PROMINEO TECH

Web App Design with React Week 3 Coding Assignment

Points possible: 70

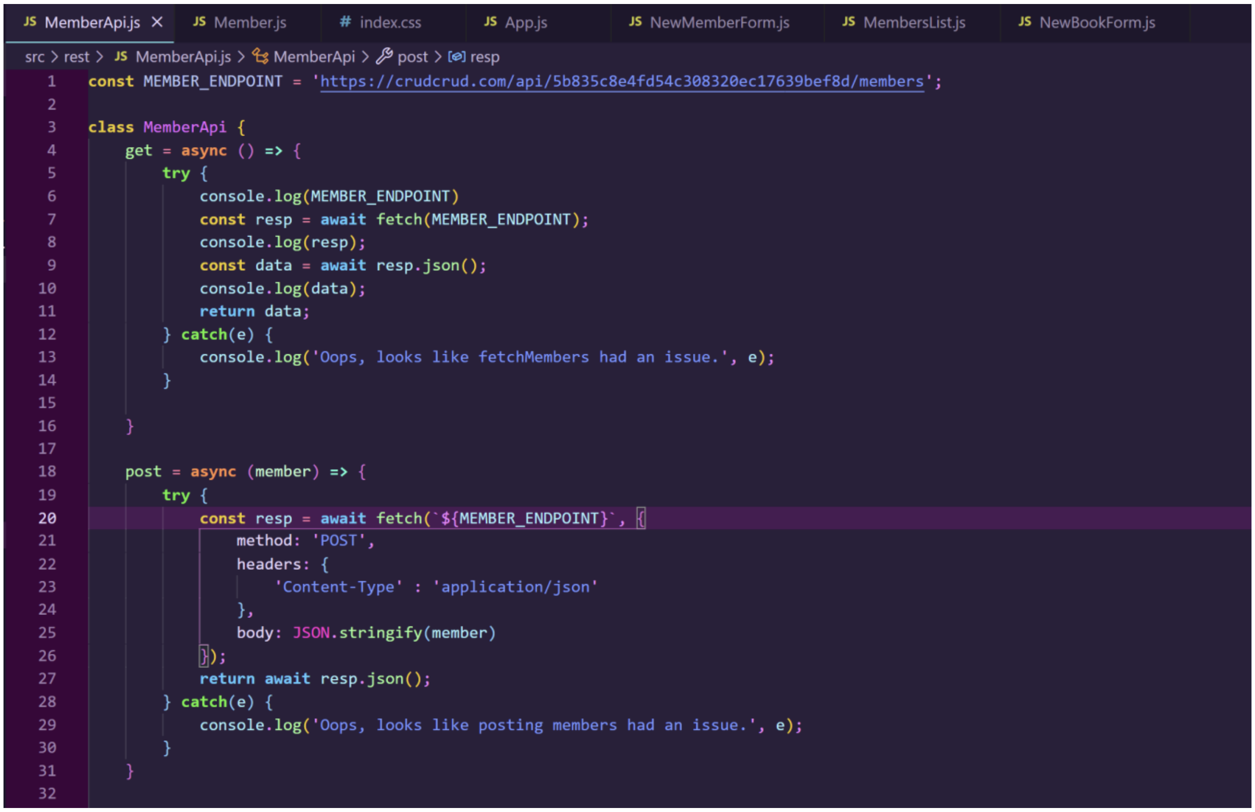
Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity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

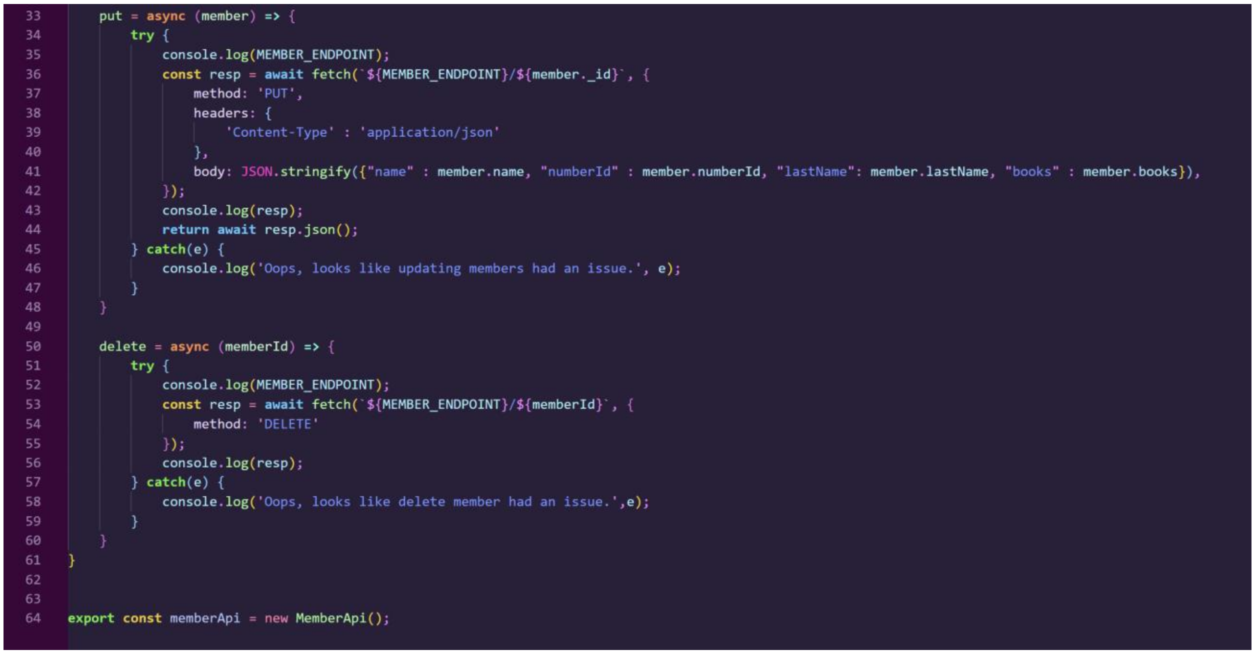
Coding Steps:

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.

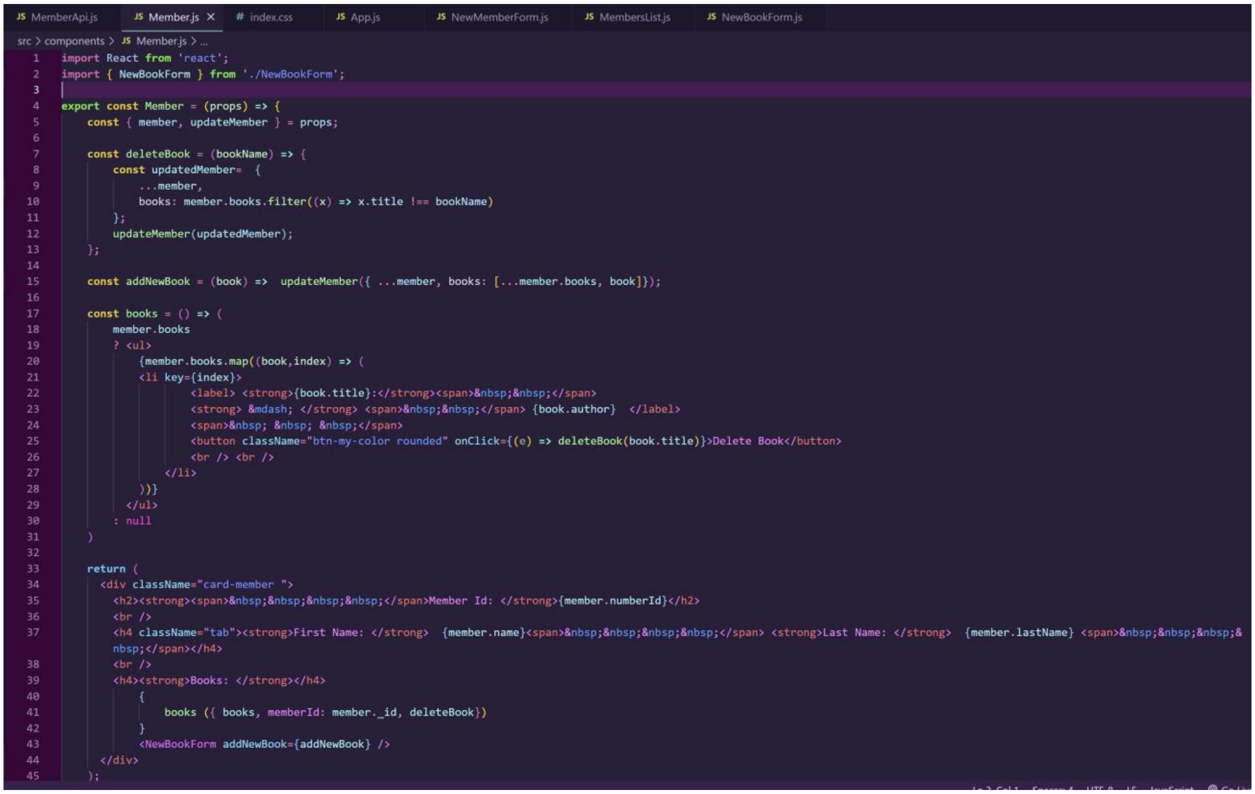
Screenshots of Code:



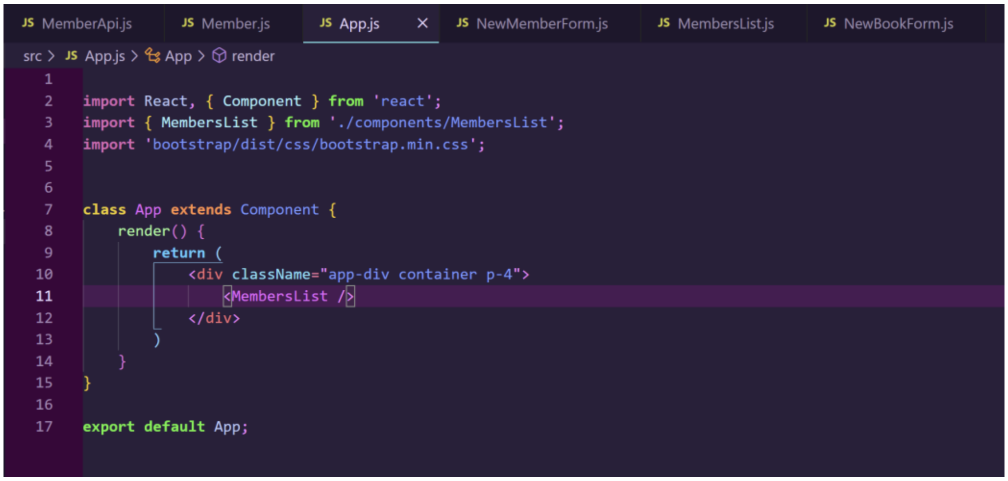
```javascript
const MEMBER_ENDPOINT = 'https://crudcrud.com/api/5b835c8e4fd54c308320ec17639bef8d/members';

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

    }

    post = async (member) => {
        try {
            const resp = await fetch(`${MEMBER_ENDPOINT}`, {
                method: 'POST',
                headers: {
                    'Content-Type' : 'application/json'
                },
                body: JSON.stringify(member)
            });
            return await resp.json();
        } catch(e) {
            console.log('Oops, looks like posting members had an issue.', e);
        }
    }

```



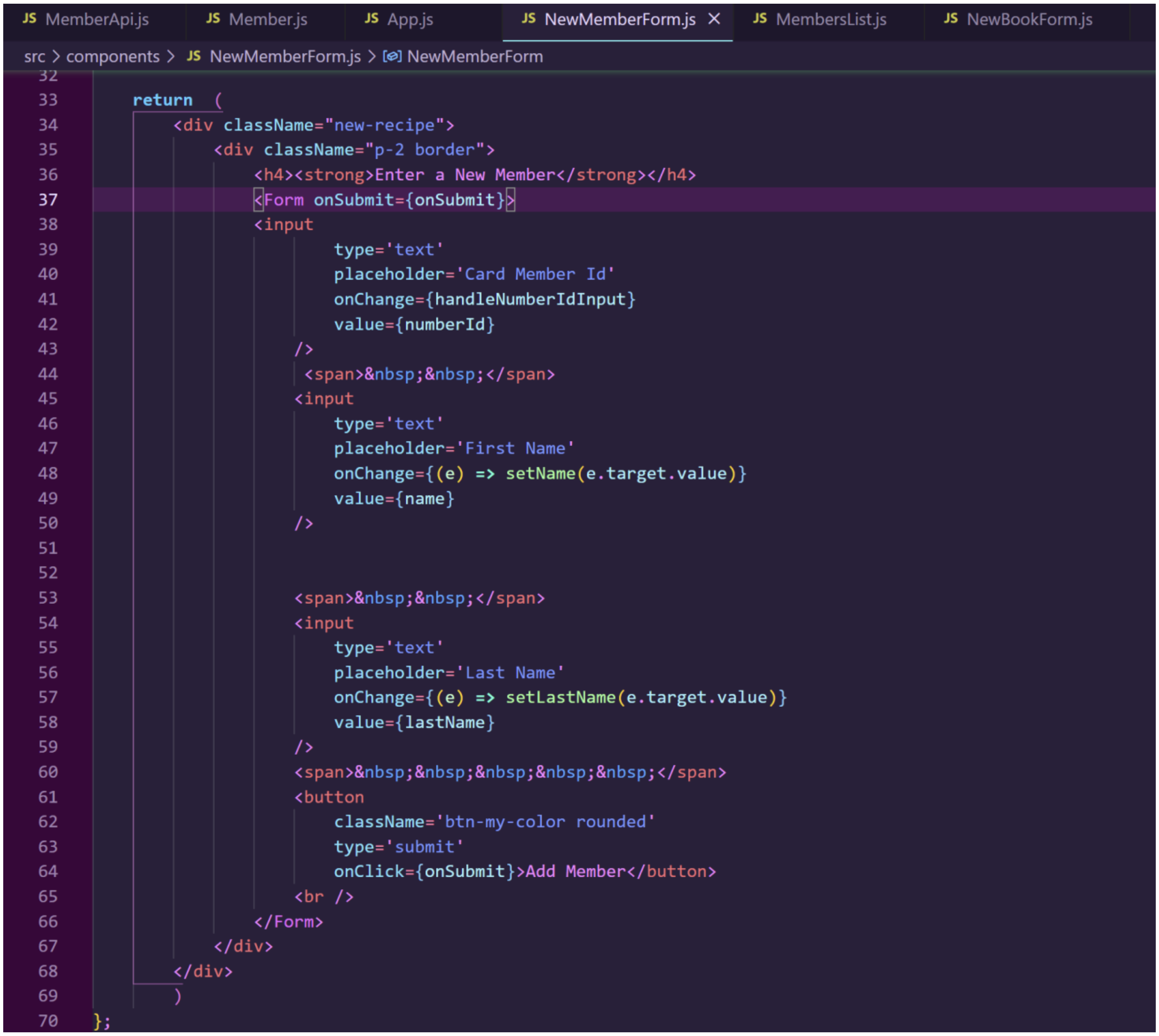
```javascript
    put = async (member) => {
        try {
            console.log(MEMBER_ENDPOINT);
            const resp = await fetch(`${MEMBER_ENDPOINT}/${member._id}`, {
                method: 'PUT',
                headers: {
                    'Content-Type' : 'application/json'
                },
                body: JSON.stringify({"name" : member.name, "numberId" : member.numberId, "lastName": member.lastName, "books" : member.books}),
            });
            console.log(resp);
            return await resp.json();
        } catch(e) {
            console.log('Oops, looks like updating members had an issue.', e);
        }
    }

    delete = async (memberId) => {
        try {
            console.log(MEMBER_ENDPOINT);
            const resp = await fetch(`${MEMBER_ENDPOINT}/${memberId}`, {
                method: 'DELETE'
            });
            console.log(resp);
        } catch(e) {
            console.log('Oops, looks like delete member had an issue.',e);
        }
    }
}


export const memberApi = new MemberApi();
```



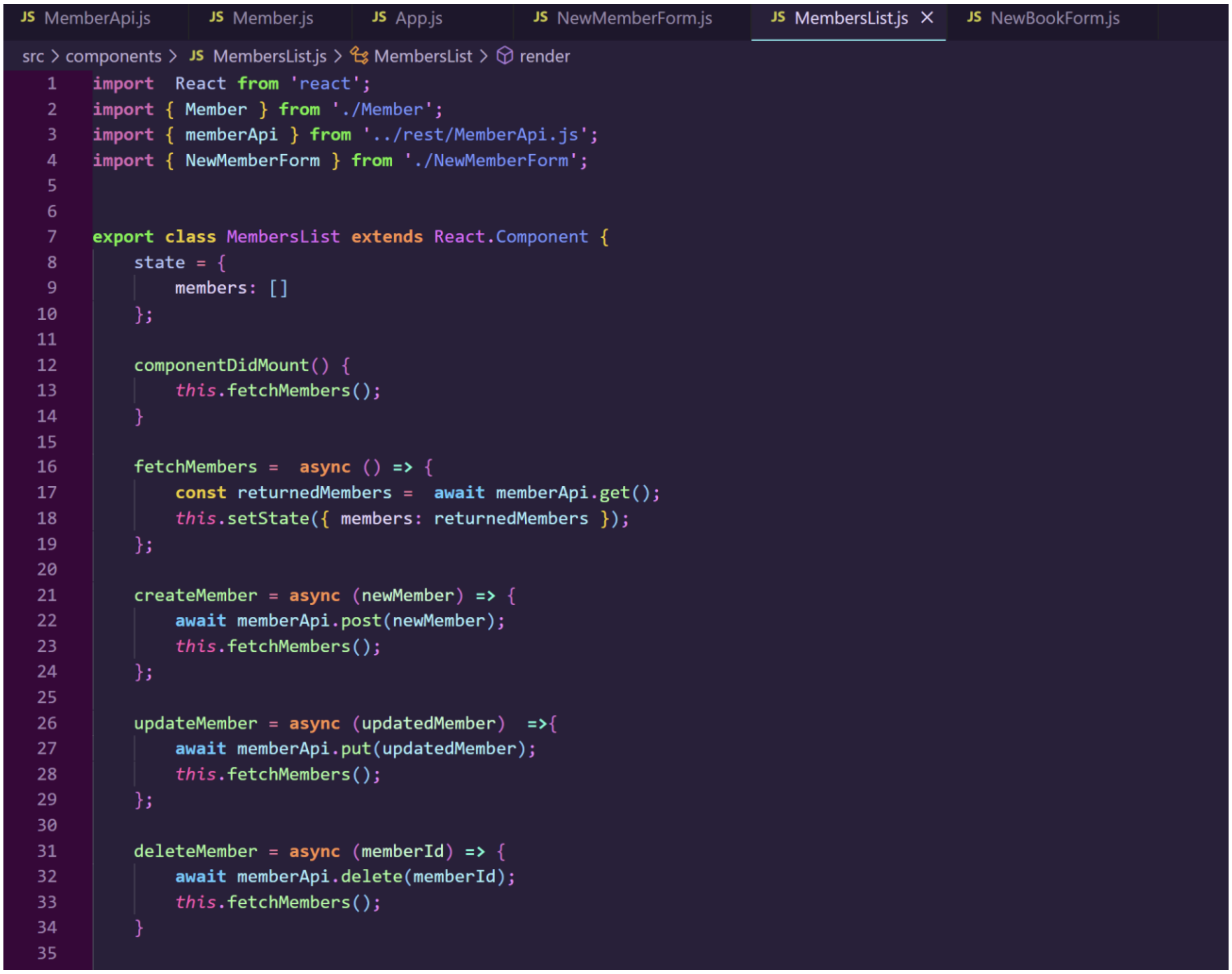
```jsx
import React from 'react';
import { NewBookForm } from './NewBookForm';

export const Member = (props) => {
    const { member, updateMember } = props;

    const deleteBook = (bookName) => {
        const updatedMember=  {
            ...member,
            books: member.books.filter((x) => x.title !== bookName)
        };
        updateMember(updatedMember);
    };

    const addNewBook = (book) =>  updateMember({ ...member, books: [...member.books, book]});

    const books = () => (
        member.books
        ? <ul>
            {member.books.map((book,index) => (
            <li key={index}>
                    <label> <strong>{book.title}:</strong><span>&nbsp;&nbsp;</span>
                    <strong> &mdash; </strong> <span>&nbsp;&nbsp;</span> {book.author}  </label>
                    <span>&nbsp; &nbsp; &nbsp;</span>
                    <button className="btn-my-color rounded" onClick={(e) => deleteBook(book.title)}>Delete Book</button>
                    <br /> <br />
                </li>
            ))}
          </ul>
        : null
    )

    return (
      <div className="card-member ">
        <h2><strong><span>&nbsp;&nbsp;&nbsp;&nbsp;</span>Member Id: </strong>{member.numberId}</h2>
        <br />
        <h4 className="tab"><strong>First Name: </strong>  {member.name}<span>&nbsp;&nbsp;&nbsp;&nbsp;</span> <strong>Last Name: </strong>  {member.lastName} <span>&nbsp;&nbsp;&nbsp;&nbsp;</span></h4>
        <br />
        <h4><strong>Books: </strong></h4>
            {
                books ({ books, memberId: member._id, deleteBook})
            }
            <NewBookForm addNewBook={addNewBook} />
      </div>
    );
```



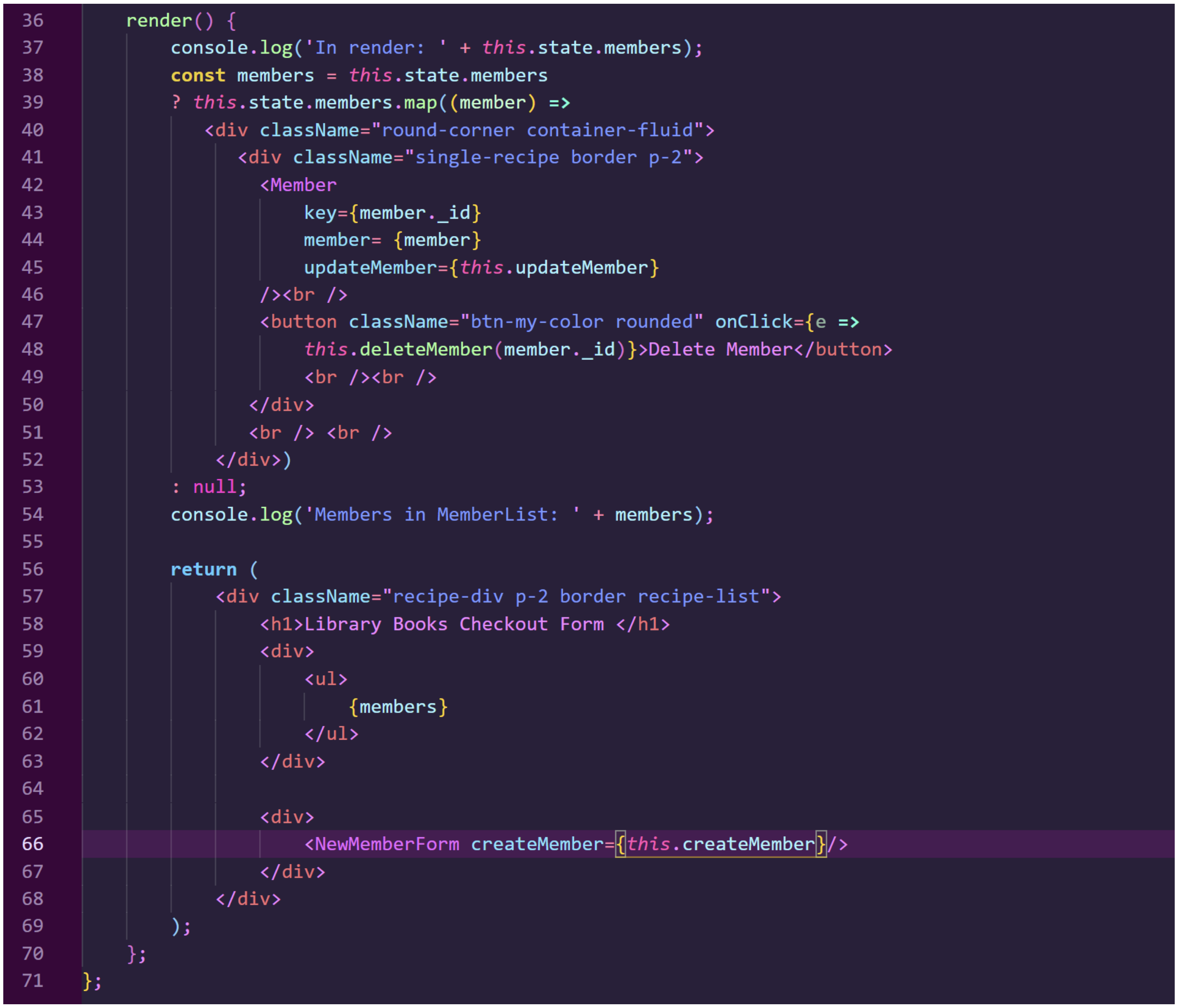
```jsx

import React, { Component } from 'react';
import { MembersList } from './components/MembersList';
import 'bootstrap/dist/css/bootstrap.min.css';


class App extends Component {
    render() {
        return (
            <div className="app-div container p-4">
                <MembersList />
            </div>
        )
    }
}

export default App;
```



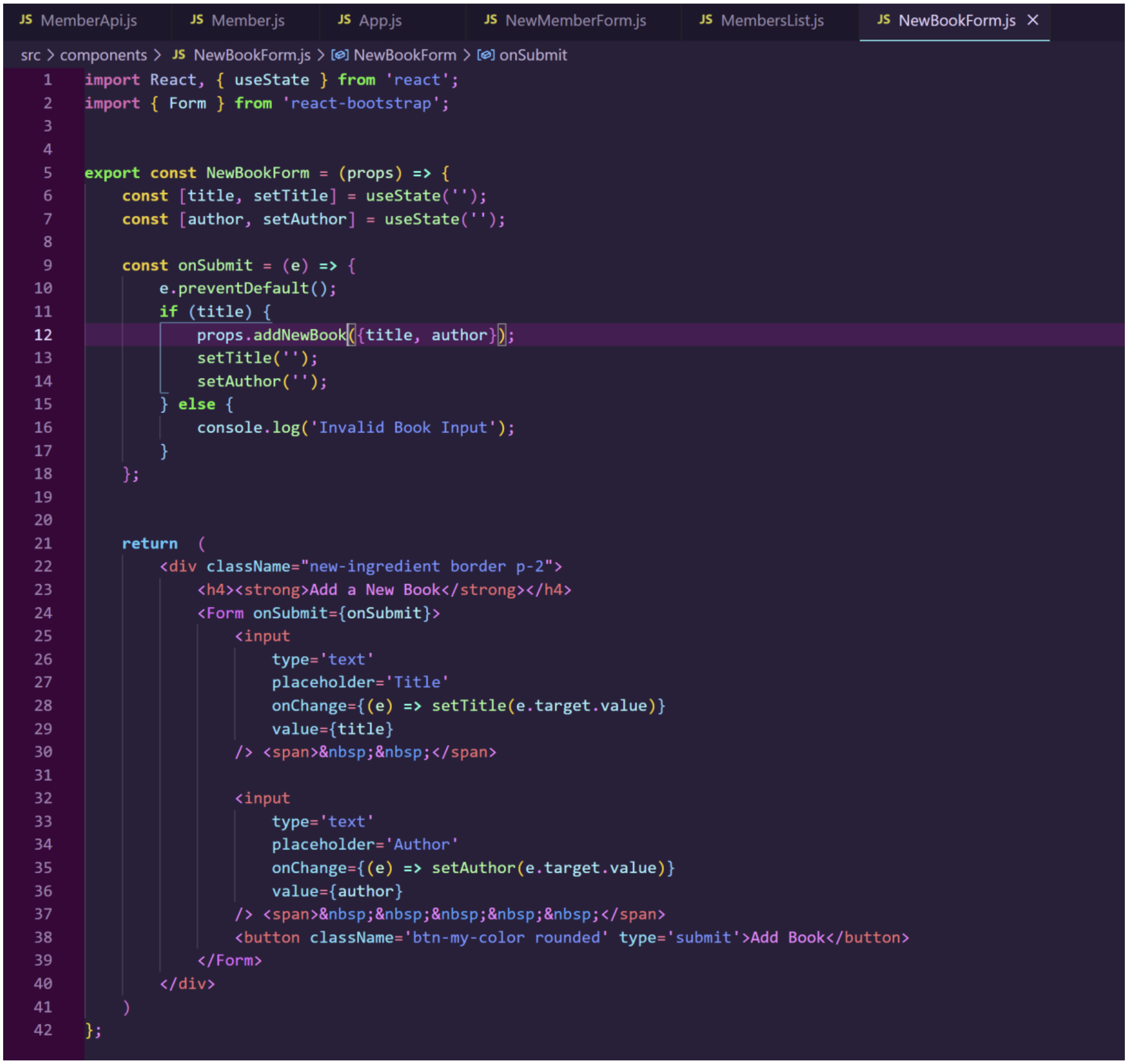
```

    return  (
        <div className="new-recipe">
            <div className="p-2 border">
                <h4><strong>Enter a New Member</strong></h4>
                <Form onSubmit={onSubmit}>
                <input
                        type='text'
                        placeholder='Card Member Id'
                        onChange={handleNumberIdInput}
                        value={numberId}
                    />
                     <span>&nbsp;&nbsp;</span>
                    <input
                        type='text'
                        placeholder='First Name'
                        onChange={(e) => setName(e.target.value)}
                        value={name}
                    />


                    <span>&nbsp;&nbsp;</span>
                    <input
                        type='text'
                        placeholder='Last Name'
                        onChange={(e) => setLastName(e.target.value)}
                        value={lastName}
                    />
                    <span>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</span>
                    <button
                        className='btn-my-color rounded'
                        type='submit'
                        onClick={onSubmit}>Add Member</button>
                    <br />
                </Form>
            </div>
        </div>
        )
};
```



```
import  React from 'react';
import { Member } from './Member';
import { memberApi } from '../rest/MemberApi.js';
import { NewMemberForm } from './NewMemberForm';


export class MembersList extends React.Component {
    state = {
        members: []
    };

    componentDidMount() {
        this.fetchMembers();
    }

    fetchMembers =  async () => {
        const returnedMembers =  await memberApi.get();
        this.setState({ members: returnedMembers });
    };

    createMember = async (newMember) => {
        await memberApi.post(newMember);
        this.fetchMembers();
    };

    updateMember = async (updatedMember)  =>{
        await memberApi.put(updatedMember);
        this.fetchMembers();
    };

    deleteMember = async (memberId) => {
        await memberApi.delete(memberId);
        this.fetchMembers();
    }

```

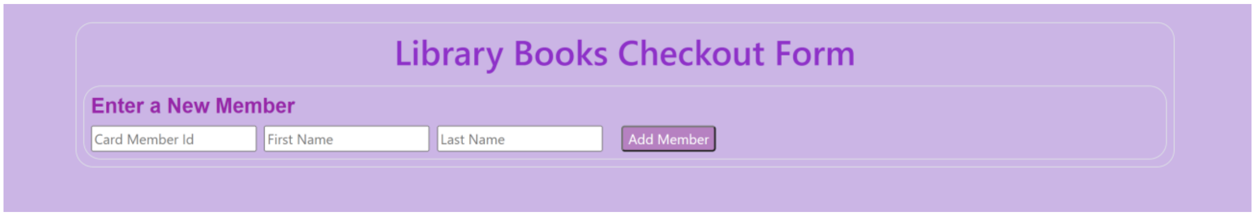


```
    render() {
        console.log('In render: ' + this.state.members);
        const members = this.state.members
        ? this.state.members.map((member) =>
           <div className="round-corner container-fluid">
              <div className="single-recipe border p-2">
                <Member
                    key={member._id}
                    member= {member}
                    updateMember={this.updateMember}
                /><br />
                <button className="btn-my-color rounded" onClick={e =>
                    this.deleteMember(member._id)}>Delete Member</button>
                    <br /><br />
               </div>
               <br /> <br />
            </div>)
        : null;
        console.log('Members in MemberList: ' + members);

        return (
            <div className="recipe-div p-2 border recipe-list">
                <h1>Library Books Checkout Form </h1>
                <div>
                    <ul>
                        {members}
                    </ul>
                </div>

                <div>
                    <NewMemberForm createMember={this.createMember}/>
                </div>
            </div>
        );
    };
};
```

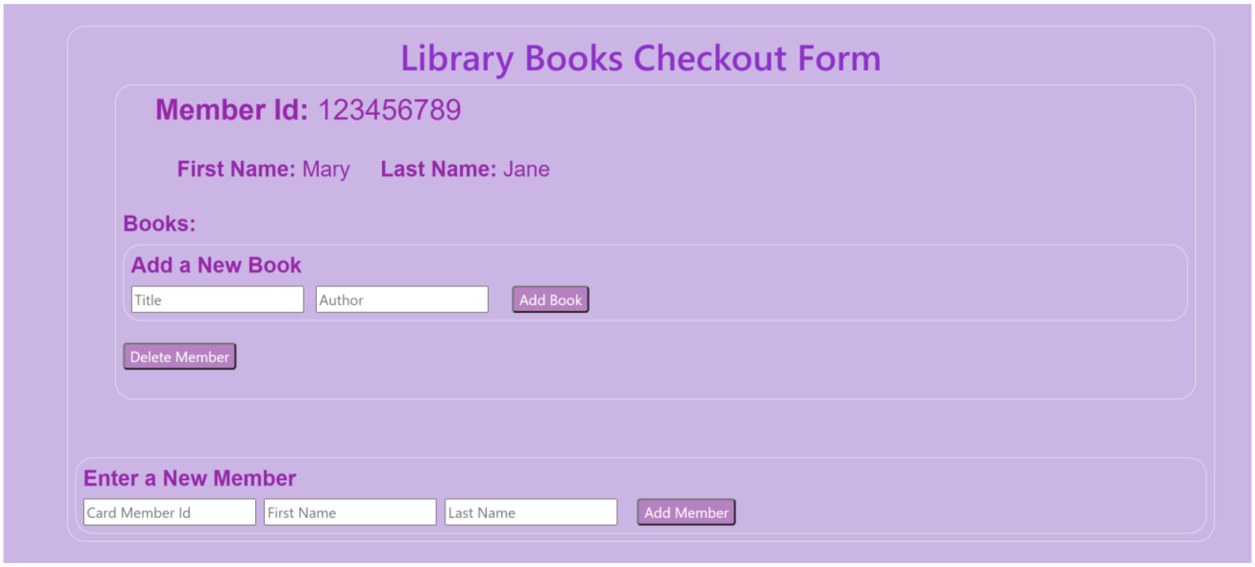


```
import React, { useState } from 'react';
import { Form } from 'react-bootstrap';


export const NewBookForm = (props) => {
    const [title, setTitle] = useState('');
    const [author, setAuthor] = useState('');

    const onSubmit = (e) => {
        e.preventDefault();
        if (title) {
            props.addNewBook({title, author});
            setTitle('');
            setAuthor('');
        } else {
            console.log('Invalid Book Input');
        }
    };


    return  (
        <div className="new-ingredient border p-2">
            <h4><strong>Add a New Book</strong></h4>
            <Form onSubmit={onSubmit}>
                <input
                    type='text'
                    placeholder='Title'
                    onChange={(e) => setTitle(e.target.value)}
                    value={title}
                /> <span>&nbsp;&nbsp;</span>

                <input
                    type='text'
                    placeholder='Author'
                    onChange={(e) => setAuthor(e.target.value)}
                    value={author}
                /> <span>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</span>
                <button className='btn-my-color rounded' type='submit'>Add Book</button>
            </Form>
        </div>
    )
};
```

Screenshots of Running Application:


Library Books Checkout Form

Enter a New Member



Library Books Checkout Form

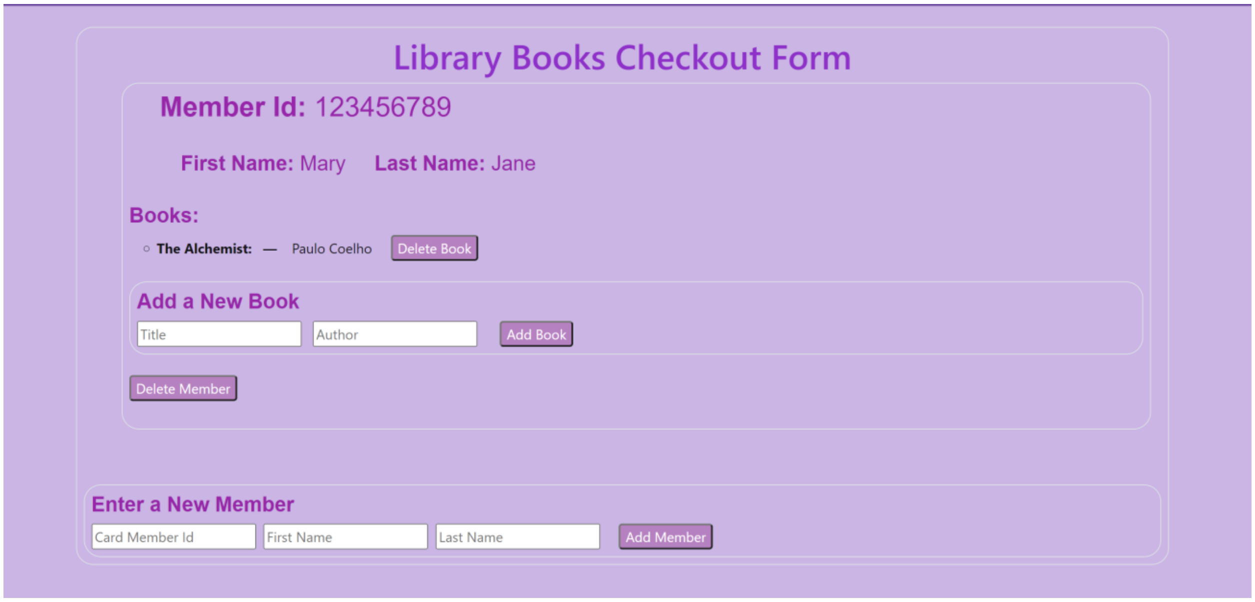
Member Id: 123456789

First Name: Mary **Last Name:** Jane

Books:

Add a New Book

Enter a New Member



Library Books Checkout Form

Member Id: 123456789

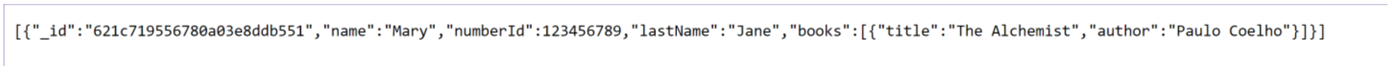
First Name: Mary **Last Name:** Jane

Books:

- **The Alchemist:** — Paulo Coelho

Add a New Book

Enter a New Member



[{"_id":"621c719556780a03e8ddb551","name":"Mary","numberId":123456789,"lastName":"Jane","books":[{"title":"The Alchemist","author":"Paulo Coelho"}]}]

URL to GitHub Repository:

https://github.com/JoanaBarao7/React_Week3