

“E-COMMERCE WEBSITE USING REACT.JS”



WEB TECHNOLOGY

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APRIL, 2022

DECLARATION

I hereby declare that project report entitled “E-COMMERCE WEBSITE IMPLEMENTED USING JAVASCRIPT / HTML / CSS / REACT.JS “ submitted by us (**Sristi Mitra (2K19/CO/389), Vineet (2K19/CO/427), Zishnendu Sarker (2K19/CO/450) & Ayush Karn 2K19/CO/454**) to Delhi Technological University (DTU), Delhi is a record of original work done under the guidance of **Mr. Vinay Dubey** for the course of Web Technology. All the codes and implementations are completely written by me.

CETIFICATE

This is to certify that Sristi Mitra, Vineet, Zishnendu Sarker & Ayush Karn of Computer Engineering Department (COE) has successfully completed the project work entitled “E-COMMERCE WEBSITE IMPLEMENTED USING JAVASCRIPT / HTML / CSS / REACT.JS” on Web Technology for Seventh Semester.

ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude to my teacher Mr. Vinay Dubey as well as our college (Delhi Technological University, Delhi) which gave me the golden opportunity to do this wonderful project on the topic “E-COMMERCE WEBSITE IMPLEMENTED USING JAVASCRIPT / HTML / CSS / REACT.JS”, which also helped me in doing a lot of Research and I came to know about so many new things I am really thankful to them.

ABSTRACT

E-commerce (electronic commerce) is the activity of electronically buying or selling of products on online services or over the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. E-commerce is in turn driven by the technological advances of the semiconductor industry, and is the largest sector of the electronics industry. In this project I have made a website using React.js Node.js and JavaScript that works like a E-Commerce site such as Amazon, Flipkart, WalMart, etc. The functionalities that I have provided are listed below:

- Sign Up
- Log In and Log Out
- Product Component
- Add to Basket
- Remove from Basket
- Calculating the total amount
- Interactive Interface

TABLE OF CONTENT

CHAPTER 1: Introduction to My Work

Chapter 1.1: Problem Statement

Chapter 1.2: Brief Intro of all the API's and components used

Chapter 1.3: Goal of the Project

Chapter 2: Technical Documentation and Results

Chapter 3: Conclusion and References

Chapter1 Introduction to My Work

1.1Problem Statement

As we are in 21st century now and everything is being digitalized. From taking classes, making notes to banking transactions as well as shopping. In this project I have prepared a online E-Commerce website with an aim to digitalize buying and selling stuffs. Well, you'll say that there are already well established Online E-Commerce giants like Amazon, Flipkart, Snapdeal, etc. in India then why even create a new one that would be same as them then I would like to tell you that I am not actually from India, I am from Nepal

and there is not any well-established E-Commerce website in Nepal. There are just few and they are not even any good. With this project I have taken a foot ahead in the direction to make a E-Commerce website that can be the next big thing in the Online marketplace for my country. Not only this I along with few of my friends have actually started a E-Commerce site in my city but that is built upon php and I actually want to make a transition towards React.js / Node.js to make it more responsive and have a high usage and easy maintainability and handling of the site.

Chapter 1.2

Brief Intro of all the API's and components used

HTML5:

Hypertext Markup Language is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript

CSS3

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

JavaScript

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMA Script specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions

React.js

React is an open-source, front end, JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. I have used react.js for writing my program. In react we have to write code in JSX format and later it gets converted to respective JavaScript by Babel Compiler

Node.js

Node.js is an open-source, cross-platform, back-end, JavaScript runtime environment that executes JavaScript code outside a web browser. I have used node.js for creating a runtime environment for my project

FireBase

Firebase is a platform developed by Google for creating mobile and web applications. It was originally an independent company founded in 2011. In 2014, Google acquired the platform and it is now their flagship offering for app development. I have used Firebase in this project for hosting my website and I am planning to use the database feature of Firebase in future for maintaining the database for my app

Chapter 1.3:

Goal of the project:

Functionality That I have given in this E-Commerce Website:

- Sign Up
- Log In and Log Out
- Product Component
- Add to Basket
- Remove from Basket
- Calculating the total amount
- Interactive Interface

Final Aim:

- 1) To Develop Skills of Web Technology
- 2) Making an interactive Website

Chapter 2: Technical Documentation and Results

Components Created along with the code:

App.js

```
import React, { useEffect } from "react";
import "./App.css";
import Header from "./Header";
import Home from "./Home";
import { BrowserRouter as Router, Switch, Route } from "react-router-dom";
import Checkout from "./Checkout";
import Login from "./Login";
import { auth } from "./firebase";
import { useStateValue } from "./StateProvider";
import Payment from "./Payment";
import { loadStripe } from "@stripe/stripe-js";
import { Elements } from "@stripe/react-stripe-js";

const promise = loadStripe(
  "pk_test_51HW06KE8z01YKg7KJcB400StIjWW6chdQuDQRQKnScbTK0bBuPWDk1Sz
  nxG4TzYJ0NeWDIS6ck1PfcTWlGQ9sgvb00V4yqK9LK"
);

function App() {
  const [{}, dispatch] = useStateValue();

  useEffect(() => {
    auth.onAuthStateChanged((authUser) => {
      console.log("The User is>>>", authUser);
    });
  });
}
```

```
    if (authUser) {
      dispatch({
        type: "SET_USER",
        user: authUser,
      });
    } else {
      dispatch({
        type: "SET_USER",
        user: null,
      });
      //the user is logged out
    }
  });
}, []);
return (
  //BEM
  <Router>
    <div className="app">
      <Switch>
        <Route path="/login">
          <Login />
        </Route>
        <Route path="/checkout">
          <Header />
          <Checkout />
        </Route>
        <Route path="/payment">
          <Header />
          <Elements stripe={promise}>
            <Payment />
          </Elements>
        </Route>

        <Route path="/">
```

```

        <Header />
        <Home />
      </Route>
    </Switch>
  </div>
</Router>
);
}

export default App;

```

Checkout.js

```

import React from "react";
import "../Checkout.css";
import Subtotal from "../Subtotal";
import { useStateValue } from "../StateProvider";
import CheckoutProduct from "../imgs/CheckoutProduct";

function Checkout() {
  const [{ basket, user }, dispatch] = useStateValue();
  return (
    <div className="checkout">
      <div className="checkout__left">

        <div>
          <h3>Hello, {user?.email}</h3>
          <h2 className="checkout__title">Your Shopping Basket</h2>

          {basket.map((item) => (
            <CheckoutProduct
              id={item.id}
              title={item.title}

```

```

        image={item.image}
        price={item.price}

      />
    )})
  </div>
</div>
<div className="checkout__right">
  <Subtotal />
</div>
</div>
);
}

export default Checkout;

```

Checkout.css

```

.checkout__ad {
  width: 100%;
  margin-bottom: 10px;
}

.checkout {
  display: flex;
  padding: 20px;
  background-color: white;
  height: max-content;
}

.checkout__title {
  margin-right: 10px;
  padding: 10px;
}

```

```
border-bottom: 1px solid lightgray;
}
```

CheckoutProduct.js

```
import React from 'react';
import './CheckoutProduct.css'
import { useStateValue } from "../StateProvider";

function CheckoutProduct({ id, image, title, price, rating, hideButton }) {
  const [{ basket }, dispatch] = useStateValue();

  const removeFromBasket = () => {
    // remove the item from the basket
    dispatch({
      type: 'REMOVE_FROM_BASKET',
      id: id,
    })
  }

  return (
    <div className='checkoutProduct'>
      <img className='checkoutProduct__image' src={image} />

      <div className='checkoutProduct__info'>
        <p className='checkoutProduct__title'>{title}</p>
        <p className="checkoutProduct__price">
          <small>$</small>
          <strong>{price}</strong>
        </p>
        <div className="checkoutProduct__rating">
```

```

        {Array(rating)
          .fill()
          .map((_, i) => (
            <p>{i}</p>
          ))}
      </div>
      {!hideButton && (
        <button onClick={removeFromBasket}>Remove from B
asket</button>
      )}
    </div>
  </div>
)
}

export default CheckoutProduct

```

CheckoutProduct.css

```

.checkoutProduct {
  display: flex;
  margin-top: 20px;
  margin-bottom: 20px;
}

.checkoutProduct__info {
  padding-left: 20px;
}

.checkoutProduct__info > button {
  background: #f0c14b;
  border: 1px solid;
}

```



```
margin-top: 10px;
border-color: #a88734 #9c7e31 #846a29;
color: #111;
}

.checkoutProduct__image {
  object-fit: contain;
  width: 180px;
  height: 180px;
}

.checkoutProduct__rating {
  display: flex;
}

.checkoutProduct__title {
  font-size: 17px;
  font-weight: 800;
}
```

Firestore.js

```
import firebase from "firebase";
const firebaseConfig = {
  apiKey: "AIzaSyAWau4GDZv5XfWJXpS4xbPb0Tl0Qbw98DM",
  authDomain: "clone-a041a.firebaseio.com",
  databaseURL: "https://clone-a041a.firebaseio.com",
  projectId: "clone-a041a",
  storageBucket: "clone-a041a.appspot.com",
  messagingSenderId: "850126730270",
  appId: "1:850126730270:web:5243fd1d50e81b0d372a0f",
};
```

```
const firebaseApp = firebase.initializeApp(firebaseConfig);
const db = firebaseApp.firestore();
const auth = firebase.auth();
export { db, auth };
```

Header.js

```
import React from "react";
import "./Header.css";
import SearchIcon from "@material-ui/icons/Search";
import ShoppingBasketIcon from "@material-ui/icons/ShoppingBasket";
import { Link } from "react-router-dom";
import { useStateValue } from "../StateProvider";
import { auth } from "../firebase";

function Header() {
  const [{ basket, user }] = useStateValue();
  const handleAuthentication = () => {
    if (user) {
      auth.signOut();
    }
  };

  return (
    <div className="header">
      <Link to="/">
        
      </Link>
    </div>
  );
}
```

```

    />
  </Link>

  <div className="header__search">
    <input className="header__searchInput" type="text" />
    <SearchIcon className="header__searchIcon" />
  </div>

  <div className="header__nav">
    <Link to={!user && "/login"}>
      <div onClick={handleAuthentication} className="header__option">

        <span className="header__optionLineOne">
          Hello {!user ? "Guest" : user.email}
        </span>

        <span className="header__optionLineTwo">
          {user ? "Sign Out" : "Sign In"}
        </span>
      </div>
    </Link>

    <Link to="/orders">
      <div className="header__option">
        <span className="header__optionLineOne">Returns</span>
        <span className="header__optionLineTwo">& Orders</span>
      </div>
    </Link>

    <Link to="/YourPlus">
      <div className="header__option">
        <span className="header__optionLineOne">Your</span>
        <span className="header__optionLineTwo">Plus</span>
      </div>
    </Link>

```

```

    <Link to="./checkout">
      <div className="header__optionBasket">
        <ShoppingBasketIcon />
        <span className="header__optionLineTwo header__basketCou
nt">
          {basket?.length}
        </span>
      </div>
    </Link>
  </div>
</div>
);
}

export default Header;

```

Header.css

```

.home {
  display: flex;
  justify-content: center;
  margin-left: auto;
  margin-right: auto;
  max-width: 1500px;
}

.home__row {
  display: flex;
  z-index: 1;
  margin-left: 5px;
  margin-right: 5px;
}

```

```
.home__image {
  width: 100%;
  z-index: -1;
  margin-bottom: -150px;
  mask-image: linear-
gradient(to bottom, rgba(0, 0, 0, 1), rgba(0, 0, 0, 0));
}
```

Home.js

```
import React from "react";
import "./Home.css";
import Product from "./Product";

function Home() {
  return (
    <div className="home">
      <div className="home__container">
        
        <div className="home__row">
          <Product
            id="11111"
            title="
```

```
        LG Ultragear 27-  
        inch IPS FHD, , HDR 10, Gaming Monitor with Display Port, Pivot Sta  
        nd, 144Hz, 1ms - 27GL650Fk"  
        price={144.99}  
        image="https://images-na.ssl-images-  
amazon.com/images/I/812wPJneMKL._SL1500_.jpg"  
        rating={4}  
    />  
    <Product  
        id="22222"  
        title="MSI Optix MAG241C 23.6 inch Full HD Curved Gaming  
        Monitor, 144hz Refresh Rate"  
        price={199.99}  
        rating={5}  
        image="https://images-na.ssl-images-  
amazon.com/images/I/51sp9mu5FzL._SL1024_.jpg"  
    />  
</div>  
  
    <div className="home__row">  
        <Product  
            id="12333"  
            title="Think Like a Monk"  
            //price="9.99"  
            image="https://images-na.ssl-images-  
amazon.com/images/I/41GmSlYkjnl._SY445_QL70_ML2_.jpg"  
            rating={5}  
        />  
        <Product  
            id="12345"  
            title="Crushing It!!!! by Gary Vee"  
            price={29.99}  
            rating={4}
```

```
        image="https://images-na.ssl-images-
amazon.com/images/I/51+lcnIDQfL.jpg"
    />
</div>

<div className="home__row">
    <Product
        id="12344"
        title="The Lean Startup"
        price={29.99}
        image="https://images-na.ssl-images-
amazon.com/images/I/51Zymoq7UnL._AC_SY400_.jpg"
        rating={3}
    />
    <Product
        id="123458"
        title="GTX 2070 Ultimate Edition"
        price={999.99}
        rating={4}
        image="https://www.nvidia.com/content/dam/en-
zz/Solutions/geforce/geforce-rtx-turing/tech-shots/geforce-rtx-2070-
web-tech-shot-630-u@2x.png"
    />
</div>

<div className="home__row">
    <Product
        id="123460"
        title="Skytech Archangel Gaming Computer PC Desktop -
RYZEN 5 2600 6-
Core 3.4 GHz, GTX 1660 6G, 500GB SSD, 16GB DDR4 RAM "
        price={899}
        rating={5}
        image="https://images-na.ssl-images-
amazon.com/images/I/71XvDKfQxjL._AC_SL1500_.jpg"
```

```
    />
    <Product
      id="1234561"
      title="SkyTech Blaze II Gaming Computer PC Desktop"
      price={699}
      rating={5}
      image="https://m.media-
amazon.com/images/I/81PeBrTfhnL._AC_UL480_FMwebp_QL65_.jpg"
    />
    <Product
      id="1231269"
      title="Thermaltake LCGS Shadow III AIO Liquid Cooled CPU
Gaming PC (AMD RYZEN 5 3600 6-core, ToughRam DDR"
      price={1299}
      rating={4}
      image="https://m.media-
amazon.com/images/I/919vEB1rZnL._AC_UY327_FMwebp_QL65_.jpg"
    />
    <Product
      id="1234654"
      title="Razer Blade 15 Base Gaming Laptop 2020: Intel Cor
e i7-10750H 6-Core, NVIDIA GeForce GTX 1660 Ti, "
      price={1599}
      rating={4}
      image="https://m.media-
amazon.com/images/I/71r5254QPZL._AC_UY327_FMwebp_QL65_.jpg"
    />

  </div>

  <div className="home__row">
    <Product
      id="4903850"
```



```
        title="Samsung LC12782136213 49' Curved LED Gaming Monit
or"

        price={199.99}
        rating={4}
        image="https://images.samsung.com/is/image/samsung/nz-
c24rg5-lc24rg50fqexxy-frontblack-174542981?$PD_GALLERY_L_JPG$"
    />
    <Product
        id="123456"
        title="AOC Curved LED Gaming Monitor"
        price={149.99}
        rating={3}
        image="https://images-na.ssl-images-
amazon.com/images/I/61cdbJ5%2BV5L._AC_SX466_.jpg"
    />
    <Product
        id="123457"
        title="GTX 2080 Ti Ultimate Edition"
        price={1299.99}
        rating={4}
        image="https://images-na.ssl-images-
amazon.com/images/I/514km%2BZccrL._AC_SL1000_.jpg"
    />
</div>

<div className="home__row">
    <Product
        id="123459"
        title="LG Smart TV 49 Super Ultra High Defination SD HD
Super Reaility and Everything Included' "
        price={699.99}
        rating={4}
        image="https://images-na.ssl-images-
amazon.com/images/I/81rnw0hav2L._AC_SL1500_.jpg"
```

```
    />
  </div>
  <div className="home__row">
    <Product
      id="1234569"
      title="Let Us C by Yashwant Katekar "
      price={10}
      rating={4}
      image="https://images-na.ssl-images-
amazon.com/images/I/511150auWmL.jpg"
    />
    <Product
      id="1234569"
      title="Subtle Art of Not Giving a F**K"
      price={15}
      rating={5}
      image="https://images-na.ssl-images-
amazon.com/images/I/71t4GuxLCuL.jpg"
    />
    <Product
      id="1234569"
      title="Game of Thrones by George R R Martin Full Set of
5 Books"
      price={80}
      rating={5}
      image="https://cdn.shopify.com/s/files/1/0064/5342/8271/
products/RHGM5-game-thrones-armor-front-1200.jpg?v=1550953191"
    />
    <Product
      id="1234569"
      title="War and Peace by Leo Tolstoy"
      price={10}
      rating={4}
```

```

        image="https://m.media-
amazon.com/images/I/51pLmsCHVEL.jpg"
    />

    </div>
</div>
</div>
);
}

export default Home;

```

Home.css

```

.home {
  display: flex;
  justify-content: center;
  margin-left: auto;
  margin-right: auto;
  max-width: 1500px;
}

.home__row {
  display: flex;
  z-index: 1;
  margin-left: 5px;
  margin-right: 5px;
}

.home__image {
  width: 100%;
  z-index: -1;
}

```

```
margin-bottom: -150px;
mask-image: linear-
gradient(to bottom, rgba(0, 0, 0, 1), rgba(0, 0, 0, 0));
}
```

Index.js

```
import React from "react";
import ReactDOM from "react-dom";
import "./index.css";
import App from "./App";
import * as serviceWorker from "./serviceWorker";
import { StateProvider } from "./StateProvider";
import reducer, { initialState } from "./reducer";

ReactDOM.render(
  <React.StrictMode>
    <StateProvider initialState={initialState} reducer={reducer}>
      <App />
    </StateProvider>
  </React.StrictMode>,
  document.getElementById("root")
);

serviceWorker.unregister();
```

Index.css

```
* {
  margin: 0;
}
```

```
body {
  background-color: rgb(234, 237, 237);
  margin: 0;
  font-family: -apple-
system, BlinkMacSystemFont, "Segoe UI", "Roboto", "Oxygen",
  "Ubuntu", "Cantarell", "Fira Sans", "Droid Sans", "Helvetica Neu
e",
  sans-serif;
  -webkit-font-smoothing: antialiased;
  -moz-osx-font-smoothing: grayscale;
}

code {
  font-family: source-code-
pro, Menlo, Monaco, Consolas, "Courier New",
  monospace;
}
```

Login.js

```
import { auth } from "../firebase";
import React, { useState } from "react";
import { Link, useHistory } from "react-router-dom";
import "../Login.css";

function Login() {
  const history = useHistory();
  const [email, setEmail] = useState("");
  const [password, setPassword] = useState("");
  const signIn = (e) => {
    e.preventDefault();
```

```

    auth
      .signInWithEmailAndPassword(email, password)
      .then((auth) => {
        history.push("/");
      })
      .catch((error) => alert(error.message));
};

const register = (e) => {
  e.preventDefault();
  auth
    .createUserWithEmailAndPassword(email, password)
    .then((auth) => {
      console.log(auth);
      if (auth) {
        history.push("/");
      }
    })
    .catch((error) => alert(error.message));
};

return (
  <div className="login">
    <Link to="/">
      
    </Link>
    <div className="login__container">
      <h1>Sign-In</h1>
      <form>
        <h5>E-mail</h5>

```

```

    <input
      type="text"
      value={email}
      onChange={(e) => setEmail(e.target.value)}
    />
    <h5>Password</h5>
    <input
      type="password"
      value={password}
      onChange={(e) => setPassword(e.target.value)}
    />
    <button
      type="submit"
      onClick={signIn}
      className="login__signInButton"
    >
      Sign-In
    </button>
  </form>
  <p>
    By signing in you agree to the my terms and condition and
    that is for
    cookies and bookmarks and everything that you posses. We w
    ill take
    every deatil from you
  </p>
  <button onClick={register} className="login__registerButton"
  >
    Create Account
  </button>
</div>
</div>
);
}

```

```
export default Login;
```

Login.css

```
.login__logo {  
  margin-top: 20px;  
  margin-bottom: 20px;  
  object-fit: contain;  
  width: 100px;  
  margin-right: auto;  
  margin-left: auto;  
}  
.login {  
  display: flex;  
  background-color: white;  
  flex-direction: column;  
  align-items: center;  
  height: 100vh;  
}  
.login__container {  
  width: 300px;  
  height: fit-content;  
  display: flex;  
  flex-direction: column;  
  border-radius: 5px;  
  border: 1px solid lightgray;  
  padding: 20px;  
}  
.login__container > h1 {  
  font-weight: 500;
```



```
margin-bottom: 20px;
}
.login__container > form > h5 {
margin-bottom: 5px;
}
.login__container > form > input {
height: 30px;
margin-bottom: 10px;
background-color: white;
width: 98%;
}
.login__container > p {
margin-top: 15px;
font-size: 12px;
}
.login__signInButton {
background: #f0c14b;
border: 1px solid;
border-radius: 2px;
width: 100%;
height: 30px;
margin-top: 10px;
border-color: #a88734 #9c7e31 #846a29;
}
.login__registerButton {
border-radius: 2px;
width: 100%;
height: 30px;
border: 1px solid;
margin-top: 10px;
border-color: darkgrey;
}
```

Order.js

```

import React from 'react'
import './Order.css'
import moment from "moment";
import CheckoutProduct from "./CheckoutProduct";
import CurrencyFormat from "react-currency-format";

function Order({ order }) {
  return (
    <div className='order'>
      <h2>Order</h2>
      <p>{moment.unix(order.data.created).format("MMMM Do YYYY
, h:mm")}</p>
      <p className="order__id">
        <small>{order.id}</small>
      </p>
      {order.data.basket?.map(item => (
        <CheckoutProduct
          id={item.id}
          title={item.title}
          image={item.image}
          price={item.price}
          rating={item.rating}
          hideButton
        />
      ))}
      <CurrencyFormat
        renderText={(value) => (
          <h3 className="order__total">Order Total: {value
}</h3>
        )}
        decimalScale={2}
        value={order.data.amount / 100}
        displayType={"text"}
        thousandSeparator={true}

```

```

        prefix={"$"}
      />
    </div>
  )
}

export default Order

```

Order.css

```

.order {
  padding: 40px;
  margin: 20px 0;
  border: 1px solid lightgray;
  background-color: white;
  position: relative;
}

.order__id {
  position: absolute;
  top: 40px;
  right: 20px;
}

.order__total {
  font-weight: 500;
  text-align: right;
}

```

Product.js

```

import React from "react";
import "../Product.css";

```

```
import { useStateValue } from "../StateProvider";

function Product({ id, title, image, price, rating }) {
  const [{ basket }, dispatch] = useStateValue();

  const addtoBasket = () => {
    //dispatch item into data layer
    dispatch({
      type: "ADD_TO_BASKET",
      item: {
        id: id,
        title: title,
        image: image,
        price: price,
        rating: rating,
      },
    });
  };

  return (
    <div className="product">
      <div className="product__info">
        <p>{title}</p>
        <p className="product__price">
          <small>${</small>
          <strong>{price}</strong>
        </p>
        <div className="product__rating">
          {Array(rating)
            .fill()
            .map((_, i) => (
              <p>☆</p>
            ))}
        </div>
      </div>
    </div>
  );
}
```

```

    </div>

    <img src={image} alt="" />
    <button className="button" onClick={addToBasket}>Add to Basket
</button>
  </div>
);
}

export default Product;

```

Product.css

```

.product {
  display: flex;
  flex-direction: column;
  align-items: center;
  justify-content: flex-end;
  margin: 10px;
  padding: 20px;
  width: 100%;
  min-width: 100px;
  max-height: 400px;
  background-color: white;
  z-index: 1;
}

.product:hover {
  background-color: lightgrey;
  transform: scale(1.05);
  transition-duration: 0.5s;
}

```

```
.product > img {
  max-height: 200px;
  width: 100%;
  height: 200px;
  object-fit: contain;
  margin-bottom: 15px;
}

.product__info {
  height: 100px;
  width: 100%;
  margin-bottom: 15px;
}

.product__rating {
  display: flex;
}

.product__price {
  margin-top: 5px;
}

.product > button {
  background: #f0c14b;
  border: 1px solid;
  margin-top: 10px;
  border-color: #a88734 #9c7e31 #846a29;
  color: #111;
}
```

Products.js

```
import React from "react";
import "./Product.css";
import { useStateValue } from "./StateProvider";

function Product({ id, title, image, price, rating }) {
  const [{ basket }, dispatch] = useStateValue();

  const addToBasket = () => {
    //dispatch item into data layer
    dispatch({
      type: "ADD_TO_BASKET",
      item: {
        id: id,
        title: title,
        image: image,
        price: price,
        rating: rating,
      },
    });
  };

  return (
    <div className="product">
      <div className="product__info">
        <p>{title}</p>
        <p className="product__price">
          <small>$</small>
          <strong>{price}</strong>
        </p>
        <div className="product__rating">
          {Array(rating)
            .fill()
            .map((_, i) => (
              <p>☆</p>
            ))}
        </div>
      </div>
    </div>
  );
}
```

```

        )))
      </div>
    </div>

    <img src={image} alt="" />
    <button className="button" onClick={addToBasket}>Add to Basket
  </button>
  </div>
);
}

export default Product;

```

reducer.js

```

export const initialState = {
  basket: [],
  user: null,
};

//selector
export const getBasketTotal = (basket) =>
  basket?.reduce((amount, item) => item.price + amount, 0);

const reducer = (state, action) => {
  switch (action.type) {
    case "ADD_TO_BASKET":
      return {
        ...state,
        basket: [...state.basket, action.item],
      };
  }
};

```



```

    case "REMOVE_FROM_BASKET":
      const index = state.basket.findIndex(
        (basketItem) => basketItem.id === action.id
      );
      let newBasket = [...state.basket];
      if (index >= 0) {
        newBasket.splice(index, 1);
      } else {
        console.warn(
          `Cant remove product(id:${action.id}) as its not in the ba
asket!`
        );
      }
      return {
        ...state,
        basket: newBasket,
      };
    case "SET_USER":
      return {
        ...state,
        user: action.user,
      };

    default:
      return state;
  }
};

export default reducer;

```

StateProvider.js

```

import React, { createContext, useReducer, useContext } from "react"
;

//Prepare Data-layer
export const StateContext = createContext();

//Wrap our app and provide the data-layer to every component
export const StateProvider = ({ reducer, initialState, children }) =
> (
  <StateContext.Provider value={useReducer(reducer, initialState)}>
    {children}
  </StateContext.Provider>
);

//Pull Info from data-layer
export const useStateValue = () => useContext(StateContext);

```

Subtotal.js

```

import React from "react";
import "./Subtotal.css";
import CurrencyFormat from "react-currency-format";
import { useStateValue } from "./StateProvider";
import { getBasketTotal } from "./reducer";
import { useHistory } from "react-router-dom";

function Subtotal() {
  const history = useHistory();
  const [{ basket }] = useStateValue();

  return (
    <div className="subtotal">
      <CurrencyFormat

```

```

    renderText={({value} => (
      <div>
        <p>
          Subtotal ({basket.length} items) :<strong>{value}</strong>
        </p>
        <small className="subtotal__gift">
          <input type="checkbox" />
          This Order contains a gift
        </small>
      </div>
    )})
    decimalScale={2}
    value={getBasketTotal(basket)}
    displayType={"text"}
    thousandSeparator={true}
    prefix={"$"}
  />

  <button onClick={(e) => history.push("/payment")}>
    Proceed to Checkout
  </button>
</div>
);
}

export default Subtotal;

```

Subtotal.css

```

.subtotal {
  display: flex;
  flex-direction: column;

```

```
justify-content: space-between;
width: 300px;
height: 100px;
padding: 20px;
background-color: #f3f3f3;
border: 1px solid #dddddd;
border-radius: 3px;
}

.subtotal__gift {
  display: flex;
  align-items: center;
}

.subtotal__gift > input {
  margin-right: 5px;
}

.subtotal > button {
  background-color: #f0c14b;
  width: 100%;
  height: 30px;
  border: 1px solid;
  margin-top: 10px;
  border-color: #a88734 #9c7e31 #846a29;
  color: #111;
}
```

***Note: All the codes couldn't be given in a word file. So, I have basically provided with the most important codes for my project here**

Chapter 3 Conclusion and References

From this project I would like to conclude that I have actually learnt a great deal about web development and a guy who was not at all interested in building web based application I have actually come to like it and I will be making a few more projects on the web development. Also not to forget having an E-Commerce website of your own business actually has so many advantages. Some of them are as follows:

- 1) Can Broaden Your Brand
- 2) Its More Convenient
- 3) Increase Your Reach
- 4) Gives You Marketing Opportunities
- 5) Scalable

The website that I created is hosted on the web address: <https://clone-a041a.web.app/> (you can ctrl+click to visit the site)

Credits:

- 1) <https://reactjs.org/tutorial/tutorial.html> (React Guide)
- 2) <https://www.w3schools.com/js/> (W3Schools)
- 3) <https://www.coursera.org/> (Coursera)
- 4) <https://www.youtube.com/user/TechGuyWeb> (Traversy Media)
- 5) https://www.youtube.com/channel/UClb90NQQcskPUGDI_XsQEz5Q (Dev. Ed)