**Name:Gowtham Raj E**

**Reg.no:** IC5292

**EMPLOYEE MANAGEMENT SYSTEM**

**A group of people standing in front of a world map

Description automatically generated**

**App.js:**

import HomePage from './component/homePage';

import './App.css'

function App() {

  return (

    <div className="App">

     <HomePage></HomePage>

    </div>

  );

}

export default App;

**Homepage.js**

import { Component } from "react";

import {BrowserRouter,Routes,Route,Link} from "react-router-dom"

import Insert from "./insertEmployee";

import Delete from "./deleteEmployee";

import Update from "./updateEmployee";

import Find from "./findEmployee";

import Findall from "./findAllEmployee";

import './emp.css';

 export default class HomePage extends Component{

     render(){

       return(

       <BrowserRouter>

       <div>

        <ul class ="link">

            <li class="btn "><Link to="/insert">Insert</Link></li><br></br>

            <li class="btn "><Link to="/update">update</Link></li><br></br>

            <li class="btn "><Link to="/delete">delete</Link></li><br></br>

            <li class="btn "><Link to="/find">find</Link></li><br></br>

            <li class="btn "><Link to="/findall">findall</Link></li><br></br>

        </ul>

        <hr/>

        <Routes>

            <Route  path="/insert" element={<Insert></Insert>}></Route>

            <Route path="/delete" element={<Delete></Delete>}></Route>

            <Route path="/update" element={<Update></Update>}></Route>

            <Route path="/find" element={<Find></Find>}></Route>

            <Route path="/findall" element={<Findall></Findall>}></Route>

        </Routes>

       </div>

       </BrowserRouter>

     )

    }

  }

**Insertemployee.js:**

**A screenshot of a computer

Description automatically generated**

import { Component } from "react";

import Employee from "../model/Employee";

import axios from 'axios'

import './emp.css';

class App extends Component {

    constructor(props) {

      super(props);

      this.state = {

        Eid: '',

        Ename: '',

        Esalary: '',

        result: '',

        eidError : '',

        esalaryError: '',

        enameError :''

      };

    }

    validateEid = (eid) =>{

      let re =/^[0-9]+$/;

      if(eid === ''){

        return " eid is required";

      }

      else if(! re.test(eid)){

        return"invalid id"

      }

      else{

        return null

      }

    }

    validateEname = (ename) =>{

      let re =/^[a-zA-Z]+$/;

      if(ename === ''){

        return " ename is required";

      }

      else if(! re.test(ename)){

        return"invalid id"

      }

      else{

        return null

      }

    }

    validateEsalary = (esalary) =>{

      let re =/^[0-9]+$/;

      if(esalary === ''){

        return " esalary is required";

      }

      else if(! re.test(esalary)){

        return"invalid id"

      }

      else{

        return null

      }

    }

    handleResult = () => {

      let error = this.validateEid(this.state.Eid);

      this.setState({eidError : error})

      let error1 = this.validateEname(this.state.Ename);

      this.setState({enameError : error1})

      let error2 = this.validateEsalary(this.state.Esalary);

      this.setState({esalaryError : error2})

      if(!error && !error1 && !error2){

      const { Eid, Ename, Esalary } = this.state;

      const result = `Employee Id: ${Eid} \nEmployee Name: ${Ename} \nEmployee Salary: ${Esalary}`;

      this.setState({ result });

      let employee =new Employee();

      employee.setId(Eid)

      employee.setName(Ename)

      employee.setSalary(Esalary)

      axios.post("http://localhost:3004/employees", employee)

        .then(() => {

          document.getElementById("ResultDiv").innerHTML = "<b>Object saved</b>";

        })

        .catch((error) => {

          console.error("There was an error saving the employee!", error);

        });

    }

  }

    changeId =(e) => {

      this.setState({Eid:e.target.value})

      let error = this.validateEid(this.state.Eid);

      this.setState({eidError : error})

    }

    changeName =(e) => {

      this.setState({Ename:e.target.value})

      let error1 = this.validateEname(this.state.Ename);

      this.setState({enameError : error1})

    }

    changeSalary=(e) => {

      this.setState({Esalary:e.target.value})

      let error2 = this.validateEsalary(this.state.Esalary);

      this.setState({esalaryError : error2})

    }

  render() {

      return (

        <div class="container">

          <form onSubmit={(e) => { e.preventDefault(); this.handleResult(); }}>

            <br></br>

            <h1 class="heading">Employee Management System</h1>

            <label>Eid :</label>

            <input type='text' name="Eid" value={this.state.Eid} onChange={this.changeId}></input><br></br>

            <font color="red" ><b>{this.state.eidError}</b></font>

            <br></br>

            <label>Ename:</label>

            <input type='text'  name="Ename"value={this.state.Ename} onChange={this.changeName}></input><br></br>

            <font color="red" ><b>{this.state.enameError}</b></font>

            <br></br>

            <label>Esalary:</label>

            <input type='text' name="Esalary" value={this.state.Esalary} onChange={this.changeSalary}></input><br></br>

            <font color="red" ><b>{this.state.esalaryError}</b></font>

            <br></br>

            <button type="submit">insert</button>

          </form>

          <div>

            <br></br>

            <pre>{this.state.result}</pre>

          </div>

          <div id="Resultdiv">

          </div>

        </div>

      );

    }

  }

  export default App;

**Deleteemployee.js:**

**A screenshot of a computer

Description automatically generated**

import {Component} from 'react';

import Employee from "../model/Employee";

import axios from 'axios';

import './emp.css';

class Delete extends Component {

    constructor(props) {

      super(props);

      this.state = {

        Eid: '',

        Ename: '',

        Esalary: '',

        result: '',

        eidError : '',

        esalaryError: '',

        enameError :''

      };

    }

    validateEid = (eid) =>{

      let re =/^[0-9]+$/;

      if(eid === ''){

        return " eid is required";

      }

      else if(! re.test(eid)){

        return"invalid id"

      }

      else{

        return null

      }}

     handleResult = () => {

      let error = this.validateEid(this.state.Eid);

      this.setState({eidError : error})

    if(!error ){

      const { Eid, Ename, Esalary } = this.state;

let employee =new Employee();

      employee.setId(Eid)

      employee.setName(Ename)

      employee.setSalary(Esalary)

      axios.delete("http://localhost:3004/employees/"+Eid)

        .then(() => {

          document.getElementById("ResultDiv").innerHTML = "<b>Object deleted</b>";

        })

        .catch((error) => {

          console.error("There was an error saving the employee!", error);

        });

      }

    }

    changeId =(e) => {

      this.setState({Eid:e.target.value})

      let error = this.validateEid(this.state.Eid);

      this.setState({eidError : error})

    }

  render() {

      return (

        <div class="container">

          <form onSubmit={(e) => { e.preventDefault(); this.handleResult(); }}>

            <br></br>

            <h1 class="heading">Employee Management System</h1>

            <label>Eid :</label>

            <input type='text' name='Eid' value={this.state.Eid} onChange={this.changeId}></input><br></br>

            <font color="red" ><b>{this.state.eidError}</b></font>

            <br></br><br></br>

            <button type="submit">Delete</button>

          </form>

          <div>

            <br></br>

           {/\* <pre>{this.state.result}</pre>\*/}

          </div>

          <div id='ResultDiv'> </div>

        </div>

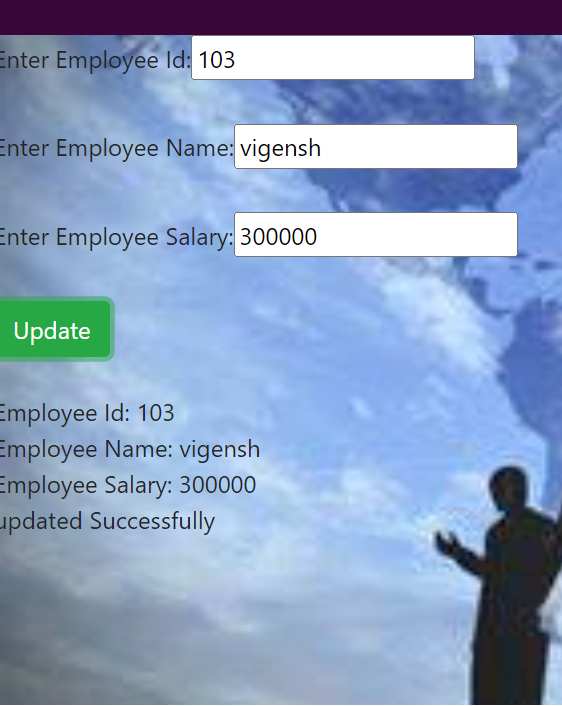
      );

    }

  }

 export default Delete;

**Updateemployee.js:**

****

import {Component} from 'react';

import Employee from "../model/Employee";

import axios from 'axios';

import './emp.css';

class Update extends Component {

    constructor(props) {

      super(props);

      this.state = {

        Eid: '',

        Ename: '',

        Esalary: '',

        result: '',

        eidError : '',

        esalaryError: '',

        enameError :''

      };

    }

 validateEid = (eid) =>{

      let re =/^[0-9]+$/;

      if(eid === ''){

        return " eid is required";

      }

      else if(! re.test(eid)){

        return"invalid id"

}

      else{

        return null

      }

    }

    validateEname = (ename) =>{

      let re =/^[a-zA-Z]+$/;

      if(ename === ''){

        return " ename is required";

      }

      else if(! re.test(ename)){

        return"invalid id"

}

      else{

        return null

      }

    }

    validateEsalary = (esalary) =>{

      let re =/^[0-9]+$/;

      if(esalary === ''){

        return " esalary is required";

      }

      else if(! re.test(esalary)){

        return"invalid id"

      }

      else{

        return null

      }

    }

   handleResult = () => {

      let error = this.validateEid(this.state.Eid);

      this.setState({eidError : error})

      let error1 = this.validateEname(this.state.Ename);

      this.setState({enameError : error1})

      let error2 = this.validateEsalary(this.state.Esalary);

      this.setState({esalaryError : error2})

      if(!error && !error1 && !error2){

      const { Eid, Ename, Esalary } = this.state;

      let employee =new Employee();

      employee.setId(Eid)

      employee.setName(Ename)

      employee.setSalary(Esalary)

axios.put("http://localhost:3004/employees/"+Eid, employee)

        .then(() => {

          document.getElementById("ResultDiv").innerHTML = "<b>Object saved</b>";

        })

        .catch((error) => {

          console.error("There was an error saving the employee!", error);

        });

      }

    }

    changeId =(e) => {

      this.setState({Eid:e.target.value})

      let error = this.validateEid(this.state.Eid);

      this.setState({eidError : error})

    }

    changeName =(e) => {

      this.setState({Ename:e.target.value})

      let error1 = this.validateEname(this.state.Ename);

      this.setState({enameError : error1})

    }

    changeSalary=(e) => {

      this.setState({Esalary:e.target.value})

      let error2 = this.validateEsalary(this.state.Esalary);

      this.setState({esalaryError : error2})

    }

  render() {

      return (

        <div class="container">

          <form onSubmit={(e) => { e.preventDefault(); this.handleResult(); }}>

            <br></br>

            <h1 class="heading">Employee Management System</h1>

            <label>Eid :</label>

            <input type='text'  name="Eid"value={this.state.Eid} onChange={this.changeId}></input><br></br>

            <font color="red" ><b>{this.state.eidError}</b></font>

            <br></br>

            <label>Ename:</label>

            <input type='text' name='Ename' value={this.state.Ename} onChange={this.changeName}></input><br></br>

            <font color="red" ><b>{this.state.enameError}</b></font>

            <br></br>

            <label>Esalary:</label>

            <input type='text' name='Esalary' value={this.state.Esalary} onChange={this.changeSalary}></input><br></br>

            <font color="red" ><b>{this.state.esalaryError}</b></font>

            <br></br>

            <button type="submit">Update</button>

          </form>

          <div>

            <br></br>

       </div>

        </div>

      );

    }

  }

 export default Update;

**Find.js:**

**A screenshot of a computer

Description automatically generated**

import { Component } from 'react';

import axios from 'axios';

import './emp.css';

class Find extends Component {

  constructor(props) {

    super(props);

    this.state = {

      Eid: '',

      Ename: '',

      Esalary: '',

      result: '',

      eidError: ''

    };

  }

  validateEid = (eid) => {

    let re = /^[0-9]+$/;

    if (eid === '') {

      return "Eid is required";

    } else if (!re.test(eid)) {

      return "Invalid ID";

    } else {

      return null;

    }

  }

  handleResult = (e) => {

    e.preventDefault();

    let error = this.validateEid(this.state.Eid);

    this.setState({ eidError: error });

    if (!error) {

      const { Eid } = this.state;

      axios.get(`http://localhost:3004/employees/${Eid}`)

        .then((response) => {

          const employee = response.data;

          if (employee) {

            const result = `Employee Id: ${employee.id} \nEmployee Name: ${employee.name} \nEmployee Salary: ${employee.salary}`;

            const formattedResult = result.replace(/\n/g, "<br/>");

            this.setState({

              Ename: employee.name,

              Esalary: employee.salary,

              result: formattedResult

            });

          } else {

            this.setState({

              result: "<b>No employee found with the given ID.</b>"

            });

          }

        })

        .catch((error) => {

          console.error("There was an error fetching the employee!", error);

          this.setState({

            result: "<b>Error fetching the employee data. Please try again.</b>"

          });

        });

    }

  }

  changeId = (e) => {

    const Eid = e.target.value;

    this.setState({ Eid }, () => {

      const error = this.validateEid(Eid);

      this.setState({ eidError: error });

    });

  }

  render() {

    return (

      <div class="container">

        <form onSubmit={this.handleResult}>

          <h1 class="heading">Employee Management System</h1>

          <label>Eid :</label>

          <input type='text' name='Eid' value={this.state.Eid} onChange={this.changeId} /><br />

          <span style={{ color: "red" }}><b>{this.state.eidError}</b></span><br />

          <button type="submit">Find</button>

        </form>

        <div>

          <br />

          <div id="ResultDiv" dangerouslySetInnerHTML={{ \_\_html: this.state.result }}></div>

        </div>

      </div>

    );

  }

}

export default Find;

**FindAll.js:**

**A group of people standing in front of a map

Description automatically generated**

import { Component } from 'react';

import axios from 'axios';

import './emp.css';

class FindAll extends Component {

  constructor(props) {

    super(props);

    this.state = {

      employees: [],

      error: ''

    };

  }

  handleFindAll = () => {

    axios.get("http://localhost:3004/employees")

      .then((response) => {

        const employees = response.data;

        if (employees.length > 0) {

          this.setState({ employees, error: '' });

        } else {

          this.setState({ error: "No employees found." });

        }

      })

      .catch((error) => {

        console.error("There was an error fetching the employees!", error);

        this.setState({ error: "Error fetching the employees. Please try again." });

      });

  }

  render() {

    return (

      <div class="container">

        <h1 class="heading">Employee Management System</h1>

        <button onClick={this.handleFindAll}>Find All Employees</button>

        <div>

          {this.state.error && (

            <p style={{ color: "red" }}><b>{this.state.error}</b></p>

          )}

          {this.state.employees.length > 0 && (

            <table border="1" style={{ marginTop: "20px", width: "100%" }}>

              <thead>

                <tr>

                  <th>Employee ID</th>

                  <th>Employee Name</th>

                  <th>Employee Salary</th>

                </tr>

              </thead>

              <tbody>

                {this.state.employees.map((employee) => (

                  <tr key={employee.id}>

                    <td>{employee.id}</td>

                    <td>{employee.name}</td>

                    <td>{employee.salary}</td>

                  </tr>

                ))}

              </tbody>

            </table>

          )}

        </div>

      </div>

    );

  }

}

export default FindAll