

Full Stack Project

You need to build a web site for managing a store.

The store manages data (MongoDB based) about customers, products and purchases.

The data base has 3 collections:

- Products
 - o ID (PK)
 - o Name
 - o Price
 - o Quantity
- Customers
 - o ID (PK)
 - o First Name
 - o Last Name
 - o City
- Purchases
 - o ID (PK)
 - o CustomerID (FK)
 - o ProductID (FK)
 - o Date

The data base has the following initial data:

- 2 products
 - 2 customers
- (The purchases collection is empty)

The web site has the following pages:

1. "Menu" Page

A page with 3 links :

"Products" – redirect to "Products" page

"Customers" - redirect to "Customers" page

"Purchases" - redirect to "Purchases" page

2. "Products" page

A page with the following regions:

- Region 1 – A region that presents the total amount of purchased products
- Region 2 – A region that presents all products data. Each product will be in a region with the following:

- Name – A link. Click on that link will redirect to “Edit Product” Page
- Price
- Quantity
- A region with all customers that bought the product. Each customer region presents:
 - The name of the customer - A link. Click on that link will redirect to “Edit Customer” Page
 - The purchased date
 - A button called “Add”. Click on “Add” button will open a new region with a combobox with all products and a “Save” button. Click on save will add the new product to the customer. The purchased date will be pulled from the computer. This should also update the total purchased amount in Region1.

3. “Edit Product” Page

A page with 2 regions :

- Region 1 - a form for updating or deleting selected product data. Deleting a product will also remove all related data from the “Purchased” Collection in the DB
- Region 2 – A list of all its customers. Each customer name is a link that redirect to “Edit Customer” page

4. “Edit Customer” Page

A page with 2 regions :

- Region 1 - a form for updating or deleting selected customer data. Deleting a customer will also remove all related data from the “Purchased” table in the DB
- Region 2 – A list of all his purchased products. Each Product name is a link that redirect to “Edit Product” page

5. “Customers” page

This page has 2 regions:

- Region 1 - table with. Each table row presents :
 - Customer Name (first column)
 - His list of products names (second column). Each product name is a link to the “Edit Product” Page.
 - His list of purchased dates
- Region 2 – A button called “Buy Product”. A click on that button will open a new region with a form with :
 - Combobox with all products
 - A “Buy” product. A click on the button will add the selected product to the “purchased” Collection with the current data

6. "Purchased" page

This page has :

- Combobox with all products
- Combobox with all customers
- Text box for a given date
- A "Search" button

A click on the search button will present a table for the selected customer (or All customers if none of them was selected), his purchased products of the selected type (or ALL products if none of them was selected) and the purchased dates

Extra

Add a "users" collection to the password with predefined users. Each user has username & password and a "role" (like "simple user" and "Admin")

Add a Login page to the web site and make it available only to registered users (use JWT). All registered users can see the products, customers & purchased pages. Only Admins can edit a product or customer