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:

PlanesApi.js | PlaneList.js | Plane.js | NewPlaneForm.js | NewPassengerForm.js

lesson-3 > test > src > rest > PlanesApi.js > PlanesApi > post > resp

```
const PLANES_ENDPOINT = 'https://621868501a1ba20cbaa04c74.mockapi.io/planes';


class PlanesApi { // this class handles all the api calls

    get = async () => {
        try {
            const resp = await fetch(PLANES_ENDPOINT);
            const data = await resp.json();
            return data;
        } catch(e) {
            console.log('Oops, looks like fetchPlanes had an issue.', e);
        }
    }

    post = async (plane) => {
        try{
            console.log(`${PLANES_ENDPOINT}`);
            const resp = await fetch(`${PLANES_ENDPOINT}/`, {
                method: 'POST',
                headers: {
                    'Content-Type': 'application/json',
                },

                body: JSON.stringify(plane)

            });
            return await resp.json();
        }
        catch(e){
            console.log('Oops, looks like creating/POST planes had an issue.');
        }
    }

```

PlanesApi.js | PlaneList.js | Plane.js | NewPlaneForm.js | NewPassengerForm.js

lesson-3 > test > src > rest > PlanesApi.js > PlanesApi > post > resp

```

    put = async (plane) => {
        try {
            const resp = await fetch(`${PLANES_ENDPOINT}/${plane.id}`, {
                method: 'PUT',
                headers: {
                    'Content-type': 'application/json'
                },
                body: JSON.stringify(plane)
            });
            return await resp.json();
        } catch(e) {
            console.log('Oops, looks like updating planes had an issue.', e);
        }
    }

    delete = async (plane) => {
        try {
            const resp = await fetch(`${PLANES_ENDPOINT}/${plane.id}`, {
                method: 'DELETE',
                headers: {
                  'Content-Type': 'application/json'
                }
            });
            return await resp.json();
        } catch(e) {
            console.log('Problem deleting plane.', e);
        }
    }

}

export const planesApi = new PlanesApi();

```

PROMINEO TECH

PlanesApi.js | PlaneList.js | Plane.js | NewPlaneForm.js | NewPassengerForm.js

lesson-3 > test > src > components > PlaneList.js > PlaneList

```
import React from "react";
import { Plane } from './Plane';
import { planesApi } from "../rest/PlanesApi";
import { NewPlaneForm } from "./NewPlaneForm";


export class PlaneList extends React.Component {

    state = {
        planes: [],
    };

    componentDidMount() {
        this.fetchPlanes();
    };

    fetchPlanes = async () => {
        const planes = await planesApi.get();
        this.setState({ planes });
    };

    createPlane = async (plane) => {
        await planesApi.post(plane);
        this.fetchPlanes();
    }

    updatePlane = async (plane) => {
        await planesApi.put(plane);
        this.fetchPlanes();
    };

    deletePlane = async (plane) => {
        await planesApi.delete(plane);
        this.fetchPlanes();
    }
```

PlanesApi.js | PlaneList.js | Plane.js | NewPlaneForm.js | NewPassengerForm.js

lesson-3 > test > src > components > PlaneList.js > PlaneList

```
    render() {
        return(
            <div className='container'>

                <div>
                    <NewPlaneForm createPlane={this.createPlane} />
                </div>

                <div>

                {this.state.planes.map((plane) => (
                    <Plane
                    plane={plane}
                    key={plane.id}
                    updatePlane={this.updatePlane}
                    deletePlane={this.deletePlane}
                    />
                ))}
                </div>

            </div>
        )
    }
}

```

PROMINEO TECH

PlanesApi.js | PlaneList.js | Plane.js | NewPlaneForm.js | NewPassengerForm.js

lesson-3 > test > src > components > Plane.js > Plane

```jsx
import React from "react";
import { NewPassengerForm } from './NewPassengerForm';


export const Plane = (props) => {

    const { plane, updatePlane} = props;

    // console.log(plane);
    // console.log(plane.passengers);

    const deletePlane = () => {
        props.deletePlane(plane);
    }

    const deletePassenger = (passenger) => {
        console.log('inside deletePassenger function in Plane');
        const updatedPlane = {
            ...plane,
            passengers: plane.passengers.filter((x) => x !== passenger) //removed id
        };
        console.log(passenger, 'was deleted');
        updatePlane(updatedPlane);
    }

    const addNewPassenger = (passenger) => {
        console.log('inside addNewPassenger in Plane.js');
        console.log('passenger.name is: ' + passenger.name);
        console.log('passenger.seat is ' + passenger.seat);
        return updatePlane({...plane, passengers: [...plane.passengers, passenger]})
    };

```

PlanesApi.js | PlaneList.js | Plane.js | NewPlaneForm.js | NewPassengerForm.js

lesson-3 > test > src > components > Plane.js > Plane

```jsx
    const passengers = () => (  //creating passengers
        <ul>
            {plane.passengers.map((passenger, index) => (
                <ul className="d-inline p-2" key={index}>
                    <h5>{`name: ${passenger.name}, seat: ${passenger.seat}`}</h5>
                    <button className="btn btn-danger btn-sm" onClick={(e) => deletePassenger(passenger)}>delete</button>
                    {/* removed id from passenger*/}
                </ul>
            ))}

        </ul>
    );


    return (
        <div>

        <div className="card">

            <div className="card-title text-center mt-3">
                <h1>{plane.model}</h1> <button className="btn btn-danger" onClick={deletePlane}>delete plane</button>
            </div>

            <div className="card-body">
            {
                passengers({ passengers, planeId: plane.id, deletePassenger })
            }
            </div>

            <div className="card-footer text-center">
                <NewPassengerForm addNewPassenger={addNewPassenger} />
            </div>
        </div>
        <br></br>
        </div>

    );
};
```

PROMINEO TECH

PlanesApi.js | PlaneList.js | Plane.js | NewPlaneForm.js | NewPassengerForm.js

lesson-3 > test > src > components > NewPlaneForm.js > ...

```
import React, {useState} from 'react';

export const NewPlaneForm = (props) => {
    const[model, setModel] = useState('');

    const onSubmit = (e) => {
        console.log('inside NewPlaneForm');
        e.preventDefault();

        if (model){
        console.log('New Plane Name: ' + model);
        console.log('props: ', props);
        props.createPlane({model});
        setModel('');

        }
        else{
            console.log('invalid input');
        }
    };

    return(
        <div className="card m-5">
            <div className="card-header text-center">
            <h1>add a new plane </h1>
            </div>

            <div className="card-body text-center">
            <form onSubmit={onSubmit}>
                <input
                    type='text'
                    placeholder='plane'
                    onChange={(e) => setModel(e.target.value)}
                    value={model}
                />
                <button className="btn btn-primary m-3" type='submit' value='submit'>add plane</button>
                </form>
            </div>
```

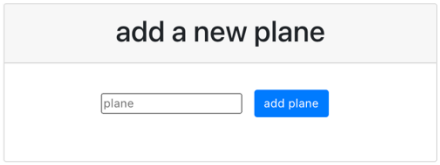
PlanesApi.js | PlaneList.js | Plane.js | NewPlaneForm.js | NewPassengerForm.js

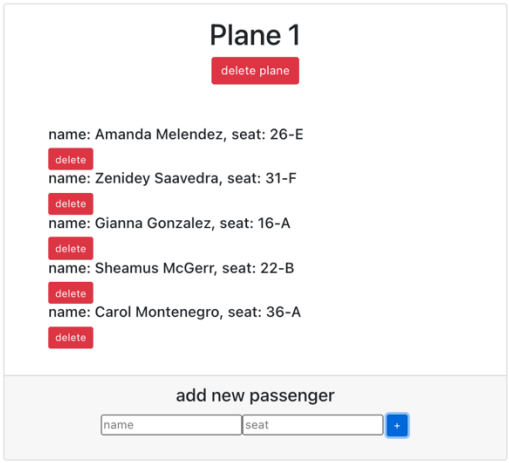
lesson-3 > test > src > components > NewPassengerForm.js > NewPassengerForm

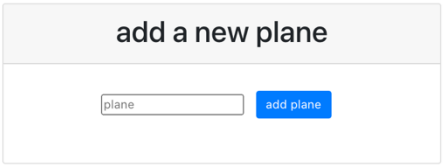
```
import React, { useState } from "react";

export const NewPassengerForm = (props) => {
    const [name, setName] = useState('');
    const[seat, setArea] = useState('');

    const onSubmit = (e) => {
        e.preventDefault();
        if (name && seat) {
            console.log('New Passenger Name: ' + name + seat);
            props.addNewPassenger({name, seat});
            setName('');
            setArea('');
        } else {
            console.log('invalid input');
        }
    };

    return (
        <div>
            <h4>add new passenger</h4>
            <form className="mb-3" onSubmit={onSubmit}>
                <input
                type='text'
                placeholder='name'
                onChange={(e) => setName(e.target.value)}
                value={name}
                />
                <input
                type='text'
                placeholder='seat'
                onChange={(e) => setArea(e.target.value)}
                value={seat}
                />
                <button className='btn btn-primary btn-sm m-1' type='submit'>+</button>
            </form>
        </div>
    )
}
```

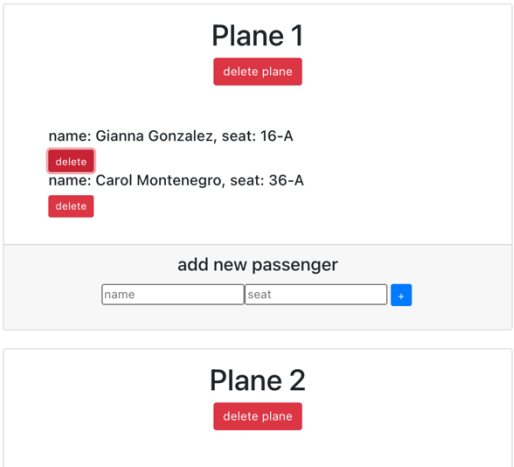
PROMINEO TECH

Screenshots of Running Application:









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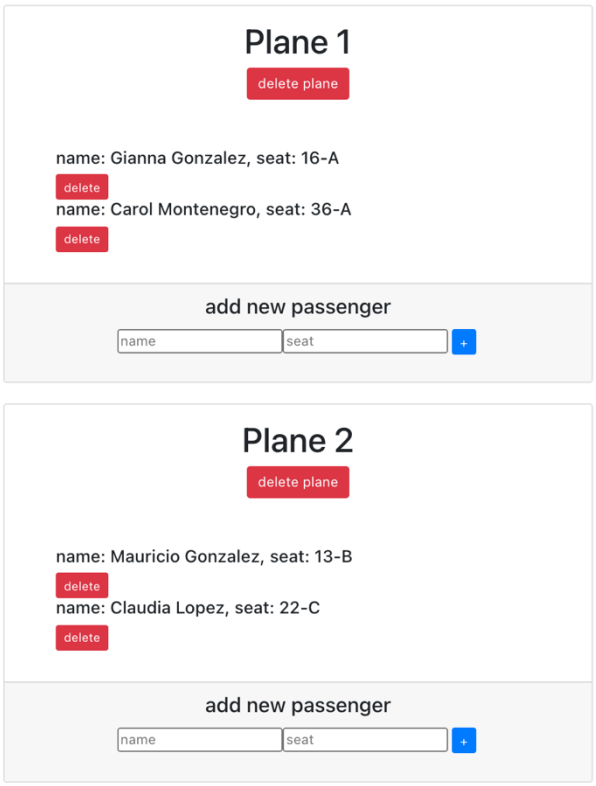

URL to GitHub Repository:

https://github.com/zenidev/Coding-Assignment-Week-15.git