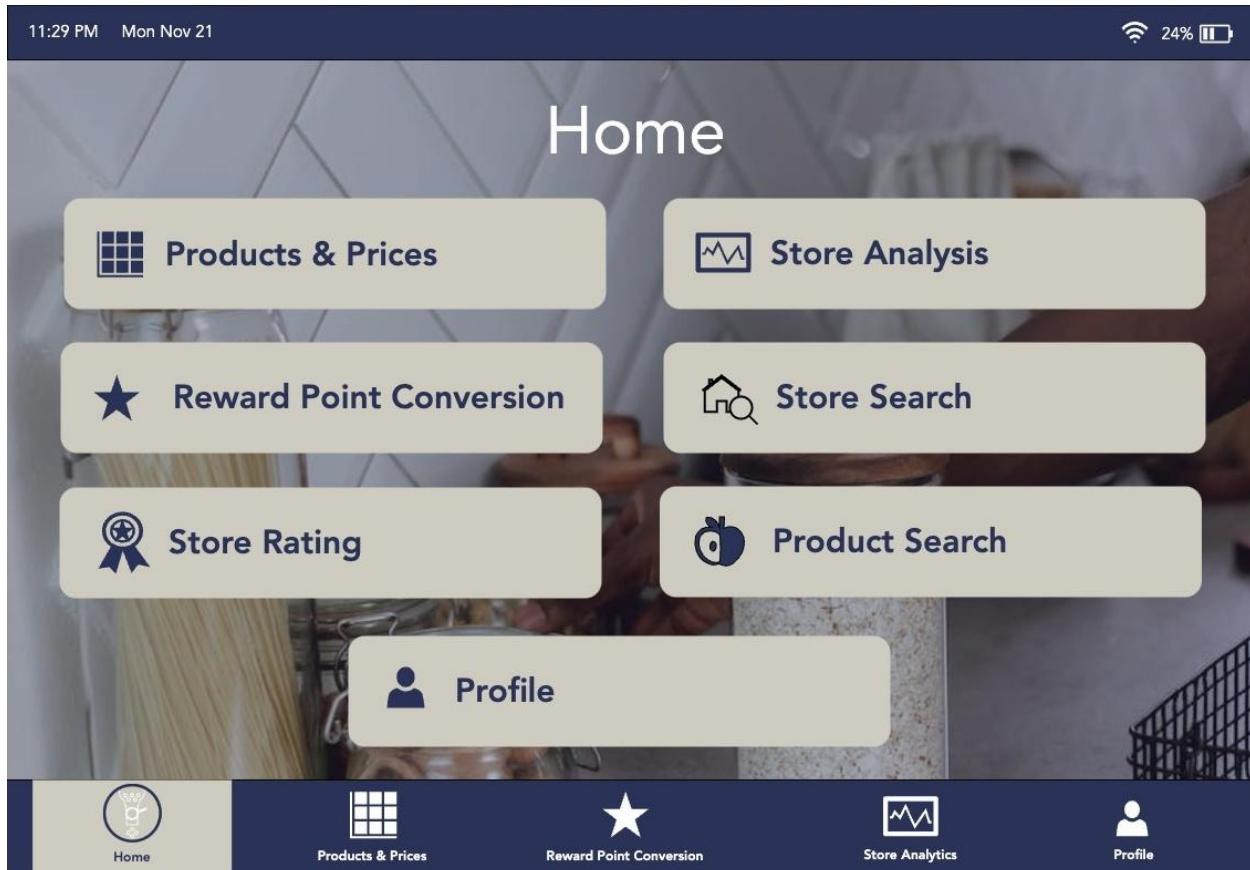
4. Beneath the header, there are three buttons: “Saved stores”, “Share with friends”, and “Profile settings”.
5. To view your saved stores, you can select the “Saved stores” button.
6. To share the application with friends using email, Facebook, or Twitter, you can select the “Share with friends” button.
7. To make modifications to your profile settings (update name, email address, or password), you can select the “Profile settings” button.
8. The user Profile screen displays a “Logout” button at the bottom of the screen to allow you to log out of the application.
9. The User Profile Screen displays a “Delete account” button at the bottom of the screen to allow you to delete your account. If you select this button, a message will appear to confirm this action.

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4. Store Owner Site Navigation

4.1 Home Page (Store owner) (*O: Colombini, M1: Hull*)

Upon logging in to the application, you will be on the Home page.



1. To manage your store's products and prices, click the “Products & Prices” button on the Home Page. This will take you to the Products & Prices dashboard where you can upload, modify, or delete products.
2. To view up-to-date information about your store's performance, click the “Store Analytics” button on the Home Page. This will take you to the Store Analytics dashboard.
3. To manage reward point conversion entries, click the “Reward Point Conversion” button on the Home Page. This will take you to the Reward Point Conversion dashboard where you can add, modify, or delete reward point conversion entries.

4. To view the latest store ratings of your store, click the “Store Rating” button on the Home Page. This will take you to the Store Rating dashboard.
5. To search for other stores, click the “Store Search” button on the Home Page. This will take you to the Store Search screen where you can search for stores.
6. To search for products, click the “Product Search” button on the Home Page. This will take you to the Product Search screen where you can search for products.
7. To view and edit information related to your store, click the “Profile” button on the Home Page. This will take you to your User Profile page.
8. To navigate to different areas of the application, use the navigation menu on the Home Page. The navigation menu includes buttons for “Home”, “Products & Prices”, “Reward Point Conversion”, “Store Analytics”, and “Profile”.

4.2 Navigation Menu (Store owner) (*O: Hull, M1: Maximova*)

After the store owner has logged in to Refill.Me, a menu bar will be displayed on the bottom of the screen. The five items on this main menu are:



1. The Home button (see section 4.1)
2. The Products & Prices button (see section 4.3)
3. The Reward Point Conversion button (see section 4.5)
4. The Store Analytics button (see section 4.4)
5. The Profile button (see section 4.9)

Each button on the navigation menu will direct you to the corresponding pages.

4.3 Products & Prices Dashboard (*O: Hull*)

Name	Product ID	Category	Price	Unit	Action
Fuji apples	4593	fruits	2.99	lb	<input checked="" type="checkbox"/> <input type="button" value="Delete"/>
Ginger	9433	vegetables	4.99	lb	<input checked="" type="checkbox"/> <input type="button" value="Delete"/>
Honeycrisp apples	4593	fruits	2.99	lb	<input checked="" type="checkbox"/> <input type="button" value="Delete"/>
Kiwi	4667	fruits	5.99	lb	<input checked="" type="checkbox"/> <input type="button" value="Delete"/>
Lentil	2496	beans	1.99	lb	<input checked="" type="checkbox"/> <input type="button" value="Delete"/>
Steel cut oats	6679	grains	1.99	lb	<input checked="" type="checkbox"/> <input type="button" value="Delete"/>
Walnuts - halves	9457	nuts	14.99	lb	<input checked="" type="checkbox"/> <input type="button" value="Delete"/>

The Products & Prices dashboard is where you can add, remove, or edit the information regarding the products offered by your store.

1. Table of Offered Products - The Products & Prices dashboard will display a table of all of the products that are offered by your store. Each row in the table will show the following information regarding a product:
 - a. The product's name.
 - b. The product's ID number.
 - c. The product's category.
 - d. The product's price.
 - e. The product's unit for the price.

2. Add a Product - tapping this button above the product table will allow you to add another product to the offerings available in your store.
3. Edit a Product - the edit button is in the action column on the right. Tapping this button will allow you to edit information about the corresponding product in the row.
4. Delete a Product - the delete button is in the action column on the right. Tapping this button will allow you to remove a product from the offerings available in your store.

4.4 Store Analytics Dashboard (*O: Hull*)

The screenshot shows a mobile application interface for a store analytics dashboard. At the top, there is a header bar with the time (11:29 PM), date (Mon Nov 21), signal strength, battery level (24%), and a profile icon. Below the header is a large title "Store Analytics" over a background image of a grocery store aisle. Underneath the title is a section titled "Recent Searches in Your Area" containing a table of search results. The table has columns for "Product Searched", "Product Found", "Date", "Product Available in My Store", and "Action". The data is as follows:

Product Searched	Product Found	Date	Product Available in My Store	Action
Turmeric	✓	11/27/2022	✓	<button>Save</button>
Spaghetti	✗	11/27/2022	✗	<button>Saved</button>
All-purpose flour	✓	11/25/2022	✗	<button>Saved</button>
Orange	✓	11/23/2022	✓	<button>Save</button>
Lentil	✗	11/22/2022	✗	<button>Save</button>
Steel cut oats	✓	11/22/2022	✓	<button>Save</button>

Below the table are two buttons: "See Full Listing" and "See Saved Searches". At the bottom of the screen is a navigation bar with icons for Home, Products & Prices, Reward Point Conversion, Store Analytics (highlighted in yellow), and Profile.

The Store Analytics Dashboard contains information about what shoppers are searching for in your store's area.

1. Table of Searches - The Store Analytics Dashboard will display all recent searches by shoppers in your store's area in a table. The table will display the following information regarding these searches:
 - a. The product that was searched for.
 - b. Whether the shopper found the product or not, represented by a checkmark or an X, respectively.
 - c. The date that the search was performed.
 - d. Whether the product was available in your store or not, represented by a checkmark or an X, respectively.
 - e. Whether you have saved a search or not. If you have saved a search, the action column will have a dark blue button that displays "Saved." If you have not already saved a search, the action column will show a white button that displays "Save."
2. Save or Remove a Search Entry - To save a search entry for later, tap the "Save" button under the action column in the search's row. It will turn dark blue and will change the button's text to "Saved." To remove a saved search entry, tap the "Saved" button and it will turn back to white.
3. See Full Listing - Located on the bottom left of the table, tapping this button will allow you to view all recent search entries.
4. See Saved Searches - Located on the bottom right of the table, tapping this button will allow you to view all of your saved search entries.

4.5 Reward Point Conversion Dashboard (*O: Hull, MI: Chang-Horvath*)

The Reward Point Conversion Dashboard displays all the information about rewards and discounts that can be redeemed and used in your store.

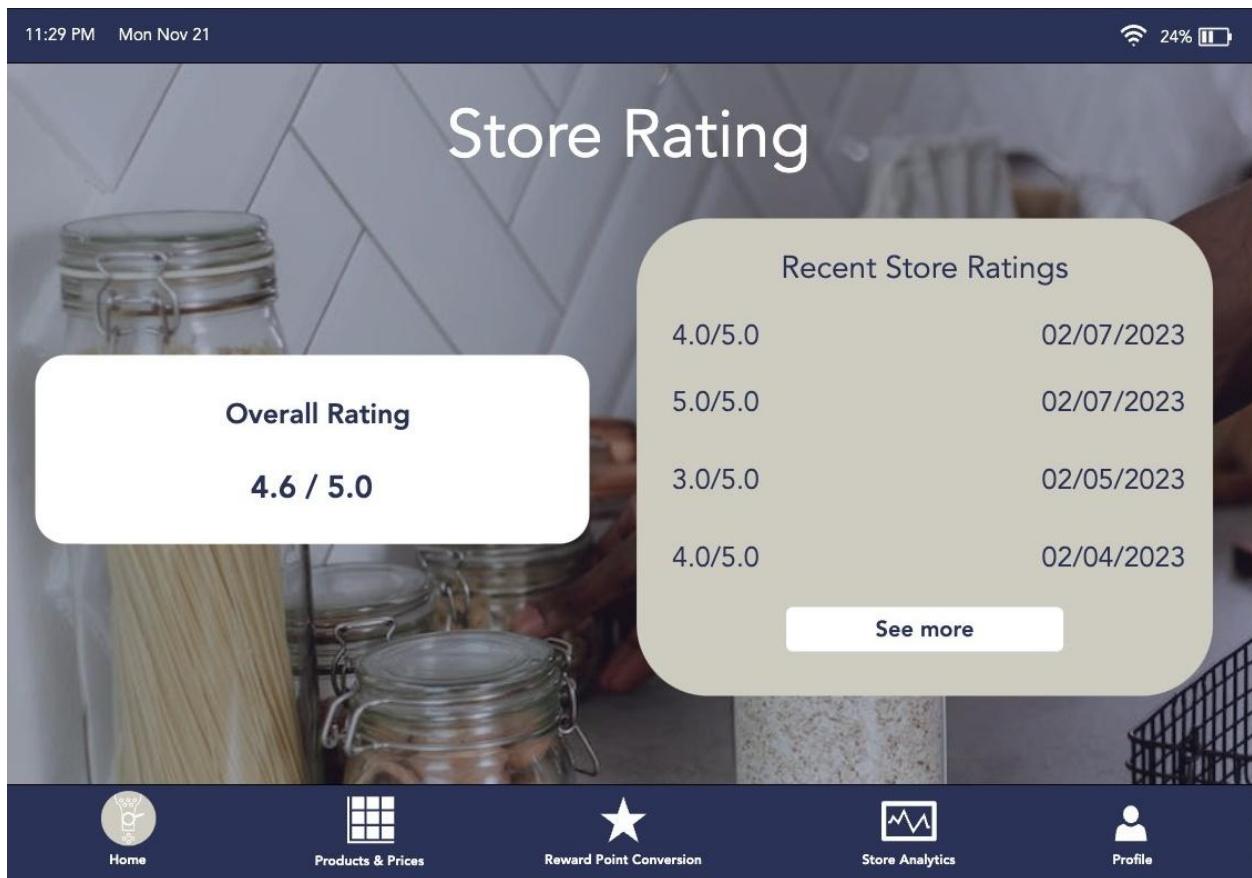
The screenshot shows a mobile application interface for a reward point conversion dashboard. At the top, there is a header bar with the time "11:29 PM", the date "Mon Nov 21", and a battery icon showing 24% charge. Below the header is a large title "Reward Point Conversion". A button labeled "Add conversion" is positioned above a table. The table has columns for "Name", "Reward Points", "Expiry Date", and "Action". It lists four items: "Fuji apple (2 pc)" with 50 points expiring 12/31/2022; "10% discount on any pasta product" with 100 points expiring 12/31/2022; "5% discount on any liquid detergent" with 50 points expiring 1/31/2023; and "5% discount on any spices" with 80 points expiring 1/31/2023. Each row in the table has a "checkbox" and a "trash bin" icon in the "Action" column. Below the table is a photograph of various glass jars containing food items like flour and pasta. At the bottom is a navigation bar with icons for Home, Products & Prices, Reward Point Conversion (highlighted in yellow), Store Analytics, and Profile.

Name	Reward Points	Expiry Date	Action
Fuji apple (2 pc)	50	12/31/2022	<input checked="" type="checkbox"/>
10% discount on any pasta product	100	12/31/2022	<input checked="" type="checkbox"/>
5% discount on any liquid detergent	50	1/31/2023	<input checked="" type="checkbox"/>
5% discount on any spices	80	1/31/2023	<input checked="" type="checkbox"/>

1. Rewards Table - This table shows all of the services and discounts that can be redeemed in your store. It will display the following information:
 - a. The name of the deal/discount.
 - b. The amount of reward points it can be redeemed for.
 - c. The expiration date of the deal/discount.
2. Add conversion - located above the Rewards table, tapping this button will allow you to add a new deal/discount to the available promotions.

3. Edit - to edit an existing deal/discount's information, tap the edit button on the left action column.
4. Delete - to delete a deal/discount from the table, tap the trash can button on the right in the action column.

4.6 Store Rating Dashboard (O: Colombini)



1. To access the Store Rating screen, go to the Home screen and select the "Store Rating" button.
2. The "Overall Rating" field displays the average rating of the store based on all previous ratings submitted by shoppers.

3. The “Recent Store Ratings” table will display the most recent store ratings received by the store.
4. Each row in the table will display the rating that the store received and the date when the rating was received.
5. To view older store ratings, click on the “See more” button located below the table.
6. You can use the “Overall Rating” field and the “Recent Store Ratings” table to monitor the store’s performance and customer feedback.
7. Use this feedback to improve the quality of your store and ensure customer satisfaction.

4.7 Store Search Dashboard (*O: Colombini*)

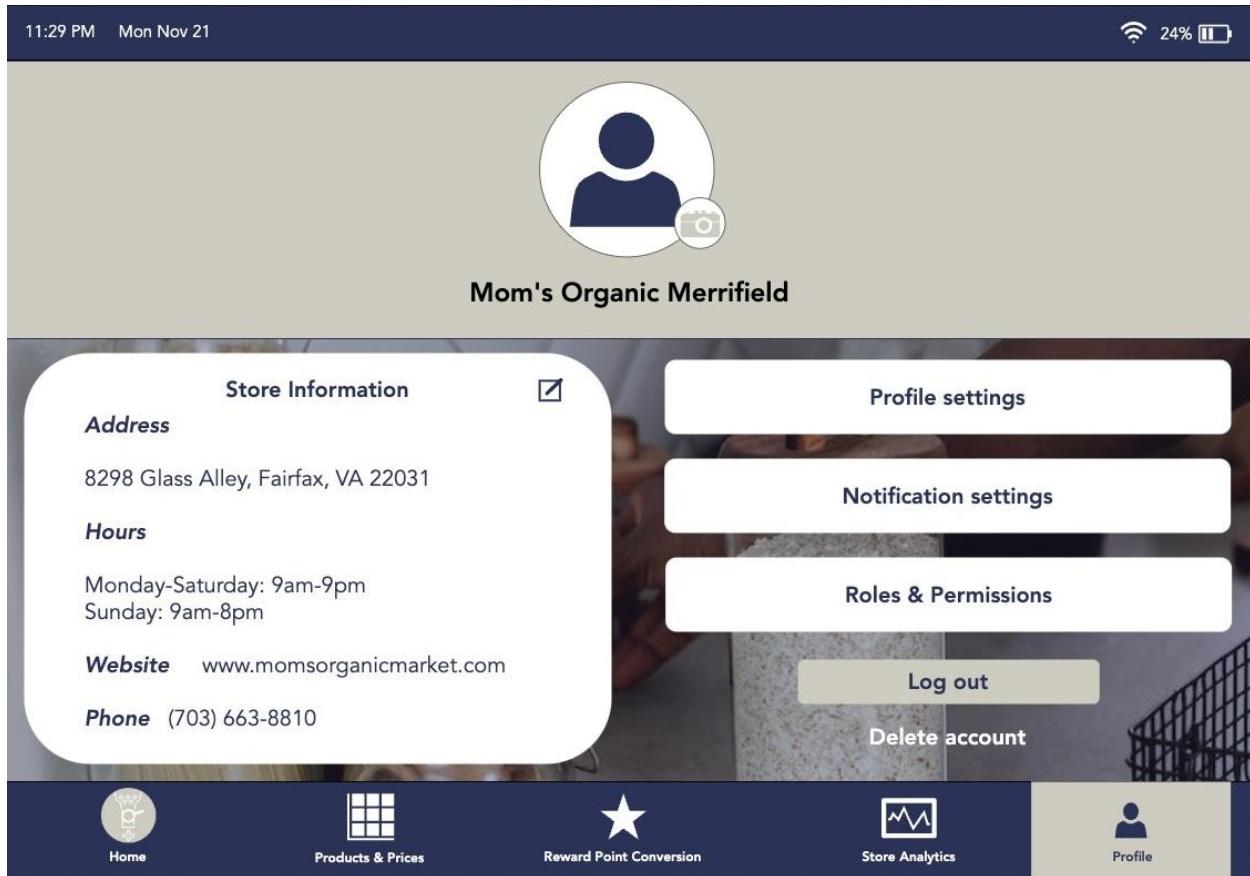
The store search page for store owners looks the same as the store search page for the shoppers. The responsive design of the application allows the seamless adjustment of the screen to any mobile device.

4.8 Product Search Dashboard (*O: Colombini, M1: Chang-Horvath*)

The product search page for store owners looks the same as the product search page for the shoppers. The responsive design of the application allows the seamless adjustment of the screen to any mobile device.

Note: Store owners do not have access to the built-in Shopping List feature, thus, if you are logged in as a store owner, you will not be able to add a product to a shopping list. The “+” sign in each product’s entry, which allows shoppers to add the product to their built-in shopping list, is not displayed.

4.9 User Profile (Store owner) (O: Chang-Horvath, M1: Maximova)



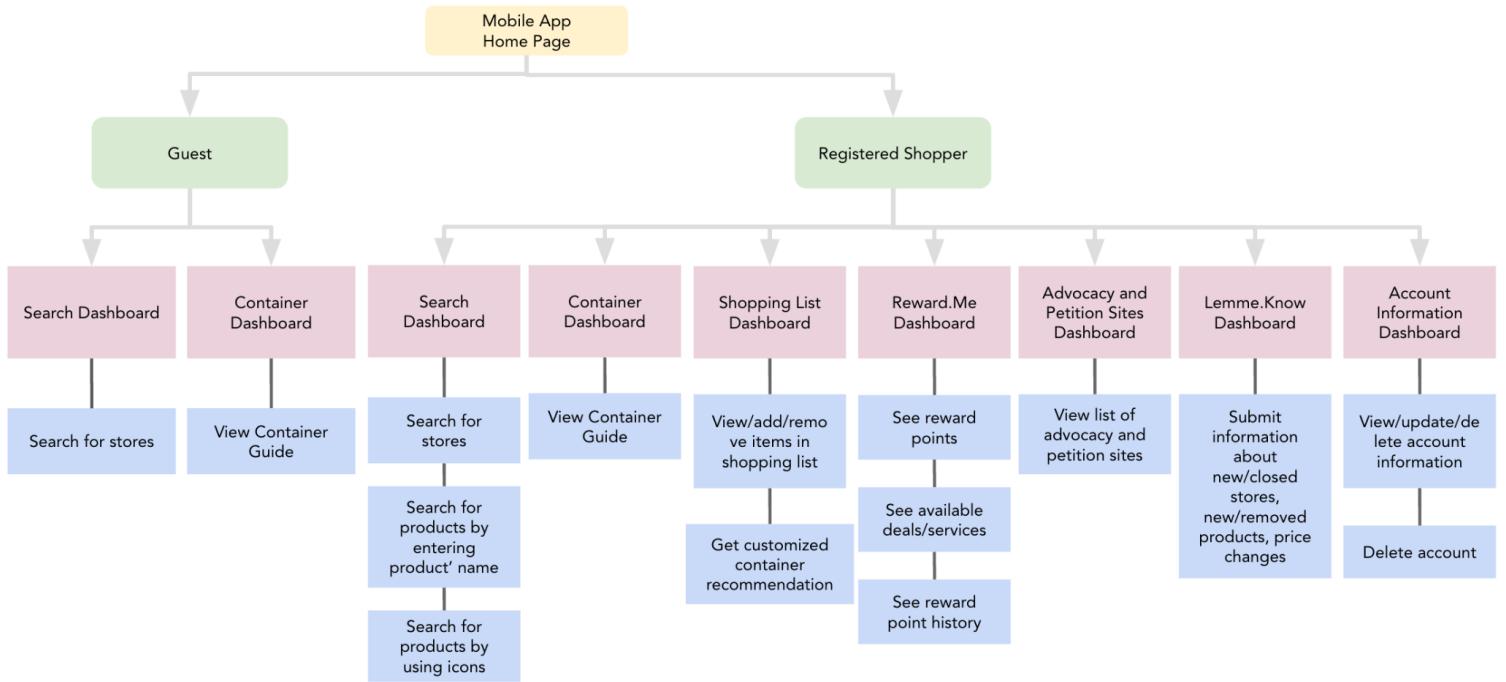
1. To access the User Profile Screen, select the “Profile” option from either the home screen or the navigation toolbar at the bottom of the screen.
2. The User Profile screen will display the store’s name in the header of the screen. The store name was provided by the store owner as part of the registration process.
3. To upload a photo as the store’s profile picture, the store owner can tap on the person icon above the store’s name. A small camera icon is displayed right next to it. Tapping on the camera icon will allow you to upload a photo from your device.
4. Beneath the header, there is a “Store Information” section, which displays the store’s address, opening hours, the store’s website (if applicable), and the store’s phone number.

If you would like to edit any of this information, select the edit option represented by a small pencil in the upper right corner of the “Store information” section.

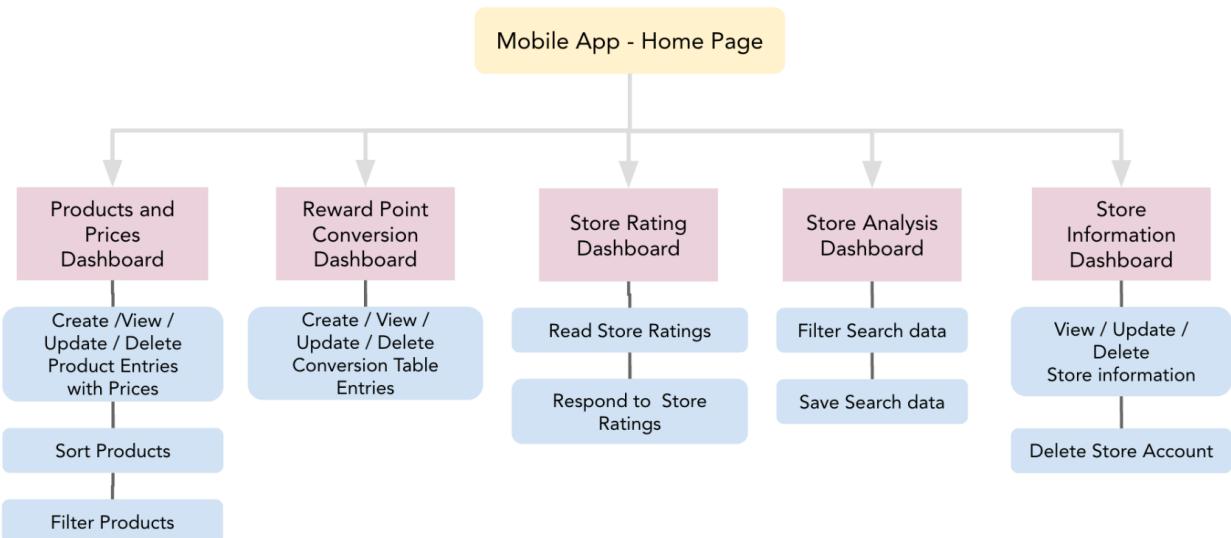
5. Next to the “Store Information” section, there are three buttons: “Profile settings”, “Notification settings”, and “Roles & Permissions”.
6. To make modifications to the profile settings (update name, email address, or password), the store owner can select the “Profile settings” button.
7. To make modifications to the notification settings (receive notification about new store rating, new search in the store’s vicinity, etc.), you can select the “Notification settings” button.
8. To make modifications to the roles and permissions associated with the user accounts related to the store (limit user access to different features of the app like adding, editing, deleting entries in the different dashboards), you can select the “Roles & Permissions” button.
9. The user Profile screen displays a “Logout” button at the bottom of the screen to allow you to log out of the application.
10. The User Profile Screen displays a “Delete account” button at the bottom of the screen to allow the store owner to delete their account. If you select this button, a message will appear to confirm this action.

11. Site Maps (*O: Hull, MI: Chang-Horvath*)

Site Map - Shopper



Site Map - Store Owner



12. Glossary

Amazon Relational Database Services (Amazon RDS): a web service to set up, maintain, and scale a relational database in the cloud.

Android: an open-source mobile phone operating system used on mobile devices such as smartphones and tablets.

Application Programming Interface (API): a set of rules for two different programs to communicate with each other.

Amazon Web Services (AWS): a cloud computing platform.

Amazon Maps API: a programming interface that allows developers to add mapping capabilities like interactive maps and custom overlays to android applications.

Application Layer: a layer where an application can effectively communicate with other applications on different computer systems and networks.

Backend: a computer system or application that is not directly accessed by the users but rather responsible for storing and manipulating data.

Bauxite: a naturally occurring mineral.

Biodegrade: to decompose and become incorporated back into the environment.

Bulk section: an aisle where products are available in dispensers or bins, and the shoppers can buy the exact amount they desire.

Bring Your Own Container (BYOC): an initiative to encourage shoppers to bring their own containers with them to the store in order to avoid creating packaging waste.

Cascading Style Sheets (CSS): a stylesheet language used to create the design (fonts, colors, borders, etc.) of webpages.

Compostable: breaking down into organic matter and not producing any harmful chemicals during that process.

Container: tote bag, produce bag, glass or plastic jar, glass or plastic box, glass or plastic bottle that can be used for package-free shopping.

Container Guide: a small lexicon providing an overview of different types of containers and the types of products that could be stored in them.

Container Recommendation Feature: a feature of Refill.Me that suggests specific containers for products based on the type of product such as liquid or solid.

Continuous Integration and Delivery (CI/CD): a method for automatically merging contributions and deploying new stable software to a production environment.

Customized Container Recommendation Feature: a feature of Refill.Me that suggests all needed containers for a particular shopping list based on the items added to the list by the shopper.

Crowdsourcing: a way to solicit user feedback using surveys (either paper based or online).

Database: an organized collection of structured information, typically stored electronically in a computer system.

Data Layer: a layer of the application/website which contains all of the data that is generated by users engaging with the application/website.

Django: a high-level Python web framework that enables rapid development of secure and maintainable websites.

Docker: a platform designed to help developers build, share, and run development processes.

EPA: United States Environmental Protection Agency.

Experienced package-free shopper: a shopper who has knowledge of package-free shopping.

Expo: an open source framework for creating mobile apps.

Farmers' market: a market where local farmers sell their products directly to consumers.

Frontend: a computer system of the website/application which is exposed to users for direct interaction.

GitHub: a hosting service for version control and development of software.

GitHub Issues: a GitHub repository feature that tracks issues, team-members' work, and development process of an application.

Google Maps: a web mapping platform and application that provides street maps, satellite imagery, and real-time traffic information.

Greenhouse gas emissions: gasses (such as carbon dioxide and methane) predominantly emitted through human activities that trap heat in the earth's atmosphere, and thus directly contribute to climate change.

Hyper Text Markup Language (HTML): a programming language used to create websites.

Integrated Development Environment (IDE): an advanced code editor with syntax highlighting, built-in debugger, and compiler.

iOS: a closed source mobile operating system used in iPhones and iPads from Apple Inc.

Javascript: a high-level client-side scripting language to implement functionality on websites.

Loose product: product sold without any packaging.

Mainstream grocery shopping: grocery shopping that does not follow sustainable practices, thus, it entails buying packaged items, using plastic, and not considering environmental aspects.

Microplastics: tiny plastic particles that are less than five millimeters long and are created when larger plastic pieces break down.

MySQL: a relational database that uses SQL as its database language.

Node Package Manager (npm): a software-sharing repository for software and packages that are used for software development, especially software written in Javascript.

Novice package-free shopper: a shopper who has no experience with, and thus, no knowledge of package-free shopping.

Optical Character Recognition (OCR): a software that recognizes and converts text from images to machine-readable format.

Package-free: without any packaging materials such as plastic, paper, cardboard, aluminum, or glass.

Package-free store (in the context of Refill.Me): a supermarket with a bulk section, a store exclusively selling loose products, and a vendor at farmers' markets.

Package-free shopper: a shopper who prefers to buy loose products by filling them into their own containers.

Package-free shopping: shopping using one's own containers, thus, shopping without creating packaging waste.

Package Manager: a set of software tools that automates the installation, updating, configuration, and deletion of programs in a systematic way.

Packaging: material used to protect a product from any damage during transportation or storage.

Presentation Layer: a layer where functions like data conversion, data encryption and decryption as well as data translation take place.

Produce bag: a reusable bag, usually with a window and tare weight label, that is used for buying fruits/vegetables.

Python: a high-level programming language that supports multiple programming paradigms, including structured, and functional programming.

React Native: a framework that allows for the building of native mobile apps using the programming language React.

Relational Database: a type of database that stores and provides access to data points that are related to one another.

Rest Framework(s): an application programming interface that conforms to the constraints of REST architecture.

Single-use: designed to be used only once, and then to be discarded.

Structured Query Language (SQL): a widely used database language used for inserting, querying, and retrieving data from relational databases.

Tare weight: the weight of an empty container that should not be included when the price of the product is calculated.

Tote bag: a large bag, often made of cotton, used to carry many items.

Virtual Machine (VM): a digital version of a physical computer.

Visual Studio Code (VS Code): a source-code editor that can be used with a variety of programming languages.

Webpack: a software tool that bundles Javascript files to be used in a web browser.

Web Server: computer software and hardware that stores content for a website such as images, videos, and other data, and it operates on HTTP and other protocols to deliver the files for a website to clients who request it.

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