

## Question 2 Interactive React Component (25 pts)

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

**Fish Store Orders**

**Order Form**  
Item: Sea Lion  
Quantity: 1  
Send Order

**Order History**  
Number of Orders: 2  
**Most Recent Order**  
Item: Sea Lion  
Quantity: 1

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 Fish Store only carries the following items: “Gold Fish”, “Grey Whale”, “Dolphin”, “Sea Lion”. 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.