

COSC 304 Project

Introduction to Database

DIRT LAND

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**DIRT
LAND**

1. Introduction

1.1 Mission Statement

Dirt Shop's mission is to provide every dirt lover with fresh and unique dirt categorized by soil type. Users should be able to find their desired dirt UNIQUE for each user because we are a direct supplier and freshness is our motto.

1.2 Mission Statement

Soil which is also commonly referred to as dirt is a mixture of minerals, organic matter, and maybe animal dirt and in some cases, human faeces (if unlucky) provide us humans with a medium to grow a plantation.

We could not deny that soil provides a host of crucial services for both people and the planet. Soil puts food on our plates, purifies our water, protects us against floods, and combats drought. Therefore, in honour of soil, we are trying to spread awareness about how important and magnificent soil is.

**DIRT LAND
WHERE WE DO THE DIGGING FOR YOU.**

3. Login Information

Admin:

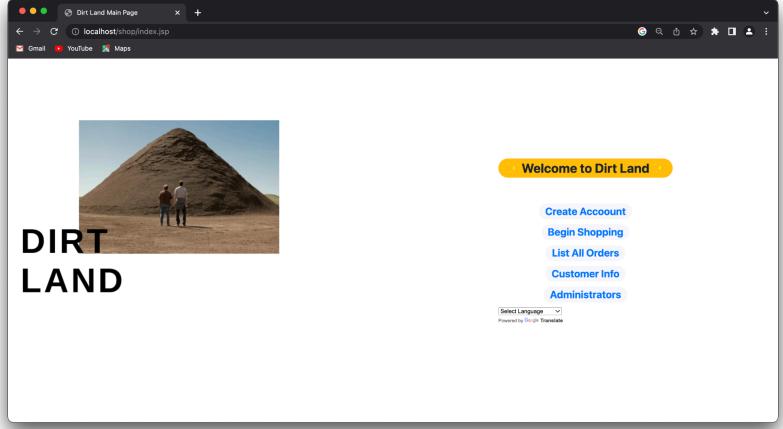
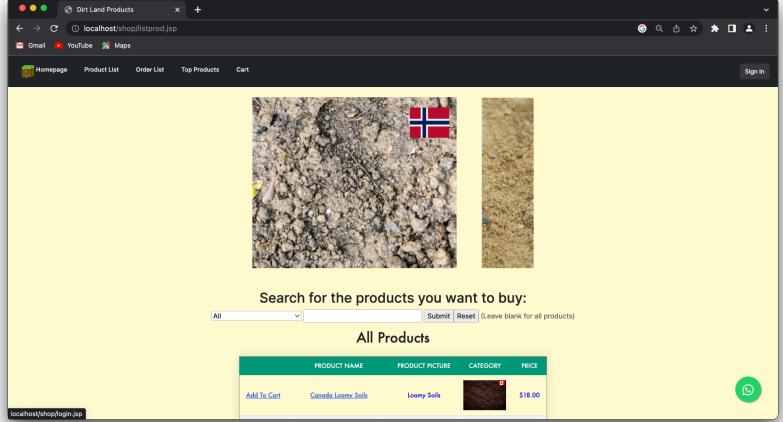
| username | password |
|----------|----------|
| 1 | ethan |

Customer:

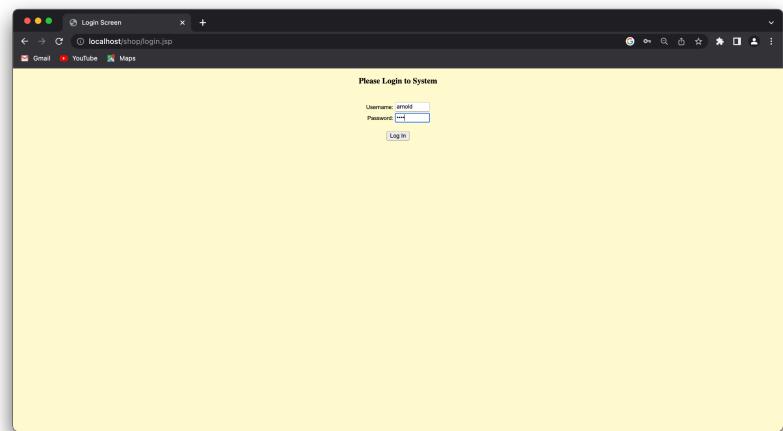
| username | password |
|----------|----------|
| arnold | test |
| bobby | bobby |
| candace | password |
| darrren | pw |
| beth | test |

4. Project Walkthrough

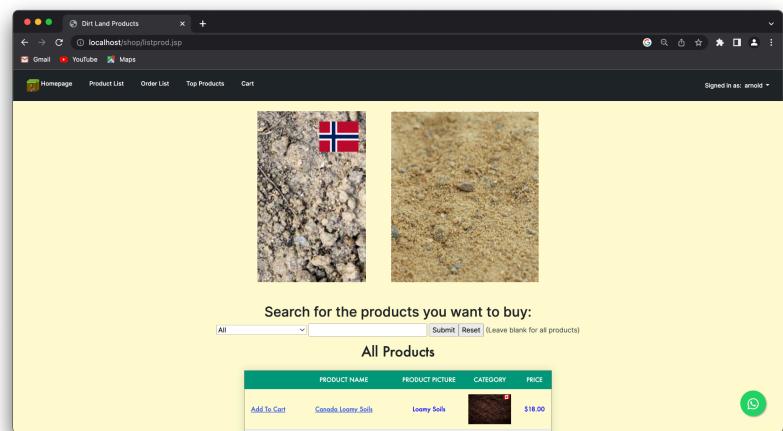
Customer Experience

| Description | Screenshots |
|--|--|
| <p>Our main page is located at index.jsp. This is the page that users and admins use to navigate to the other five pages which are Create Account, Begin Shopping, List all Orders, Customer Info, and Administrators.</p> <p>Users could also use google translate API at the bottom of the page.</p> |  |
| <p>When Begin Shopping clicked on the main page, it will redirect the user to listprod.jsp which contains the display of all the products in the database with the product name, picture, category and price. Users can scroll through the product list and add the product to their cart.</p> |  |

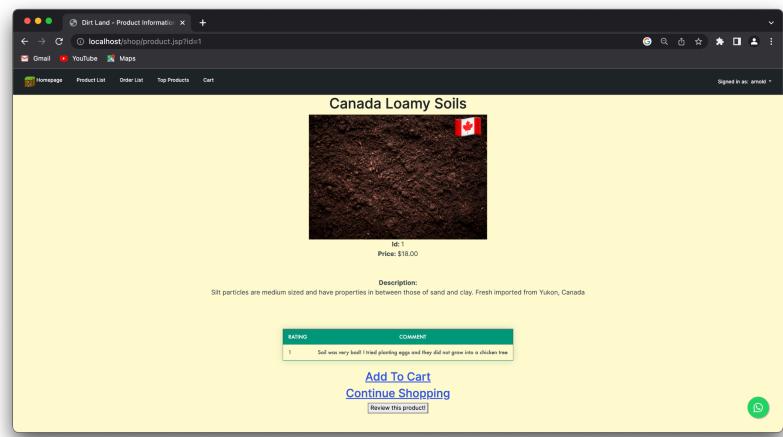
Users can sign into their accounts by clicking the sign-in button located at the top right corner of the navigation bar. It will redirect users to the login.jsp page where they can enter their username and password to log in.



When a user signs in to the system, the user's name will be displayed on the right side of the navigation bar. The system also keeps track of the items contained in the individual cart of the user when signed in.



When the product name is pressed from the list product page, it will redirect to the product.jsp page. Here users can see the product id, picture, and description of the product. Users have options to add the product to their cart, continue shopping or review the product.

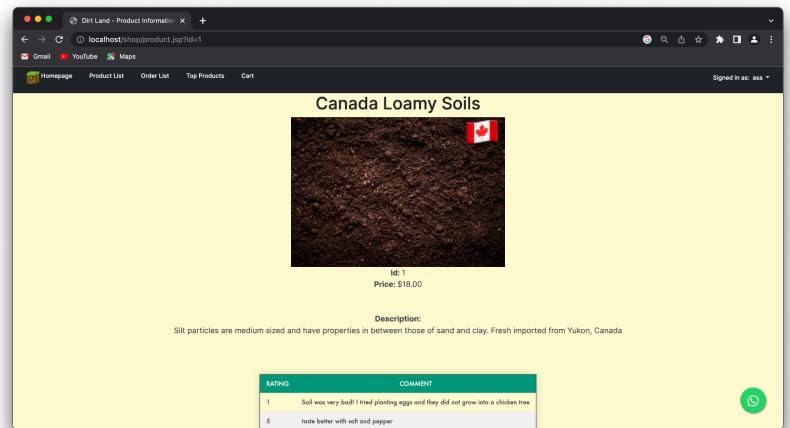


When the review button is pressed on the product page, it navigates to addReview.jsp.

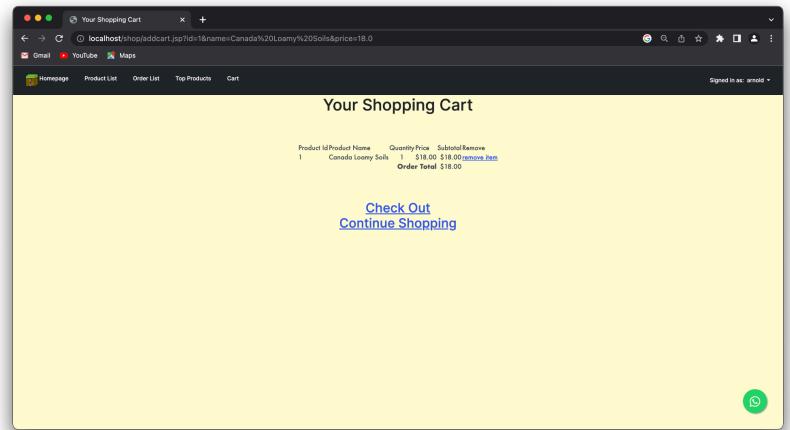
This page displays the user's name, a rating, and a comment box for the user to fill in. Which allows users to give feedback on the products by leaving a review.

Here's an example of a review that we just inputted.

A screenshot of a web browser window titled "Dirt Land Order List". The URL is "localhost/shop/addReview.jsp?id=1". The page displays a form for leaving a review. At the top, it says "reviewing product as : arnold". Below that are fields for "rating (1-5)" (with a dropdown menu showing "1") and "comment:" (with a text input field containing "Soil was very bad! I tried planting eggs and they did not grow into a chicken tree"). There is a "Submit" button at the bottom right of the form.



When an item is added to the cart system will navigate to viewCart.jsp which will display the id, name, quantity on the cart, price and the total of the individual item and the cart. There is a remove item button on every item that users can decrease the quantity selected or remove the item completely. When the cart is completed the user can click checkout or continue shopping to add more items



Users can also browse products by choosing a category on the scroll bar at listprod.jsp. This will display the products in that specific category to screen for user convenience.

The screenshot shows a web browser window titled "Dirt Land Products" displaying a list of products. At the top, there is a search bar with placeholder text "Search for the products you want to buy:" and a dropdown menu showing "All" selected under "Recommended Products". Below the search bar is a table with columns: PRODUCT NAME, PRODUCT PICTURE, CATEGORY, and PRICE. The table contains six rows, each representing a different type of loamy soil from a specific country:

| PRODUCT NAME | PRODUCT PICTURE | CATEGORY | PRICE |
|-------------------------|-----------------|-------------|---------|
| Canada Loamy Soils | | Loamy Soils | \$18.00 |
| Japan Loamy Soils | | Loamy Soils | \$19.00 |
| Singapore Loamy Soils | | Loamy Soils | \$10.00 |
| Switzerland Loamy Soils | | Loamy Soils | \$22.00 |
| Indonesia Loamy Soils | | Loamy Soils | \$21.00 |
| France Loamy Soils | | Loamy Soils | \$25.00 |

The system also displays the recommended products to the user. It shows a table of products the user previously bought and there is also another table below which shows similar products which have the same categories as the products the user previously ordered. Users can also search recommended products' names using the search bar.

The screenshot shows a web browser window titled "Dirt Land Products" displaying recommended products. At the top, there is a search bar with placeholder text "Search for the products you want to buy:" and a dropdown menu showing "All" selected under "All recommended products". Below the search bar is a section titled "Products you previously ordered" containing a table with columns: PRODUCT NAME, PRODUCT PICTURE, PRICE, TOTAL QUANTITY ORDERED, and LAST ORDERED. The table contains three rows:

| PRODUCT NAME | PRODUCT PICTURE | PRICE | TOTAL QUANTITY ORDERED | LAST ORDERED |
|-----------------------|-----------------|---------|------------------------|-----------------------|
| Indonesia Loamy Soils | | \$21.00 | 2 | 2019-10-15 10:25:55.0 |
| Norway Chalky Soils | | \$13.00 | 1 | 2019-10-15 10:25:55.0 |
| Canada Loamy Soils | | \$18.00 | 1 | 2019-10-15 10:25:55.0 |

Below this is a section titled "Similar products" containing another table with columns: PRODUCT NAME, PRODUCT PICTURE, CATEGORY, and PRICE. The table contains six rows:

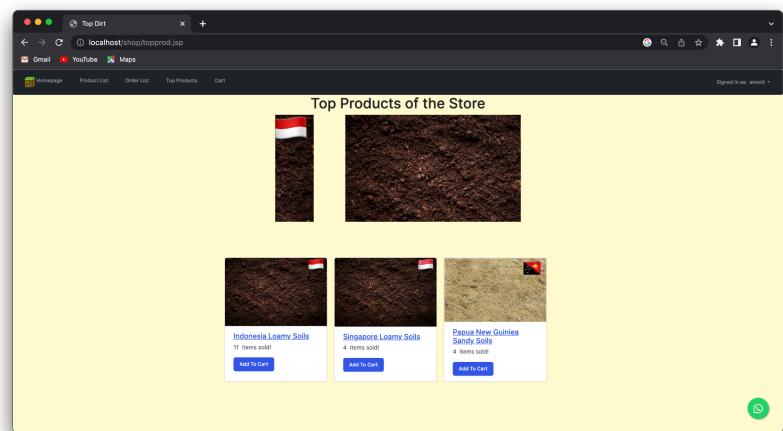
| PRODUCT NAME | PRODUCT PICTURE | CATEGORY | PRICE |
|-------------------------|-----------------|--------------|---------|
| Norway Chalky Soils | | Chalky Soils | \$13.00 |
| Guatemala Chalky Soils | | Chalky Soils | \$16.00 |
| Canada Loamy Soils | | Loamy Soils | \$18.00 |
| Japan Loamy Soils | | Loamy Soils | \$19.00 |
| Singapore Loamy Soils | | Loamy Soils | \$10.00 |
| Switzerland Loamy Soils | | Loamy Soils | \$22.00 |

Users can also see their orders on the order list menu which is accessible at the navigation bar (listorder.jsp). This page also displays all the orders made on the site with additional information about the order like Order ID and Customer ID.

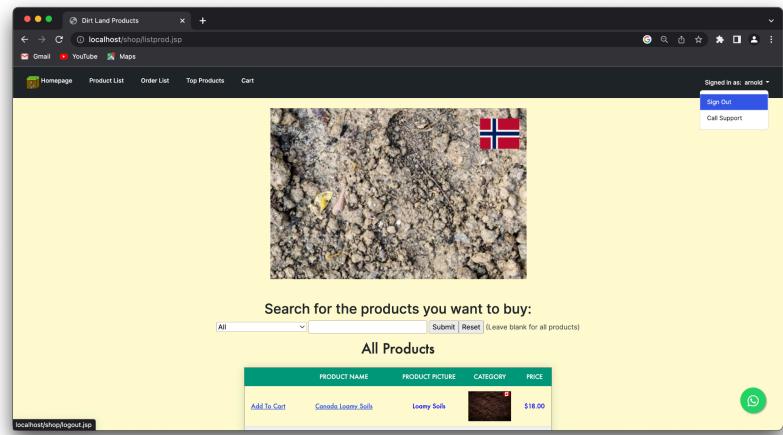
| OrderID | CustomerID | Customer Name | Total Amount |
|-----------|------------|-----------------|--------------|
| 1 | 1 | Arnold Anderson | \$75.00 |
| ProductID | Quantity | Price | |
| 1 | 1 | \$18.00 | |
| 5 | 2 | \$31.00 | |
| 10 | 1 | \$10.00 | |
| Totals | 4 | \$75.00 | |

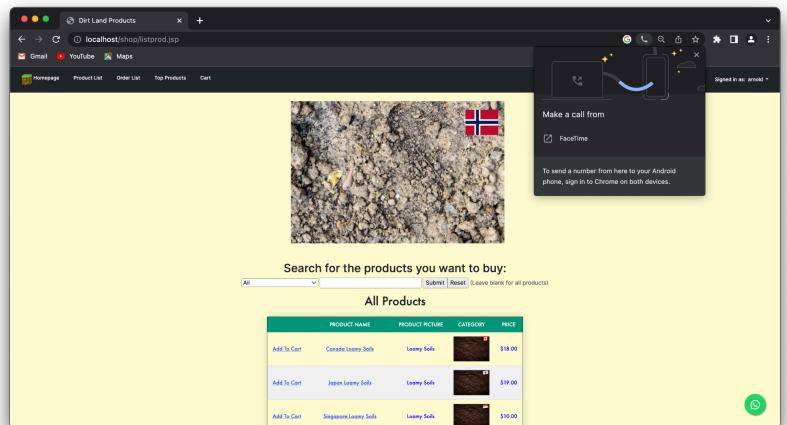
| OrderID | CustomerID | Customer Name | Total Amount |
|-----------|------------|---------------|--------------|
| 2 | 2 | Bobby Brown | \$105.00 |
| ProductID | Quantity | Price | |
| 5 | 5 | \$21.00 | |
| Totals | 5 | \$105.00 | |

Our application also allows users to see our most purchased products by clicking “Top Products” in the navigation bar. It redirects the user to our top product page where a list of our best seller products is presented. User has the option to view, and add these products directly to their shopping cart.

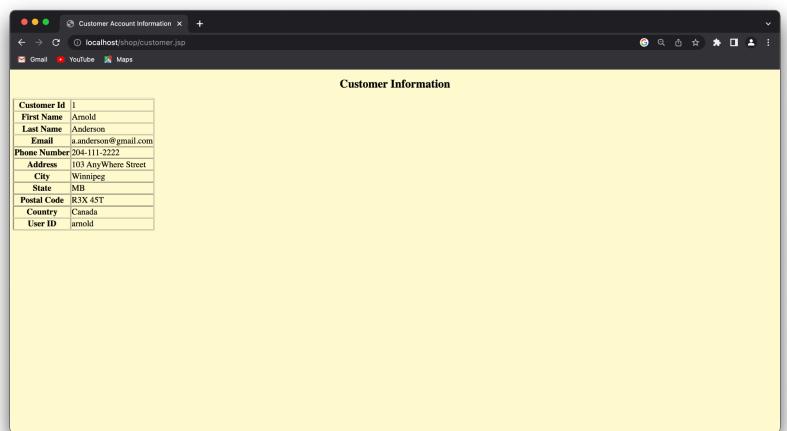


Users can click on the dropdown menu on our navigation bar and see a list of customer actions. Not only can the user sign out by clicking the sign out button, but they can also contact us by tapping “call support” which jumps to a WhatsApp chat page where the user can chat or call for help.

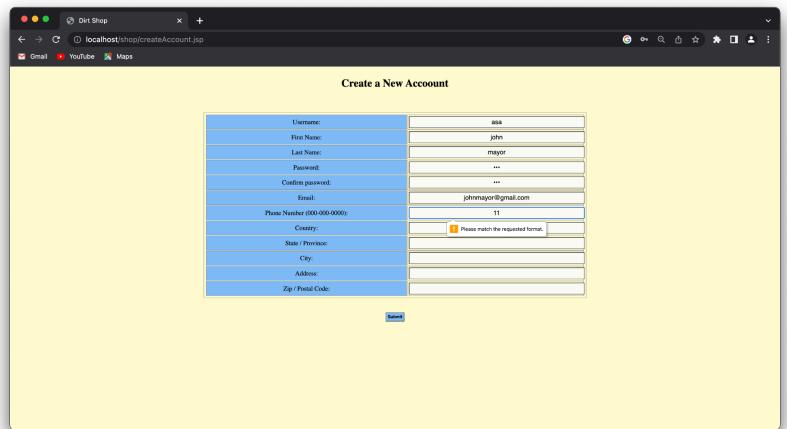




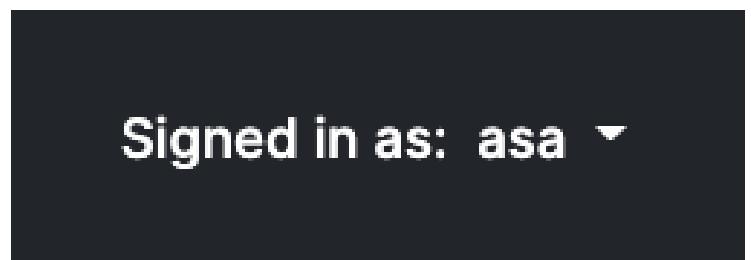
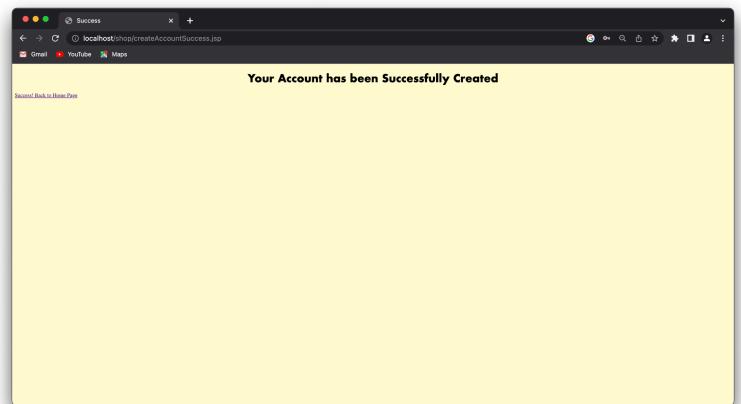
Account information is viewable when the user clicks the “Customer Info” button on the homepage. The page lists all relevant information about the current user, including their registered details and their User ID.



For example ,when we press “create account”, we need to fill in all of the requested information before being able to create an account. Here we demonstrate if the user doesn’t match the required phone number pattern.



we can now log in as “asa” after a successful account creation



Another feature is users can edit their account's address and password. Beforehand, users have to log in first and then be able to update their address and password. If users leave either the password field or address field empty, it will show an error message and a link to go back to filling up the edit account form again

Error message when users are not logged in

Please login by clicking the link below.

[Login](#)

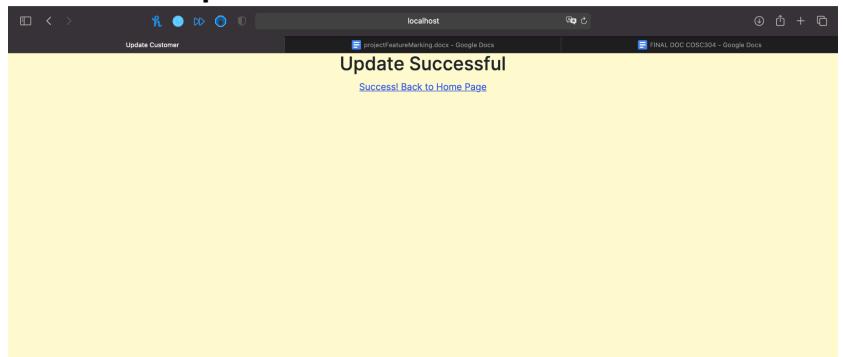
Or if you don't have an account, click the create account link below.

[Create Account](#)

Edit account form

A screenshot of a web browser showing the "Edit Account Information" form. The form has two input fields: "Address:" containing "123 Nowhere Street" and "Password:" containing "test". Below the inputs is a blue "Edit Account" button. The browser's navigation bar shows "localhost" and the user "Signed in as: arnold".

Successful update account



Arnold's address and password is updated

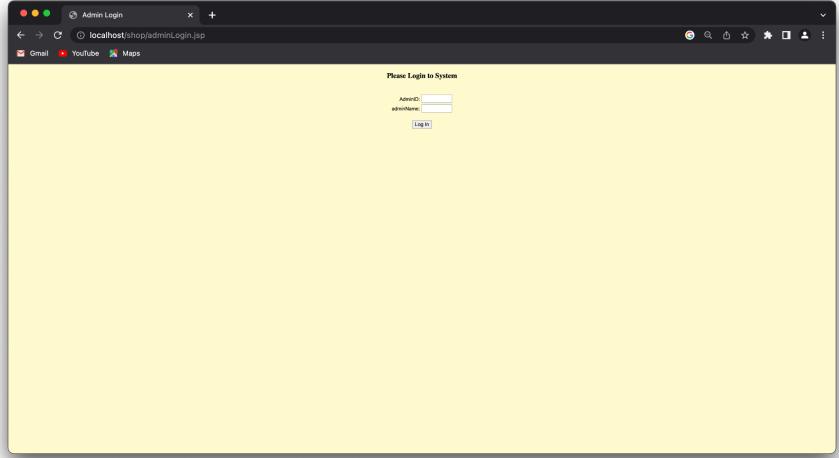
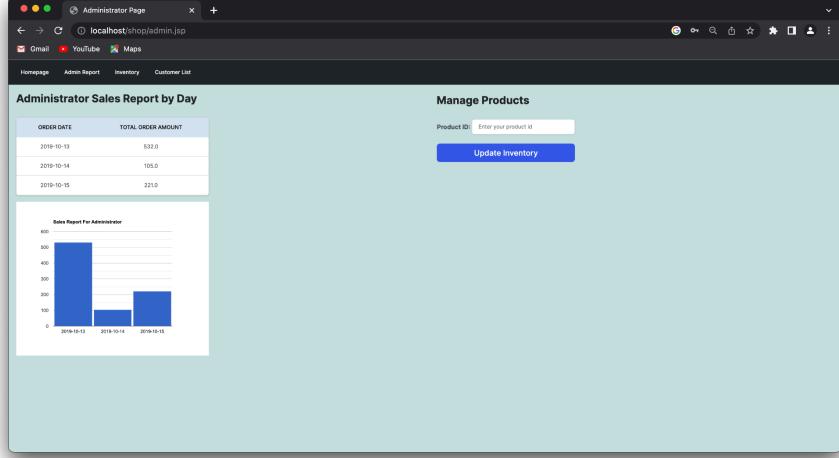
A screenshot of a web browser window titled "Dirt Land Order List". The main content area displays a table titled "Order List" with five rows of data. The columns are labeled: ID, NAME, EMAIL, PHONE NUMBER, ADDRESS, CITY, STATE, POSTAL CODE, and COUNTRY. The data is as follows:

| ID | NAME | EMAIL | PHONE NUMBER | ADDRESS | CITY | STATE | POSTAL CODE | COUNTRY |
|----|-------------------|------------------------|--------------|----------------------|-----------|-------|-------------|---------------|
| 1 | Arnold Anderson | a.anderson@gmail.com | 204-111-2222 | 123 NoWhere Street | Winnipeg | MB | R3X 4S7 | Canada |
| 2 | Bobby Brown | bobby.brown@hotmail.ca | 572-342-8911 | 222 Bush Avenue | Boston | MA | 22222 | United States |
| 3 | Candace Cole | cole@charity.org | 333-444-5555 | 333 Central Crescent | Chicago | IL | 33333 | United States |
| 4 | Darren Doe | oe@doe.com | 250-807-2222 | 444 Dover Lane | Kelowna | BC | V1V 2X9 | Canada |
| 5 | Elizabeth Elliott | engel@uiowa.edu | 555-666-7777 | 555 Everwood Street | Iowa City | IA | 52241 | United States |

Error when a field left empty in edit account form

A screenshot of a web browser window titled "Update Customer". The main content area displays the message "Please fill the form again as a field is left empty" in bold black text. Below this message is a "Back" button. The browser's address bar shows "localhost".

Admin Experience

| Description | Screenshots |
|--|---|
| <p>When a user clicked the admin button on the main page, the system will direct the user to the admin login page. The page allows users to sign in with their admin id and admin names. Once done, the user can click “log in” and the system will authenticate the user and verify their information. If all details are correct, the system will direct the user to the admin page.</p> |  |
| <p>Once the admin has successfully logged in, the system will direct the user to the admin page. The admin portal comprises the sales report table and the sales report statistics implemented using google charts. On the manage product section, the user can enter the product id that they want to update, and click update inventory to edit the product info.</p> |  |
| <p>Admins can also add a new product to the database by filling up a form. It returns an error if a field is left empty. If product is added successfully it will show “Added Product Successfully” and a link to the admin page.</p> | |

[Back to Admin](#)

Add Product Form

Product Name

Price(\$)

Image URL

Enter your product photo path located under the program folder

Product Description
Sandy soils are those that are generally coarse textured until 50 cm depth and consequently retain few nutrients and have a low water holding capacity. Fresh from the skies of Canada

Category ID

[Add Product](#)

Added Product Successfully

[Back to Admin Page](#)

| | | | | | | |
|--|-----------------------------|------------------------------|-------------|--|---------|--|
| | Add To Cart | Papua New Guinea Sandy Soils | Sandy Soils | | \$9.00 | |
| | Add To Cart | Canada Sandy Soils | Sandy Soils | | \$50.00 | |

Error message if a field is empty

Please fill the form completely.

[Back to Add Product Form](#)

Here the admin can make changes to their product details.

For example, when we type “4” and press “update inventory”, the system will direct the user to the edit product page. All the product info fields are listed on the right-hand side. We can change the price of the product from \$4.0 to \$420.0, and click “update product”. The page will pop up a dialogue to show that the product is updated. We can also confirm this change on the listprod page.

[Edit Product](#)

localhost/shop/editProduct.jsp

[Back to Admin](#)

Edit Product Info

Update your item details here, once ready, click update product to update or delete current item.

Product Name

Price(\$)

Image URL

Enter your product photo path located under the program folder

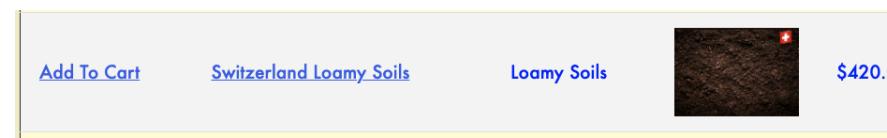
Product Description

Category ID

Product ID

[Update Product](#)

[Delete Product](#)



The admin page allows offer modification of the product inventories. From the navigation bar, the user can click “Inventory” which jumps to the inventory page. From here, the system lists out all current inventories each with their product ID, Warehouse ID, Quantity and Price. To edit the inventory, the user need to enter the product ID that they want to edit and the new quantity of the inventory. To illustrate, here we change the quantity of product with product ID 1 from 5 to 68 and clicked “update inventory” to update.

| Product ID | Warehouse ID | Quantity | Price |
|------------|--------------|----------|-------|
| 1 | 1 | 5 | 18.00 |
| 2 | 1 | 10 | 19.00 |
| 3 | 1 | 3 | 10.00 |
| 4 | 1 | 2 | 22.00 |
| 5 | 1 | 6 | 21.00 |
| 6 | 1 | 3 | 25.00 |
| 7 | 1 | 1 | 30.00 |
| 8 | 1 | 6 | 14.00 |
| 9 | 1 | 9 | 15.00 |
| 10 | 1 | 7 | 13.00 |
| 11 | 1 | 9 | 16.00 |
| 12 | 1 | 12 | 59.00 |
| 13 | 1 | 11 | 27.00 |
| 14 | 1 | 8 | 39.00 |
| 15 | 1 | 68 | 18.00 |

| Product ID | Warehouse ID | Quantity | Price |
|------------|--------------|----------|-------|
| 1 | 1 | 68 | 18.00 |

The admin portal also offers a customer list. The user can navigate to the customer list when clicking the “customer list” on the navigation bar. Here the system will present a list of customers that are registered in the system, with their customer Ids, names, emails and more. However, their credentials are not listed here.

| ID | Name | Email | Phone Number | Address | City | State | Postal Code | Country |
|----|------------------|------------------------|--------------|----------------------|-----------|-------|-------------|---------------|
| 1 | Arnold Anderson | a.anderson@gmail.com | 204-111-2222 | 103 AnyWhere Street | Winnipeg | MB | R3B 4ST | Canada |
| 2 | Bobby Brown | bobby.brown@hotmail.ca | 572-342-8911 | 222 Bush Avenue | Boston | MA | 22222 | United States |
| 3 | Conrad Cole | cole@charity.org | 333-444-5555 | 333 Central Crescent | Chicago | IL | 33333 | United States |
| 4 | Dorine Doe | sd@doe.com | 250-807-2222 | 444 Dover Lane | Kelowna | BC | V1V 2X9 | Canada |
| 5 | Elizabeth Elliot | engel@isawade.edu | 555-666-7777 | 555 Everwood Street | Iowa City | IA | 52241 | United States |