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Intermediate Assessment – React Js Lab

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## **Question: Laptop Allocation Management System**

**Required Properties are :** Laptop Id, Laptop Make, Configuration, Allocated User, Allotted On, Allocation Period.

1. Define a web application for the given scenario using React as a front end.
2. Configure JSON server and consider JSON file as your database.
3. Perform all the CRUD operations using React Http Client Service.
4. Perform the validations for all the fields.
5. Application must be the Responsive Page (Including Mobile View) and Single Page Application (SPA).
6. UI must be a Rich UI and look & Feel.
7. Maintain the Code Quality .

**Answer:**

### **Laptop Allocation Management**

My Web Application Consist of

new-app

-node\_modules

-Public

-Src

-App.css

-App.js

-Home.js

-Index.css

-Index.js

-LaptopDetail.js

-LaptopCreate.js

-LaptopEdit.js

-LaptopListing.js

-LaptopLogin.js

-LaptopRegister.js

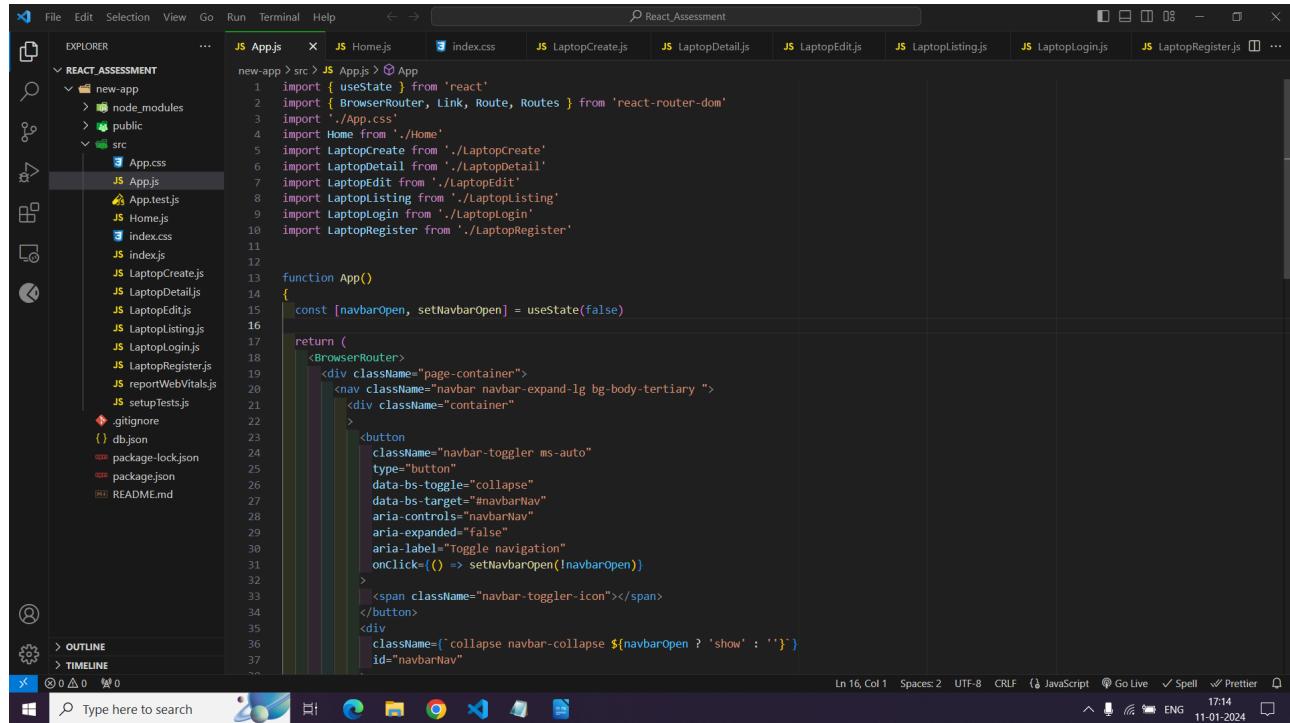
-db.json

-Package.lock.json

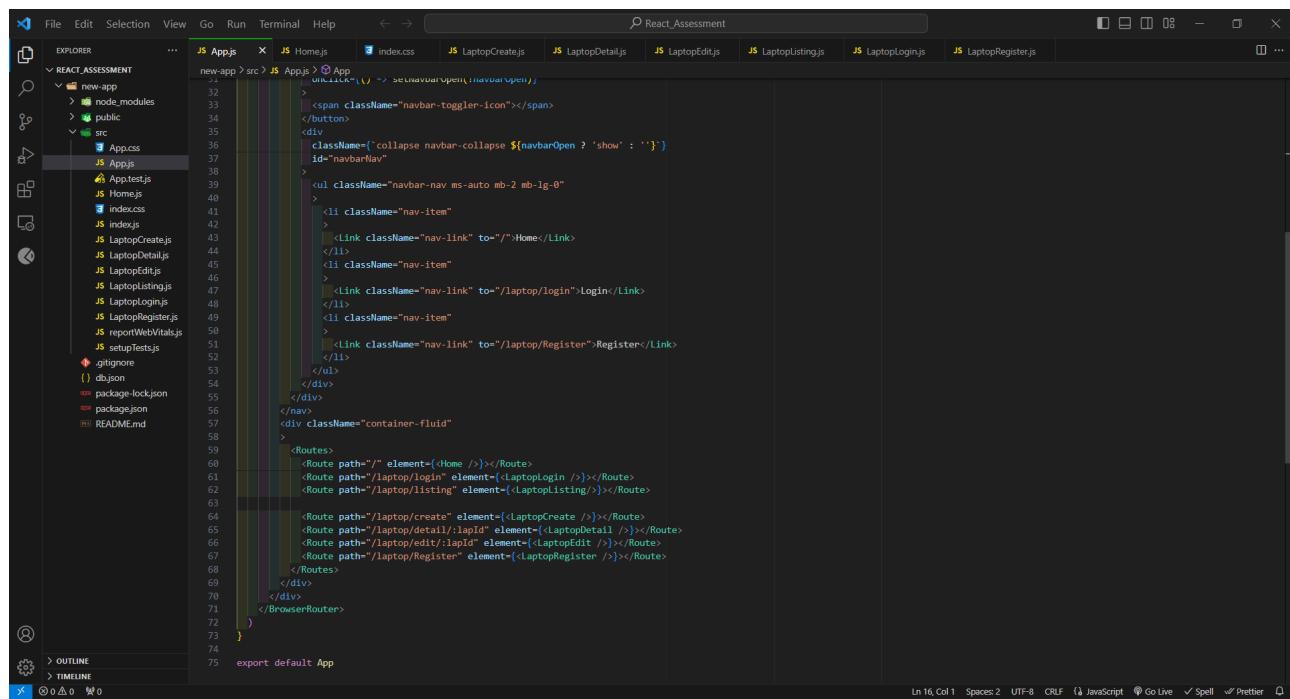
-Package.json

## Coding

### App.js

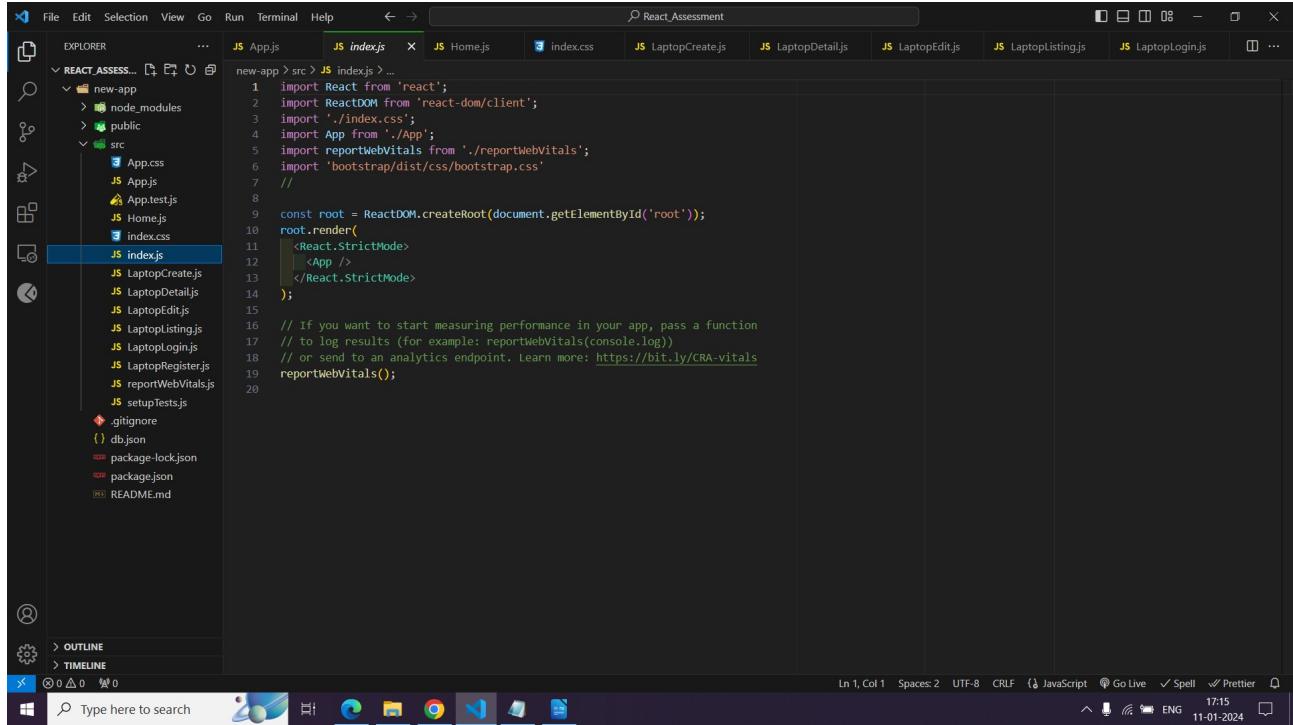


```
File Edit Selection View Go Run Terminal Help < - > React_Assessment JS App.js JS Home.js index.css JS LaptopCreate.js JS LaptopDetail.js JS LaptopEdit.js JS LaptopListing.js JS LaptopLogin.js JS LaptopRegister.js ...  
new-app > src > JS App.js > App  
1 import { useState } from 'react'  
2 import { BrowserRouter, Link, Route, Routes } from 'react-router-dom'  
3 import './App.css'  
4 import Home from './Home'  
5 import LaptopCreate from './LaptopCreate'  
6 import LaptopDetail from './LaptopDetail'  
7 import LaptopEdit from './LaptopEdit'  
8 import LaptopListing from './LaptopListing'  
9 import LaptopLogin from './LaptopLogin'  
10 import LaptopRegister from './LaptopRegister'  
  
function App()  
{  
  const [navbarOpen, setNavbarOpen] = useState(false)  
  
  return (  
    <BrowserRouter>  
      <div className="page-container">  
        <nav className="navbar navbar-expand-lg bg-body-tertiary ">  
          <div className="container">  
            <button  
              className="navbar-toggler ms-auto"  
              type="button"  
              data-bs-toggle="collapse"  
              data-bs-target="#navbarNav"  
              aria-controls="navbarNav"  
              aria-expanded="false"  
              aria-label="Toggle navigation"  
              onClick={() => setNavbarOpen(!navbarOpen)}  
            >  
              <span className="navbar-toggler-icon"></span>  
            </button>  
            <div  
              className={`collapse navbar-collapse ${navbarOpen ? 'show' : ''}`}  
              id="navbarNav"  
            >  
              <ul className="navbar-nav ms-auto mb-2 mb-lg-0">  
                <li className="nav-item">  
                  <Link className="nav-link" to="/">Home</Link>  
                </li>  
                <li className="nav-item">  
                  <Link className="nav-link" to="/laptop/login">Login</Link>  
                </li>  
                <li className="nav-item">  
                  <Link className="nav-link" to="/laptop/Register">Register</Link>  
                </li>  
              </ul>  
            </div>  
          </div>  
        </nav>  
        <div className="container-fluid">  
          <Routes>  
            <Route path="/" element={<Home />}></Route>  
            <Route path="/laptop/login" element={<LaptopLogin />}></Route>  
            <Route path="/laptop/listing" element={<LaptopListing />}></Route>  
            <Route path="/laptop/create" element={<LaptopCreate />}></Route>  
            <Route path="/laptop/detail/:lapId" element={<LaptopDetail />}></Route>  
            <Route path="/laptop/edit/:lapId" element={<LaptopEdit />}></Route>  
            <Route path="/laptop/Register" element={<LaptopRegister />}></Route>  
          </Routes>  
        </div>  
      </div>  
    </BrowserRouter>  
  )  
  
  export default App
```



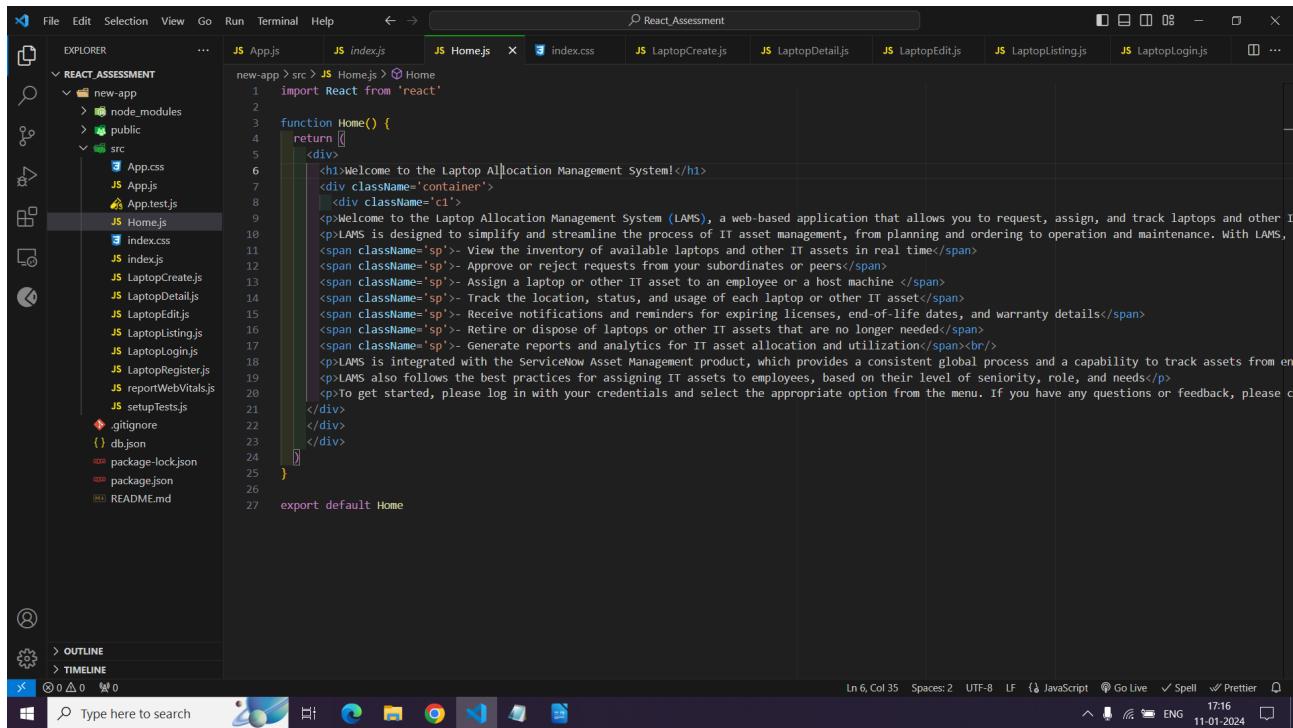
```
File Edit Selection View Go Run Terminal Help < - > React_Assessment JS App.js JS Home.js index.css JS LaptopCreate.js JS LaptopDetail.js JS LaptopEdit.js JS LaptopListing.js JS LaptopLogin.js JS LaptopRegister.js ...  
new-app > src > JS App.js > App  
1 import { useState } from 'react'  
2 import { BrowserRouter, Link, Route, Routes } from 'react-router-dom'  
3 import './App.css'  
4 import Home from './Home'  
5 import LaptopCreate from './LaptopCreate'  
6 import LaptopDetail from './LaptopDetail'  
7 import LaptopEdit from './LaptopEdit'  
8 import LaptopListing from './LaptopListing'  
9 import LaptopLogin from './LaptopLogin'  
10 import LaptopRegister from './LaptopRegister'  
  
function App()  
{  
  const [navbarOpen, setNavbarOpen] = useState(false)  
  
  return (  
    <BrowserRouter>  
      <div className="page-container">  
        <nav className="navbar navbar-expand-lg bg-body-tertiary ">  
          <div className="container">  
            <button  
              className="navbar-toggler ms-auto"  
              type="button"  
              data-bs-toggle="collapse"  
              data-bs-target="#navbarNav"  
              aria-controls="navbarNav"  
              aria-expanded="false"  
              aria-label="Toggle navigation"  
              onClick={() => setNavbarOpen(!navbarOpen)}  
            >  
              <span className="navbar-toggler-icon"></span>  
            </button>  
            <div  
              className={`collapse navbar-collapse ${navbarOpen ? 'show' : ''}`}  
              id="navbarNav"  
            >  
              <ul className="navbar-nav ms-auto mb-2 mb-lg-0">  
                <li className="nav-item">  
                  <Link className="nav-link" to="/">Home</Link>  
                </li>  
                <li className="nav-item">  
                  <Link className="nav-link" to="/laptop/login">Login</Link>  
                </li>  
                <li className="nav-item">  
                  <Link className="nav-link" to="/laptop/Register">Register</Link>  
                </li>  
              </ul>  
            </div>  
          </div>  
        </nav>  
        <div className="container-fluid">  
          <Routes>  
            <Route path="/" element={<Home />}></Route>  
            <Route path="/laptop/login" element={<LaptopLogin />}></Route>  
            <Route path="/laptop/listing" element={<LaptopListing />}></Route>  
            <Route path="/laptop/create" element={<LaptopCreate />}></Route>  
            <Route path="/laptop/detail/:lapId" element={<LaptopDetail />}></Route>  
            <Route path="/laptop/edit/:lapId" element={<LaptopEdit />}></Route>  
            <Route path="/laptop/Register" element={<LaptopRegister />}></Route>  
          </Routes>  
        </div>  
      </div>  
    </BrowserRouter>  
  )  
  
  export default App
```

## Index.js



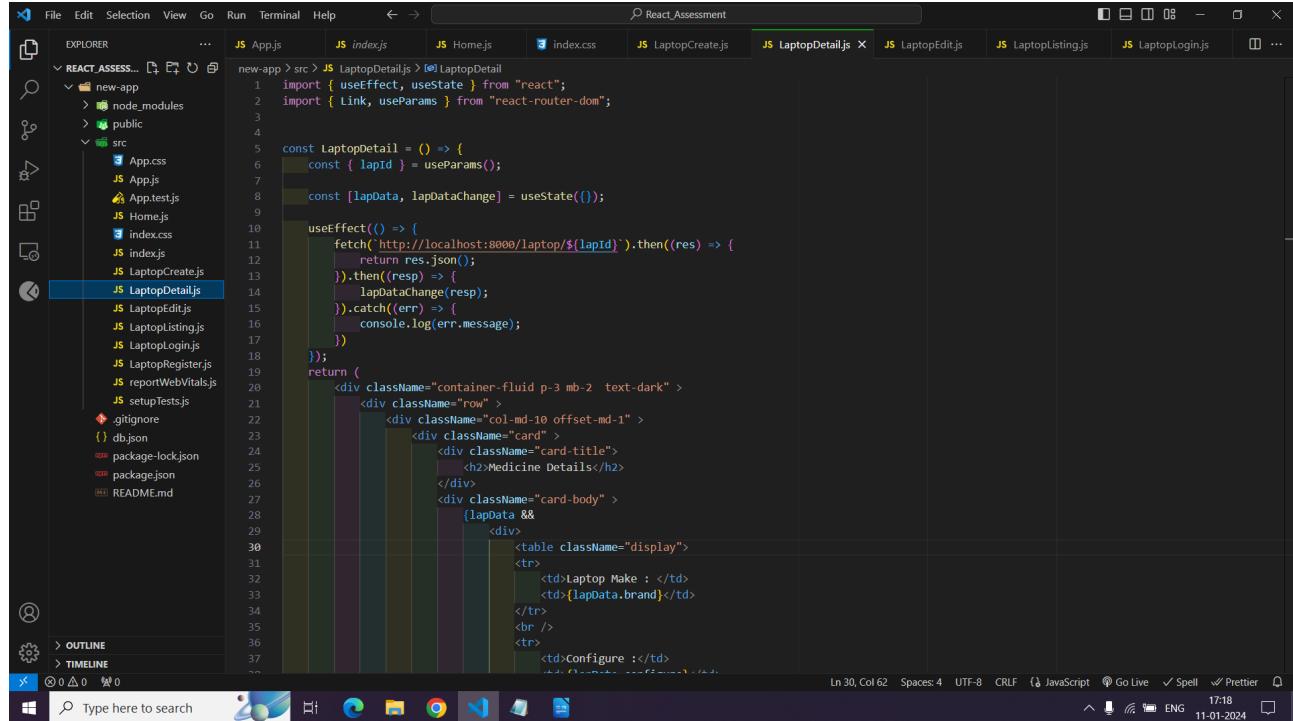
```
File Edit Selection View Go Run Terminal Help < > React_Assessment
EXPLORER ... JS App.js JS index.js X JS Home.js Index.css JS LaptopCreate.js JS LaptopDetail.js JS LaptopEdit.js JS LaptopListing.js JS LaptopLogin.js ...
REACT_ASSESSMENT new-app
  node_modules
  public
    src
      App.css
      App.js
      App.test.js
      Home.js
      index.css
      index.js
      LaptopCreate.js
      LaptopDetail.js
      LaptopEdit.js
      LaptopListing.js
      LaptopLogin.js
      LaptopRegister.js
      reportWebVitals.js
      setupTests.js
      .gitignore
      db.json
      package-lock.json
      package.json
      README.md
      OUTLINE
      TIMELINE
      Type here to search
      1 import React from 'react';
      2 import ReactDOM from 'react-dom/client';
      3 import './index.css';
      4 import App from './App';
      5 import reportWebVitals from './reportWebVitals';
      6 import 'bootstrap/dist/css/bootstrap.css'
      7 //
      8
      9 const root = ReactDOM.createRoot(document.getElementById('root'));
      10 root.render(
      11   <React.StrictMode>
      12     <App />
      13   </React.StrictMode>
      14 );
      15
      16 // If you want to start measuring performance in your app, pass a function
      17 // to log results (for example: reportWebVitals(console.log))
      18 // or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
      19 reportWebVitals();
      20
Ln 1, Col 1 Spaces: 2 UTF-8 CRLF ⓘ JavaScript ⓘ Go Live ⓘ Spell ⓘ Prettier ⓘ 17:15 ENG 11-01-2024
```

## Home.js



```
File Edit Selection View Go Run Terminal Help < > React_Assessment
EXPLORER ... JS App.js JS index.js JS Home.js X index.css JS LaptopCreate.js JS LaptopDetail.js JS LaptopEdit.js JS LaptopListing.js JS LaptopLogin.js ...
REACT_ASSESSMENT new-app
  node_modules
  public
    src
      App.css
      App.js
      App.test.js
      Home.js
      index.css
      index.js
      LaptopCreate.js
      LaptopDetail.js
      LaptopEdit.js
      LaptopListing.js
      LaptopLogin.js
      LaptopRegister.js
      reportWebVitals.js
      setupTests.js
      .gitignore
      db.json
      package-lock.json
      package.json
      README.md
      OUTLINE
      TIMELINE
      Type here to search
      1 import React from 'react';
      2
      3 function Home() {
      4   return [
      5     <div>
      6       <h1>Welcome to the Laptop Allocation Management System!</h1>
      7       <div className='container'>
      8         <div className='c1'>
      9           <p>Welcome to the Laptop Allocation Management System (LAMS), a web-based application that allows you to request, assign, and track laptops and other IT assets. LAMS is designed to simplify and streamline the process of IT asset management, from planning and ordering to operation and maintenance. With LAMS, you can easily view the inventory of available laptops and other IT assets in real time. Approve or reject requests from your subordinates or peers. Assign a laptop or other IT asset to an employee or a host machine. Track the location, status, and usage of each laptop or other IT asset. Receive notifications and reminders for expiring licenses, end-of-life dates, and warranty details. LAMS is integrated with the ServiceNow Asset Management product, which provides a consistent global process and a capability to track assets from end-to-end. To get started, please log in with your credentials and select the appropriate option from the menu. If you have any questions or feedback, please don't hesitate to contact us.</p>
      10        <div>
      11          <span>- View the inventory of available laptops and other IT assets in real time</span>
      12          <span>- Approve or reject requests from your subordinates or peers</span>
      13          <span>- Assign a laptop or other IT asset to an employee or a host machine</span>
      14          <span>- Track the location, status, and usage of each laptop or other IT asset</span>
      15          <span>- Receive notifications and reminders for expiring licenses, end-of-life dates, and warranty details</span>
      16          <span>- Retire or dispose of laptops or other IT assets that are no longer needed</span>
      17          <span>- Generate reports and analytics for IT asset allocation and utilization</span>
      18        </div>
      19      </div>
      20    </div>
      21  ]
      22 }
      23
      24
      25 }
      26
      27 export default Home;
Ln 6, Col 35 Spaces: 2 UTF-8 LF ⓘ JavaScript ⓘ Go Live ⓘ Spell ⓘ Prettier ⓘ 17:16 ENG 11-01-2024
```

## LaptopDetail.js



A screenshot of the Visual Studio Code interface showing the `LaptopDetail.js` file. The code uses React hooks like `useEffect` and `useState` to fetch data from a local API endpoint (`http://localhost:8000/laptop/:lapId`) and display it in a card component. The code includes imports for `useEffect`, `useState`, `Link`, and `useParams` from the `react` and `react-router-dom` libraries.

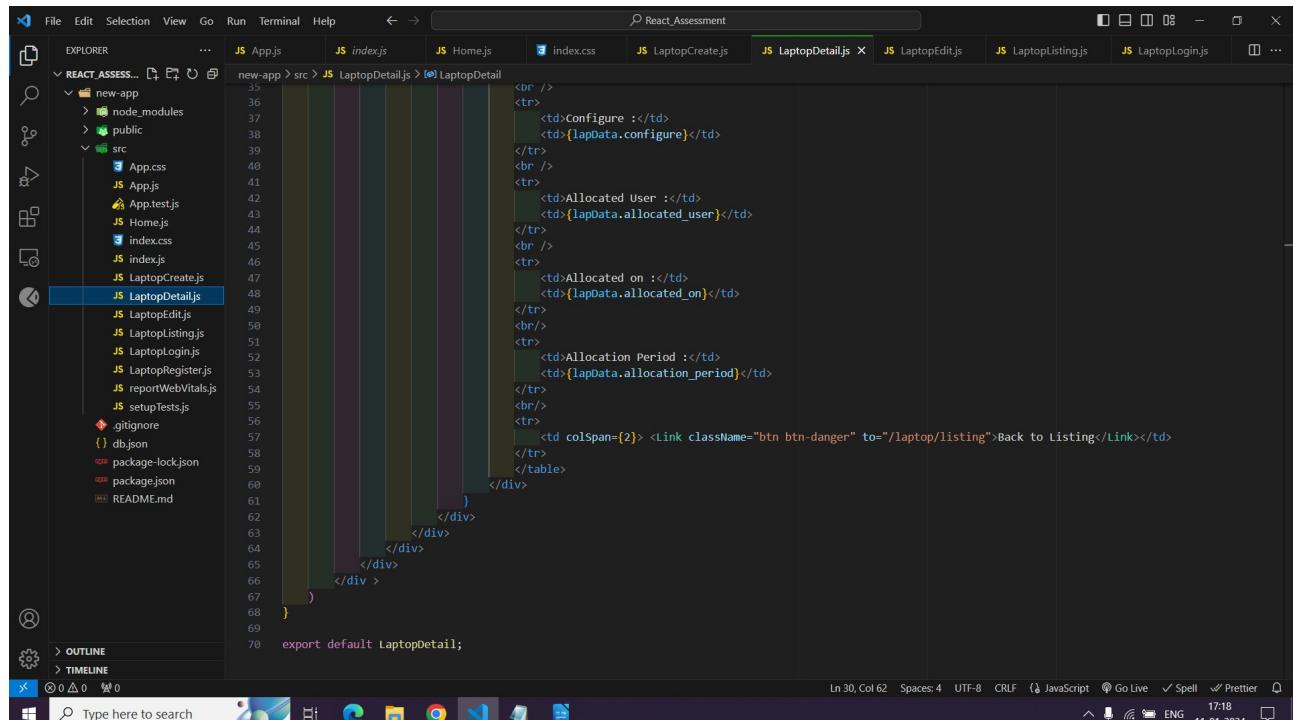
```
import { useEffect, useState } from "react";
import { Link, useParams } from "react-router-dom";

const LaptopDetail = () => {
  const { lapId } = useParams();
  const [lapData, lapDataChange] = useState({});

  useEffect(() => {
    fetch(`http://localhost:8000/laptop/${lapId}`)
      .then(res => {
        return res.json();
      })
      .then(resp => {
        lapDataChange(resp);
      })
      .catch(err => {
        console.log(err.message);
      });
  });

  return (
    <div className="container-fluid p-3 mb-2 text-dark">
      <div className="row">
        <div className="col-md-10 offset-md-1">
          <div className="card">
            <div className="card-title">
              <h2>Medicine Details</h2>
            </div>
            <div className="card-body">
              {lapData &gt;
                <table className="display">
                  <tr>
                    <td>Laptop Make :</td>
                    <td>{lapData.brand}</td>
                  </tr>
                  <br />
                  <tr>
                    <td>Configure :</td>
                    <td>{lapData.configure}</td>
                  </tr>
                  <br />
                  <tr>
                    <td>Allocated User :</td>
                    <td>{lapData.allocated_user}</td>
                  </tr>
                  <br />
                  <tr>
                    <td>Allocated on :</td>
                    <td>{lapData.allocated_on}</td>
                  </tr>
                  <br />
                  <tr>
                    <td>Allocation Period :</td>
                    <td>{lapData.allocation_period}</td>
                  </tr>
                  <br />
                  <tr>
                    <td colSpan={2}> <Link className="btn btn-danger" to="/laptop/listing">Back to Listing</Link></td>
                  </tr>
                </table>
              }
            </div>
          </div>
        </div>
      </div>
    </div>
  );
}

export default LaptopDetail;
```



A second screenshot of the Visual Studio Code interface showing the same `LaptopDetail.js` file. This version of the code uses a single `return` statement to wrap the entire component structure. It includes the same logic for fetching data and rendering it in a card component.

```
<div className="container-fluid p-3 mb-2 text-dark">
  <div className="row">
    <div className="col-md-10 offset-md-1">
      <div className="card">
        <div className="card-title">
          <h2>Medicine Details</h2>
        </div>
        <div className="card-body">
          {lapData &gt;
            <table className="display">
              <tr>
                <td>Laptop Make :</td>
                <td>{lapData.brand}</td>
              </tr>
              <br />
              <tr>
                <td>Configure :</td>
                <td>{lapData.configure}</td>
              </tr>
              <br />
              <tr>
                <td>Allocated User :</td>
                <td>{lapData.allocated_user}</td>
              </tr>
              <br />
              <tr>
                <td>Allocated on :</td>
                <td>{lapData.allocated_on}</td>
              </tr>
              <br />
              <tr>
                <td>Allocation Period :</td>
                <td>{lapData.allocation_period}</td>
              </tr>
              <br />
              <tr>
                <td colSpan={2}> <Link className="btn btn-danger" to="/laptop/listing">Back to Listing</Link></td>
              </tr>
            </table>
          }
        </div>
      </div>
    </div>
  </div>
</div>

export default LaptopDetail;
```

## LaptopCreate.js

A screenshot of a code editor window titled "React\_Assessment". The current file is "LaptopCreate.js". The code implements a form for creating a laptop record. It uses useState to manage state for brand, configuration, allocated user, allocation period, and validation. It handles form submission by sending a POST request to "http://localhost:8000/laptop/" with the JSON-formatted data from the form. An alert is shown if the save is successful.

```
import React, { useState } from "react";
import { Link, useNavigate } from "react-router-dom";
const LaptopCreate = () => {
  const [id] = useState("");
  const [brand, brandChange] = useState("");
  const [configure, configureChange] = useState("");
  const [allocated_user, userChange] = useState("");
  const [allocated_on, timeChange] = useState("");
  const [allocation_period, periodChange] = useState("");
  const [validation, valChange] = useState(false);

  const navigate = useNavigate();

  const handleSubmit = (e) => {
    e.preventDefault();
    const lapData = { brand, configure, allocated_user, allocation_period };

    fetch("http://localhost:8000/laptop/", {
      method: "POST",
      headers: { "content-type": "application/json" },
      body: JSON.stringify(lapData)
    }).then((res) => {
      alert("Saved successfully.");
      navigate("/laptop/listing");
    }).catch((err) => {
      console.log(err.message);
    });
  }

  return (
    <div>
      <div className="row">
        <div className="offset-lg-3 col-lg-6">
          <form className="container" onSubmit={handleSubmit}>
            <div className="card" style={{ "textAlign": "left" }}>
              <div className="card-title">
                <h2>Create Record</h2>
              </div>
              <div>
                <div>
                  <h3>Create Record</h3>
                </div>
                <div className="card-body">
                  <div>
                    <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                      <div className="form-group">
                        <label>ID:</label>
                        <input value={id} disabled="disabled" className="form-control"/>
                      </div>
                    </div>
                    <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                      <div className="form-group">
                        <label>Laptop Make:</label>
                        <input required="" value={brand} onBlur={(e=>valChange(true))} onChange={(e=>brandChange(e.target.value))} className="form-control"/>
                        {brand.length==0 && validation && <span className="text-danger">Brand Name is mandatory</span>}
                      </div>
                    </div>
                    <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                      <div className="form-group">
                        <label>Configure:</label>
                        <input value={configure} onBlur={(e=>valChange(true))} onChange={(e=>configureChange(e.target.value))} className="form-control"/>
                        {configure.length==0 && validation && <span className="text-danger">Configure details is mandatory</span>}
                      </div>
                    </div>
                    <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                      <div className="form-group">
                        <label>Allocated user:</label>
                        <input value={allocated_user} onBlur={(e=>valChange(true))} onChange={(e=>userChange(e.target.value))} className="form-control"/>
                        {allocated_user.length==0 && validation && <span className="text-danger">Allocated user details is mandatory</span>}
                      </div>
                    </div>
                    <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                      <div className="form-group">
                        <label>Allocation Period:</label>
                        <input value={allocated_on} onBlur={(e=>valChange(true))} onChange={(e=>timeChange(e.target.value))} className="form-control"/>
                        {allocated_on.length==0 && validation && <span className="text-danger">Allocation period is mandatory</span>}
                      </div>
                    </div>
                  </div>
                </div>
              </div>
            </form>
          </div>
        </div>
      </div>
    </div>
  );
}

export default LaptopCreate;
```

A screenshot of a code editor window titled "React\_Assessment". The current file is "LaptopCreate.js". The code is identical to the one in the first screenshot, but it includes CSS styles for the form fields. The styles use Bootstrap classes like "col-lg-12", "col-md-12", "col-sm-12", and "col-xs-12" to define column widths. The "form-control" class is used for input fields, and "text-danger" is used for validation error messages.

```
import React, { useState } from "react";
import { Link, useNavigate } from "react-router-dom";
const LaptopCreate = () => {
  const [id] = useState("");
  const [brand, brandChange] = useState("");
  const [configure, configureChange] = useState("");
  const [allocated_user, userChange] = useState("");
  const [allocated_on, timeChange] = useState("");
  const [allocation_period, periodChange] = useState("");
  const [validation, valChange] = useState(false);

  const navigate = useNavigate();

  const handleSubmit = (e) => {
    e.preventDefault();
    const lapData = { brand, configure, allocated_user, allocation_period };

    fetch("http://localhost:8000/laptop/", {
      method: "POST",
      headers: { "content-type": "application/json" },
      body: JSON.stringify(lapData)
    }).then((res) => {
      alert("Saved successfully.");
      navigate("/laptop/listing");
    }).catch((err) => {
      console.log(err.message);
    });
  }

  return (
    <div>
      <div className="row">
        <div className="offset-lg-3 col-lg-6">
          <form className="container" onSubmit={handleSubmit}>
            <div className="card" style={{ "textAlign": "left" }}>
              <div className="card-title">
                <h2>Create Record</h2>
              </div>
              <div className="card-body">
                <div>
                  <h3>Create Record</h3>
                </div>
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>ID:</label>
                    <input value={id} disabled="disabled" className="form-control"/>
                  </div>
                </div>
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>Laptop Make:</label>
                    <input required="" value={brand} onBlur={(e=>valChange(true))} onChange={(e=>brandChange(e.target.value))} className="form-control"/>
                    {brand.length==0 && validation && <span className="text-danger">Brand Name is mandatory</span>}
                  </div>
                </div>
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>Configure:</label>
                    <input value={configure} onBlur={(e=>valChange(true))} onChange={(e=>configureChange(e.target.value))} className="form-control"/>
                    {configure.length==0 && validation && <span className="text-danger">Configure details is mandatory</span>}
                  </div>
                </div>
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>Allocated user:</label>
                    <input value={allocated_user} onBlur={(e=>valChange(true))} onChange={(e=>userChange(e.target.value))} className="form-control"/>
                    {allocated_user.length==0 && validation && <span className="text-danger">Allocated user details is mandatory</span>}
                  </div>
                </div>
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>Allocation Period:</label>
                    <input value={allocated_on} onBlur={(e=>valChange(true))} onChange={(e=>timeChange(e.target.value))} className="form-control"/>
                    {allocated_on.length==0 && validation && <span className="text-danger">Allocation period is mandatory</span>}
                  </div>
                </div>
              </div>
            </form>
          </div>
        </div>
      </div>
    </div>
  );
}

export default LaptopCreate;
```

**LaptopCreate.js**

```
File Edit Selection View Go Run Terminal Help < > React_Assessment
```

```
new-app > src > LaptopCreate.js > LaptopCreate
  75   <div>
  76     <form>
  77       <div>
  78         <label>Allocated user</label>
  79         <input value={allocated_user} onBlur={e=>valChange(true)} onChange={e=>userChange(e.target.value)} className="form-control"/>
  80         {allocated_user.length==0 && validation && <span className="text-danger">Allocated user details is mandatory</span>}
  81       </div>
  82       <div>
  83         <label>Allocated on</label>
  84         <input value={allocated_on} onBlur={e=>valChange(true)} onChange={e=>timeChange(e.target.value)} className="form-control"/>
  85         {allocated_on.length==0 && validation && <span className="text-danger">Allocated on details is mandatory</span>}
  86       </div>
  87       <div>
  88         <label>Allocation Period</label>
  89         <input value={allocation_period} onBlur={e=>valChange(true)} onChange={e=>periodChange(e.target.value)} className="form-control"/>
  90         {allocation_period.length==0 && validation && <span className="text-danger">Allocation Period details is mandatory</span>}
  91       </div>
  92     </form>
  93   </div>
  94   <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
  95     <div>
  96       <button className="btn btn-success" type="submit">Save</button>
  97       <a href="/laptop/listing" className="btn btn-danger">Back</a>
  98     </div>
  99   </div>
 100 </div>
 101 </div>
 102 </div>
 103 </div>
 104 </div>
 105 </div>
 106 </div>
 107 </div>
 108 </div>
 109 </div>
 110 </div>
 111 </div>
 112 </div>
 113 >;
 114 >
 115 >
 116 export default LaptopCreate;
```

Line 45, Col 50 Spaces: 4 UTF-8 CR LF ↻ JavaScript ⚡ Go Live ⚡ 2 Spell ✎ Prettier

17:21 11-01-2024

## LaptopListing.js

**LaptopListing.js**

```
File Edit Selection View Go Run Terminal Help < > React_Assessment
```

```
new-app > src > LaptopListing.js > LaptopListing
  1 import { useEffect, useState } from "react";
  2 import { Link, useNavigate } from "react-router-dom";
  3
  4 const LaptopListing = () => {
  5   const [lapData, lapDataChange] = useState(null);
  6   const navigate = useNavigate();
  7
  8   const LoadDetail = (id) => {
  9     navigate("/laptop/detail/" + id);
 10   }
 11   const LoadEdit = (id) => {
 12     navigate("/laptop/edit/" + id);
 13   }
 14   const RemoveFunction = (id) => {
 15     if (window.confirm("Do you want to remove?")) {
 16       fetch(`http://localhost:8000/laptop/${id}`, {
 17         method: "DELETE"
 18       }).then((res) => {
 19         alert("Removed successfully..")
 20         window.location.reload();
 21       }).catch((err) => {
 22         console.log(err.message)
 23       })
 24     }
 25   }
 26
 27   useEffect(() => {
 28     fetch(`http://localhost:8000/laptop/`).then((res) => {
 29       return res.json();
 30     }).then((resp) => {
 31       lapDataChange(resp);
 32     }).catch((err) => {
 33       console.log(err.message);
 34     })
 35   }, [])
 36
 37   return (
 38     <div>
 39       <div>
 40         <div>
 41           <div>
 42             <div>
 43               <div>
 44                 <h2>Laptop Allocation Management</h2>
 45               </div>
 46             </div>
 47           </div>
 48         </div>
 49       </div>
 50     </div>
 51   );
 52 }
```

Line 39, Col 13 Spaces: 4 UTF-8 CR LF ↻ JavaScript ⚡ Go Live ⚡ 1 Spell ✎ Prettier

17:23 11-01-2024

File Edit Selection View Go Run Terminal Help

React\_Assessment

EXPLORER

REACT\_ASSESSMENT

- new-app
- node\_modules
- public
- src

  - App.css
  - App.js
  - App.test.js
  - Home.js
  - index.css
  - index.js
  - LaptopCreate.js
  - LaptopDetail.js
  - LaptopEdit.js
  - LaptopListing.js
  - LaptopLogin.js
  - LaptopRegister.js

.gitignore

{ db.json package-lock.json package.json README.md

JS LaptopListing.js

```

new-app > src > JS LaptopListing.js > JS LaptopListing
      </div>
      <br/><br/>
      <table className="table table-bordered">
        <thead className="bg-dark text-white">
          <tr>
            <td>Laptop ID:</td>
            <td>Laptop Make:</td>
            <td>Configure:</td>
            <td>Allocated User:</td>
            <td>Allocated on:</td>
            <td>Allocation Period:</td>
          </tr>
        </thead>
        <tbody>
          {lapData &
            lapData.map(item => (
              <tr key={item.id}>
                <td>{item.id}</td>
                <td>{item.brand}</td>
                <td>{item.configure}</td>
                <td>{item.allocated_user}</td>
                <td>{item.allocated_on}</td>
                <td>{item.allocation_period}</td>
                <td><button onClick={() => { LoadEdit(item.id) }} className="btn btn-outline-success rounded-top mx-2 btn-xs">Edit</button>
                  <button onClick={() => { RemoveFunction(item.id) }} className="btn btn-outline-danger rounded-top mx-2 btn-xs">Remove</button>
                  <button onClick={() => { LoadDetail(item.id) }} className="btn btn-outline-primary rounded-top mx-2 btn-xs">View</button>
                </td>
              </tr>
            ))
          </tbody>
        </table>
      </div>
    </div>
  </div>
</div>

```

export default LaptopListing;

Ln 93, Col 13 Spaces: 4 UTF-8 CRLF ↻ JavaScript ⚡ Go Live ⚡ 1 Spell ✨ Prettier

17:23 11-01-2024

## LaptopEdit.js

File Edit Selection View Go Run Terminal Help

React\_Assessment

EXPLORER

REACT\_ASSESSMENT

- new-app
- node\_modules
- public
- src

  - App.css
  - App.js
  - App.test.js
  - Home.js
  - index.css
  - index.js
  - LaptopCreate.js
  - LaptopDetail.js
  - LaptopEdit.js
  - LaptopListing.js
  - LaptopLogin.js
  - LaptopRegister.js

.gitignore

{ db.json package-lock.json package.json README.md

JS LaptopEdit.js

```

new-app > src > JS LaptopEdit.js > JS LaptopEdit
      <useEffect(() => {
        import { useState } from "react";
        import { Link, useNavigate, useParams } from "react-router-dom";
        const LaptopEdit = () => {
          const { lapId } = useParams();
          const [idChange, setIdChange] = useState("");
          const [brandChange, setBrandChange] = useState("");
          const [configureChange, setConfigureChange] = useState("");
          const [allocatedUserChange, setAllocatedUserChange] = useState("");
          const [allocatedOnChange, setTimeChange] = useState("");
          const [allocationPeriodChange, setAllocationPeriodChange] = useState("");
          const [validation, setValidation] = useState(false);
          const navigate = useNavigate();
          const handleFormSubmit = (e) => {
            e.preventDefault();
            const lapData = { brand, configure, allocatedUser, allocatedOn, allocationPeriod };
            fetch(`http://localhost:8000/laptop/${lapId}`, {
              method: "PUT",
              headers: { "Content-Type": "application/json" },
              body: JSON.stringify(lapData)
            }).then((res) => {
              alert("Saved successfully.");
              navigate("/");
            }).catch((err) => {
              console.log(err.message);
            });
          };
        };
      });

```

Ln 15, Col 13 Spaces: 4 UTF-8 CRLF ↻ JavaScript ⚡ Go Live ⚡ 2 Spell ✨ Prettier

17:25 11-01-2024

```
File Edit Selection View Go Run Terminal Help ← → React Assessment
EXPLORER JS App.js JS index.js JS Home.js JS index.css JS LaptopCreate.js JS LaptopDetail.js JS LaptopEdit.js JS LaptopListing.js JS LaptopLogin.js JS LaptopRegister.js ...
REACT_ASSESSMENT
new-app > src > JS LaptopEdit.js > LaptopEdit > useState() callback > then() callback
  .catch((err) =>
    console.log(err.message)
  )
}
return (
  <div>
    <div className="row">
      <div className="offset-lg-3 col-lg-6">
        <form className="container" onSubmit={handleSubmit}>
          <div className="card" style={{ textAlign: "left" }}>
            <div className="card-title">
              <h2>Record Update</h2>
            </div>
            <div className="card-body">
              <div className="row">
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>ID:</label>
                    <input value={id} disabled="disabled" className="form-control"/>
                  </div>
                </div>
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>Laptop Make:</label>
                    <input required value={brand} onBlur={(e) => valChange(true)} onChange={(e) => brandChange(e.target.value)} className="form-control"/>
                    {brand.length === 0 && validation && <span className="text-danger">Brand Name is mandatory</span>}
                  </div>
                </div>
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>Configure:</label>
                    <input value={configure} onBlur={(e) => valChange(true)} onChange={(e) => configureChange(e.target.value)} className="form-control"/>
                    {configure.length === 0 && validation && <span className="text-danger">Configure details is mandatory</span>}
                  </div>
                </div>
                <div className="col-lg-12 col-md-12 col-sm-12 col-xs-12">
                  <div className="form-group">
                    <label>Allocated user:</label>
                    <input value={allocatedUser} onBlur={(e) => valChange(true)} onChange={(e) => userChange(e.target.value)} className="form-control"/>
                    {allocatedUser.length === 0 && validation && <span className="text-danger">Assigned user details is mandatory</span>}
                  </div>
                </div>
              </div>
            </div>
          </form>
        </div>
      </div>
    </div>
  </div>
)
```

The screenshot shows a code editor interface with the following details:

- File Explorer:** On the left, it lists files and folders. The 'src' folder contains 'App.js', 'index.js', 'Home.js', 'index.css', 'LaptopCreate.js', 'LaptopDetail.js', 'LaptopEdit.js' (which is the active file), 'LaptopListing.js', 'LaptopLogin.js', and 'LaptopRegister.js'. Other files like 'new-app', 'node\_modules', 'public', and configuration files ('.gitignore', 'db.json', 'package-lock.json', 'package.json', 'README.md') are also listed.
- Code Editor:** The main area displays the 'LaptopEdit.js' file. The code is a functional component for editing laptop details. It uses Material-UI's Formik library for handling form state and validation. The component includes fields for 'Configure', 'Allocated user', 'Allocation Period', and a 'Save' button. A 'useEffect' hook is used to handle the 'onBlur' event for the 'Configure' input, setting its value to a configuration object if it's empty. The 'Configure' field has validation logic to ensure its length is greater than zero and that its value is a valid JSON object. Similar validation logic is present for the 'Allocated user' and 'Allocation Period' fields. The 'Save' button triggers a submission of the form.
- Bottom Status Bar:** Shows the current file path as 'React Assessment / LaptopEdit.js', line numbers (Ln 15, Col 13), and other settings like spaces, encoding, and spell checker.

## LaptopLogin.js

```
File Edit Selection View Go Run Terminal Help < > React_Assessment
EXPLORER JS App.js JS index.js JS Home.js index.css JS LaptopCreate.js JS LaptopDetail.js JS LaptopEdit.js JS LaptopListing.js JS LaptopLogin.js JS LaptopRegister.js ...
new-app > src > JS LaptopLogin.js
1 import 'bootstrap/dist/css/bootstrap.css';
2 import React from 'react';
3 import { Link } from "react-router-dom";
4
5 function LaptopLogin() {
6
7     const handleCheckEmail = (value) => {
8         let emailRegex = `^([a-zA-Z0-9_.-]+@[a-z]{2,4}\.[a-z]{2,5}$)`;
9         if(!emailRegex.test(value))
10             alert('Enter valid email...!');
11     }
12
13     const handleCheckPassword = (value) => {
14         let passwordRegex = `/^(a-zA-Z0-9@.){8,14}$/`;
15         if(!passwordRegex.test(value))
16             alert('Enter valid password...!');
17     }
18
19     return (
20         <div className="container-fluid">
21             <div className="row d-flex align-items-center justify-content-center vh-100">
22                 <div className="col-md-8 col-md-7 col-lg-6 col-xl-5">
23                     <div className="border bg-white shadow p-5 rounded">
24                         <h1>Login</h1>
25                         <form>
26                             <div className="mb-2">
27                                 <label htmlFor="email">Email</label>
28                                 <input type="email" name="email" className="form-control" placeholder="Enter your email" onBlur={(e)>handleCheckEmail(e.target.value)} required/>
29                             </div>
30                             <div className="mb-2">
31                                 <label htmlFor="password">Password</label>
32                                 <input type="password" name="password" className="form-control" placeholder="Enter your password" required onBlur={(e)>{handleCheckPassword(e.target.value)}} />
33                             </div>
34                             <Link to="/laptop/listing" className="btn btn-primary w-100">Login</Link>
35                         </form>
36                     </div>
37                 </div>
38             </div>
39         )
40
41     export default LaptopLogin

```

Ln 32, Col 32 Spaces: 2 UTF-8 LF ↳ JavaScript ⚡ Go Live ⚡ 4 Spell ⚡ Prettier ⚡ 17:27 11-01-2024

## LaptopRegister.js

```
File Edit Selection View Go Run Terminal Help < > React_Assessment
EXPLORER JS App.js JS index.js JS Home.js index.css JS LaptopCreate.js JS LaptopDetail.js JS LaptopEdit.js JS LaptopListing.js JS LaptopLogin.js JS LaptopRegister.js ...
new-app > src > JS LaptopRegister.js
1 import 'bootstrap/dist/css/bootstrap.css';
2 import React from 'react';
3 import { Link } from "react-router-dom";
4
5 function LaptopRegister() {
6
7     return (
8         <div className="container-fluid">
9             <div className="row d-flex align-items-center justify-content-center vh-100">
10                 <div className="col-sm-8 col-md-7 col-lg-6 col-xl-5">
11                     <div className="border bg-white shadow p-5 rounded">
12                         <h1>Register</h1>
13                         <form>
14                             <div className="mb-2">
15                                 <label htmlFor="name">Name</label>
16                                 <input type="text" name="name" className="form-control" placeholder="Enter your Name" />
17                             </div>
18                             <div className="mb-2">
19                                 <label htmlFor="email1">Email</label>
20                                 <input type="email" name="email" className="form-control" placeholder="Enter your email" />
21                             </div>
22                             <div className="mb-2">
23                                 <label htmlFor="password">Set new Password</label>
24                                 <input type="password" name="newpassword" className="form-control" placeholder="Enter your new password" />
25                             </div>
26                             <div className="mb-2">
27                                 <label htmlFor="confirmPassword">Confirm Password</label>
28                                 <input type="password" name="confirmpassword" className="form-control" placeholder="Confirm your password" />
29                             </div>
30                             <Link to="/" className="btn btn-primary">Register</Link>
31                         </form>
32                     </div>
33                 </div>
34             </div>
35         )
36
37     export default LaptopRegister;
38

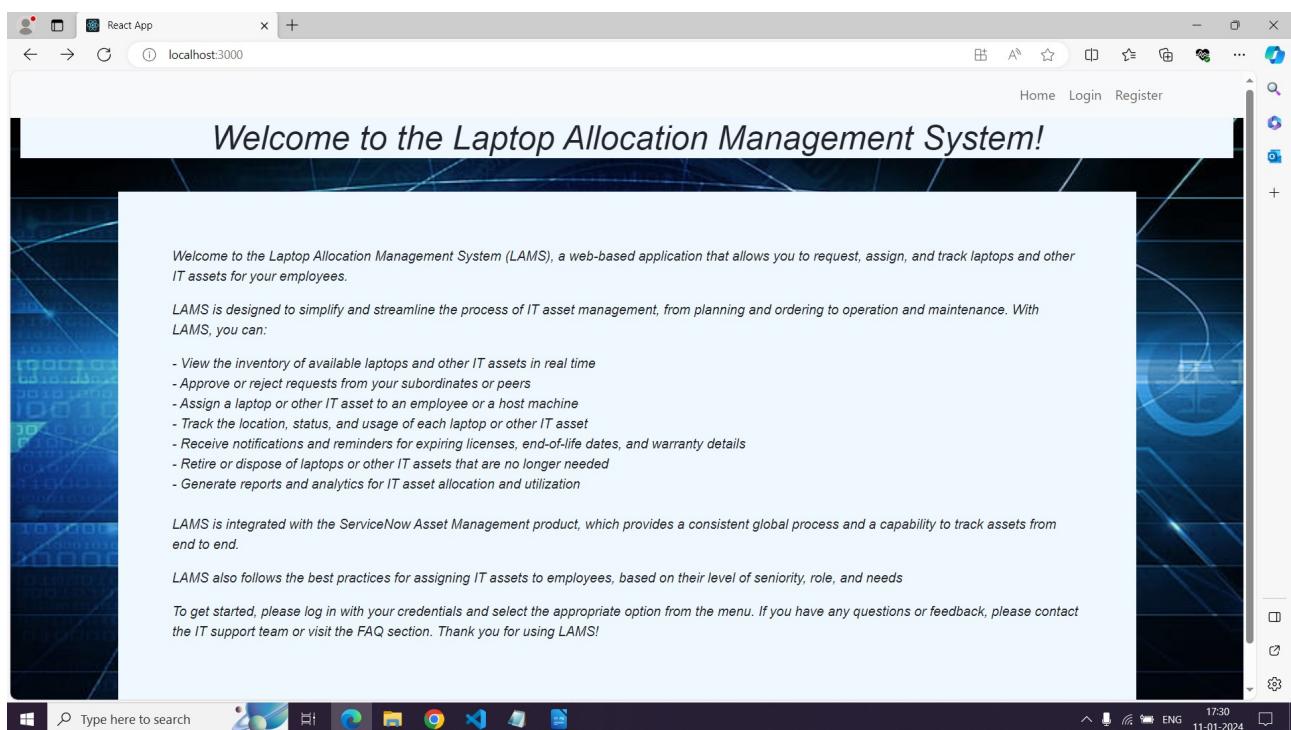
```

Ln 38, Col 31 Spaces: 2 UTF-8 LF ↳ JavaScript ⚡ Go Live ⚡ 3 Spell ⚡ Prettier ⚡ 17:28 11-01-2024

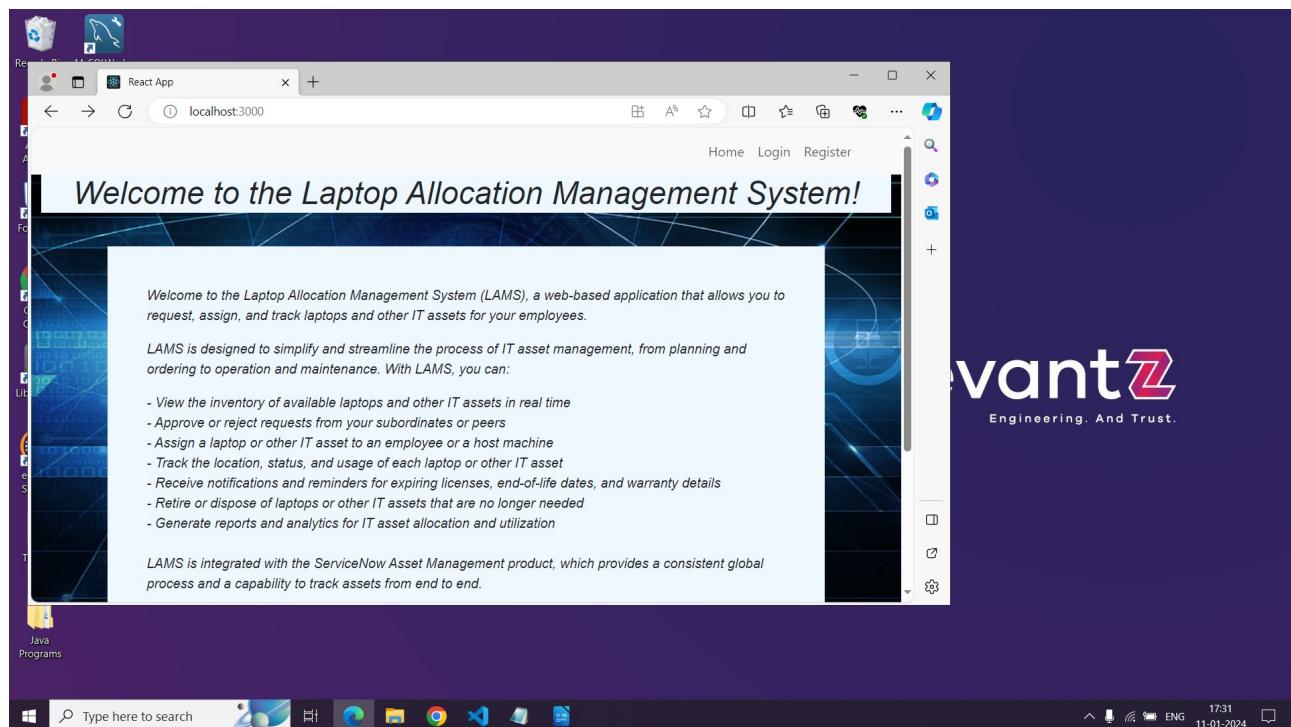
## Output:

### Home page

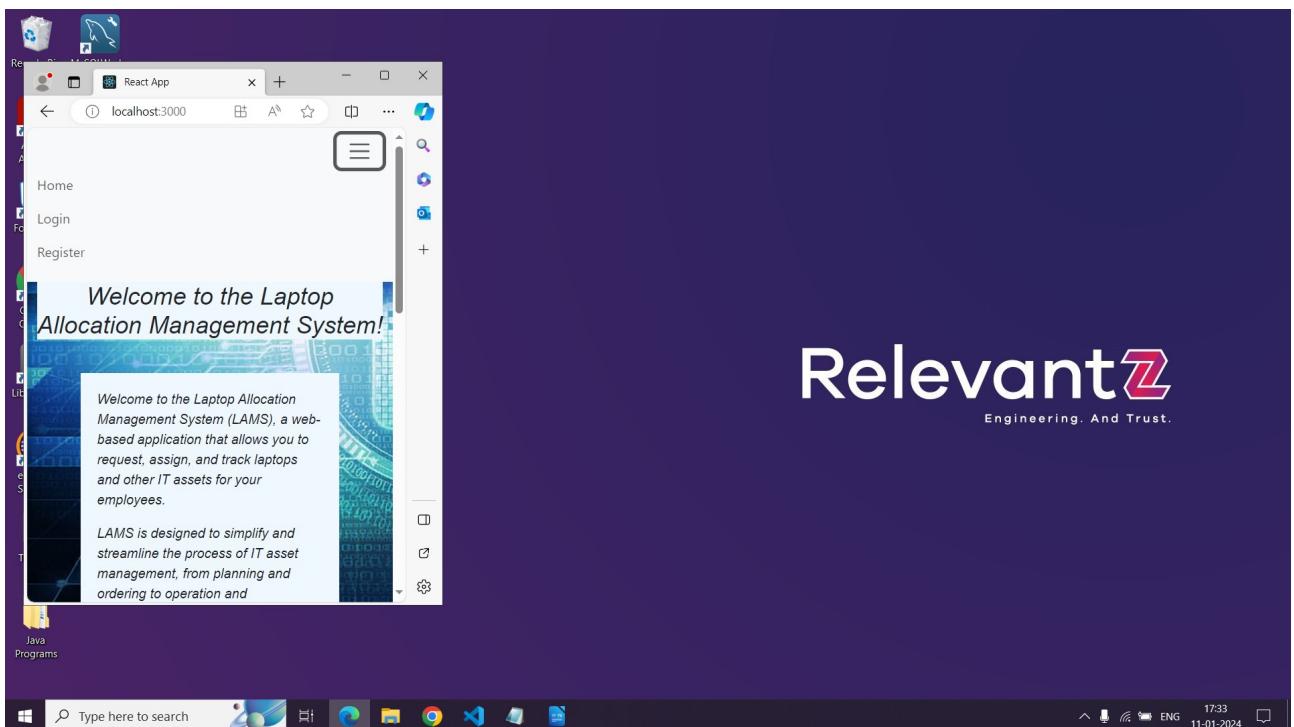
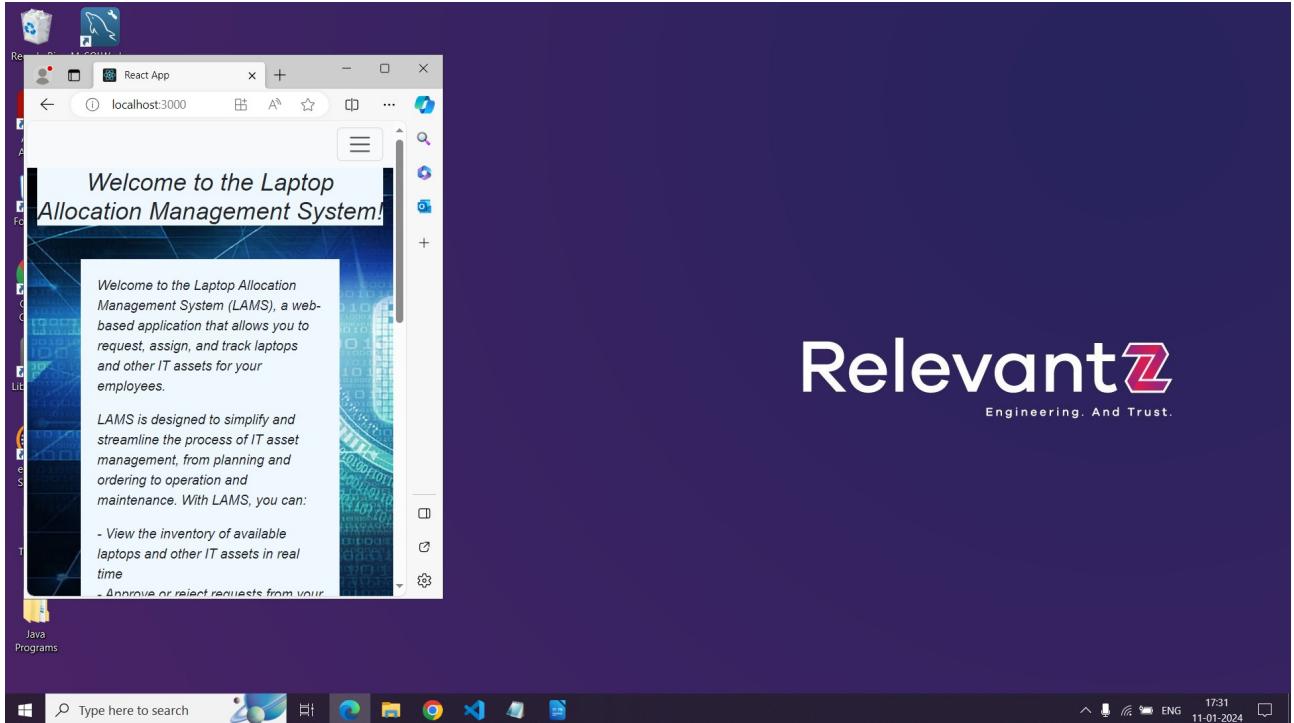
#### Larger:



#### Medium:

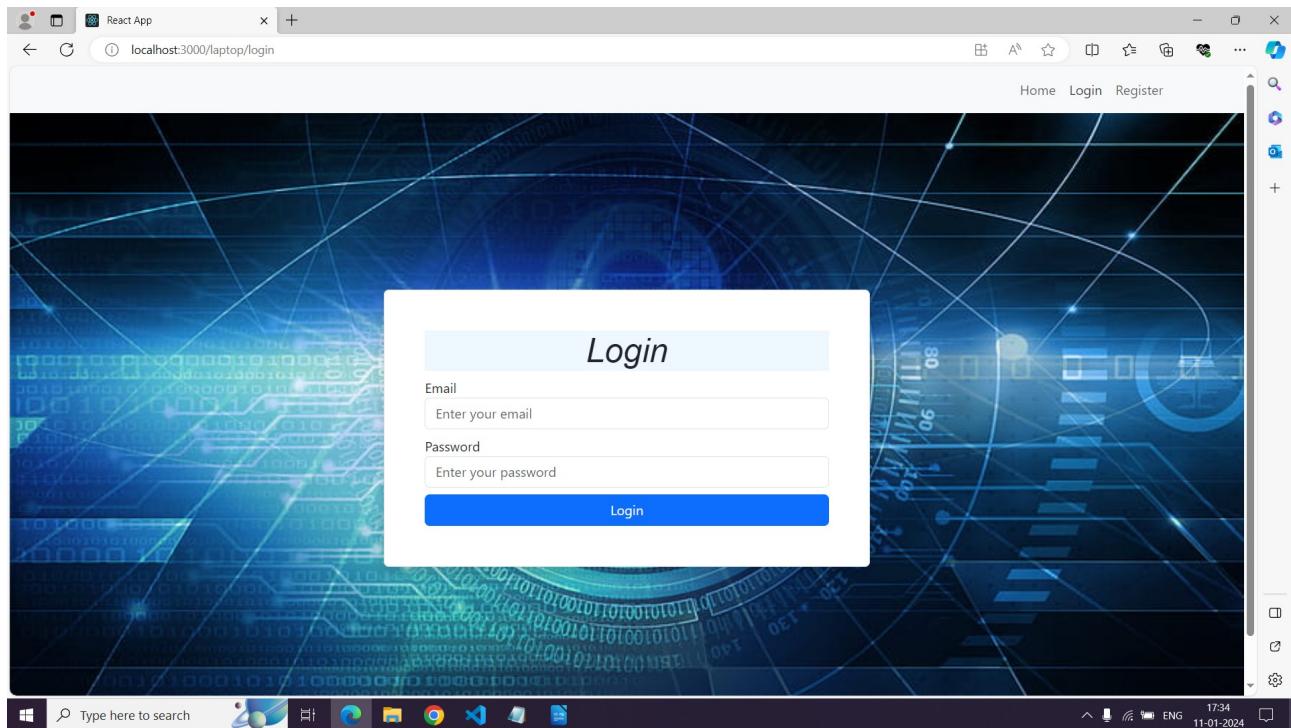


## Small:

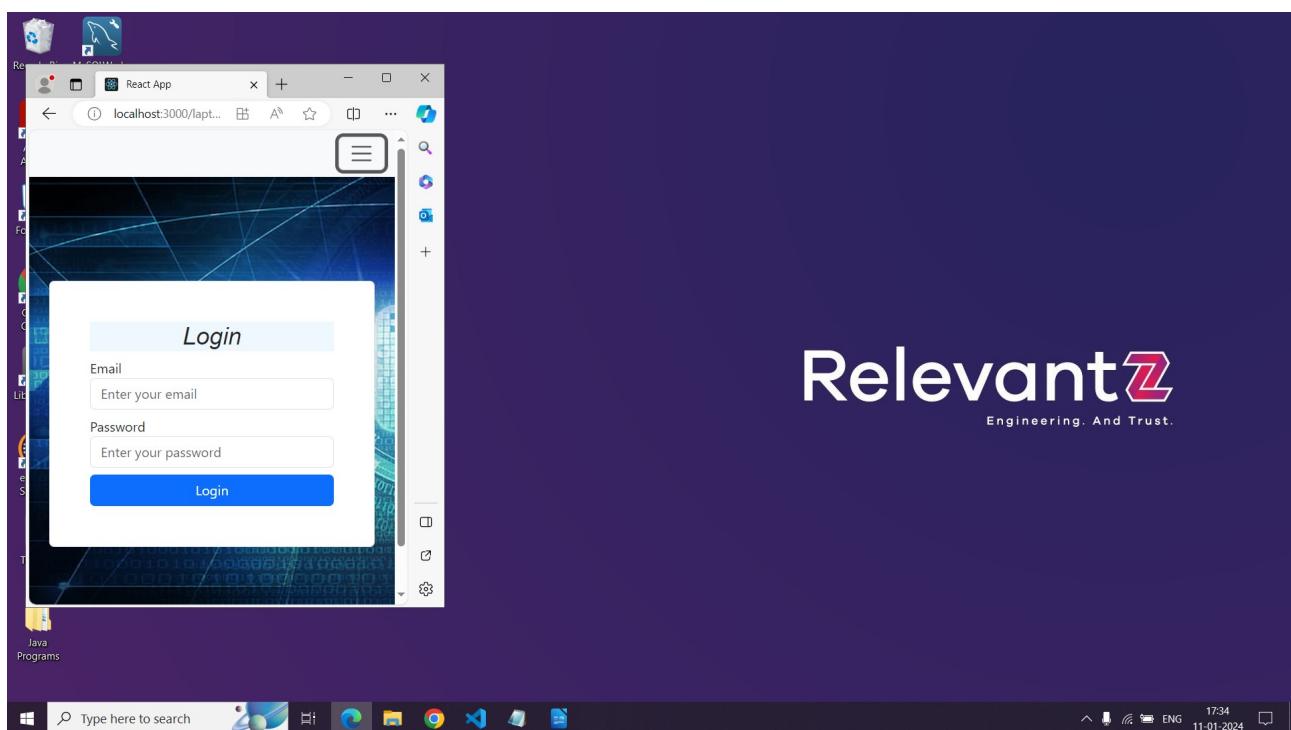


## Login page:

### Large:

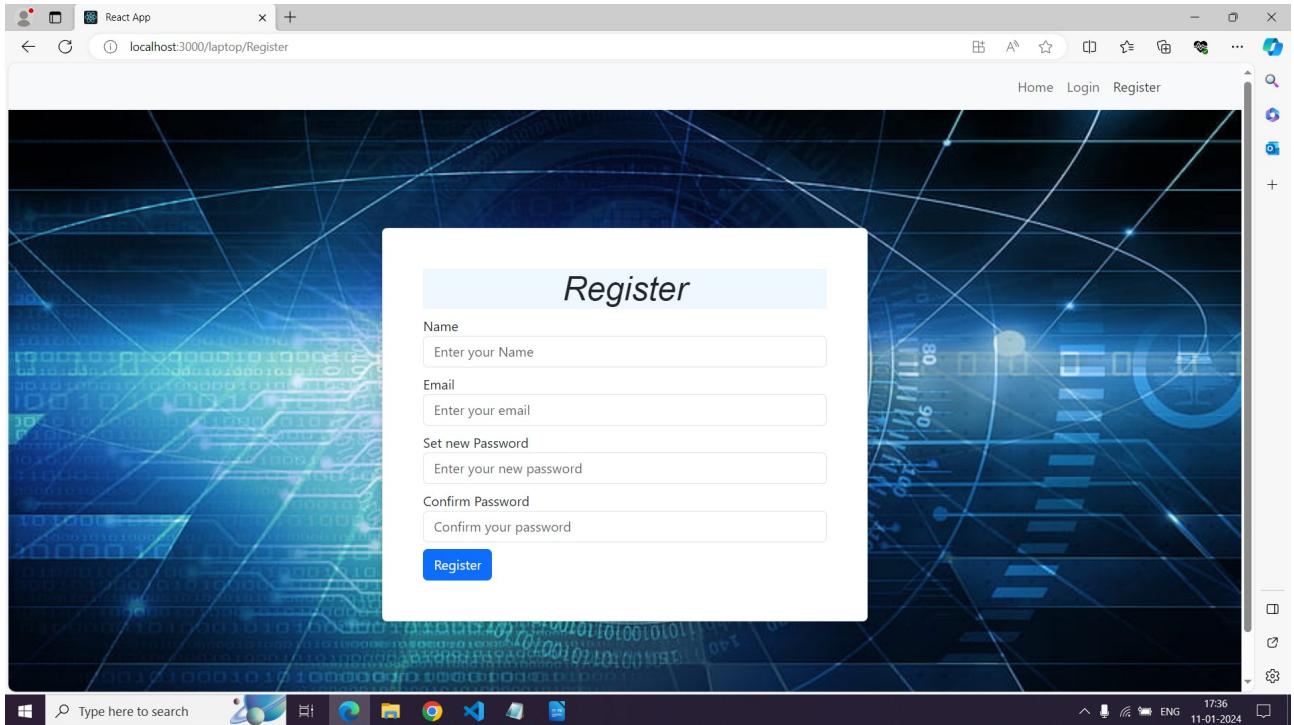


### Small:

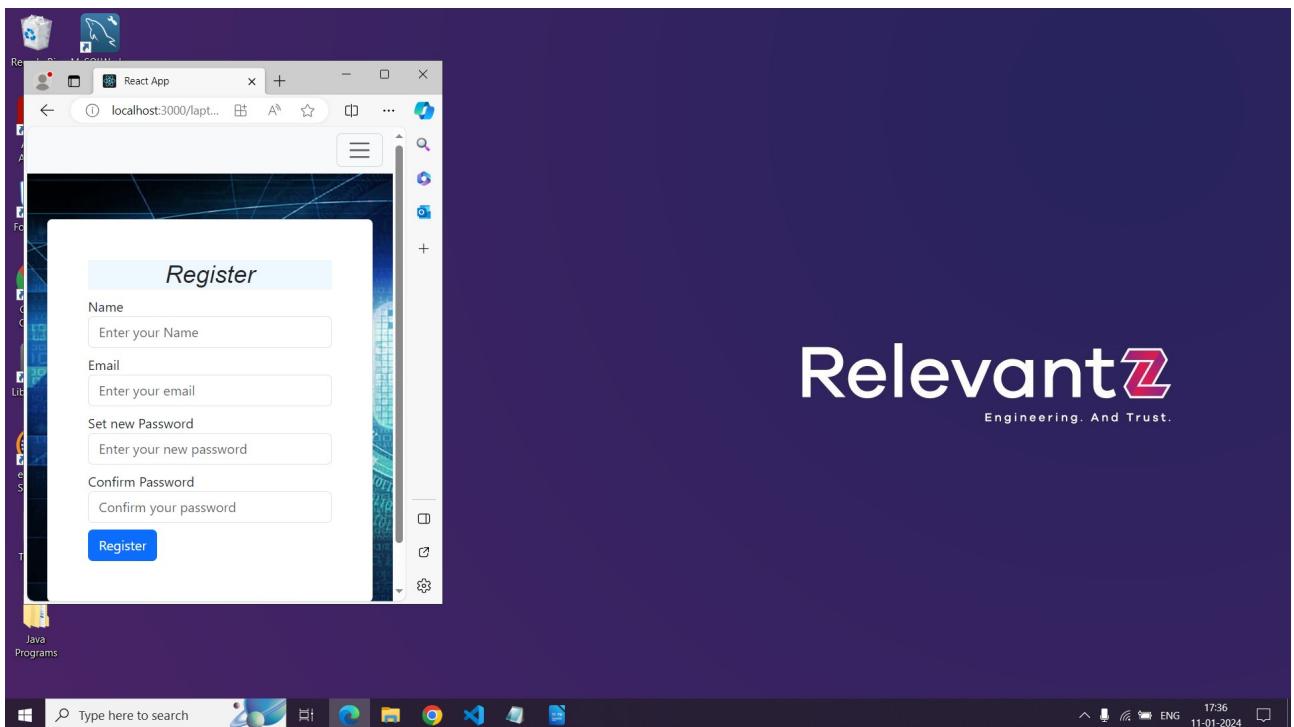


## Register page:

Large:



Small:



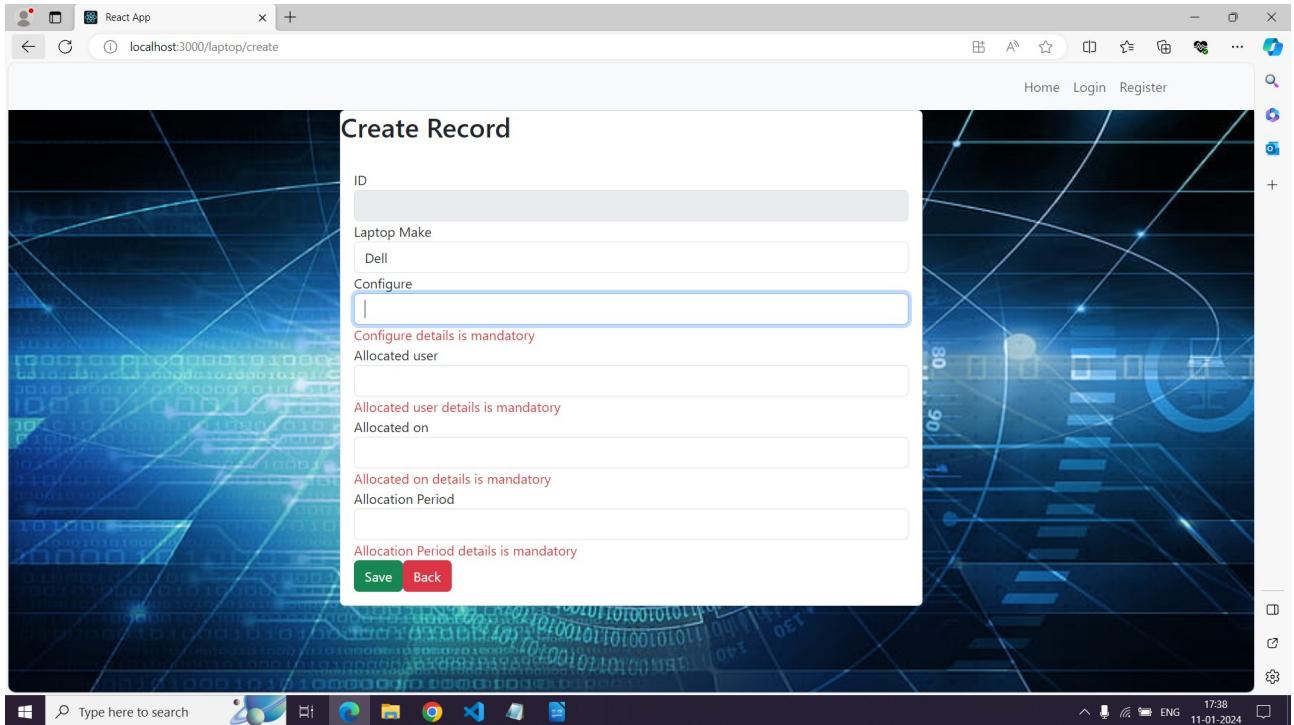
## Main Page:

The screenshot shows a web browser window titled "React App" with the URL "localhost:3000/laptop/listing". The title bar also includes "Home Login Register". The main content area is titled "Laptop Allocation Management" and features a "Add details" button. Below this is a table header with columns: Laptop ID, Laptop Make, Configure, Allocated User, Allocated on, and Allocation Period. The background of the page is a blue-toned digital circuit board or binary code pattern. The taskbar at the bottom shows various pinned icons and the date/time "11-01-2024 17:37".

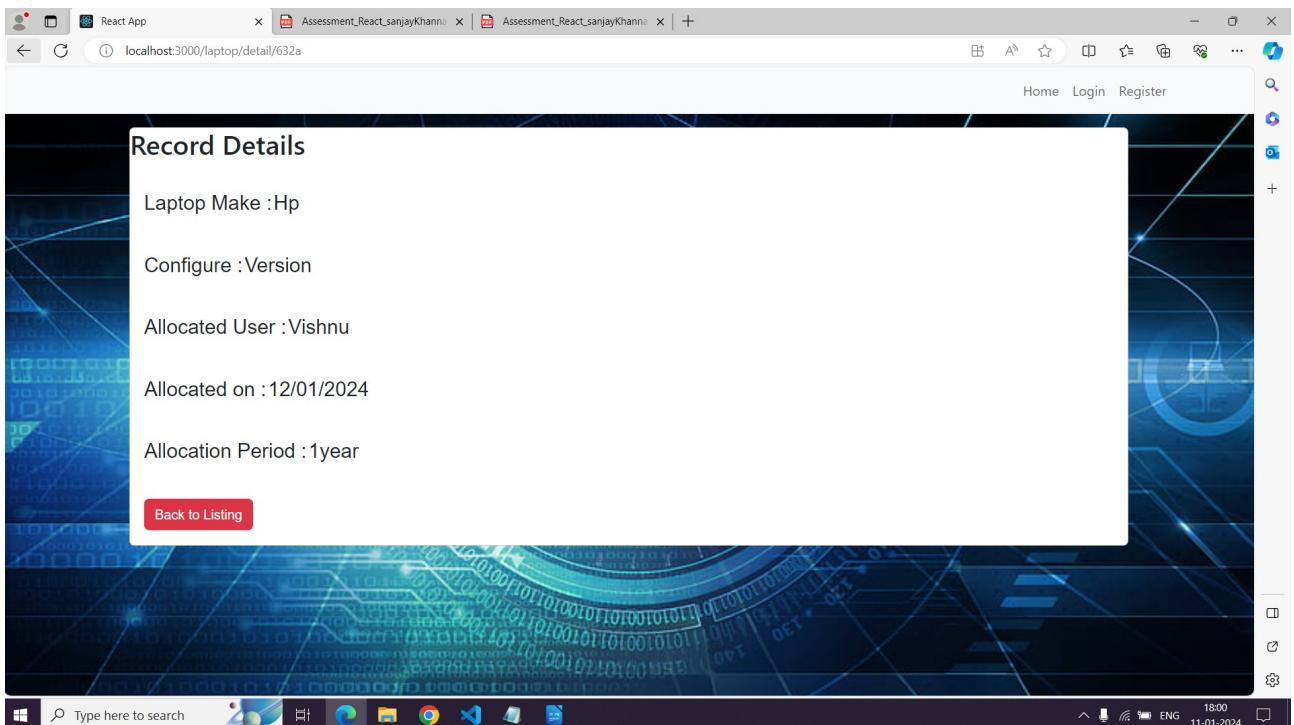
## Add Operation:

The screenshot shows a web browser window titled "React App" with the URL "localhost:3000/laptop/create". The title bar includes "Home Login Register". The main content area is titled "Create Record" and contains a form with fields for "ID", "Laptop Make", "Configure", "Allocated user", "Allocated on", and "Allocation Period". At the bottom of the form are "Save" and "Back" buttons. The background of the page is a blue-toned digital circuit board or binary code pattern. The taskbar at the bottom shows various pinned icons and the date/time "11-01-2024 17:38".

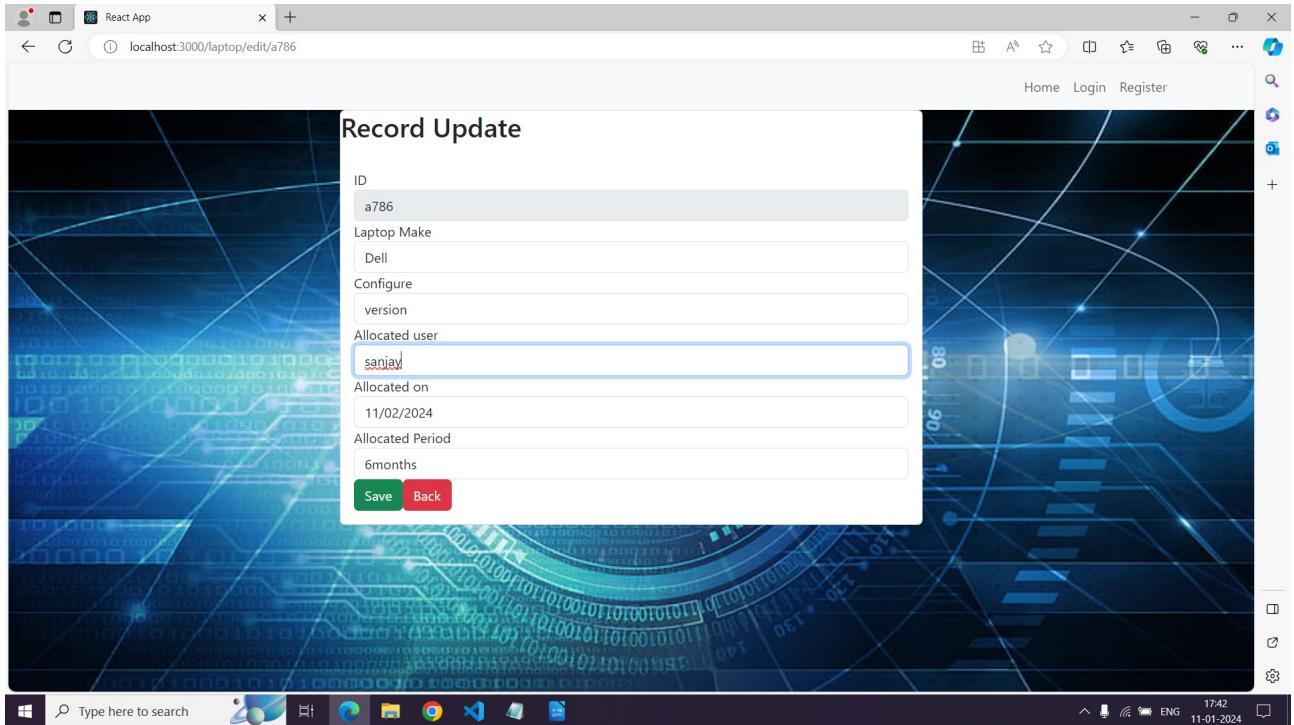
## Add Operation with Validation:



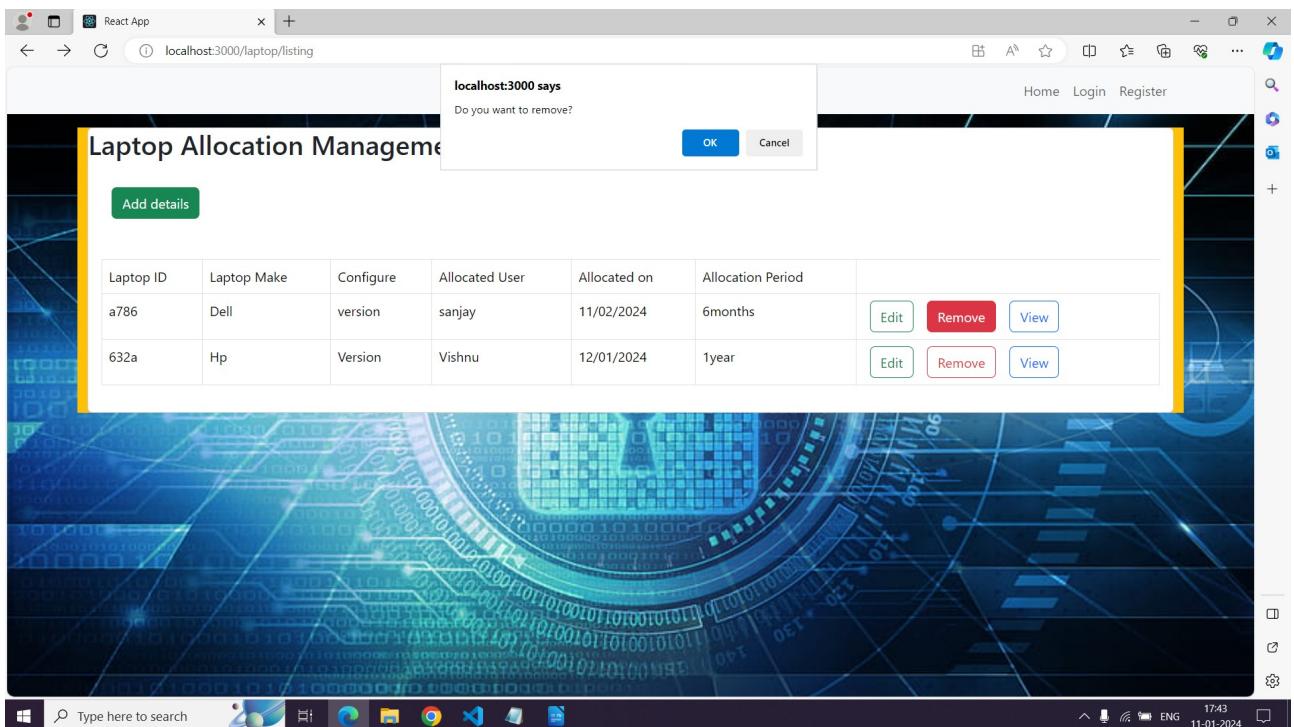
## View Operation:



## Edit Page:



## Delete Page:



React App

localhost:3000/laptop/listing

Laptop Allocation Management

Add details

Laptop ID	Laptop Make	Configure	Allocated User	Allocated on	Allocation Period			
a786	Dell	version	sanjay	11/02/2024	6months	<a href="#">Edit</a>	<a href="#">Remove</a>	<a href="#">View</a>
632a	Hp	Version	Vishnu	12/01/2024	1year	<a href="#">Edit</a>	<a href="#">Remove</a>	<a href="#">View</a>

localhost:3000 says  
Removed successfully.

OK

Home Login Register

Type here to search

17:43 11-01-2024