E-commerce Website

By:

* Moamen Mohamed
* Kirollos Isaac
* Karim Tarek Hegazy
* Abadeer Afif
* Peter George Samir
* Peter Magdy Kamal

This documentation will divided into four main parts, the first part talk about the idea in general. The second part talks mainly about the components used in our website, it goes into detail on how each component behaves based on the global state of the website. In the third section, we write about all the technologies we used to get this web application to work and lastly, in the final section of this presentation, we write on where to find the documentation of the libraries we used to make this website and also how to download and use them.

The Website main Idea

In old ages, people had to go themselves do their shopping in markets or malls and that was too time-wasting and too tiring. All the way, until Internet and Technology aroused and developed so that some people decide to create E-commerce website to ease shopping online and from your home and your order is received on your door in very short time. Our project is to make a version of an E-commerce web application that contains various items and categories with the ability to create your own account with your own credentials and data. Our application has the full process of an E-commerce website, starting from the authentication step to viewing all items with the capability to filter them according to your preference of categories through to choosing your item and viewing its details along with its price and if it suits you add it to your cart then you can safely checkout along with viewing your total amount of money to be paid upon receiving your order. All pages too can be managed through a navigation bar to direct you to your chosen page. Website is designed based on two scenarios, the first one is that you’re a seller (owner of a shop) and you want to sell your items on our web app and the second scenario is that you’re a normal user willing to buy or shop through the web app; each party has its own available functionalities and credentials that enables it to access certain pages and locks from it other pages. All that helps in empowering businesses and makes the process of trading much easier.

The Website pages and the function description of each page

1- Authentication Pages :

1- signUp.js:

Due to the nature of our application, there are two types of users, The ordinary user who can use the website to shop for items, and, The Owner user who can also use the website to shop for items, moreover, he can also use the website to put items for sale.

2- signIn.js:

This page is used for the user to login on the website, if they don’t already have an account, they can click the “Don’t have an account” option to create an account.

2- Items Pages :

1- addItem.js:

Take all the information needed to create an item and make sure that the user is authorised and has all the necessary privileges to add this item.

2- itemCard.js:

This component is responsible for the rendering of the item card in the home main page, when this card is clicked, the user is redirected to the Item component.

3- item.js:

This component is responsible for the rendering of the actual item, the user can add this item to his cart.

4- items.js:

This component is responsible for rendering a list of all the components coming from the database, users can also apply filters on this list to only see the components they are looking for.

3- Navigation Pages :

1- navBar.js:

This is the base navbar, this means that it is always rendered. It contains our logo on the far left and on the right it renders content based on the authorised state of the website, if there’s no authorised user, it will render a “sign in” button, if there is an authorised user, it will render a custom navbar for each.

2- UserNavbar.js:

This is a custom navbar, it shows 2 options, “Browse items” for users to see all the items available, “My Cart” for users to see all the items in their cart, where they can also check out and buy these items.

3- OwnerNavbar.js:

This is also a custom navbar, it shows 2 options, “Browse items” for users to see all the items available, “Add Item” where the user can provide sufficient information and add an item to this website, and lastly “My Cart” for users to see all the items in their cart, where they can also check out and buy these items.

4- Cart Pages:

1- CartItem.js:

This component is responsible for the rendering a single item from the cart, passed to it from the Cart component

2-Cart.js:

This component is responsible for rendering all the items in the user’s cart, and calculating their total. It also gives the user the possibility to check out and buy these items.

The used tools and framework

1-React.js:

React.js is an open-source JavaScript library that is used for building user interfaces specifically for single-page applications. It’s used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components. React also allows developers to create large web applications that can change data, without reloading the page, because it utilizes its **AJAX** features

2-React Router:

React Router is used to navigate between components via the navbar, or used to redirect if they are not authorised to access a view, or if they have logged in or out of the system.

3-Redux:

Redux is a design pattern used to make the website have one single point of data, which feeds all of the components.Our E-commerce website, has two main objects in the Redux store, the authorised user and the items coming from the database.

4-React-icons:

This library is used for the next and previous items in the shopping cart component.

5-Backend:

Nodejs

Reference for your Libraries

1-ReactJS: <https://reactjs.org/docs/create-a-new-react-app.html>

2-React Router:

<https://www.npmjs.com/package/react-router-dom>

3-Redux:

<https://www.npmjs.com/package/redux>

4-React-icons:

<https://www.npmjs.com/package/react-icons>