

Employee Crud Application using routing and axios.

Prerequisites:

1. Node js employee webservice should be running on port no. 3002 with all crud operations (get,post,put,delete)requests(day 15 gdrive shared).
2. Create react Application and install bootstrap 4.6 ,react-bootstrap, axios, react-router-dom version 6.
- 3.In app.js file add import for Bootstrap.css.

Steps:-

1. Add new component to display Navbar (MainheaderNavBar.js file)
 2. copy nav bar code from bootstrap docs, and change every `<a>` to `NavLink`
 3. and replace href to to
2. Add this component in app.js and import it.
 3. Wrap APP component in BrowserRouter in index.js file
- Then In app.js add route entry for `"/` and `"/home`" (line 16-17)

4. Create home Component by name HomeComponent.js in components folder , add it in app.js and import it.

5. Add route entry in app.js for “/table” to display EmployeeTable

6. Add EmployeeTable.js in components folder to display data in table format.

7.EmployeeTable is class component ,so

- a. add constructor and add this.state to store “earr” and “searcharr”.

- b. add render method, to display a button add new employee, a text box for searching text, display search array in table format using map function.

- b.1. Add componentDidMount() to send get request to webservice to get all employees and store it in this.state.earr and this.state.searcharr.

- c. In EmployeeTable Component , wrap “add new employee” in Link Component, to display form (line 43).

8. Add route entry in App.js for “/form” to display EmployeeForm Component. (line 19)

9. Add EmployeeForm.js component to display blank form.

- a. Create navigate variable to change the url through method.(line 6)
- b.Add formdetails state using useState() and initialize it to object with blank properties (line7).
- c.Create a blank form and add value and onChange properties in every textbox. (Line 26)
- d. Add onClick event on button “add employee” to send post request to webservice to add data in database.(line 49).
- e. Write addemp() method to send the post request and change the url to “/table”.

10. To add a search facility add searchtext in state object in EmployeeTable.js file (line 10).

- a. In the textbox add value and onChange event for the search text box (line 47-49)
- b. Write componentDidUpdate() method to check the previous value of prevState.searchtext!==this.sate.searchtext(current value) are not matching and if search text is not blank, then filter searcharr.(line 26-27).

c. Otherwise searcharr should be initialized to this.state.earr (line 29).

Since it is changing the state object of EmployeeTable component the component will be rerendered.

11. In EmployeeTable.js make edit button clickable by wrapping it in Link Component, which will change the url to “/edit/<empid>”

12. Add route entry in App.js to display EmployeeEdit component for url “/edit/:eid”. (line 20)

13. Create EmployeeEdit Component in EmployeeEdit.js file .

a. Create params variable to retrieve request parameter “:eid” using useParams() hook. (line 7)

b. create navigate variable using useNavigate() hook to change the link programmatically. (Line 8)

c. If you are passing any data through Link Component , to retrieve that create location variable using useLocation() hook. (line 10)

d. Create formdetails variable as state using useState() hook. Initialize it to a object with all blank properties.(line11).

e. Add useEffect() hook with blank array for initialization of formdetails.

e.1 Send get request to webservice to get single object by eid and initialize formdetails.(line 13-17).

f. Display the form with existing details of employee.(Line34).

g. In the textbox add value and onChange event for display data as soon as form appears on screen.

e. Add onClick event on update employee button. Line(58).

f. Add updateEmp() (Line 20) to send the put request to webservice ,pass formdetails as a parameter and change the url to “/table”.

14. To Add delete functionality use EmployeeTable.js file, add click event on delete button to send delete request.

15. Add function deleteEmp(empid) .

```
a.Send delete request to webservice using  
EmployeeService.deleteById(empid).then(()=>{  
  
    //send get request to webservice using  
    EmployeeService.getEmployees() to update the searcharr and  
    earr  
  
}).catch().
```

