

# CPSC 471 Final Report

Zhijie Xia, Yuan Liu, Zixing Wei, G-69

April 15, 2022

**Abstract:**

“YourStore” is a non-profit online shopping platform. Aside from its non-profit nature, its functionality is very similar to a retailer’s online shopping website, for example, Best Buy and its bestbuy.ca. It provides small stores a website application that is easy to configure and maintain. The store owners will be given the permission to list other products, change the inventory, and track all the placed orders. All end users’ data (products, orders, inventories) will be stored in the database that can be accessed and modified when needed. The project’s core concept is providing an opportunity to store owners to sell their products online, which is realized by a series of core functions, such as customers’ order placement, local stores’ order acceptance and arrange delivery . Order status is also updated at different stages of the order and tracked by all end-users. Our project has similar functionalities to other commercial online shopping services. It facilitates a complete process of shopping order, realized by many core functions, such as customers’ order placement, sellers’ order acceptance and shipment. Order status is also updated at different stages of the order and tracked by all end-users. All CRUD (create, read, update and delete) functions can be realized via Postman, and our mobile-friendly web app can also visualize the entire user-flow from registration to order complete. “YourStore” is made with React framework, Redux, Node.js, MongoDB, Express. With Node.js MongoDB, and Express, we were able to develop back-end API in javascript language to implement all necessary CRUD functions, as well as connect our back-end API to a mobile-friendly front-end web app, which is developed with a combination of React, Redux, Bootstrap. All API endpoints are properly connected to our database.

## **Introduction:**

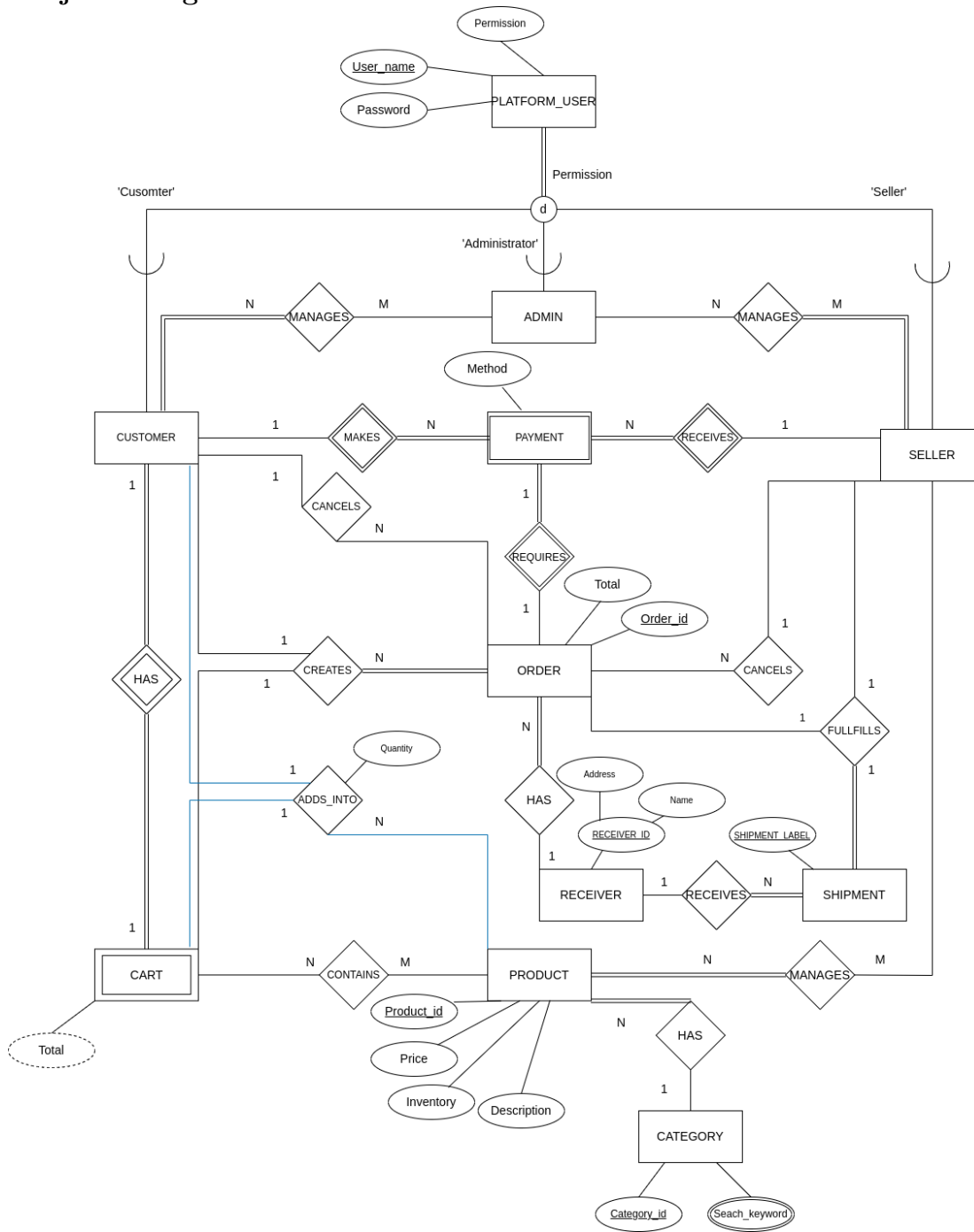
Since the prolonged pandemic has forced people to increasingly move their works and life online, many small sized local stores are suffering a plummeting in the number of in store shoppers. Thus, they desire to seize the opportunity to develop online businesses like other large-chain retail stores. This problem is partially solved by online workshops like Amazon, Ebay, and StockX. Their business model allows business owners to sell other products on their website by charging a substantial percentage of commission. Since the pandemic has lasted for a long time and there is no sign of an end at present, many local small-sized store owners argue the current business model that they build on the online platforms becomes less economically viable and not commercially sustainable for them when a considerable part of their revenue is being taken by the platform provider.

## **Our System:**

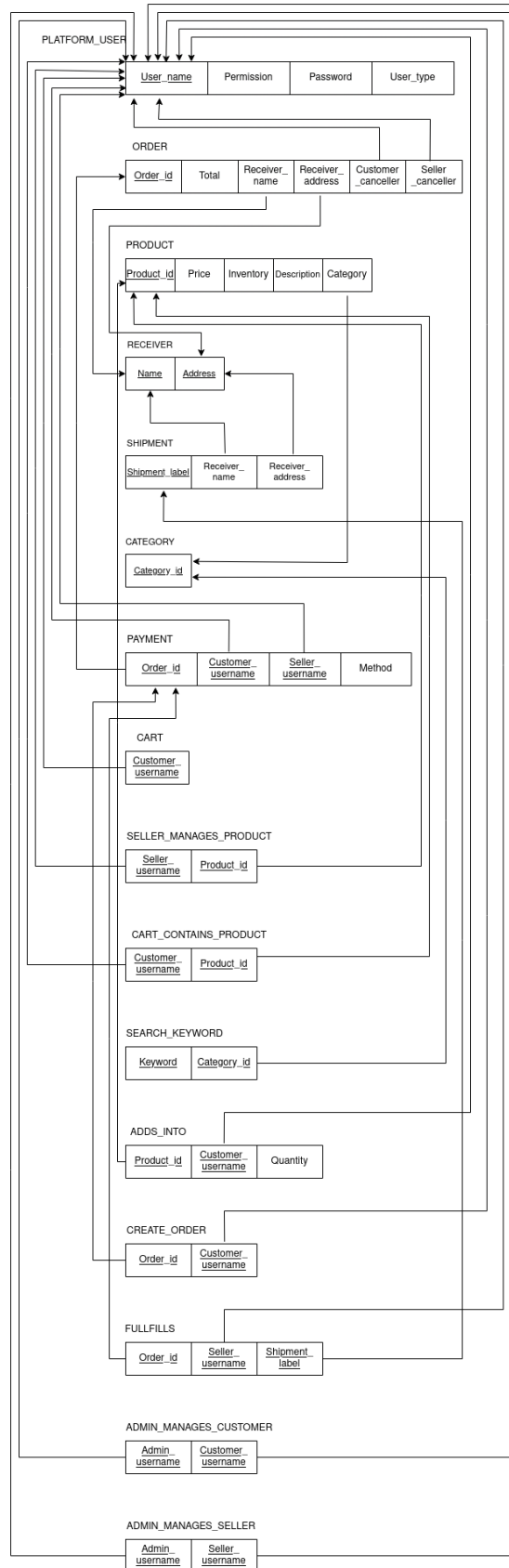
"YourStore" is a non-profit online shopping platform. Aside from its non-profit nature, its functionality is very similar to a retailer's online shopping website, for example, Best Buy and its bestbuy.ca. It provides small stores a website application that is easy to configure and maintain. The store owners will be given the permission to list other products, change the inventory, and track all the placed orders. All end users, data (products, orders, inventories) will be stored in the database that can be accessed and modified when needed. The project's core concept is providing an opportunity to store owners to sell their products online, which is realized by a series of core functions, such as customers' order placement, local stores' order acceptance and arrange delivery . Order status is also updated at different stages of the order and tracked by all end-users.

**Project Design Description:**

Project Design EER:



Implementation RMD:



**Implementation DBMS:**

**Postman Docuementation:**

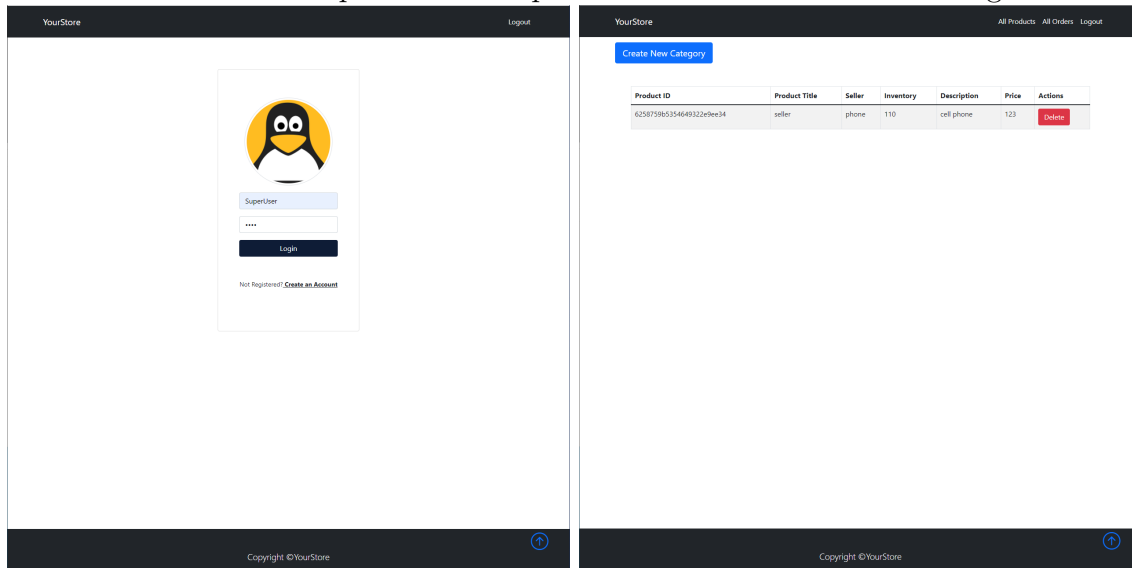
<https://documenter.getpostman.com/view/20517678/Uyr4LftC>



## User Guide:

### 1: Sign in as admin

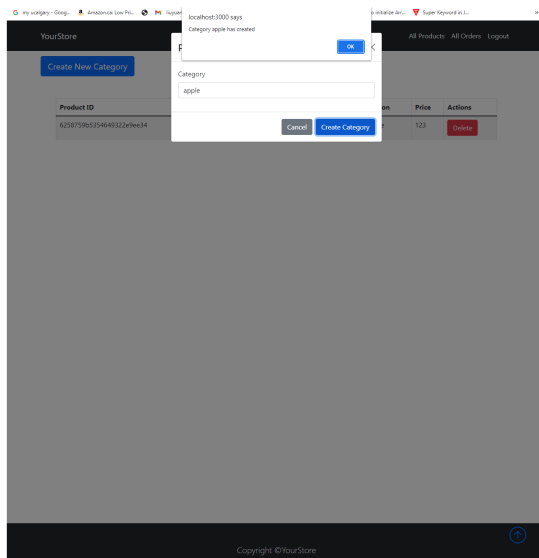
Fill in user name as “SuperUser” and password “sodu”. Then click “Login”.



### 2: Admin manage products

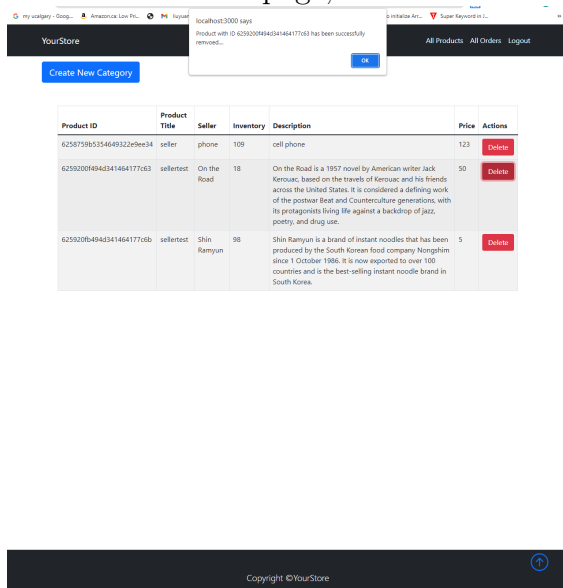
#### 2.1: Create a new category

You can access “All Products” page by automatically sign in as admin or click “All Products” at nav bar. In “All Products” page, admin can create a new category as below.



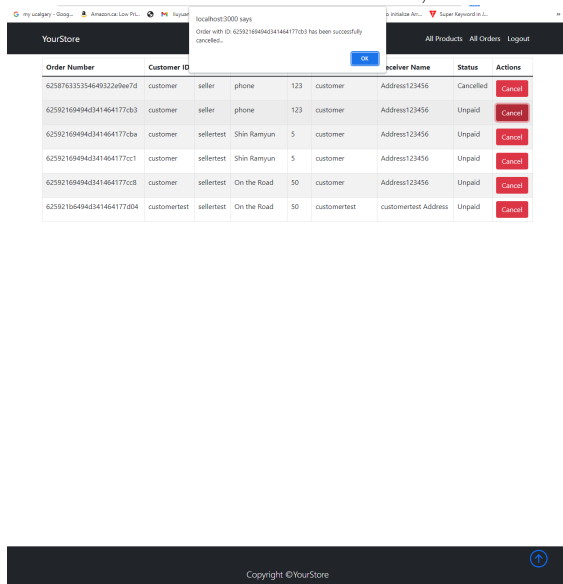
## 2.2: Delete products

In “All Products” page, admin can delete any existing products as below.



## 3: Admin manage orders

Click “All Orders” on nav bar, admin can delete any existing orders as below.



#### 4: Sign in as seller

Register a seller account and then sign in with the information that used for account registration.

YourStore

Logout

Sign Up

User Name

seller

Password

\*\*\*\*\*

User Type

Seller

Cancel

Sign Up

User Name

password


Login

Not Registered? [Create an Account](#)

Copyright ©YourStore

YourStore

Logout



seller

\*\*\*\*\*

Login

Not Registered? [Create an Account](#)

Copyright ©YourStore

YourStore

My Products

My Orders

Logout

Add New Product

Product ID	Product Title	Inventory	Description	Price	Actions
6258799b354840322e9ee34	phone	109	cell phone	123	<a href="#">Update</a> <a href="#">Delete</a>

Copyright ©YourStore

## 5: Seller manage products

You can access “My Products” page by automatically sign in as seller or click “My Products” at nav bar. In “My Products” page, seller can create a new product as below by clicking ”Add New Product”.

### 5.1: Create a new product

Filled in all the blanked fields, and click ”Create Product” to actually create the product.

Product has been successfully created.

Product Title: Huawei P40 Pro

Product Price: 1000

Inventory: 50

Category: cell phone

Search Tags: phone Huawei

Product Description: With 50 MP ultra vision camera, HUAWEI P40 Pro 5G is capable of taking shots with super clarity and rich details day and night.

Buttons: Cancel, Create Product

### 5.2: Update/Delete products

You can choose to update or delete product by click corresponding buttons.

Product with ID 6259289b494341464177563 has been successfully removed.

Product ID	Product Title	Inventory	Description	Price	Actions
6258759b5354649322efee34	phone	109	cell phone	123	<a href="#">Update</a> <a href="#">Delete</a>
6259289b494341464177563	Huawei P40 Pro	50	With 50 MP Ultra Vision Camera, HUAWEI P40 Pro 5G is capable of taking shots with super clarity and rich details day and night.	1000	<a href="#">Update</a> <a href="#">Delete</a>

## 6: Seller manage orders

Click “My Orders” on nav bar, seller can update/delete any existing orders as below. Note that you only need to fill in the fields that need to be updated.

The screenshot shows a web application interface with a dark header and a light gray background. The header includes the text "YourStore" on the left and "My Products My Orders Logout" on the right. A blue button labeled "Add New Product" is in the top left. A table with one row is visible, showing a "Product ID" of "62587595635464932269ee34". A modal window titled "Update Product Details" is open in the center. It contains a close button (X) and a note: "If you do not want to update a field, leave it blank." The form fields are: "Product Title" (Huawei P40 Pro), "Product Price" (1200), "Inventory" (20), "Category" (cell phone), and "Search Tags" (Huawei, Huawei P40 Pro, Phone). The "Product Description" field is a text area containing the text: "With 50 MP ultra vision camera, Huawei P40 Pro is capable of taking shots with super clarity and rich detail, day and night." At the bottom of the modal are "Cancel" and "Save Product" buttons. In the background, an "Actions" section with "Update" and "Delete" buttons is partially visible. The footer of the application shows "Copyright © YourStore" and a circular icon with a plus sign.

Product ID

62587595635464932269ee34

Add New Product

My Products My Orders Logout

Update Product Details

If you do not want to update a field, leave it blank.

Product Title

Huawei P40 Pro

Product Price

1200

Inventory

20

Category

cell phone

Search Tags

Huawei, Huawei P40 Pro, Phone

Product Description

With 50 MP ultra vision camera, Huawei P40 Pro is capable of taking shots with super clarity and rich detail, day and night.

Cancel Save Product

Actions

Update Delete

Copyright © YourStore

## 7: Sign in as customer

The screenshots illustrate the user interface for signing in as a customer in the 'YourStore' application.

**Top Left Screenshot: Sign Up Modal**

This modal is titled "Sign Up" and contains the following fields and elements:

- User Name:** A text input field with the value "customer".
- Password:** A password input field with masked characters "\*\*\*\*\*".
- User Type:** A dropdown menu with "Customer" selected.
- Buttons:** "Cancel" and "Sign Up".

**Top Right Screenshot: Login Form**

This form is titled "Login" and features a penguin logo at the top. It includes the following elements:

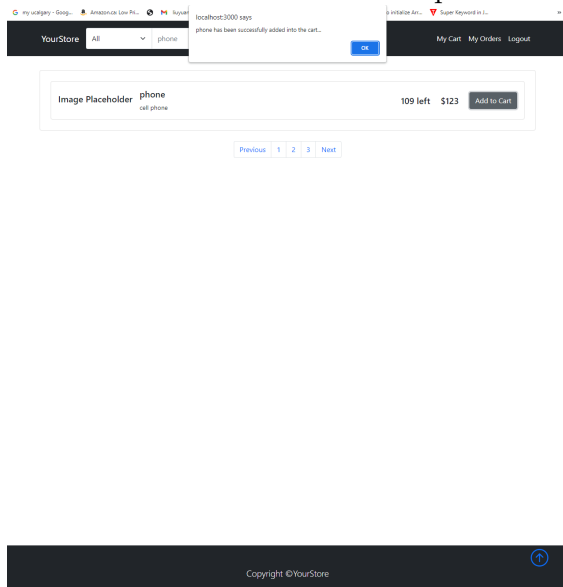
- User Name:** A text input field with the value "customer".
- Password:** A password input field with masked characters "\*\*\*\*\*".
- Buttons:** "Login" and "Create an Account".

**Bottom Screenshot: Main Shopping Interface**

This is the main shopping interface, titled "Happy Shopping at YourStore". It includes a search bar with a dropdown menu set to "All" and a "Search" button. The footer contains the text "Copyright ©YourStore" and a "Logout" link.

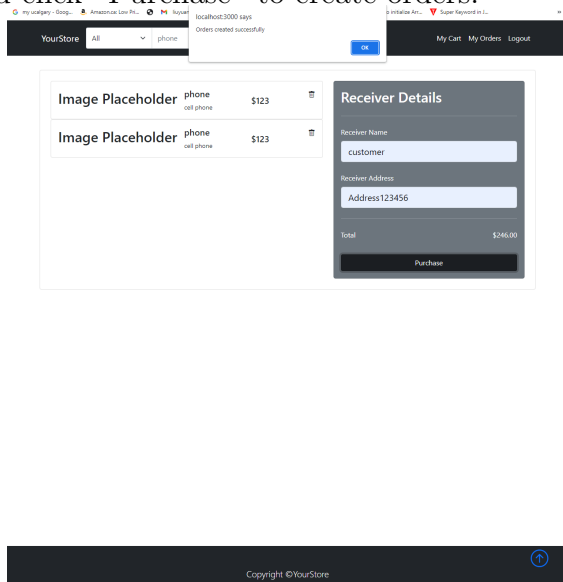
## 8: Customer add product to cart

After searching the products, the customer can choose his/her favorite product and click "Add To Cart" button to add the product into the cart.



## 9: Customer place order

The customer can navigate to his/her cart by clicking "My Cart" on the navigation bar. After examining the cart carefully, the customer can fill in the receiver details in the grey box and click "Purchase" to create orders.



## 10: Customer manage order

After click "My Orders" link in the navigation bar, the customer should be redirected to a page that he/she can manage his/her orders. The customer can choose to "Pay" for the order or "Cancel" the order by clicking the corresponding buttons.

