

## Web Scripting 3

**Assignment:** 01 – Build a Shopping Spree App in React

**Course Value:** 10%

**Due Date:** To be finished before 4pm today \*\*\*

\*\*\* If you don't complete it on time, no worries, we will go over the solution at the start of the next class. To maximize your learning and understanding of React I do encourage you to try your best to complete the assignment before the deadline.

### Assignment Description:

Create an interactive Shopping Spree application using React.

### Teamwork:

You are permitted to work in groups of up to 3 students. This is optional, you are free to work on this assignment solo if you prefer.

### Instructions:

1. Create a new React application using Create React App
  - a. See this page for instructions on how to create a React app using Create React App
    - i. <https://reactjs.org/docs/create-a-new-react-app.html#create-react-app>
2. Create an application that meets the application specifications listed below
3. Once steps one and two have been completed, show your instructor your completed code
  - a. If you finish the assignment before the class ends for the day, you can show your code to your instructor in the Zoom classroom
  - b. If you finish after the end of the day's class, you can show your instructor during the next class's lab session

### Application Specifications

- Your application must meet all the specifications listed below in order to be considered complete

### App Component

- This is the main component for the application
- Inside this component create a variable called products
  - o This variable should be an array with the following values:
    - Camera, Shoes, Handbag, Smartphone, Sweater, Watch, Headphones, Book, Ring
    - If you do not want to create the variable manually, you can copy the code from the "product-array.js" file found in the "day-01" folder

## On Page Load:

- On initial page load the application should render the following:
  - o HEADER -> H1 -> contains the text "Shopping Spree"
  - o P -> Either of the two following strings should be displayed:
    - If the user has zero items in their cart, then display the text:
      - "Add Some Items"
    - If the user has one or more items in their cart, then display the text:
      - "You have [number of items in the cart] item(s) in your cart"
  - o Form
    - Label element properly connected to the select input via an "htmlFor" attribute with the text of "Products:"
      - Note: Use "htmlFor" instead of "for". This is because "for" is a JavaScript reserved word
    - Select input with option elements with values generated from the "products" array
    - Form submit button with the text of "Add Product"

## The Product List Render

- After the user has added at least one product to their cart, create the following output between the first paragraph and the form element:
  - DIV (class name of "cart-items") -> UL -> LI -> for each product in the cart

## The Form Submit Event Handler

- When the user submits the form, you should perform the following:
  - o Update the cart state variable to include the new item
- **Development Tips**
  - o To prevent the form submission from refreshing the page, pass in an event object into your submit event handler and use the "preventDefault()" method to prevent the form from refreshing the page.

```
- function addItemToCart(e){  
-   e.preventDefault();  
- }
```

- o To grab the value from the select element try the following:

```
- const item = e.target.elements.products.value;
```

- o Change the "products" part to the id value that you set on your select element
- o To update the cart, you will need to use React's "useState" hook
  - Remember, you should never update state directly. You should always update the state value using your setter function defined when you setup "useState"
  - Since you do not want to modify your cart array directly, try using the spread operator to add a new item to your cart. See the code below:

```
- setCart([...cart, item]);
```

**Other Hints:**

- Inside the “day-01” folder is a demo video of a complete version of this assignment. This video will give you an idea of how this application should run.
  - Look in the day-01 folder for the “a-01-demo.mov” file
- Don’t worry about matching the style of your application to the styles in the demo video. Feel free to add your own unique styles to this application
  - **Note:** You will probably need to change some of the default styles that the Create React App program creates

**Marking Criteria:**

This project will be marked out of 10 and will be marked based on the following criteria:

- |                                     |          |
|-------------------------------------|----------|
| 1) All Technical Specifications Met | 10 marks |
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**Total: 10 marks**