

Lab 4 - Refill.Me User Manual

Team Iron

Old Dominion University

CS411W

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Version 2

Copyright Statement

Copyright Statement: (*O: Maximova*)

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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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1.1 Devices Refill.Me supports (*O: Maximova, M1: Chang-Horvath*)

If you intend to use Refill.Me as a ‘shopper’, we encourage you that after creating an account, use the app on a smartphone because it is customized for smartphone usage. If you intend to use Refill.Me as a ‘store owner’ then we encourage you to use a tablet for a bigger screen display. You can install Refill.Me on any mobile devices that have iOS Mohave or higher, or have Android/Windows operating systems. Developers of the app guarantee that it will work for iOS Mohave or higher; Android OS: pie or higher and Windows: supports 10.

1.2 How to install Refill.Me (*O: Maximova, M1: Chang-Horvath*)

Depending on your mobile device, go either to App Store or Google Play and search for the Refill.Me app.

To find and install Refill.Me app for iOS:

1. On your iPhone, open the App Store.
2. Tap the Search icon.
3. Enter Refill.Me in the search field.
4. Select Refill.Me in the search results to go to the app page.
5. Follow the standard installation procedure.

The procedure to find and install the Refill.Me app for Android is similar. For Windows devices proceed to www.Refill.Me.com to access the instructions for download.

1.3 Refill.Me staff ensure the security of your data (*O: Maximova*)

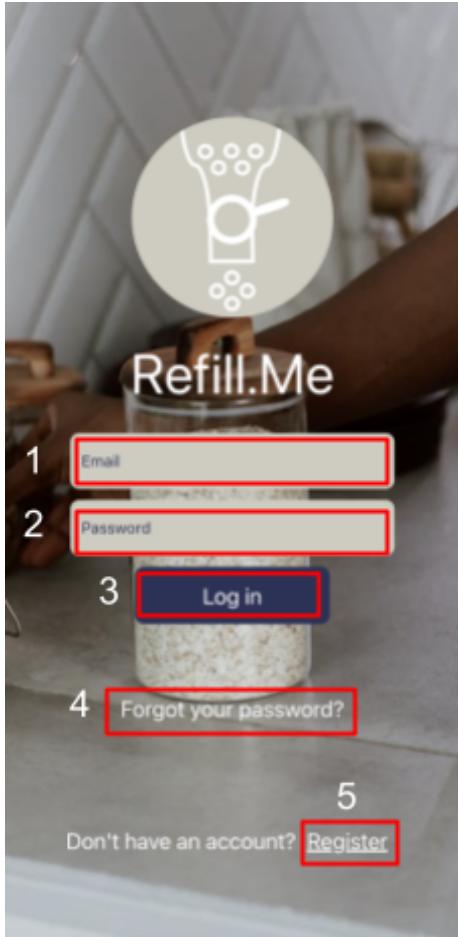
You probably have concerns that your personal data could get into the wrong hands. You may be especially concerned about your mobile device, because personal information will be transferred over the Internet. Let us assure you that your data will be safe by using the encrypted

protocol to transfer the information through the Internet. To access, sign in to your account by providing an email address and a password. Furthermore, we store your information on our servers in encrypted form.

2. Getting Started

2.1 Logging into an Account as a Shopper (*O: Colombini, M1: Maximova, M2: Rios*)

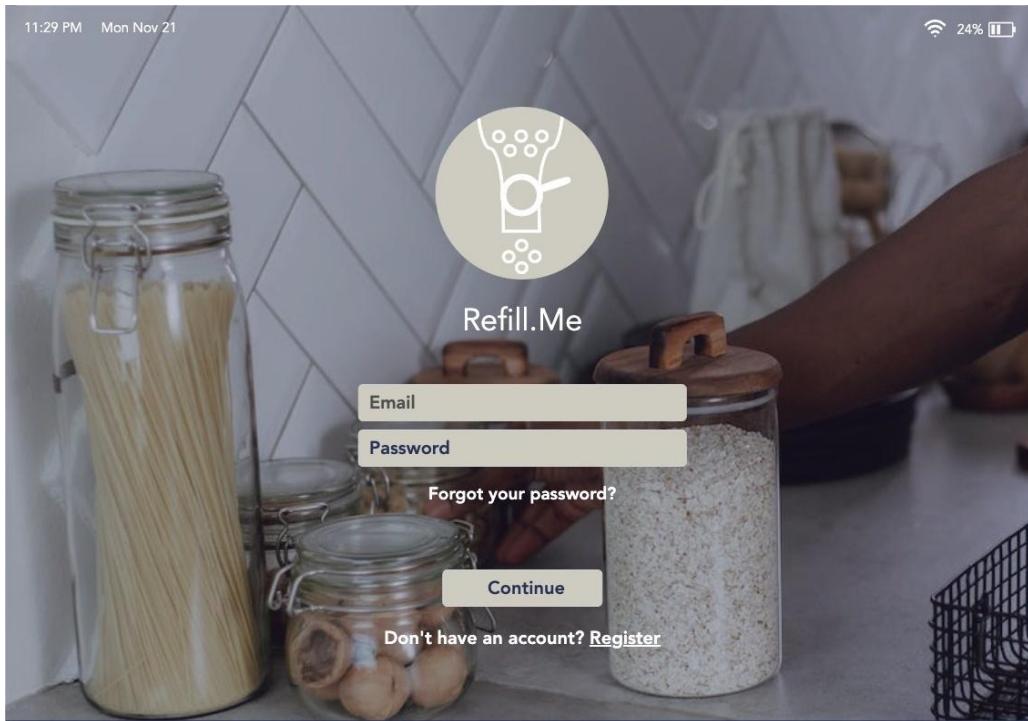
To use the app, you will need to login to your account on a smartphone.



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. (this is applicable to users who already have created their accounts in the past).
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.

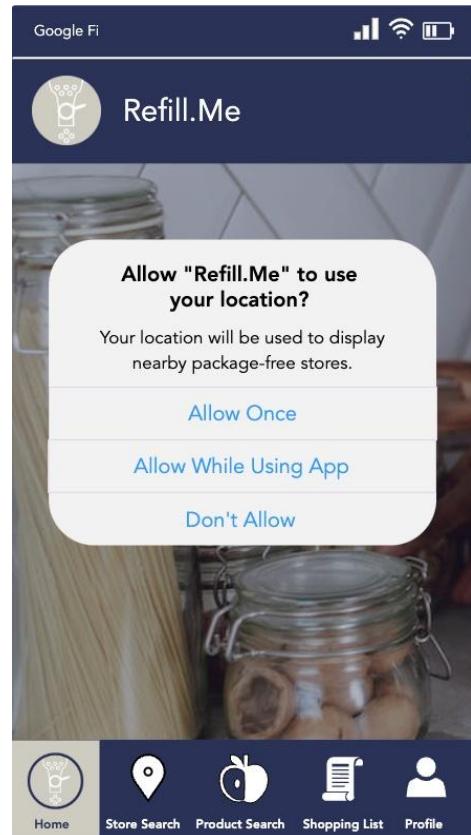
2.2 Logging into an Account as a Store Owner:

The Login process for a Store Owner is identical to Shoppers (see section 2.1), except that you will need to login on a tablet.



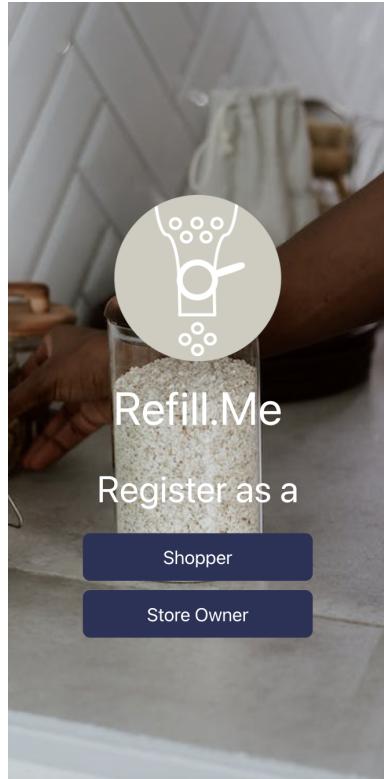
After logging in to the application for the first time, a prompt will allow you to choose your preferences regarding enabling location services. This is applicable to both shoppers and store owners. The application will offer three options (depending on the operating systems settings):

- 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*)

To create an account, you need to select the ‘Register’ hyperlink in “Don’t have an account: Register” prompt on the login screen (see section **2.1**, step 4). After that, you will see the Registration screen:



Then please choose to register as a Shopper or as a Store Owner.

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

If you choose to register as a Shopper, please fill in the form presented to you:

1. First Name - Please enter your first name.
2. Last Name - Please enter your last name.
3. Username - Please enter a valid user name.
4. 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.
5. Password - Please enter a password .
6. Confirm 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 how to correct it.

7. Submit - Please select on the 'Submit' button after the above fields have been filled in to create an account account.

2.3.2 Register a new account as a Store Owner (*O: Colombini, M1: Hull, M2: Maximova, M3: Chang-Horvath*)

The screenshot shows a registration form titled "Registration Store Owner". It contains the following fields:

- First Name (1)
- Last Name (2)
- Username (3)
- Email (4)
- Password (5)
- Confirm Password (6)
- Store Name (7)
- Store Address (8)
- Store Hours (Optional) (9): This section lists days of the week from Monday to Sunday, each with two input fields for hours.

If you chose to register as a Store Owner, please fill in the form presented to you:

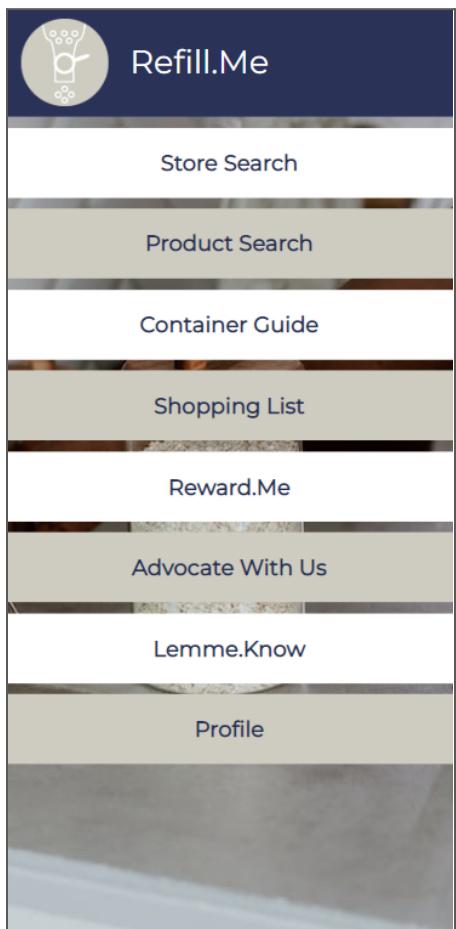
1. First Name - Please enter your first name.
2. Last Name - Please enter your last name.
3. Username - Please enter a valid user name.
4. Email address - Please enter a valid email address that you want to associate with a Refill.Me account.
5. Any fake/existing email addresses will be rejected by the application.
6. Password - Please enter a password .
7. Confirm 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 how to correct it.

7. Store Name - Please enter the name of the store that you are affiliated with.
8. Store Address - Please enter the store's physical address.
9. Store hours - Please enter the opening hours of the store (optional, it can be updated later in the application on their Profile page).
10. Submit - Please select the 'Submit' button below the 'Store hours' fields to complete the registration.

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, M3: Wasikye*)



3.1.1 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 (see section 3.4).

3.1.2 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 Refill.Me will show you a list of stores that carry the searched product (see section 3.5 for details).

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3.1.3 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 (see section **3.6** for details).

3.1.4 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 (see section **3.7** for details).

3.1.5 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 (see section **3.9**).

3.1.6 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 (see section **3.10**).

3.1.7 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 (see section **3.11**). To navigate to different areas of the application, use the navigation menu (see section **3.3**). The navigation menu includes buttons for “Home”, “Store Search”, “Product Search”, “Shopping List”, and “Profile”.

3.3 Navigation Menu (Shopper) (*O: Hull, M1: Maximova*)

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



1. The Home button (see section 3.1)
2. The Store Search button (see section 3.1.1)
3. The Product Search button (see section 3.1.2)
4. The Shopping List button (see section 3.1.4)
5. The Profile button (see section 3.11)

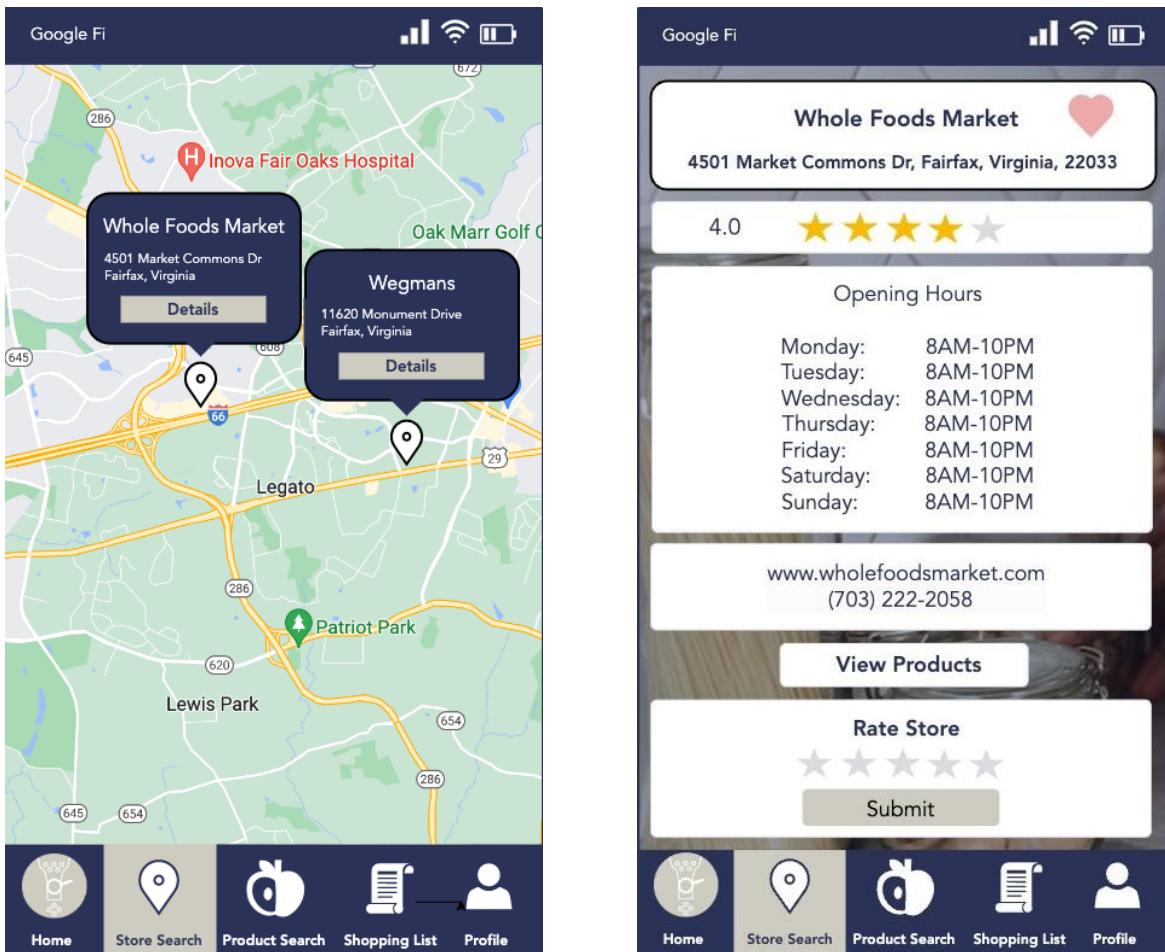
Each button on the navigation menu redirects you to the corresponding pages.

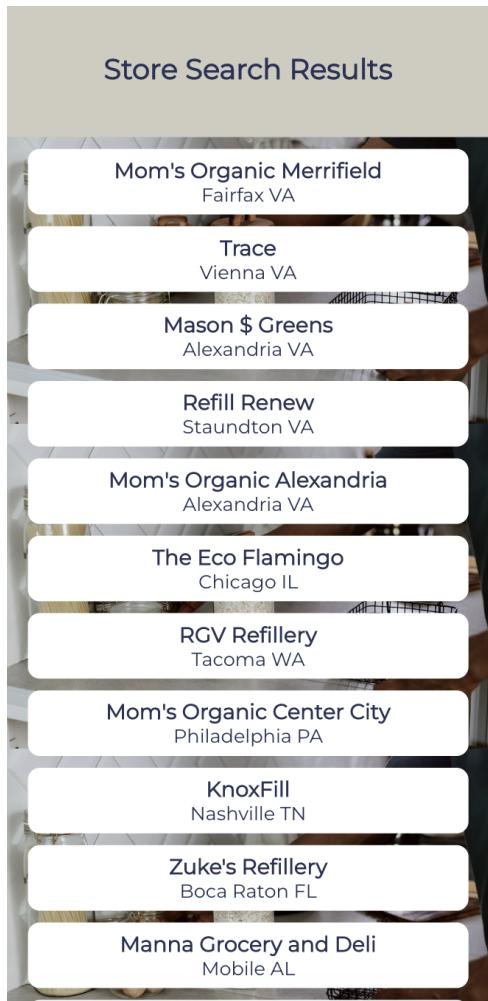
3.4 Store Search (*O: Colombini, M1: Chang-Horvath, M2: Maximova, M3: Hull*)

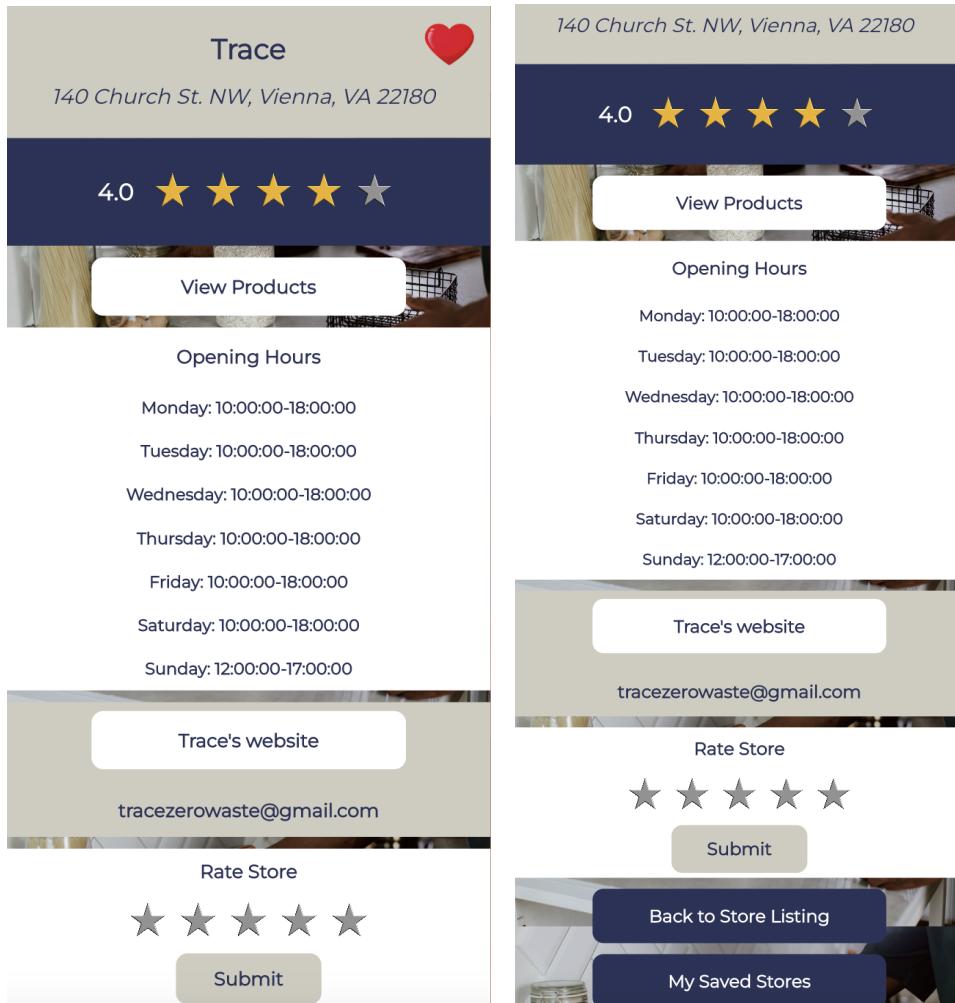
This page is the same for Shoppers and Store Owners. If you enabled location services when you first opened the application, then you can simply tap on the “Store Search” button on the navigation menu (see section 3.3), and nearby package-free stores display on a map. If you did not enable location services, 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.

The result displays each store 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 full 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. The screens for the popup and the Details page are provided:



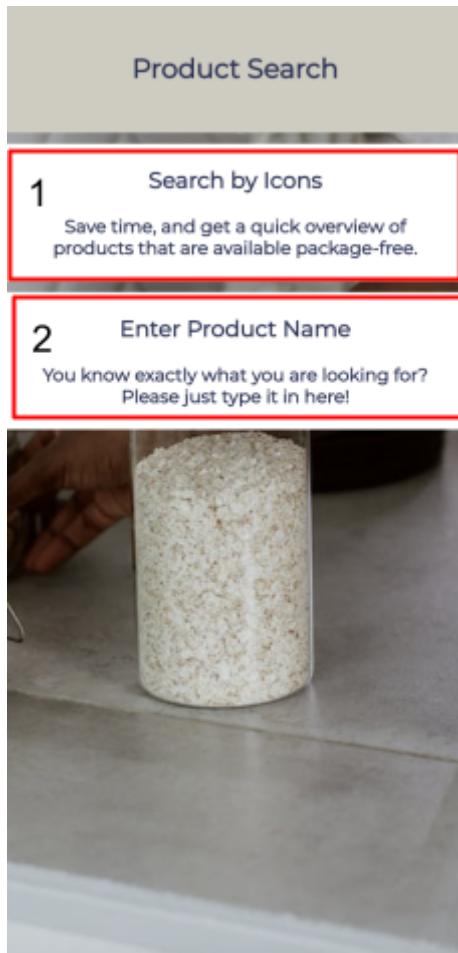




1. The store's name.
2. The store's address.
3. A heart icon at the top of the corner which when tapped turns from transparent to red and saves the store in the “Saved Stores” list.
4. The current store rating.
5. The store's opening hours. (if the store's owner provided the information).
6. The store's website (if applicable).
7. The store's email address (if applicable).

8. A “View Products” button, which when tapped, opens the product listing page of the corresponding store.
9. A “Rate Store” window with 5 gray stars that turn yellow when tapped, and a “Submit” button below them.

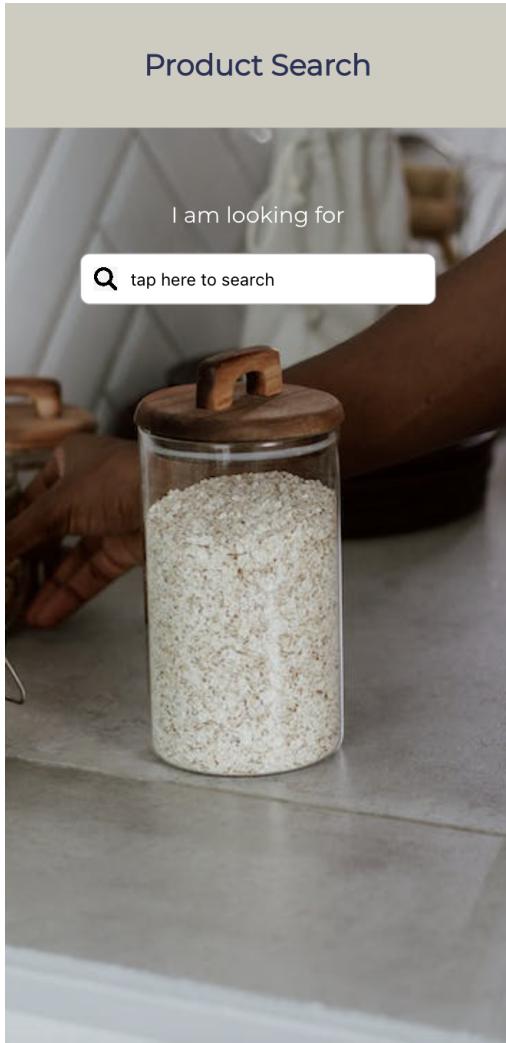
3.5 Product Search (*O: Hull, M1: Chang-Horvath*)



As mentioned in section 3.1.2, the Product Search allows shoppers and store owners 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.



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.

Results for: Walnuts

Trace - Vienna, VA	2	1
Walnuts, type	\$0.00/lb	 
MOM's Organic - Merrifield, VA		
Walnuts, type	\$0.00/lb	 
Safeway - Fairfax, VA		
Walnuts, type	\$0.00/lb	 



3 New Search

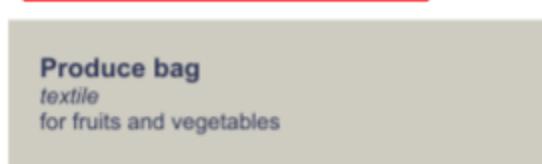
You will be able to:

1. 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.
2. 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.
3. New Search - to perform a new product search, tap the “New Search” button at the end of the list.

3.6 Container Guide (*O: Hull, M1: Maximova*)

The Container Guide contains the information regarding the different kinds of containers that you can bring to go package-free shopping, see section 3.1.3. 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.



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.

3.7 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 listing page. The Shopping List displays the products along with their unit prices, grouped by store.

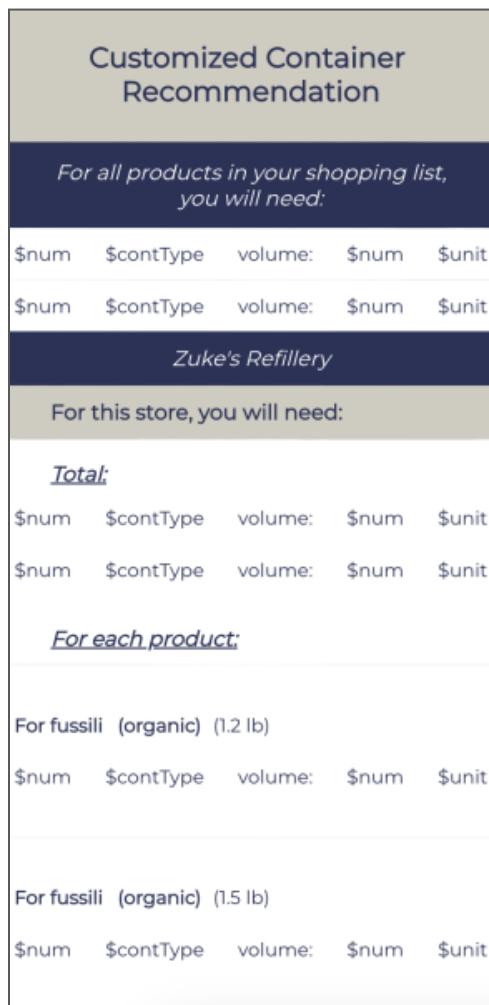
Store	Item	Quantity	Unit Price	Container Recommendation
FullFillery	fussili whole wheat (organic)	3	\$ 2.54 / lb	<input type="button" value="Container Recommendation"/>
		1	<input type="button" value="1lb"/>	<input type="button" value="1lb"/>
Ethos	penne (organic)	10 lb	\$ 2.42 / lb	<input type="button" value="Container Recommendation"/>
		<input type="button" value="10 lb"/>	<input type="button" value="10 lb"/>	<input type="button" value="Container Recommendation"/>
Nutrition Smart	farfalle (organic)	1 lb	\$ 1.38 / lb	<input type="button" value="Container Recommendation"/>
		<input type="button" value="1 lb"/>	<input type="button" value="1 lb"/>	<input type="button" value="Container Recommendation"/>
	beans black-eyed (not organic)	5 lb	\$ 2.6 / lb	<input type="button" value="Container Recommendation"/>
		<input type="button" value="5 lb"/>	<input type="button" value="5 lb"/>	<input type="button" value="Container Recommendation"/>

1. 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.
2. Remove a Product - to remove a product from the shopping list, tap the “-” button underneath the product’s name.
3. Container information - If you want to get the recommended container for a specific product, tap the container button underneath the product name.
4. Customized Container Recommendation - To get the customized container recommendation for the shopping list of the specific store, tap the “Container Recommendation for Entire Shopping List” button at the top of the Shopping List

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

3.8 Customized Container Recommendation (*O: Colombini, M1: Chang-Horvath*)

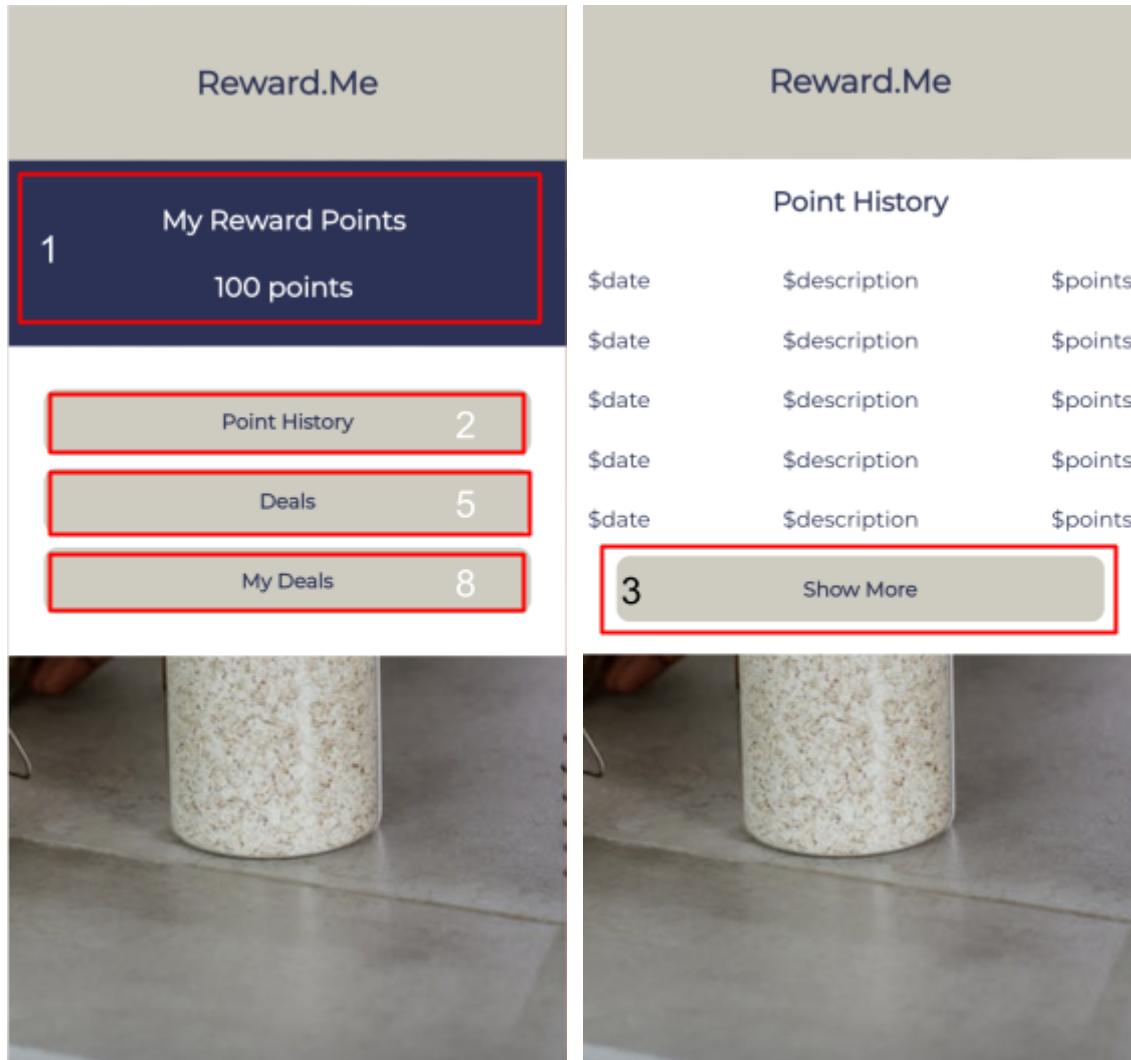
Not sure what to bring when you are shopping package-free? Don’t worry! Refill.Me will give you the number and types of containers that you need to bring.



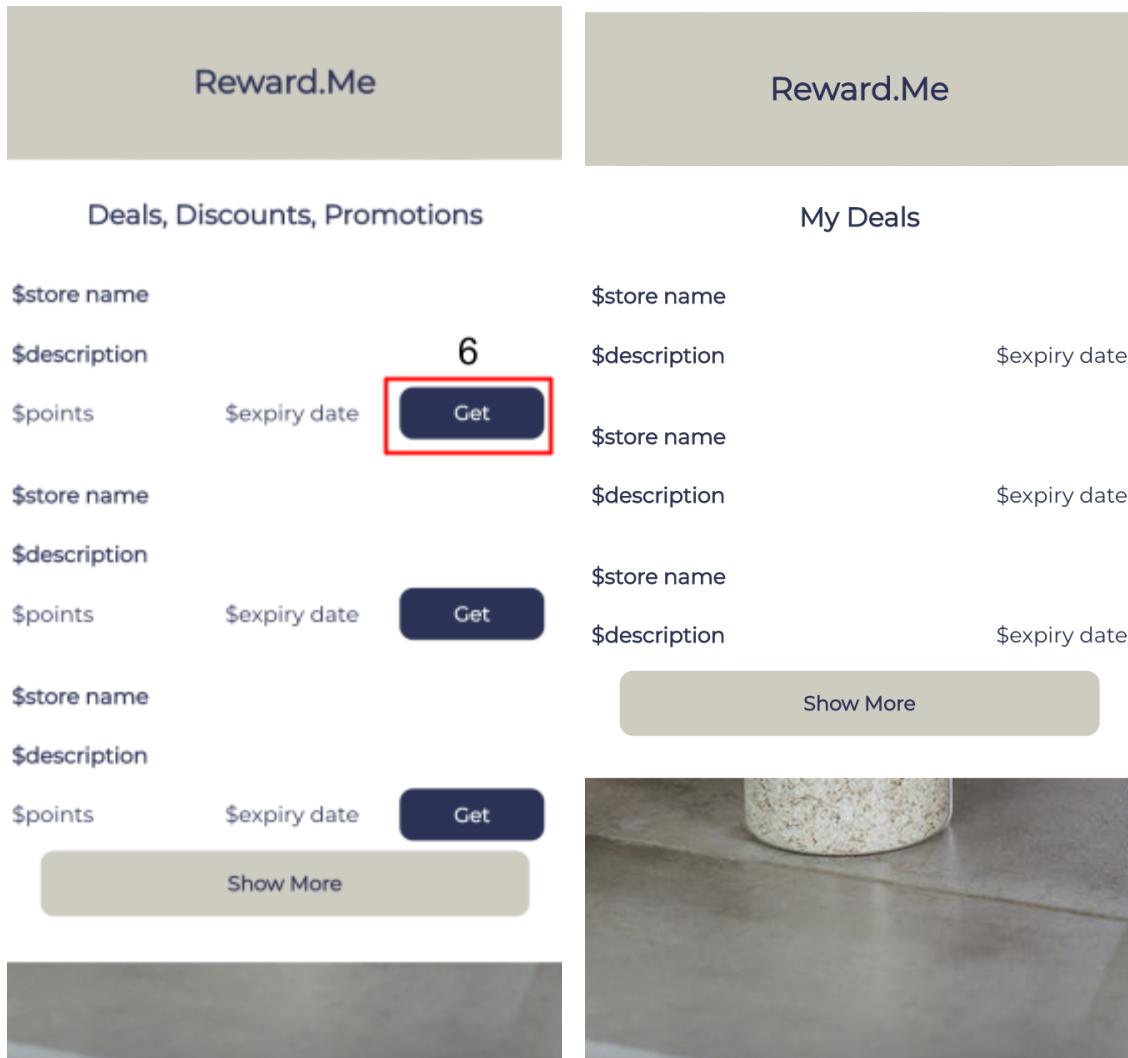
1. Table of Suggested Containers - The Container Recommendation displays a table of all the suggested containers based on the products in the shopping list. Each row in the table displays the following information:

- 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 particular 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. Selecting this button will redirect you to the Shopping List screen (see section 3.7).

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

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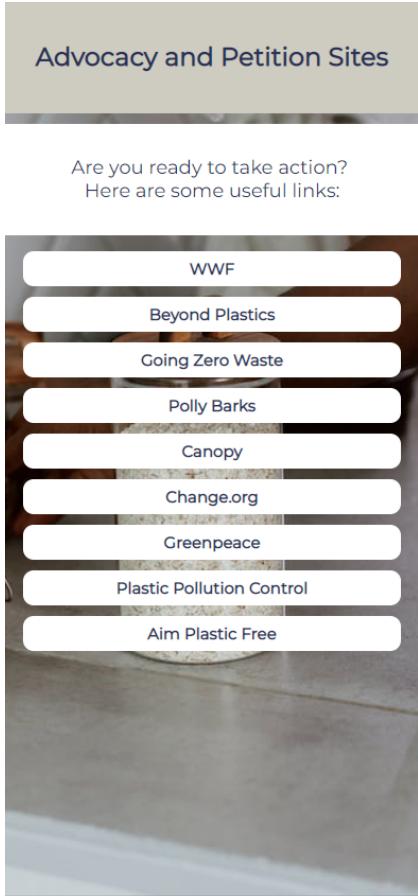


1. Reward Points Display - The Reward.Me screen app will display your current number of reward points.
2. To view the reward point history, select the “Reward Point History” button.
3. The table on the“Reward Point History” screen shows the latest entries in the reward point history. If the shopper wants 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 displays 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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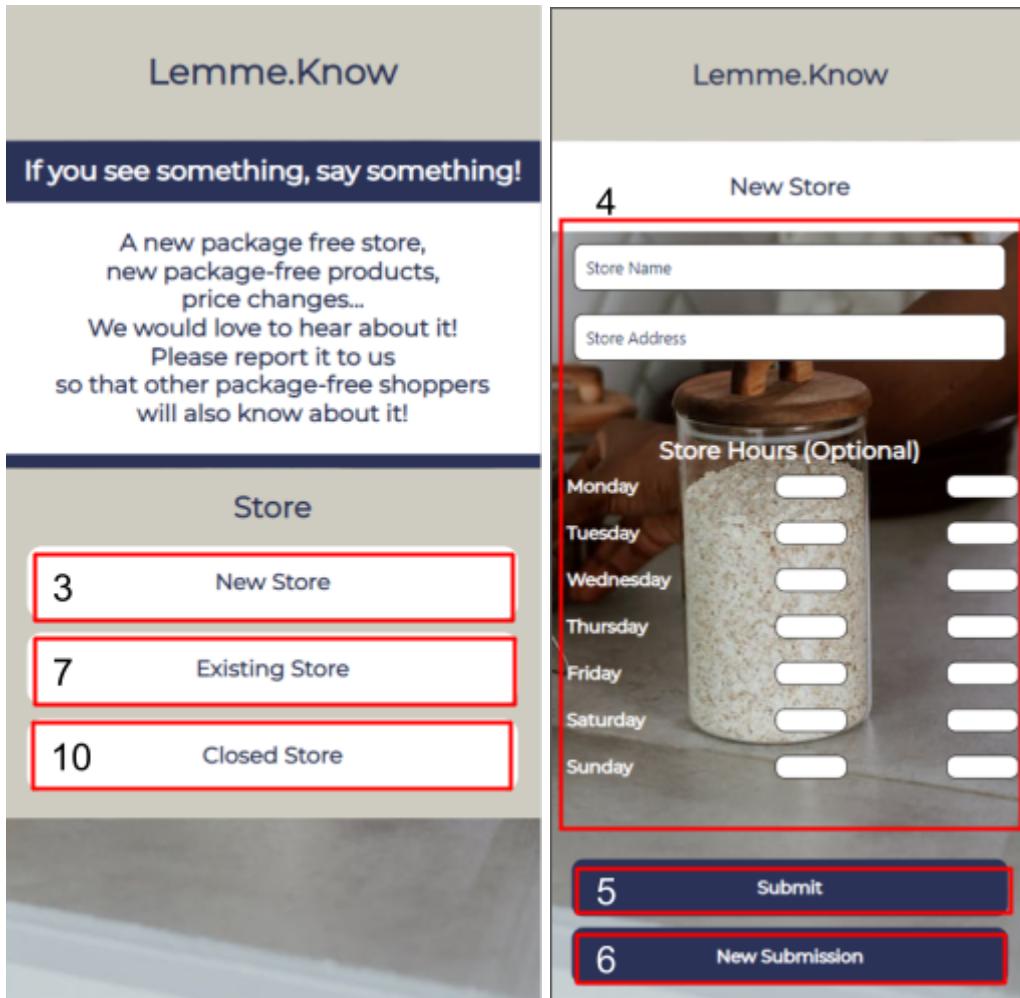
3.10 Advocacy and Petition Sites (*O: Hull, M1: Chang-Horvath, M2: Maximova*)



The Advocacy and Petition Sites page redirect you to the websites of organizations dedicated to increasing awareness about the 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 opens in a tab in your default browser.

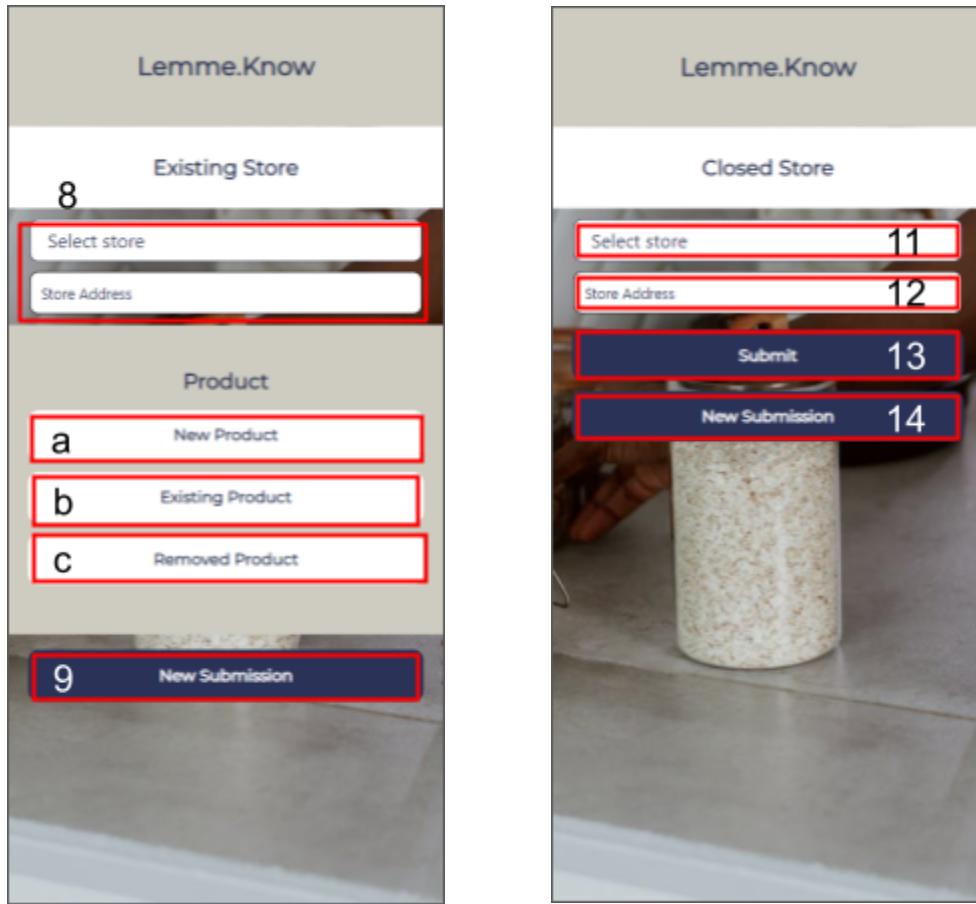
[Intentionally left blank]

3.11 Lemme.Know (*O: Colombini, M1: Hull*)



1. To access the Lemme.Know screen, select the “Lemme.Know” option from the home screen (see section 3.1).
2. The Lemme.Know screen displays 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.

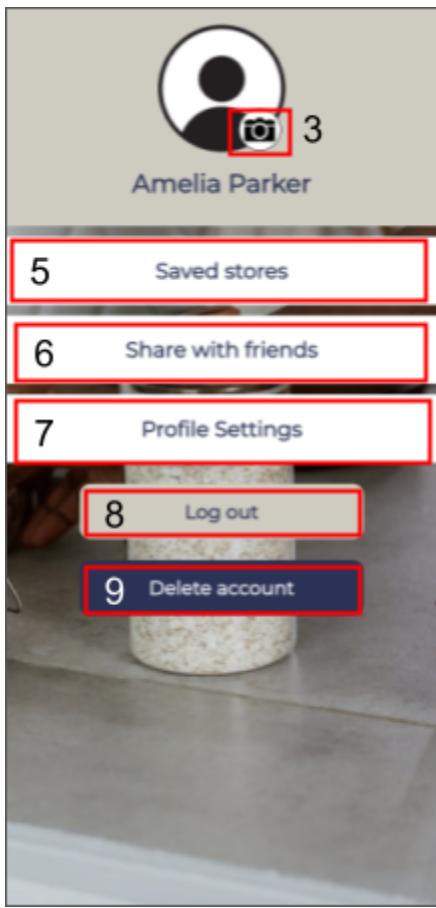
6. Tap the “New Submission” button to go back to the Lemme.Know screen to enter a new report.



7. To provide information about an existing store, select the “Existing store” button under the “Store” section.
8. Fill out the existing store form by selecting the store name from the dropdown menu and typing in the corresponding address. Then there are three buttons displayed for reporting information regarding products in existing stores:
- To report a new offered product, select the “New Product” button and fill out the form and click “Submit.”

- b. To report a price change regarding an existing product, select the “Existing Product” button and fill out the form and click “Submit.”
 - c. To report that a store no longer offers a product, select the “Removed Product” button and fill out the form and click “Submit.”
9. Tap the “New Submission” button to go back to the Lemme.Know screen to enter a new report.
10. To provide information about a closed store, select the “Closed store” button under the “Store” section.
11. Choose the store’s name from a drop-down menu.
12. Enter the store’s address.
13. Tap the “Submit” button to submit the form.
14. Tap the “New Submission” button to go back to the Lemme.Know screen to enter a new report.

[Intentionally left blank]

3.12 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 your profile picture, tap on the camera icon next to the person icon above your name. You can upload a photo from your device once you allow Refill.Me to access photos on your device.
4. Beneath the header, there are three buttons: “Saved stores”, “Share with friends”, and “Profile settings”.

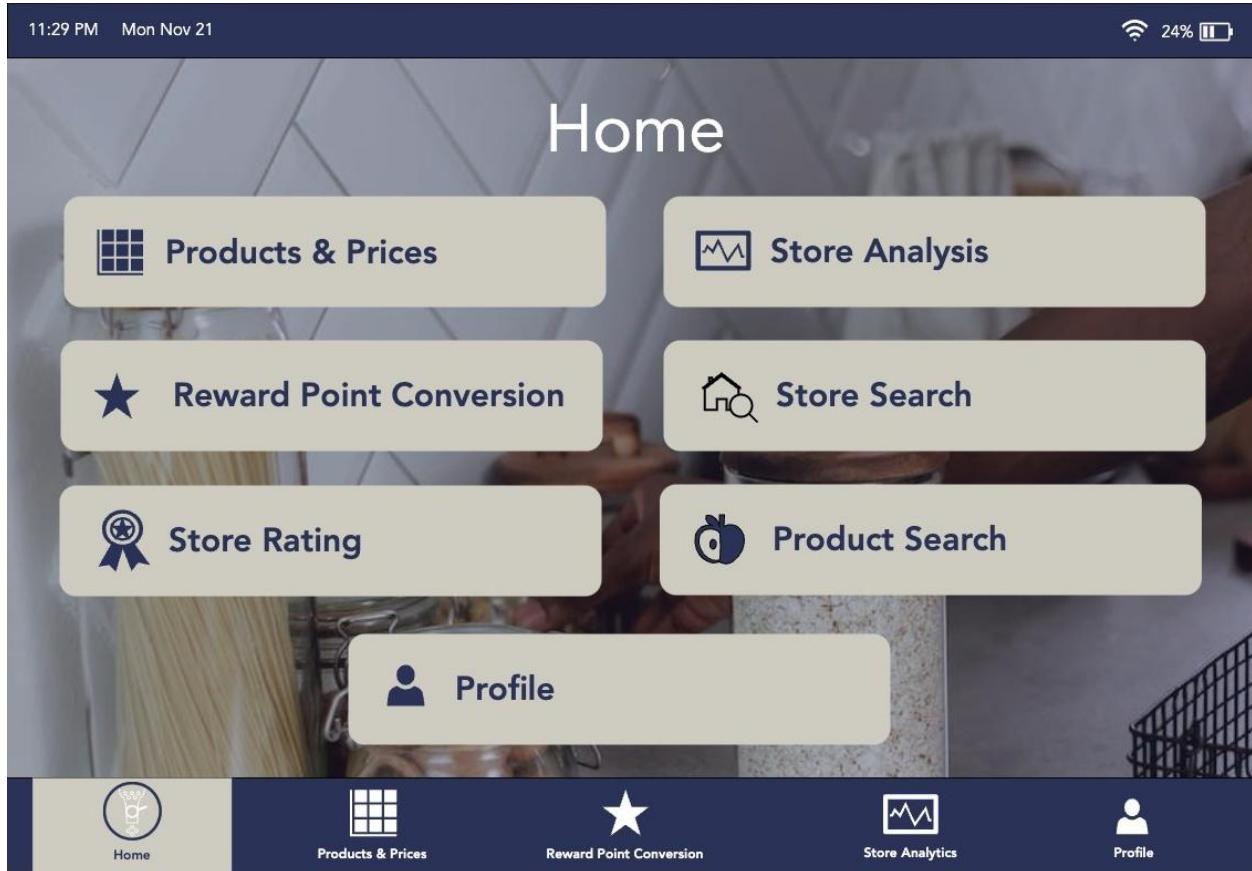
5. To view your saved stores, you can select the “Saved stores” button.
6. To share the application with friends using email, Facebook, or Twitter, you can select the “Share with friends” button.
7. To make modifications to your profile settings (update name, email address, or password), you can select 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 appears to confirm the action.

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4. Store Owner Site Navigation

4.1 Home Page (Store owner) (O: Colombini, M1: Hull, M2: Wasikye, M3: Maximova)

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



4.1.1 Products & Prices

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.(see section 4.3).

4.1.2 Store Analytics

Allows you to view up-to-date information about your store's performance. This will take you to the Store Analytics (see section 4.4).

4.1.3 Reward Point Conversion

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 screen where you can add, modify, or delete reward point conversion entries (see section **4.5**).

4.1.4 Store Search

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 (see section **3.4**).

4.1.5 Store Rating

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 (see section **4.6**).

4.1.6 Product Search

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 (see section **3.5**).

4.1.7 Profile

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 (see section **4.9**). 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”.

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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:

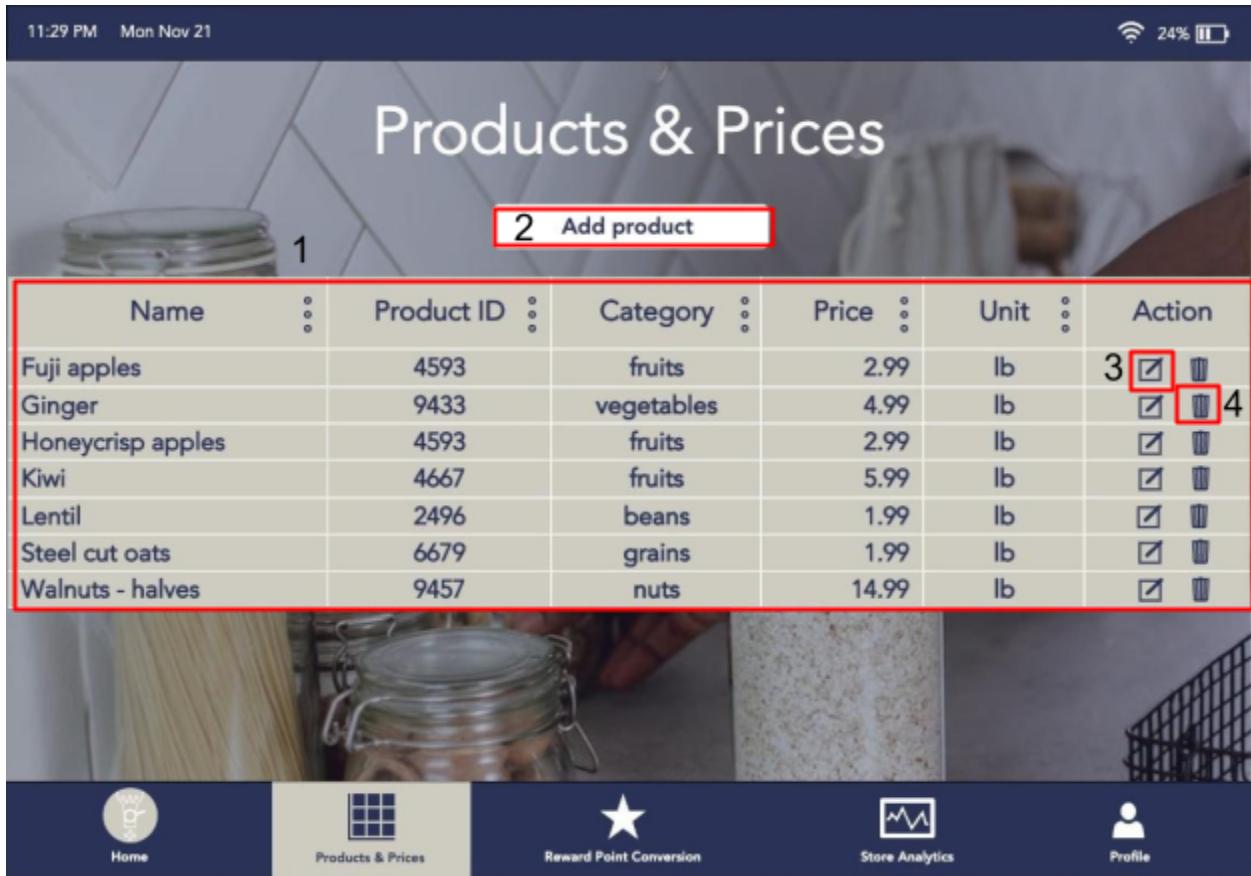


1. The Home button (see section 4.1).
2. The Products & Prices button (see section 4.3).
3. The Reward Point Conversion button (see section 4.5).
4. The Store Analytics button (see section 4.4).
5. The Profile button (see section 4.9).

Each button on the navigation menu redirects you to the corresponding pages.

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4.3 Products & Prices (*O*: Hull, *M1*: Maximova)



The Products & Prices screen 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 displays a table of all of the products that are offered by your store. Each row in the table 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 allows owners 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 allows 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 allows you to remove a product from the offerings available in your store.

4.4 Store Analytics (*O: Hull, M1: Maximova*)

The screenshot shows the 'Store Analytics' screen on a mobile device. 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, the title 'Store Analytics' is displayed. A large red box highlights the main content area, which is a table titled 'Recent Searches in Your Area'. The table has five columns: 'Product Searched', 'Product Found', 'Date', 'Product Available in My Store', and 'Action'. The data in the table is as follows:

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

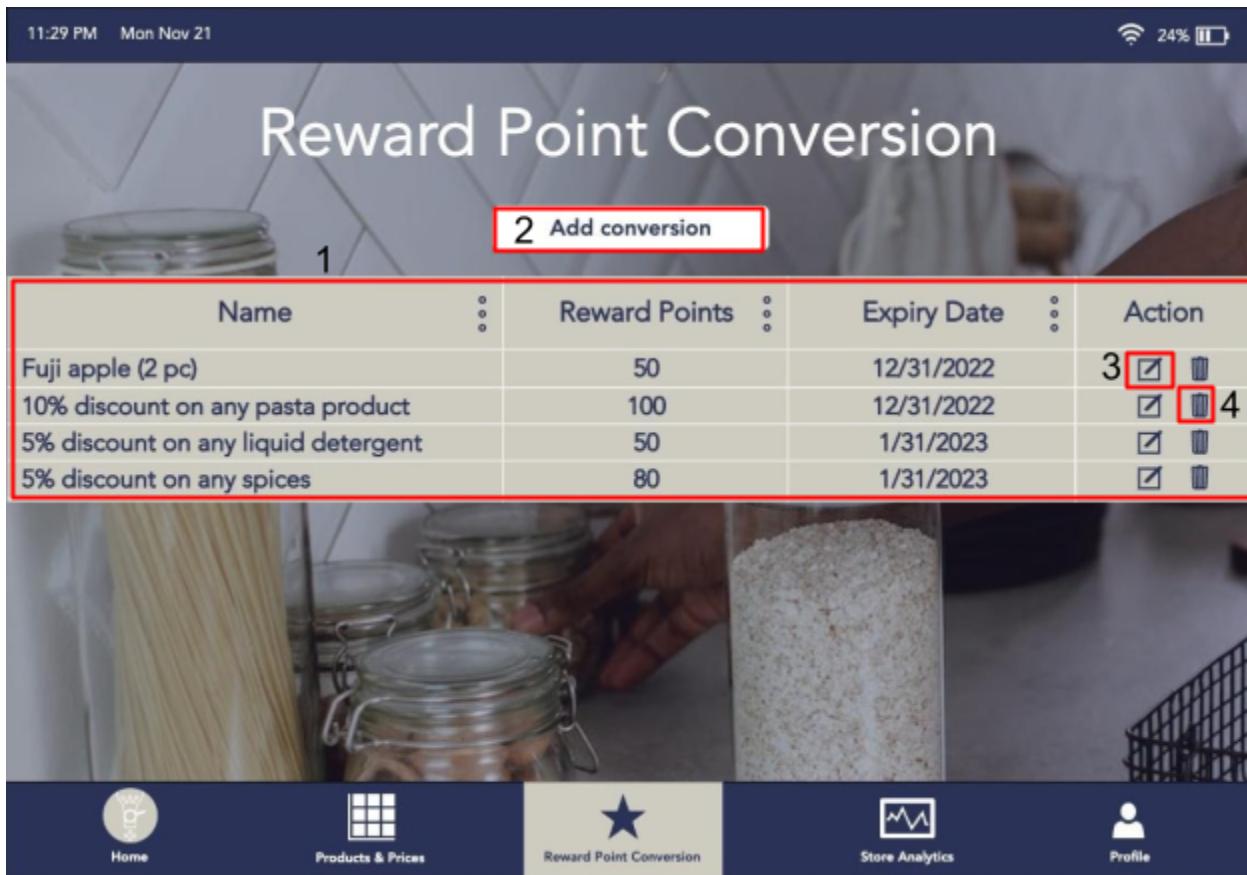
At the bottom of the table, there are two buttons: 'See Full Listing' and 'See Saved Searches', both enclosed in red boxes. Below the table, there is a blurred background image of a kitchen shelf with various items. At the very bottom, there is a navigation bar with five icons: 'Home' (house), 'Products & Prices' (grid), 'Reward Point Conversion' (star), 'Store Analytics' (line graph), and 'Profile' (person).

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

1. Table of Searches - The Store Analytics screen displays all recent searches by shoppers in your store's area in a table. The table displays 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 allows you to view all recent search entries.
4. See Saved Searches - Located on the bottom right of the table, tapping this button allows you to view all of your saved search entries.

4.5 Reward Point Conversion (O : Hull, $M1$: Chang-Horvath)

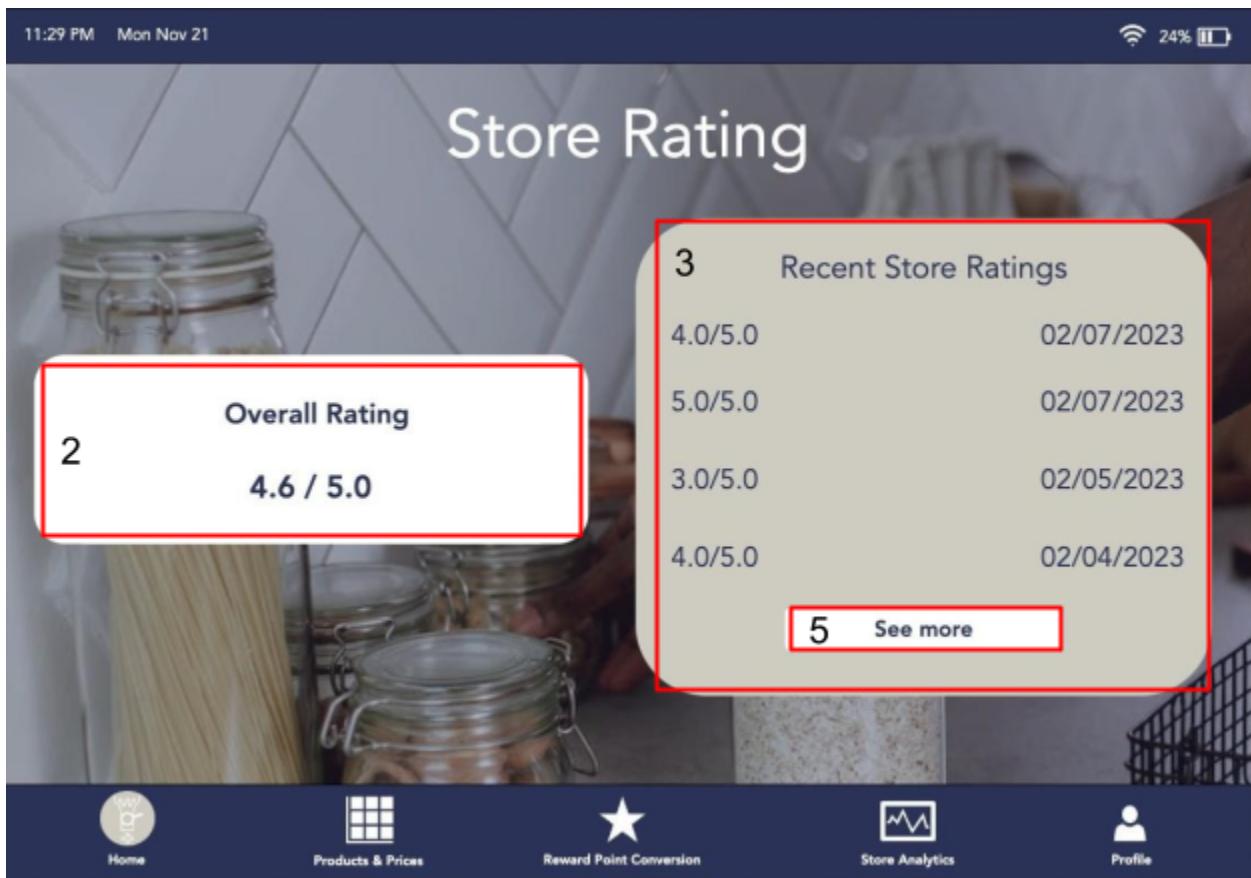
The Reward Point Conversion screen displays all the information about rewards and discounts that can be redeemed and used in your store.



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 (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 displays the most recent store ratings received by the store.
4. Each row in the table displays 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 (*O: Colombini*)

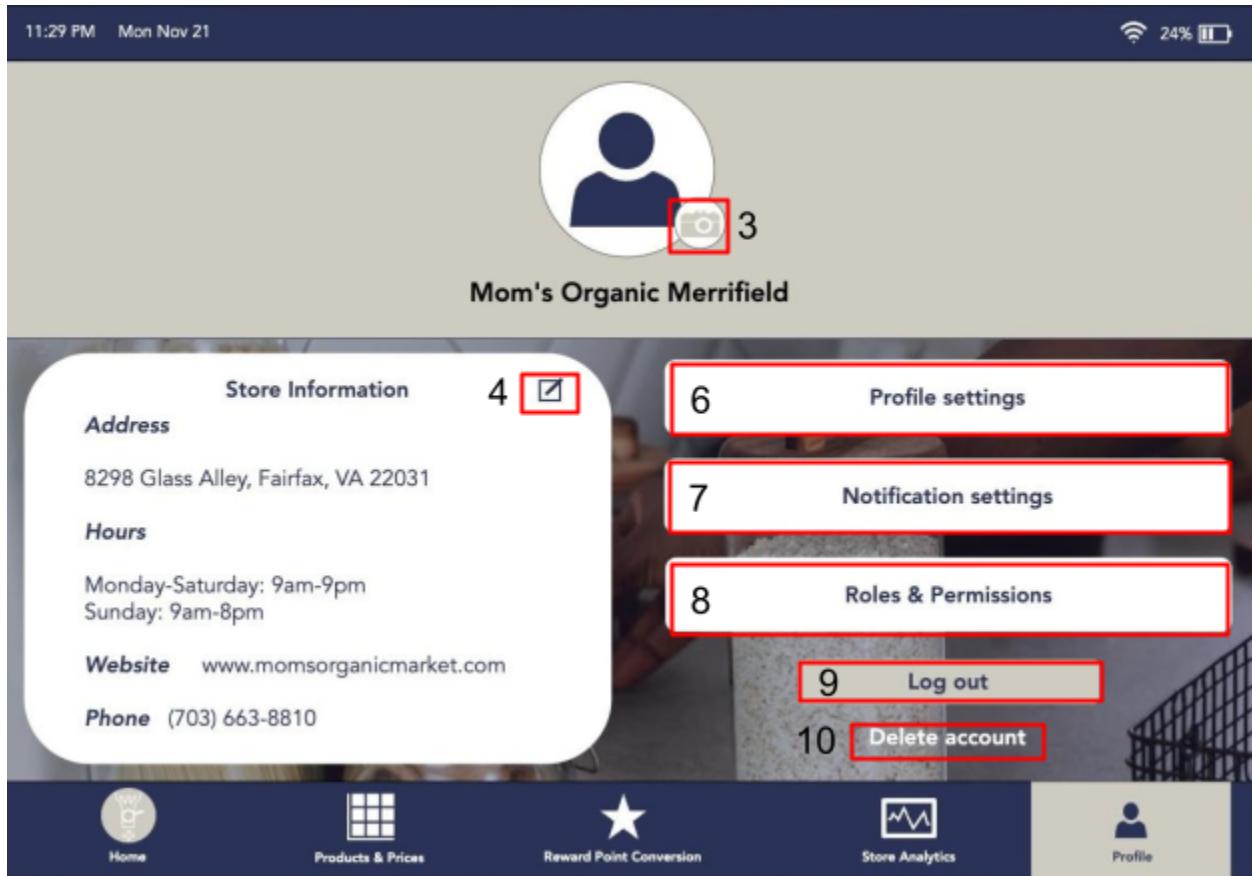
The store search page for store owners looks the same as the store search page (see section **3.4**) for the shoppers. The responsive design of the application allows the seamless adjustment of the screen to any mobile device.

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

The product search page for store owners looks the same as the product search page for the shoppers (see section **3.5**). 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, MI: Maximova)



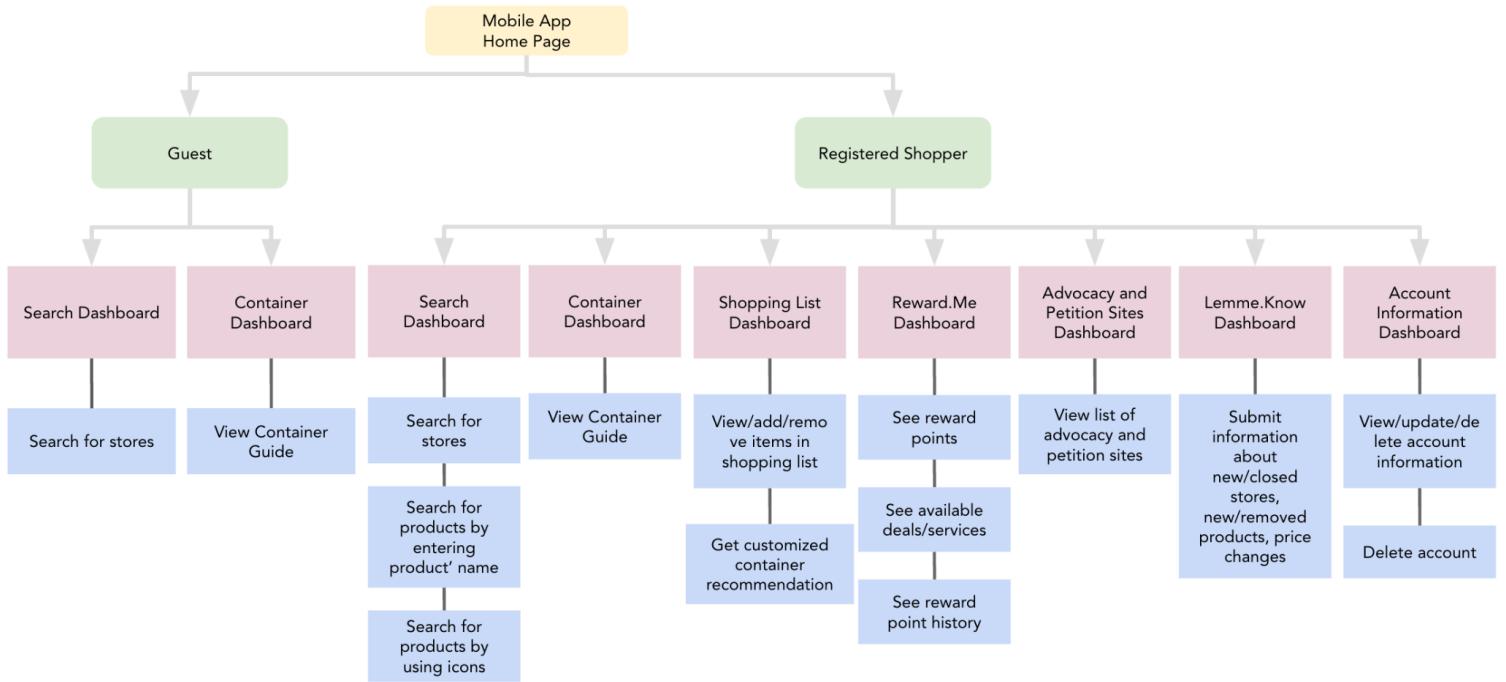
1. To access the User Profile Screen, select the “Profile” option from either the home screen or the navigation toolbar at the bottom of the screen.
2. The User Profile screen will display the store’s name in the header of the screen. The store name was provided by the store owner as part of the registration process.
3. To upload a photo as the store’s profile picture, tap on the camera icon next to the person icon above your store name..
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.

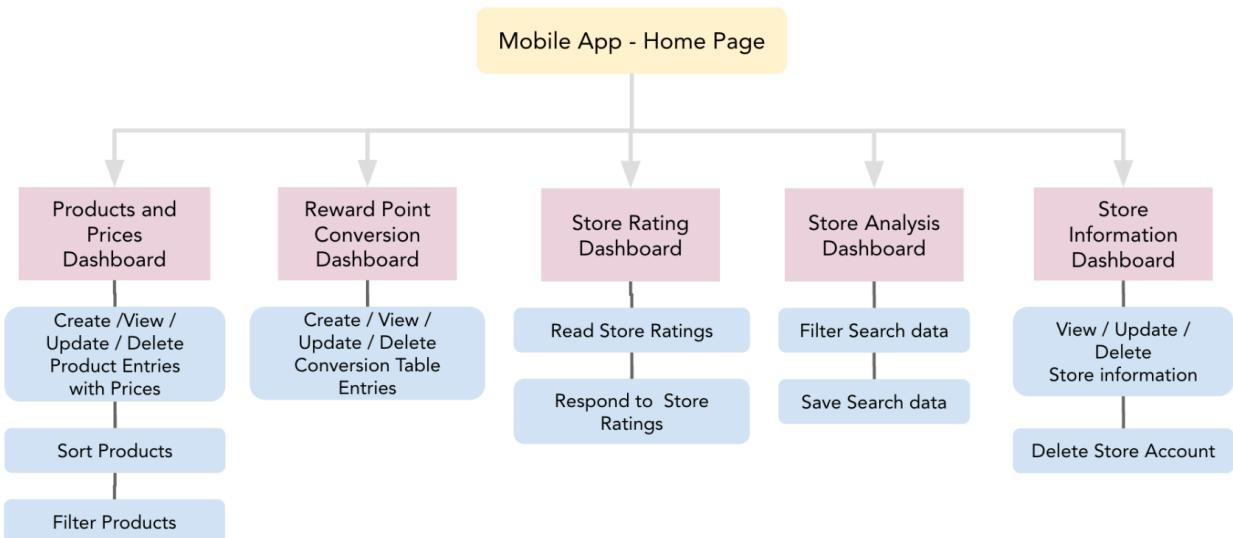
5. Next to the “Store Information” section, there are three buttons: “Profile settings”, “Notification settings”, and “Roles & Permissions”.
6. To make modifications to the profile settings (update name, email address, or password), the store owner can select the “Profile settings” button.
7. To make 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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