

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.**

2. System Features

Final Overall System Features	Category	Possible Points	Points	Comments / Code Files
Documentation				
Executive Summary (up to 1 page)	Core	2		FINAL DOC
System Features (2 pages)	Core	2		FINAL DOC
Walkthrough with screenshots (up to 15 pages)	Core	6		FINAL DOC
Hosting				
Running on cloud server	Advanced	10		only static pages hosted on Azure https://dirtlandweb.azurewebsites.net/
Main/Home Page				
Search for a product by name	Core	1		listprod.jsp
Browse products by category	Core	1		listprod.jsp
List products (by search/browse)	Core	1		listprod.jsp
List products with image	Core	1		listprod.jsp
Page header with menu	Basic	1		listprod.jsp
Page header shows current logged in user	Basic	1		listprod.jsp
Dynamic products on page based on sales	Basic	2		topprod.jsp
Improved UI (user-friendly, images, etc.)	Basic	2		1. auto slide image at listprod.jsp and topprod.jsp 2. whatsapp floating button on some pages
Product recommendation based on user	Advanced	4		listprod.jsp in drop down filter
Shopping Cart				
Add to shopping cart	Core	1		showcart.jsp
View shopping cart	Core	1		showcart.jsp
Update quantity (with data validation)	Basic	1		showcart.jsp
Remove item from shopping cart	Basic	1		removeCart.jsp
Improved formatting/UI (e.g. in header bar)	Basic	1		showcart.jsp / navbar.jsp
Cart stored in database between sessions	Basic	3		addcart.jsp
Checkout				
Checkout with customer id	Core	1		login.jsp
Checkout with data validation	Basic	2		validateLogin.jsp
Multiple shipments per order supported	Advanced	2		Note: Requires DB change.
Calculate taxes/shipping (by items/state)	Advanced	2		Note: Requires DB change.
Product Detail Page				
Product detail page and item description	Core	1		product.jsp
Product detail has an image from database	Core	1		product.jsp

User Accounts/Login				
Create user account page	Basic	2		createAccount.jsp
Create account with data validation	Basic	2		createAccount.jsp
Edit user account info (address, password)	Basic	2		myaccount.jsp (form) editCustomer.jsp (execute update statement)
Login/logout	Core	1		login.jsp / logout.jsp
Page listing all orders for user	Core	1		listOrder.jsp
Product Reviews				
Ability to enter a review on a product	Basic	2		addReview.jsp
Display product review on product detail page	Basic	1		product.jsp
Warehouses/Inventory				
Display item inventory by store/warehouse	Basic	2		inventory.jsp
Edit item inventory by store/warehouse	Advanced	3		editinventory.jsp
Administrator Portal				
Secured by login	Core	1		adminauth.jsp
List all customers	Core	1		adminListCust.jsp
List report showing total sales/orders	Core	1		admin.jsp
Report with a graph	Advanced	3		Google Visualization API (admin.jsp)
Add new product	Basic	2		addProduct.jsp (form) and addProductBackend.jsp (insert statement)
Update/delete product	Basic	2		editProduct.jsp
Upload a photo to file system for product	Advanced	2		editProductBackEnd.jsp
Database System/General				
Use AJAX for some pages	Advanced	4		Whatsapp floating button on most pages in listprod.jsp
User interface and navigation/usability		Up to 5		navBar.jsp
<i>Others (your suggestions)</i>		Up to 5		Google translate API at index.jsp bootstrap card at topproduct.jsp
Total: (out of 50 with maximum of 10 bonus marks. i.e. 60 points out of 50 is max.)				

3. Login Information

Admin:

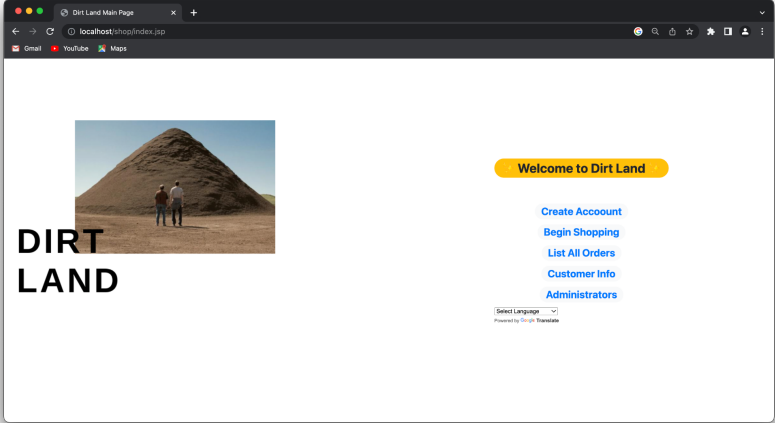
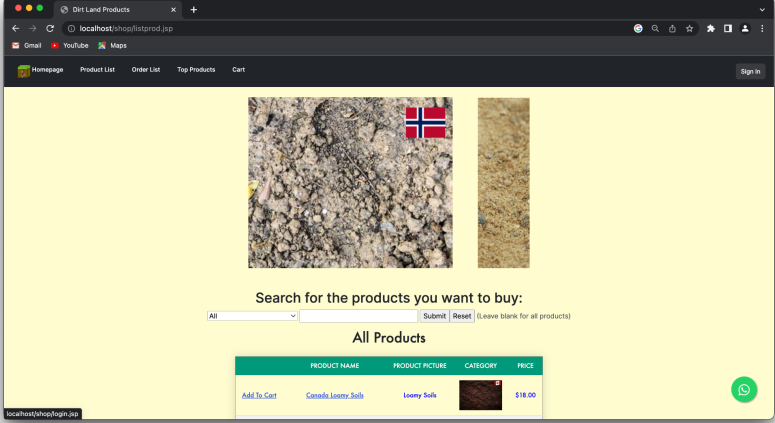
username	password
1	ethan

Customer:

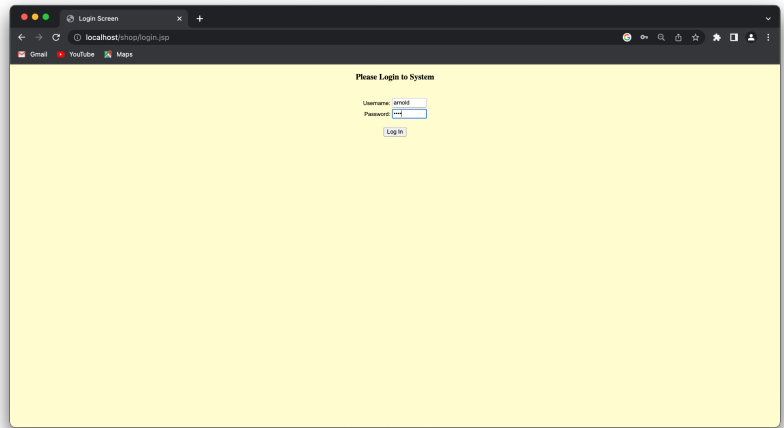
username	password
arnold	test
bobby	bobby
candace	password
darren	pw
beth	test

4. Project Walkthrough

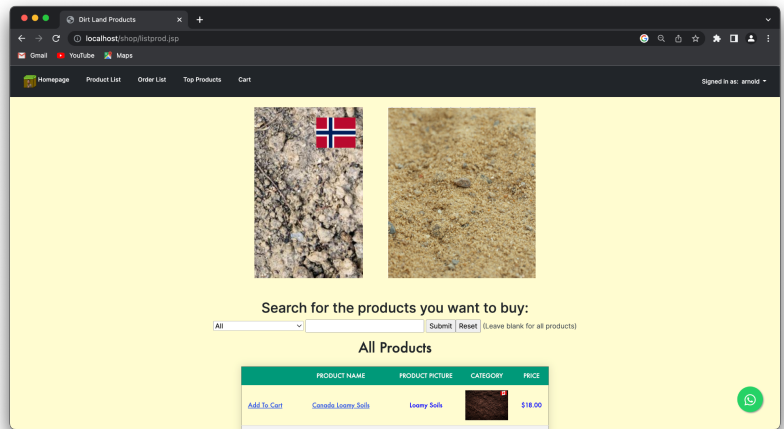
Customer Experience

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>	

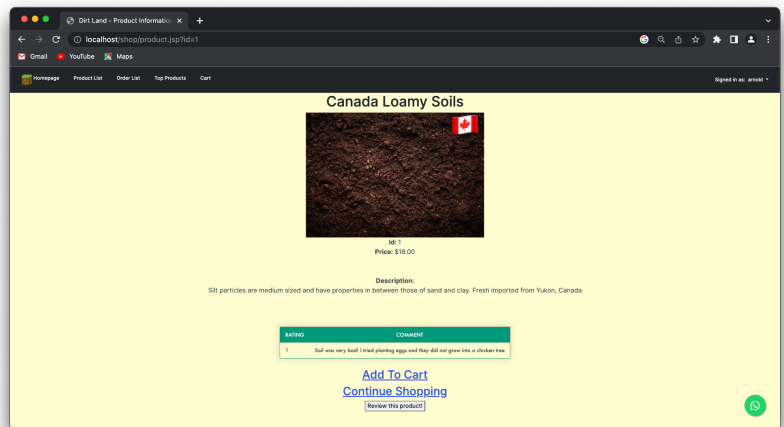
Users can sign into their accounts by clicking the sign-in button located at the top right corner of the navigation bar. It will redirect users to the login.jsp page where they can enter their username and password to log in.



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.



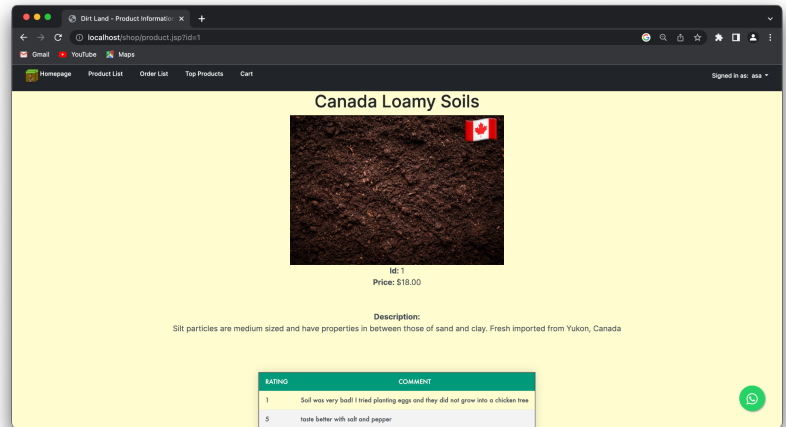
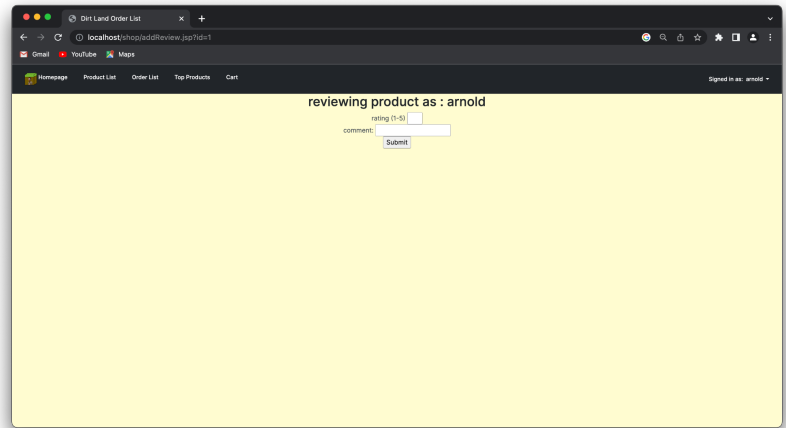
When the product name is pressed from the list product page, it will redirect to the product.jsp page. Here users can see the product id, picture, and description of the product. Users have options to add the product to their cart, continue shopping or review the product.



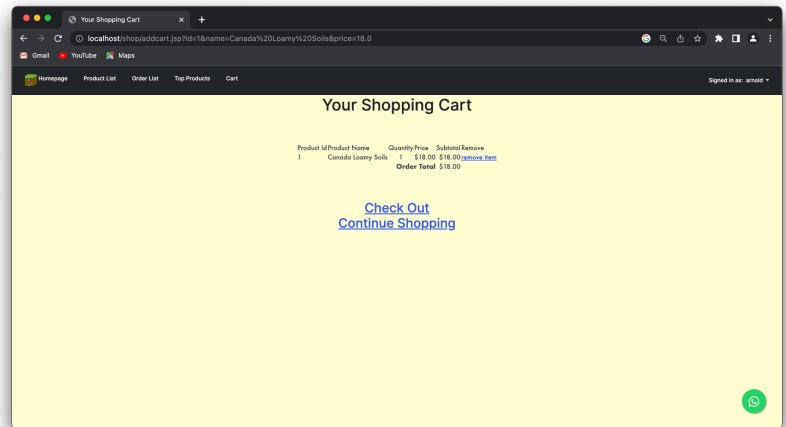
When the review button is pressed on the product page, it navigates to addReview.jsp.

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.

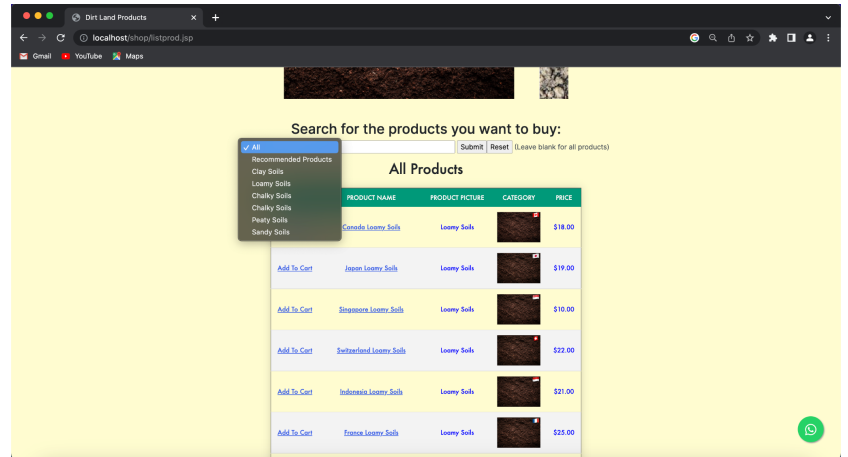
Here's an example of a review that we just inputted.



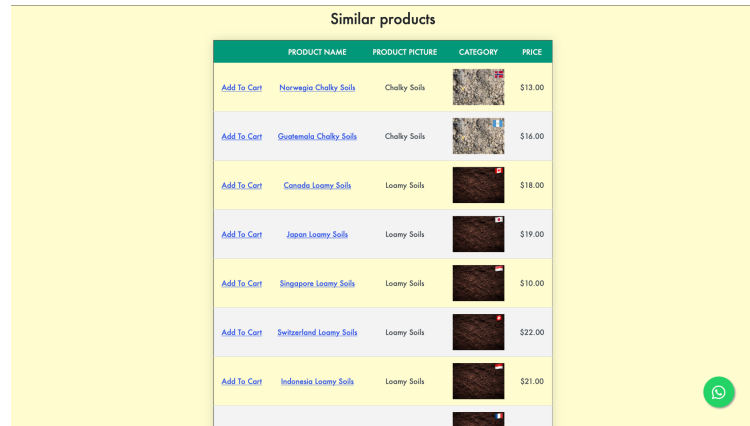
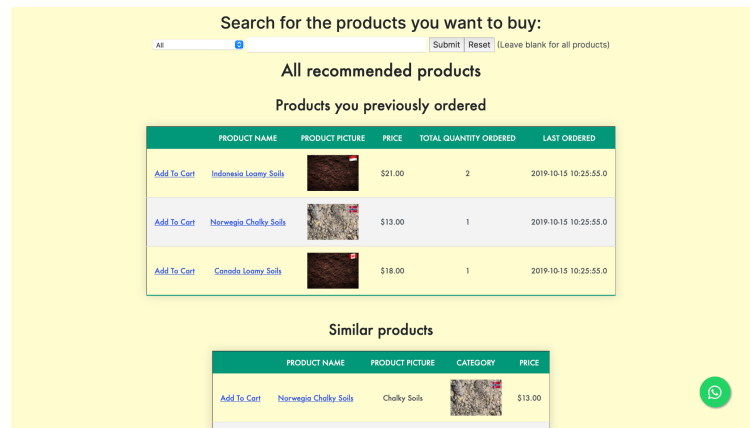
When an item is added to the cart system will navigate to viewCart.jsp which will display the id, name, quantity on the cart, price and the total of the individual item and the cart. There is a remove item button on every item that users can decrease the quantity selected or remove the item completely.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



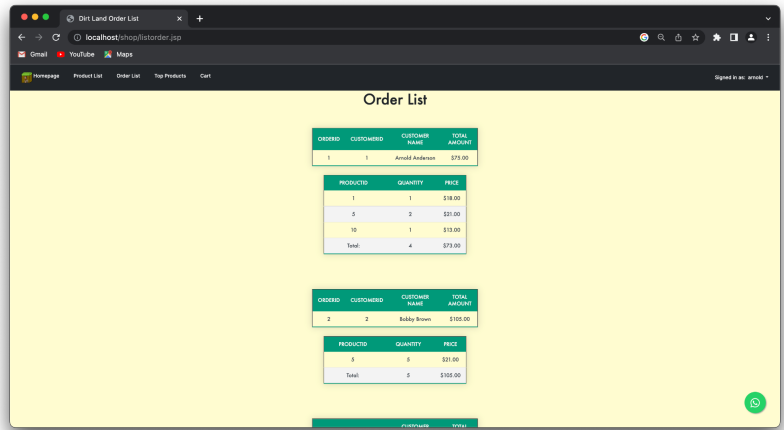
Users can also browse products by choosing a category on the scroll bar at listprod.jsp. This will display the products in that specific category to screen for user convenience.



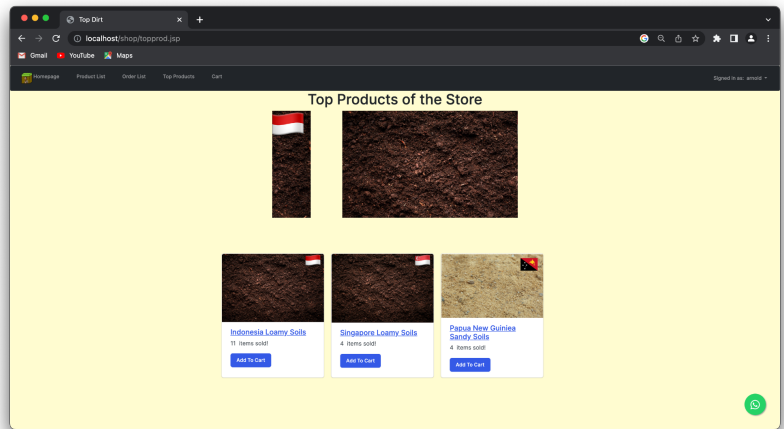
The system also displays the recommended products to the user. It shows a table of products the user previously bought and there is also another table below which shows similar products which have the same categories as the products the user previously ordered. Users can also search recommended products'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



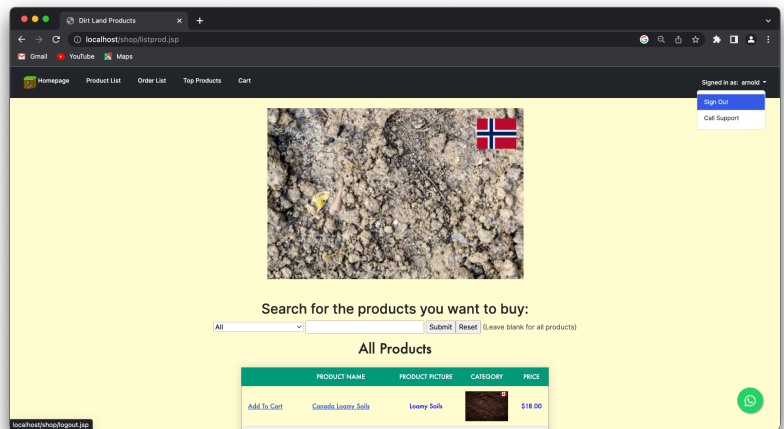
Users can also see their orders on the order list menu which is accessible at the navigation bar (listorder.jsp). This page also displays all the orders made on the site with additional information about the order like Order ID and Customer ID.

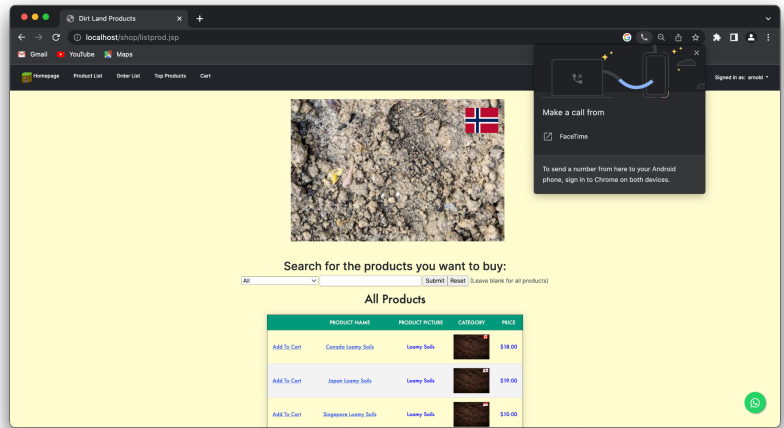


Our application also allows users to see our most purchased products by clicking “Top Products” in the navigation bar. It redirects the user to our top product page where a list of our best seller products is presented. User has the option to view, and add these products directly to their shopping cart.

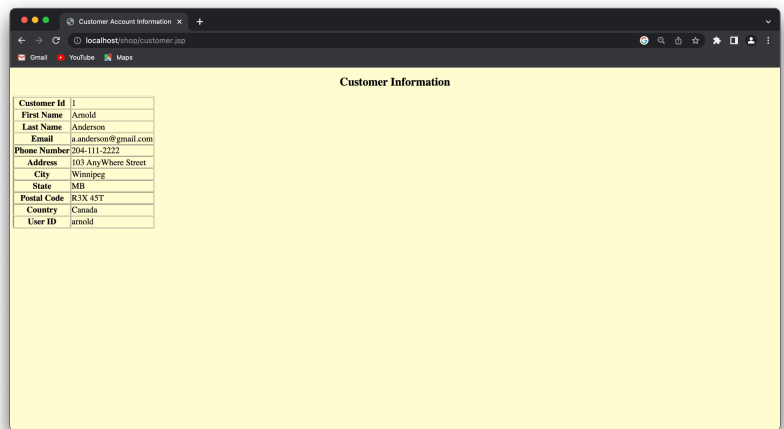


Users can click on the dropdown menu on our navigation bar and see a list of customer actions. Not only can the user sign out by clicking the sign out button, but they can also contact us by tapping “call support” which jumps to a WhatsApp chat page where the user can chat or call for help.

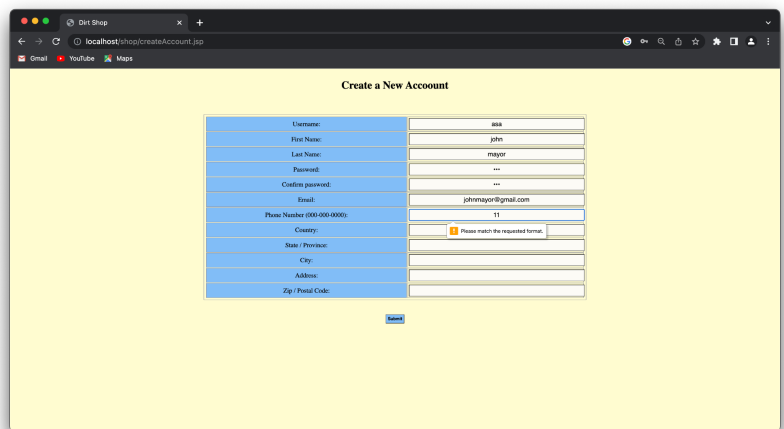




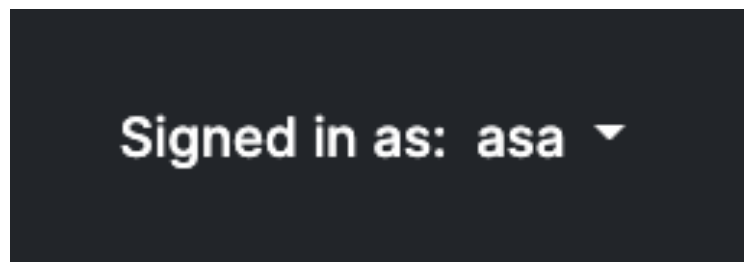
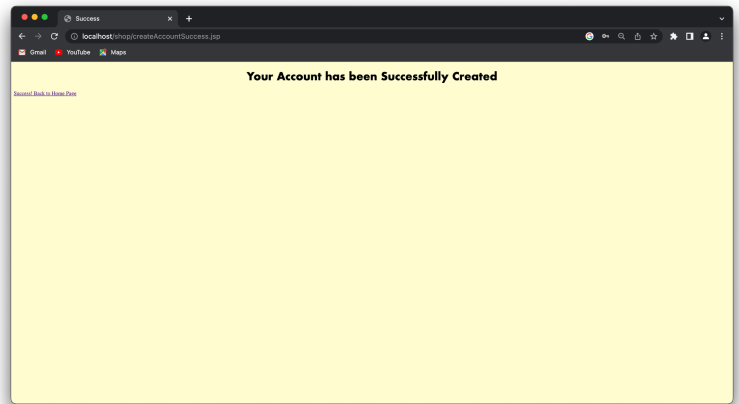
Account information is viewable when the user clicks the “Customer Info” button on the homepage. The page lists all relevant information about the current user, including their registered details and their User ID.



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.

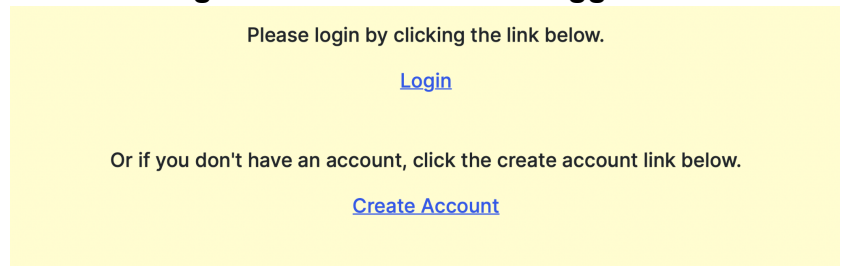


we can now log in as “asa” after a successful account creation

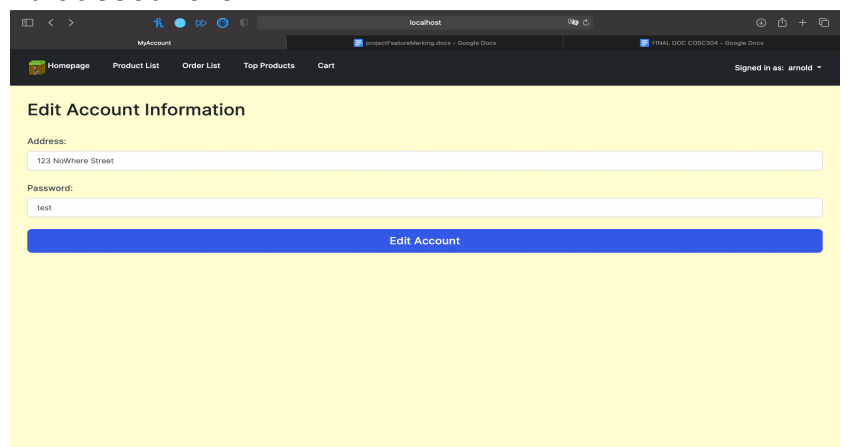


Another feature is users can edit their account’s address and password. Beforehand, users have to log in first and then be able to update their address and password. If users leave either the password field or address field empty, it will show an error message and a link to go back to filling up the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

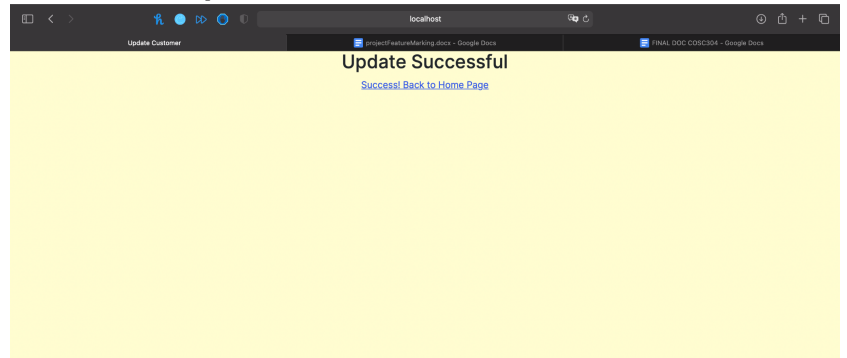
Error message when users are not logged in



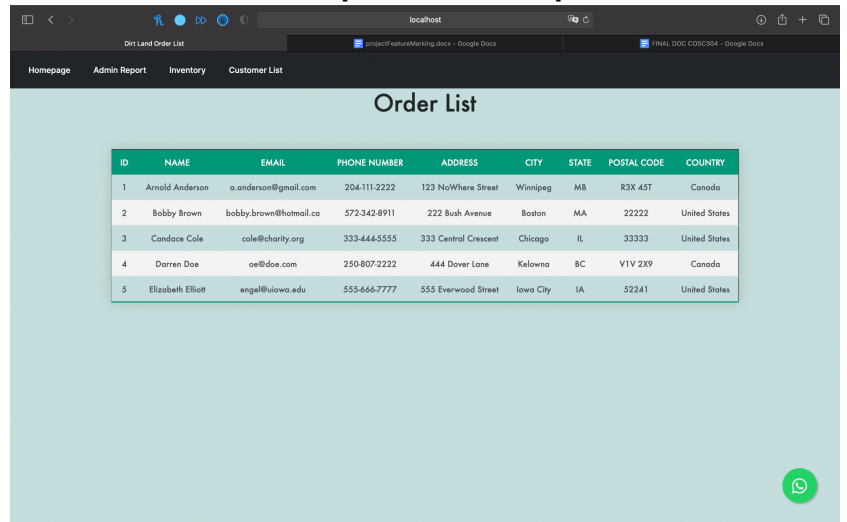
Edit account form



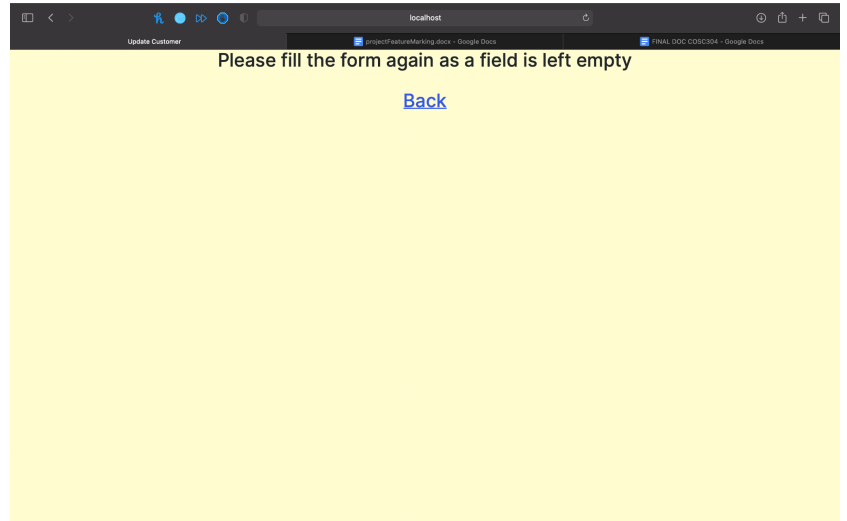
Successful update account



Arnold's address and password is updated



Error when a field left empty in edit account form

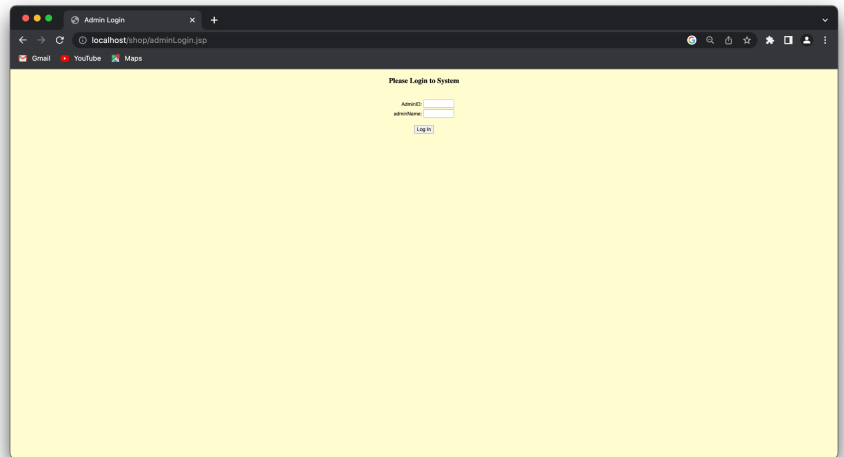


Admin Experience

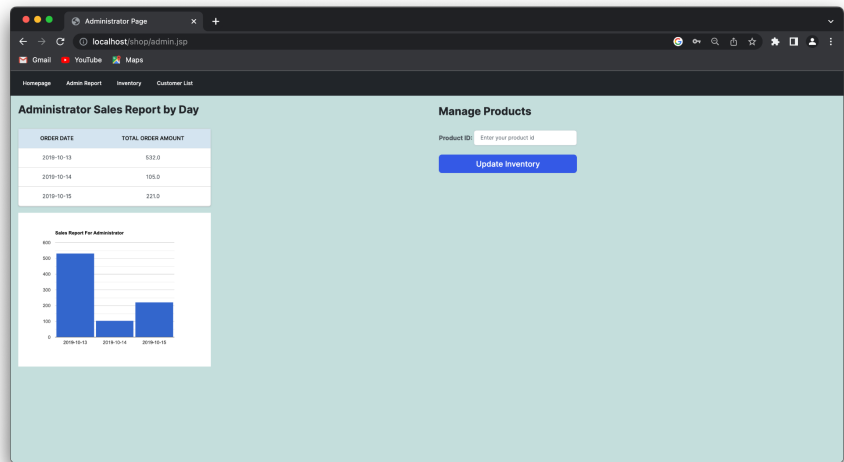
Description

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.

Screenshots



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.



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.

[← Back to Admin](#)

Add Product Form

Product Name

Price(\$)

Image URL

Enter your product photo path located under the program folder



Product Description

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.

[← 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

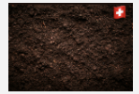
[Update Product](#)

[Delete Product](#)

[Add To Cart](#)

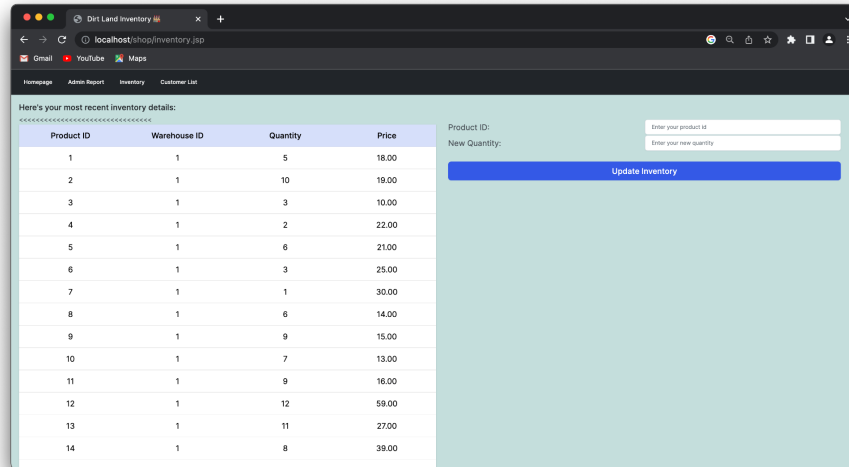
[Switzerland Loamy Soils](#)

[Loamy Soils](#)



\$420.

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	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.

