



Web App Design with React Week 3 Coding Assignment

Points possible: 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

Instructions: In VS Code, or an IDE of your choice, write the code that accomplishes the objectives listed below. Ensure that the code compiles and runs as directed. Take screenshots of the code and of the running program (make sure to get screenshots of all required functionality) and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document, with your JavaScript project code, to the repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

Coding Steps:

1. Using the Houses API, or any open API of your choice you can find online, create a single page that allows for all 4 crud operations to be performed on a resource from that API. Create a React component (or more, if needed) to represent the resource. Make all forms and other necessary UI pieces their own components as reasonable.

Screenshots of Code:



PROMINEO TECH

You, seconds ago | 1 author (You)

```
import React from "react";
```

You, seconds ago | 1 author (You)

```
export default class NewRoomForm extends React.Component {
  constructor(props) {
    super(props);
    this.state = {
      nameValue: "",
      areaValue: "",
    };
    this.handleChange = this.handleChange.bind(this);
    this.handleAreaChange = this.handleAreaChange.bind(this);
    this.handleClick = this.handleClick.bind(this);
  }

  handleChange(e) {
    this.setState({ nameValue: e.target.value });
  }

  handleAreaChange(e) {
    this.setState({ areaValue: e.target.value });
  }

  handleClick(e) {
    this.props.addNewRoom(e, this.props.data, {
      name: this.state.nameValue,
      area: this.state.areaValue,
    });
    this.setState({ nameValue: "", areaValue: "" });
  }

  render() {
    return (
      <div>
        <input
          type="text"
          placeholder="Name"
          onChange={this.handleChange}
          value={this.state.nameValue}
        ></input>
        <input
          type="text"
          placeholder="Area"
          onChange={this.handleAreaChange}
          value={this.state.areaValue}
        ></input>
        <button className="btn btn-primary btn-sm" onClick={this.handleClick}>Add Room</button>
      </div>
    );
  }
}
```

You, 4 hours ago • api and crud are working



PROMINEO TECH

You, seconds ago | 1 author (You)

```
import React from "react";
import NewRoomForm from "../new-room-form";
```

You, seconds ago | 1 author (You)

```
export default class House extends React.Component {
  render() {
    const rooms = this.props.data.rooms
    ? this.props.data.rooms.map((room, index) =>
      <li key={index}>
        {room.name} Area: {room.area}
        <button className="btn btn-danger btn-sm" onClick={
          e => this.props.deleteRoom(e, this.props.data, room)
        }>Delete</button>
      </li>)
    : null;
    return (
      <div className="container justify-content:center">
        <h1>{this.props.data.name}</h1>
        <ul>
          {rooms}
        </ul>
        <NewRoomForm
          addNewRoom={this.props.addNewRoom} data={this.props.data} />
      </div>
    )
  }
}
```



You, 5 hours ago • api and crud are working



PROMINEO TECH

You, 5 hours ago | 1 author (You)

```
import React from "react";
import "./App.css";
import House from "./house";
```

You, 5 hours ago • api and crud are working

```
const HOUSES_ENDPOINT = "https://ancient-taiga-31359.herokuapp.com/api/houses";
```

You, 5 hours ago | 1 author (You)

```
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.addNewRoom = this.addNewRoom.bind(this);
    this.deleteRoom = this.deleteRoom.bind(this);
  }

  render() {
    const houses = this.state
    ? this.state.houses.map((house, index) => (
      <House
        key={index}
        data={house}
        addNewRoom={this.addNewRoom}
        deleteRoom={this.deleteRoom}
      />
    ))
    : null;
    return <div>{houses}</div>;
  }

  componentDidMount() {
    fetch(HOUSES_ENDPOINT).then((res) => res.json())
      .then((data) => {
        this.setState({
          houses: data,
        });
      });
  }
}
```



PROMINEO TECH

```
deleteRoom(e, house, room) {
  const index = house.rooms.indexOf(room);
  house.rooms.splice(index, 1);
  updateHouse(house).then(() => {
    this.setState((state) => {
      for (let h of state.houses) {
        if (h._id === house._id) {
          let h = house;
          break;
        }
      }
      return state;
    });
  });
  e.preventDefault();
}

addNewRoom(e, house, room) {
  house.rooms.push(room);
  updateHouse(house).then(() => {
    this.setState((state) => {
      for (let h of state.houses) {
        if (h._id === house._id) {
          let h = house;
          break;
        }
      }
      return state;
    });
  });
  e.preventDefault();
}

function updateHouse(house) {
  return fetch(`${HOUSES_ENDPOINT}/${house._id}`, {
    method: "PUT",
    headers: {
      "Content-Type": "application/json",
    },
    body: JSON.stringify(house),
  });
}
```



Screenshots of Running Application:

Joes House

- Living Room Area: 200 Delete
- Bathroom Area: 100 Delete

<input type="text" value="Name"/>	<input type="text" value="Area"/>	<input type="button" value="Add Room"/>
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Joes House

- Living Room Area: 200 Delete
- Bathroom Area: 100 Delete

<input type="text" value="Bedroom"/>	<input type="text" value="350"/>	<input type="button" value="Add Room"/>
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Joes House

- Living Room Area: 200 Delete
- Bathroom Area: 100 Delete
- Bedroom Area: 350 Delete

<input type="text" value="Name"/>	<input type="text" value="Area"/>	<input type="button" value="Add Room"/>
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URL to GitHub Repository:

<https://github.com/DanielleByrne/react-crud>