Mentor-review

ETA: 2–3 h.

APIs

! You need to submit this task for review

How to complete the task?
Watch the video lessons and summary to get hints. If you have any questions, ask your mentor's help via the use of the real time chat on the learning platform. You can find it on the down right corner of your screen.

When and how will I receive feedback?
After you submit the completed task, mentors will review it and send their feedback via email. It usually happens in 1–2 days after submission.

What if my work is not approved?
You can always retake the assignment, and it won't affect your final grade.

Task 1: Develop the Back End of a Point-Of-Sales App

Goal

Create a server for the private API. It should hold a list of items for the point-of-sales application's front end.

Instructions

Step 1
Create a new folder named “server.”

Step 2
Initialize “node.” To do so, open your command prompt and change the directory to the “server” folder. Type “npm init -- y.”

Step 3
Create a file named “server.js.”

Step 4

Initialize the server with the host 127.0.0.2 and port 3450.

> For the host, create a constant variable with the value 127.0.0.2 and add it when you run the “listen” HTTP method.

> For the port, create a constant variable with the value 3450 and add it when you run the “listen” HTTP method.

The “listen” method should look like the following:

```
server.listen(port, hostname, () => {
      console.log(`Server is running at http://${hostname}:${port}/`);
});
```

Step 5

Create an API path with the URL name “/items.” On the “createServer” method, define and check the URL path name when using the first parameter’s URL method.

```
const server = http.createServer((req, res) => {
      console.log(req.url); //Will get the path
});
```

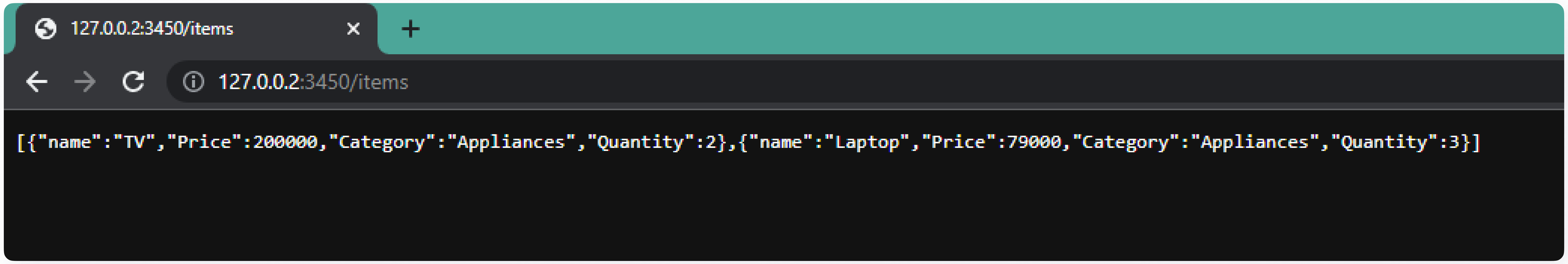
Step 6

Make sure that the response holds an array of objects in JSON format. Each object should have the following fields:

- **Item name.** It should be a string. Examples: “TV,” “Laptop.”
- **Price.** It should be a number. Examples: 400, 600.
- **Category.** It should be a string. Examples: “Appliances,” “Food.”
- **Quantity.** It should be a number. Examples: 409, 200.

Expected Outcome

After completing the assignment, you should see the following result:



```
[{"name":"TV","Price":200000,"Category":"Appliances","Quantity":2},{"name":"Laptop","Price":79000,"Category":"Appliances","Quantity":3}]
```

Task 2: Develop the Front End

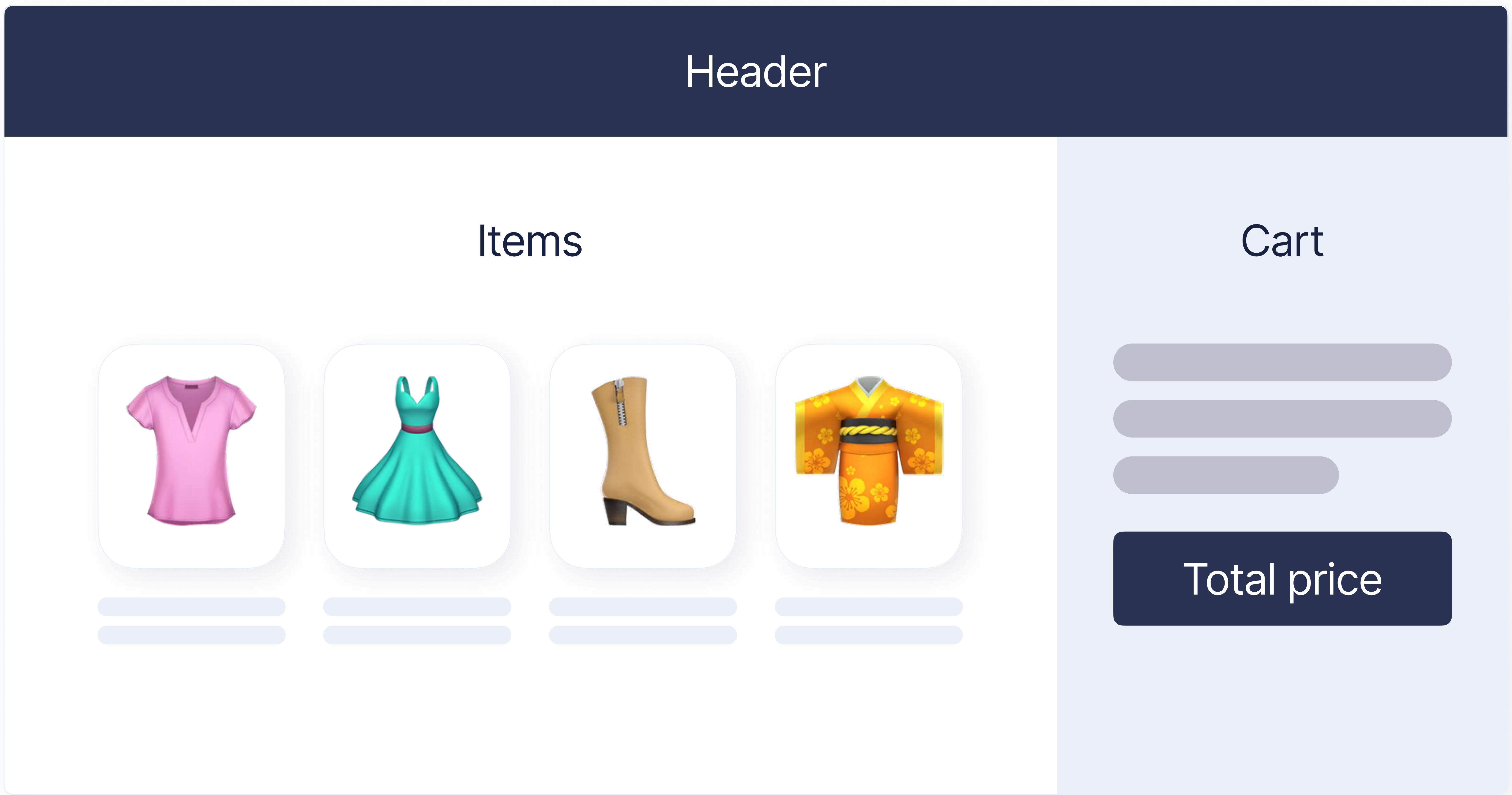
Goal

Create the front end of the point-of-sales system. Use React and the Axios library to fetch the API you have already created on the server.

Instructions

Step 1
Create a new React app named "frontend."

Step 2
Imitate the following layout for the front end:



Step 3
Use CSS to make the front end appealing. Create 3 components for the header, items, and cart. Inside the items component, map the data you get from the back end.

Step 4
Develop the following website features:

- When a customer chooses an item, it is added to the cart.
- The cart lists items the customer chose and shows the price and quantity.
- The cart shows the total sum of the item prices.

> The process of the logic development can be the following:
>
> Create an array for the cart.
>
> To add items to the cart, check if the item is already in the cart. If yes, update the quantity. If it is not, add it to the cart array.
>
> To calculate the total price, multiply the item quantity by its price and sum the multiplication results.

How to upload completed tasks

To upload the assignment, make a ".zip" archive containing all the necessary files, and upload the file here.