



Assignment 01

Instructions

Course Value: 10%

Due Date: See assignment due date in Learning Hub Activity.

Assignment Description:

Create an interactive Shopping Cart app 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:

Create a new React application, using Create React App, that represents a shopping cart.

It must meet the App Specifications listed below.

Submission Requirements:

- If completed as a team, add a contributors property to package.json, if solo, add and author property to package.json
- **Delete your node_modules folder (failure to do so will incur a 1 point penalty - no exceptions)**
- Zip up your project
- Upload to the Learning Hub Assignment 01 Folder

App Specifications:

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

App Component

This is the main (and only) component for the application

Inside this component create a variable called products to store at least 6 product names.

On initial page load the App component should render the following:

Header

- HEADER -> H1 -> contains the text "Shopping Cart"

Form

- Select input with options elements with values generated from a "products" array. (You can define the Array yourself)
 - Note: each option will need a key - you can use the index of the product
- 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
- Submit button with the text of "Add Product"

Cart List

After the user has added at least one product to their cart, create the following output after the form:

DIV (class name of "cart-items")

UL

LI -> Name of the cart item

Bonus Mark Available:

If the quantity is more than 1, conditionally output the quantity i.e. " x 2". Note that you will likely want to use 2 state hooks to accomplish this.

Cart Summary

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"

Form Submission Handling

Write a function that will get called when the user submits the form which performs the following:

- Prevent the default form submission behavior
 - `e.preventDefault();`
- Read the value of the selected option
 - `e.target.elements.products.value;`
- Add the product to the array of cart items that is stored in state.
 - **Remember: Do not modify state directly.**
Use the state setter function you got back from `useState()` and pass in a shallow copy of the previous state (hint: use the spread operator) with your new item appended. `setCart([...cart, item]);`
 - If you are going for the bonus point, the above will have extra steps:
 - Check if a cart item with that name already exists in the cart array,
 - if so, increment its quantity.
 - If not, construct an object with name and quantity properties and add it into the cart array.

Marking Criteria:

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

App loads and runs error free	2 marks
Initial render as specified above	2 marks
Can add item to cart, adjusting quantity when needed	2 marks
Cart Details display	2 marks
Cart Summary display	2 marks

Total: 10 marks

1 bonus mark available. See cart list requirements above.

Submissions

No submissions yet. Drag and drop to upload your assignment below.