

Challenges and Bugs

For homework 5, I built my site using just vanilla HTML and CSS as requested in the assignment, so then when our instructor advised us that we could use React for homework 6 if we desired, I decided for my learning purposes I wanted to build the site in React. I converted my site to React which overall wasn't too bad of a process, but definitely forced me to learn more about how the framework worked since I don't have much experience at all with it. I definitely had challenges throughout from trying for hours to figure out how to share data between components, figuring out I could use Redux and then realizing I shouldn't use maps or sets to directly mutate state, and then finally reverting to a pretty brute force method for changing product colors and sizes.

Even though I know my code has a long way to go, I am proud of how far I've already come in learning React and am excited to have peer reviews and to review my code with my TA to see how he would improve it, since he seems to have a lot more robust knowledge of the React framework. I struggled with the differences in data binding in React vs Angular as well since I come from a work background of almost exclusively using Angular, and also really enjoy but find it takes a paradigm shift to understand how React is a lot more moldable in terms of structure whereas Angular is geared toward enterprise organizations and has a lot of strict rules.

Most of the challenges here I overcame the old fashioned way us developers know - banging my head against the wall for hours, googling a lot, and frantically searching stack overflow. I find that learning by doing and just trying out a lot of different methods is definitely how concepts sink into my brain best, and just by trying and failing to implement certain features I started to get a more clear picture of how React works as a whole. I am excited to keep delving into React for my final project and might layer Ionic in there as well to continue exposing myself to new technologies, even when it is uncomfortable sometimes.

Programming Concepts

- Learned how to use React Router

```
import {
  BrowserRouter as Router,
  Switch,
  Route,
  Link
} from "react-router-dom";

function App() {
  return (
    <Router>
      <div className="App">
        <Menu></Menu>
      </div>
      <Switch>
```

```

    <Route path="/blueridge">
      <BlueRidge />
    </Route>
    <Route path="/products">
      <Products />
    </Route>
    <Route path="/details">
      <Details />
    </Route>
    <Route path="/cart">
      <Cart />
    </Route>
    <Route path="/blueridge">
      <BlueRidge />
    </Route>
    <Route path="/">
      <Home />
    </Route>
  </Switch>
</Router>
);
}

```

- Implemented a Redux store for the first time

```

import { configureStore } from '@reduxjs/toolkit'
import counterReducer from '../features/counterSlice'

export default configureStore({
  reducer: {
    counter: counterReducer
  }
})

```

- Learned more about props and state

```

const Card = (props) => {
  const dispatch = useDispatch();
  const color = props.color;
  const size = props.size;
  return (
    <div className="card-page">
      <div className="card">

```

```

    </img>
    <div className="rows">
      <div className="title-row"> <h2> The Lifejacket </h2> </div>
      <div className="red-row">
        <span className="color"> Color: {props.color}</span>

```

- Learn about conditional rendering in React

```

    {color === 'red' &&
      </img>
    }
    {color === 'blue' &&
      </img>
    }
    {color === 'green' &&
      </img>
    }

```

- Learned how to implement event handlers in React

```

<img onClick={() => dispatch(incrementByAmount({ quant, size, color }))} alt="add to
cart" src="Assets/add-button.png" className="add-button"></img>

```