

Question 2 Interactive React Component (25 pts)

You are starting work on a React based App for order management at the **Language Store**. The layout and styling has been done for you. As shown below:

Language Store Orders

Order Form
Item:
Quantity:

Order History
Number of Orders: 2
Most Recent Order
Item: Python
Quantity: 4

You are provided with the following files:

- An `index.html` This cannot be modified.
- A `index.js` file containing the main React App. This shows the *order* history on the right side of the App page. You are **only allowed to modify** this file in *two* locations as indicated in comments in the file.
- A `question2.css` CSS file that contains all the CSS for the site. This cannot be modified.

You will create/modify **two** files:

- A new file for the React component you are asked to create (shown on the left side of the screenshot above)
- An updated `index.js` React App, where only limited changes are allowed as specified in the comments in the file.

These files must implement the functionality described below.

(a) Create Files and an Empty *Order* Component (5 pts)

Get your *Parcel.js* build working by:

- Creating the new JavaScript file to hold the **Order** component. The file name must be compatible with that in the `index.js` file.
- Creating the appropriately name React *class* **Order** component in that file. This component can just render an empty `<div>` at this point

- Exporting the component in the appropriate way so that the `index.js` file can import it.

You must have a clean Parcel.js build at this point and in all the following parts to receive credit.

(b) Component Mockup (5 pts)

The Language Store only carries the following items: “JavaScript”, “Python”, “Rust”, “Go”. You will now give the *Order* component, shown on the left side of the top figure the functionality indicated below:

- It returns a `<div>` element containing the following
- An `<h2>` element containing the form title
- A `<div id="OrderForm">` element that will hold labels, text area, inputs, and button. This will receive grid styling from the style sheet (do not change or add styling).
- An `<select>` element for choosing the *item* to order. *Hint:* Within the select use elements like `<option value="Some Option">Some Option</option>`.
- An, `<input>` element for specify the *quantity* of the *item* (this can just be a string)
- A *Send Order* button

Note: Your component does not need to update the select, input, or respond to button click to receive these points.

(c) State and Event Handling (10 pts)

You will now give the *Order* component, shown on the left side of the top figure, the following additional functionality:

- Changes to the select and input elements update the component state. Hint: use `onChange` to specify the event handler and `event.target.value` to retrieve the value.
- On the click of *Send Order* button you will log the components state to the developers console.

(d) Update Parent Components *Orders* Array (5 pts)

- On the click of *Send Order* button in addition to what you did in part (c) you need to add this *order* to the array of **orders** kept by the **App** in the `index.js` file. The *orders* array holds objects of the form:

```
{item: "Item Name", quantity: "string for number"}
```

- You are allowed to modify the `index.js` in two places to help you do this.