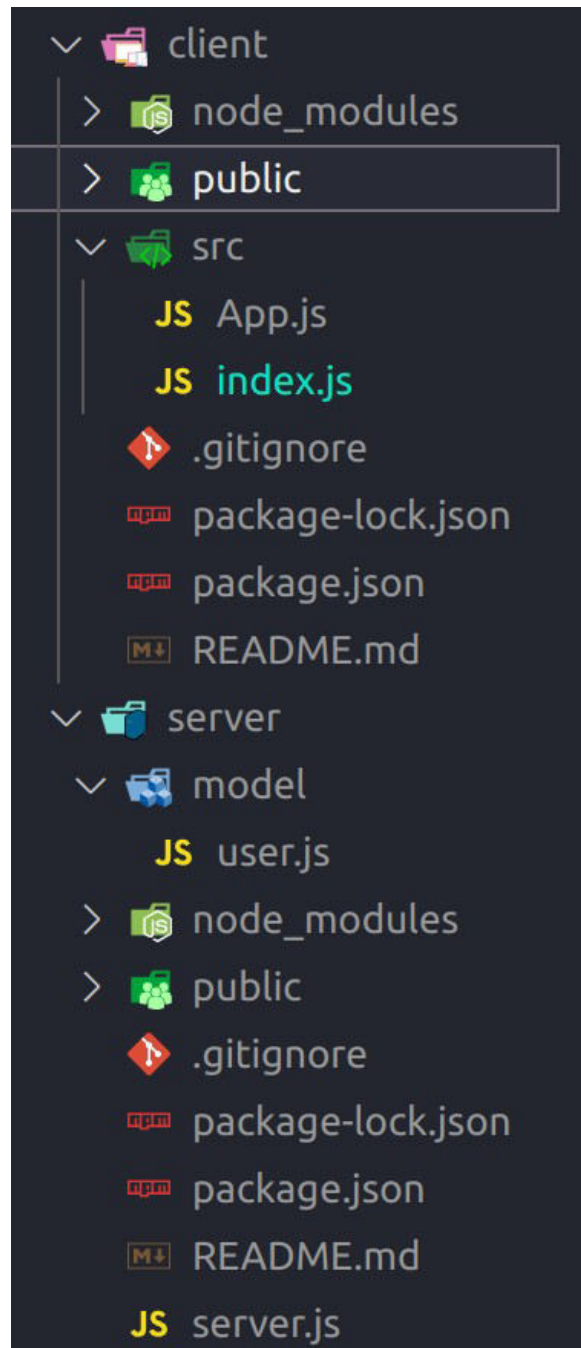


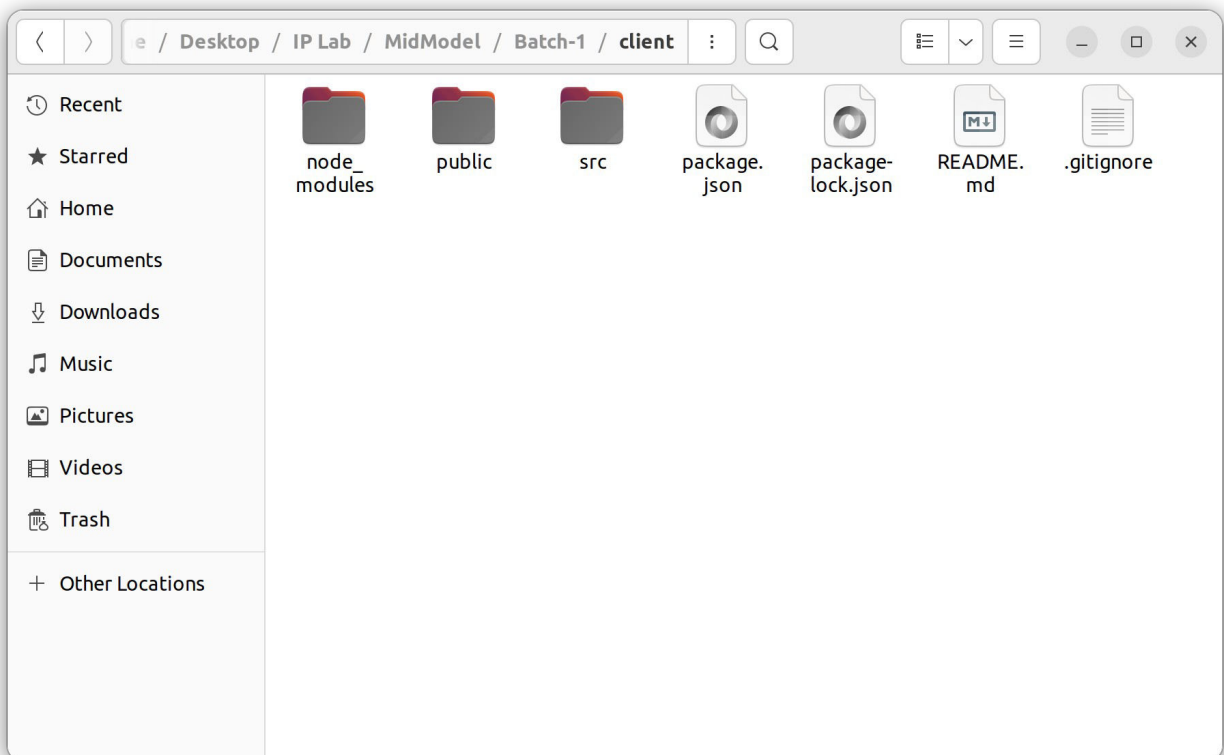
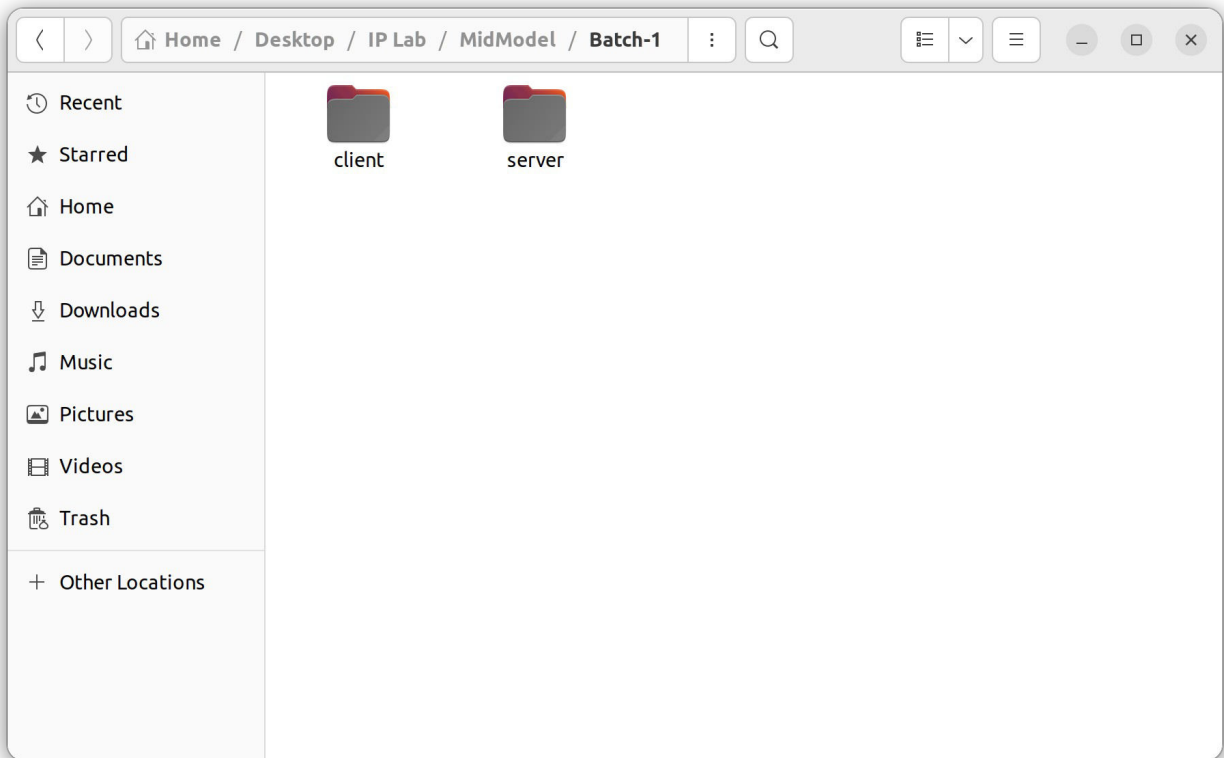
M.Rohith

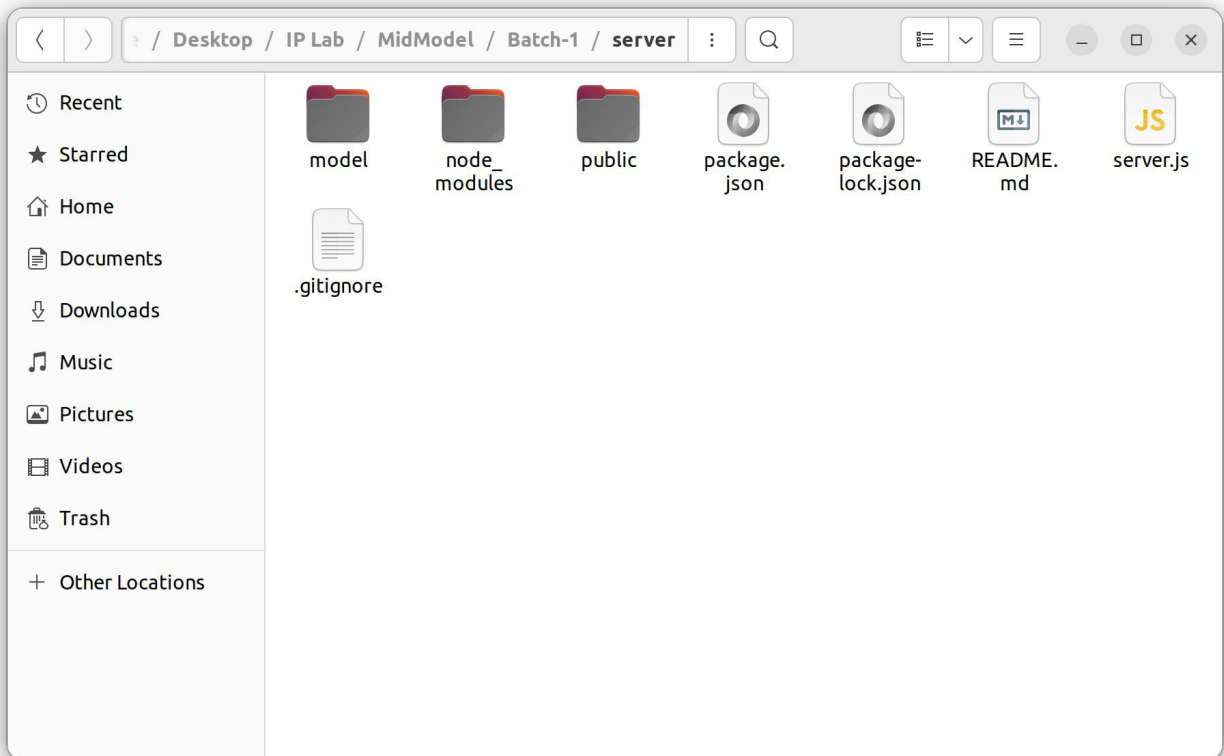
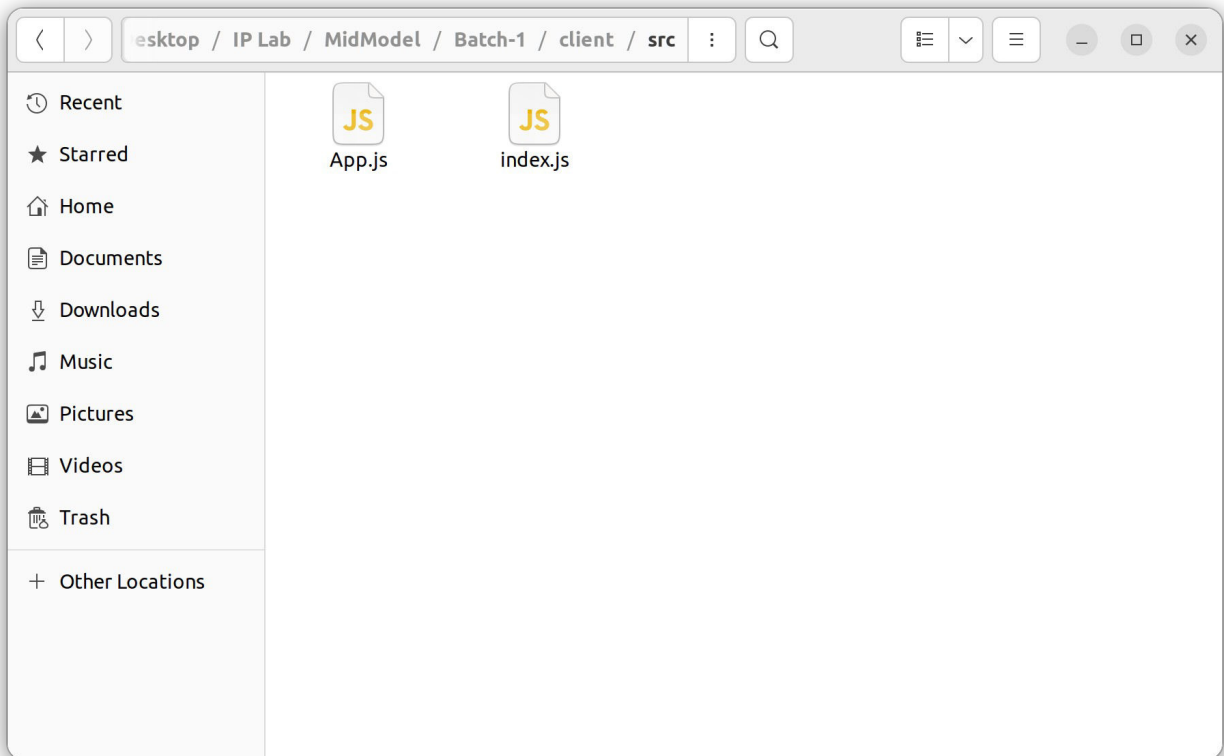
MVC ARCHITECTURE

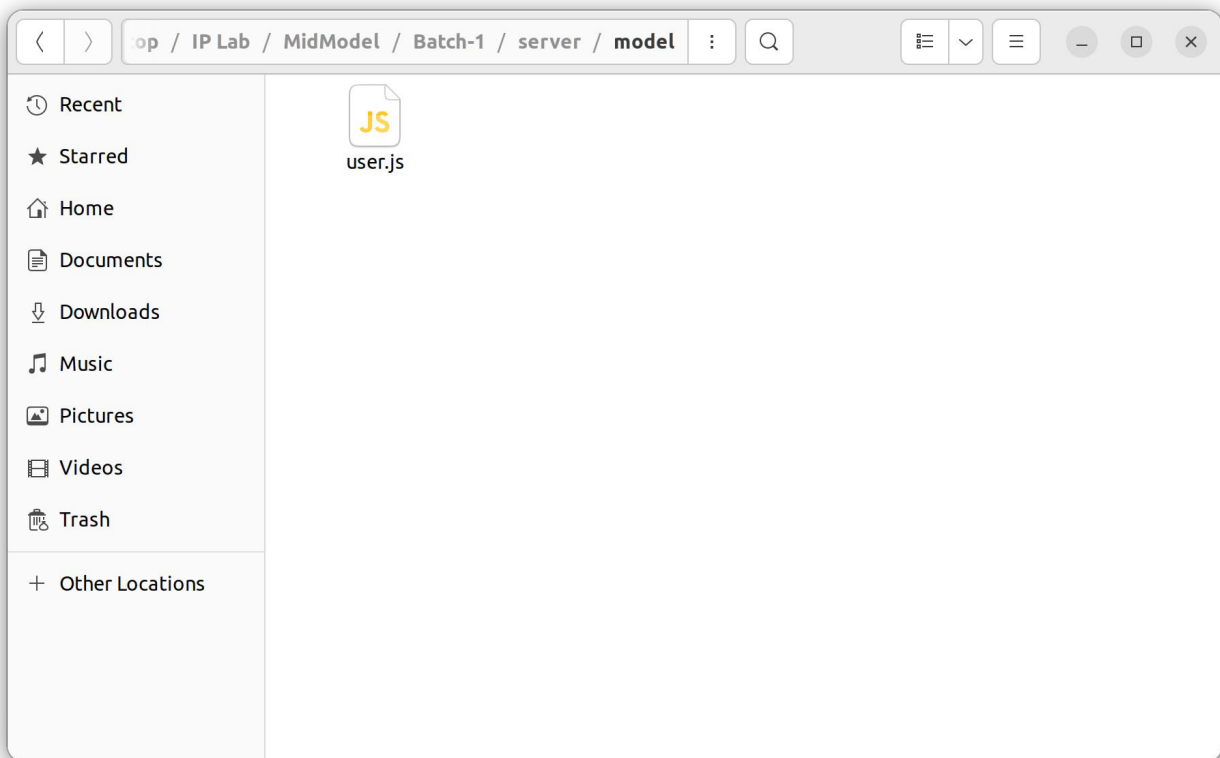
Batch-1

Structure:









Program code:

user.js

```
const mongoose = require("mongoose");

const UserSchema = new mongoose.Schema({
  username: String,
  usage: Number
});

const UserModel = mongoose.model("users", UserSchema);

module.exports = UserModel;
```

server.js

```
const mongoose = require("mongoose");
const cors = require("cors");
const express = require("express");
const UserModel = require("./model/user.js");

const app = express();
app.use(cors());
app.use(express.json());

mongoose.connect("mongodb://localhost:27017/infoBatch1");
```

```

app.post("/send", (req, res) => {
  const { username, userage } = req.body;
  console.log(`Searching for ${username} aged ${userage}`);
  UserModel.findOne({ username, userage })
    .then(result => res.json(result))
    .catch(err => console.log(err));
});

app.post("/insert", (req, res) => {
  const { username, userage } = req.body;
  console.log(`Inserting ${username} aged ${userage}`);
  UserModel.create({ username, userage })
    .then(result => res.json(result))
    .catch(err => console.log(err));
});

app.post("/delete", (req, res) => {
  const { username, userage } = req.body;
  console.log(`Deleting ${username} aged ${userage}`);
  UserModel.deleteOne({ username, userage })
    .then(result => res.json(result))
    .catch(err => console.log(err));
});

app.post("/update", (req, res) => {
  const { username, userage, newUsername, newUserage } = req.body;
  console.log(`Updating ${username} aged ${userage} to ${newUsername} aged ${newUserage}`);
  UserModel.findOneAndUpdate({ username, userage }, { username: newUsername, userage: newUserage }, { new: true })
    .then(result => res.json(result))
    .catch(err => console.log(err));
});

app.listen(3002, () => {
  console.log("Server is running on PORT 3002");
});

```

App.js

```

import { useState } from "react";
import axios from "axios";

export default function App() {
  let [name, setName] = useState("");
  let [age, setAge] = useState("");
  let [newName, setNewName] = useState("");
  let [newAge, setNewAge] = useState("");
  let [display, setDisplay] = useState("");

  function sendData() {

```

```

    console.log("Sending data...");
    axios.post("http://localhost:3002/send", { username: name, usage: age })
      .then(res => setDisplay(res.data ? `${res.data.username} aged ${res.data.usage} is Present` :
"User Not Found"))
      .catch(err => console.log(err));
  }

function insertData() {
  console.log("Inserting data...");
  axios.post("http://localhost:3002/insert", { username: name, usage: age })
    .then(res => console.log(res))
    .catch(err => console.log(err));
}

function deleteData() {
  console.log("Deleting Data...");
  axios.post("http://localhost:3002/delete", { username: name, usage: age })
    .then(res => console.log(res))
    .catch(err => console.log(err));
}

function updateData() {
  console.log("Updating Data...");
  axios.post("http://localhost:3002/update", { username: name, usage: age, newUsername:
newName, newUsage: newAge })
    .then(res => console.log(res))
    .catch(err => console.log(err));
}

return (
  <div>
    <center>
      <h1>MVC ARCHITECTURE PRACTICE</h1>
      <input type="text" placeholder="Username" onChange={(e) => setName(e.target.value)} />
      <input type="number" placeholder="Age" onChange={(e) => setAge(e.target.value)} />
      <br /><br />
      <button onClick={sendData}>Search</button>
      <br /><br />
      <button onClick={insertData}>Insert</button>
      <br /><br />
      <button onClick={deleteData}>Delete</button>
      <br /><br />
      <input type="text" placeholder="New Username" onChange={(e) =>
setNewName(e.target.value)} />
      <input type="number" placeholder="New Age" onChange={(e) =>
setNewAge(e.target.value)} />
      <button onClick={updateData}>Update</button>
      <br /><br />
      <h2>{display}</h2>
    </center>
  </div>
);

```

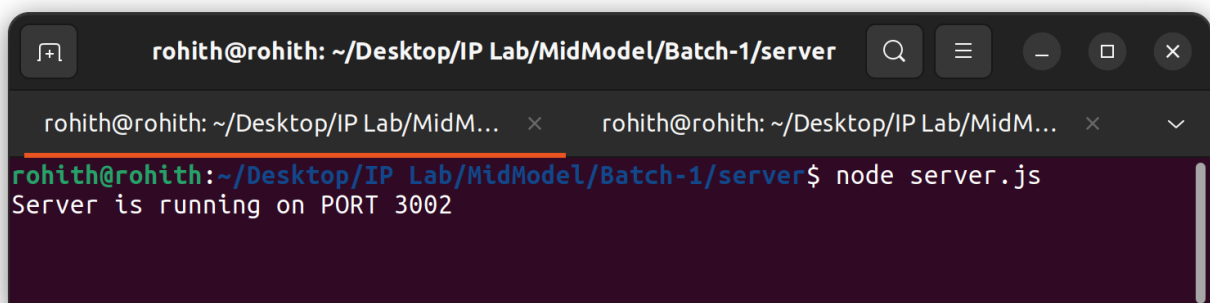
```
}
```

index.js

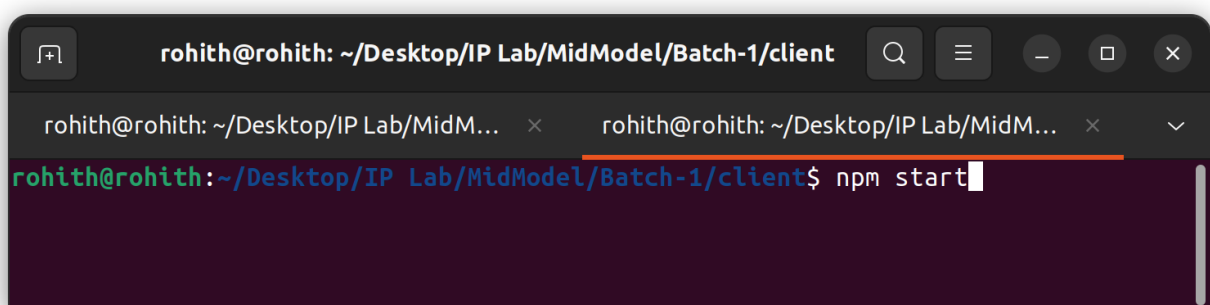
```
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <React.StrictMode>
    <App />
  </React.StrictMode>
);
```

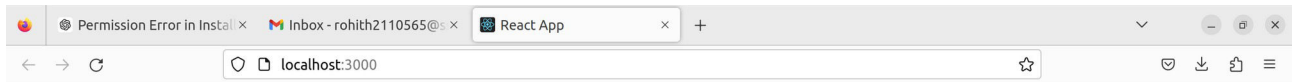
Output:

A terminal window with a dark background. The title bar shows 'rohith@rohith: ~/Desktop/IP Lab/MidModel/Batch-1/server'. The prompt is 'rohith@rohith:~/Desktop/IP Lab/MidModel/Batch-1/server\$'. The command 'node server.js' has been entered, and the output is 'Server is running on PORT 3002'.

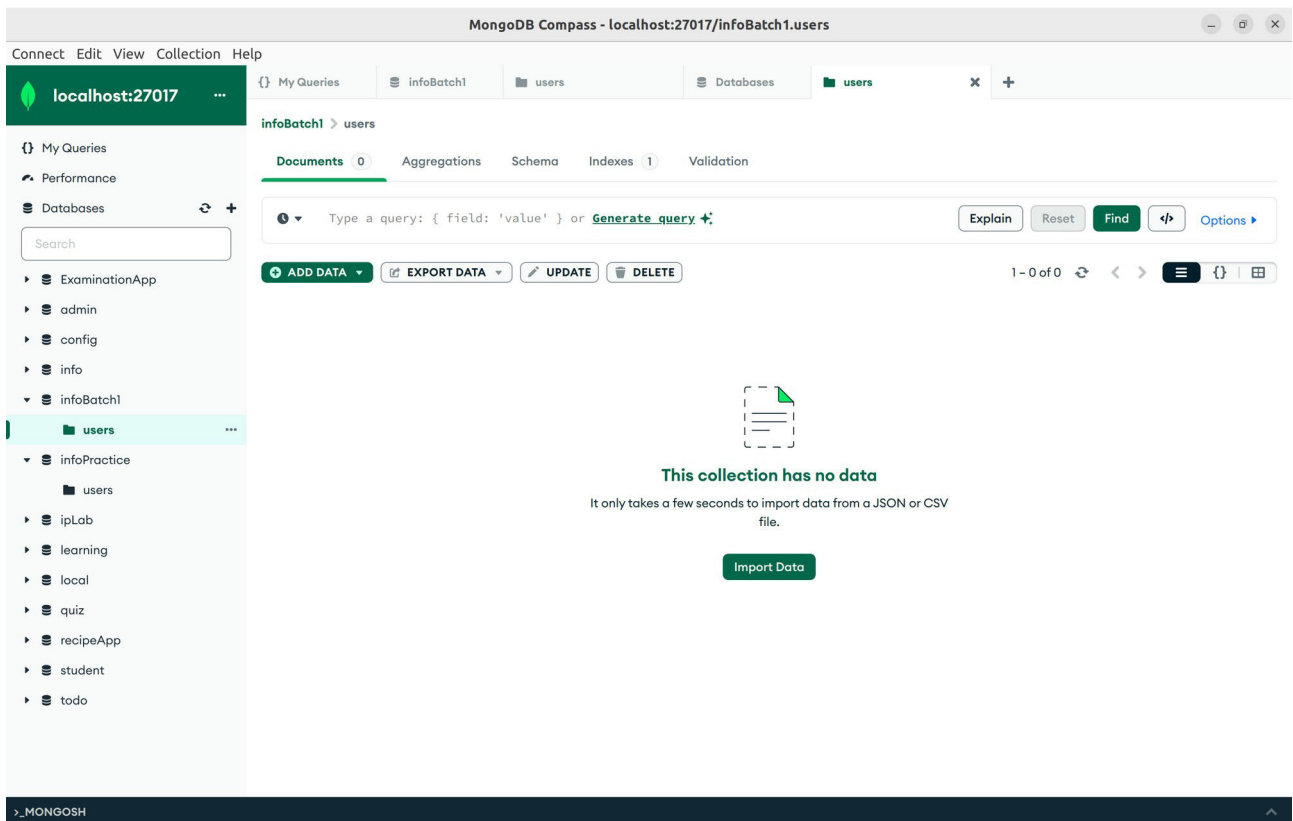
```
rohith@rohith: ~/Desktop/IP Lab/MidModel/Batch-1/server
rohith@rohith:~/Desktop/IP Lab/MidModel/Batch-1/server$ node server.js
Server is running on PORT 3002
```

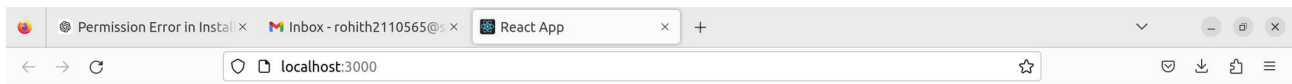
A terminal window with a dark background. The title bar shows 'rohith@rohith: ~/Desktop/IP Lab/MidModel/Batch-1/client'. The prompt is 'rohith@rohith:~/Desktop/IP Lab/MidModel/Batch-1/client\$'. The command 'npm start' has been entered, and the cursor is at the end of the line.

```
rohith@rohith: ~/Desktop/IP Lab/MidModel/Batch-1/client
rohith@rohith:~/Desktop/IP Lab/MidModel/Batch-1/client$ npm start
```

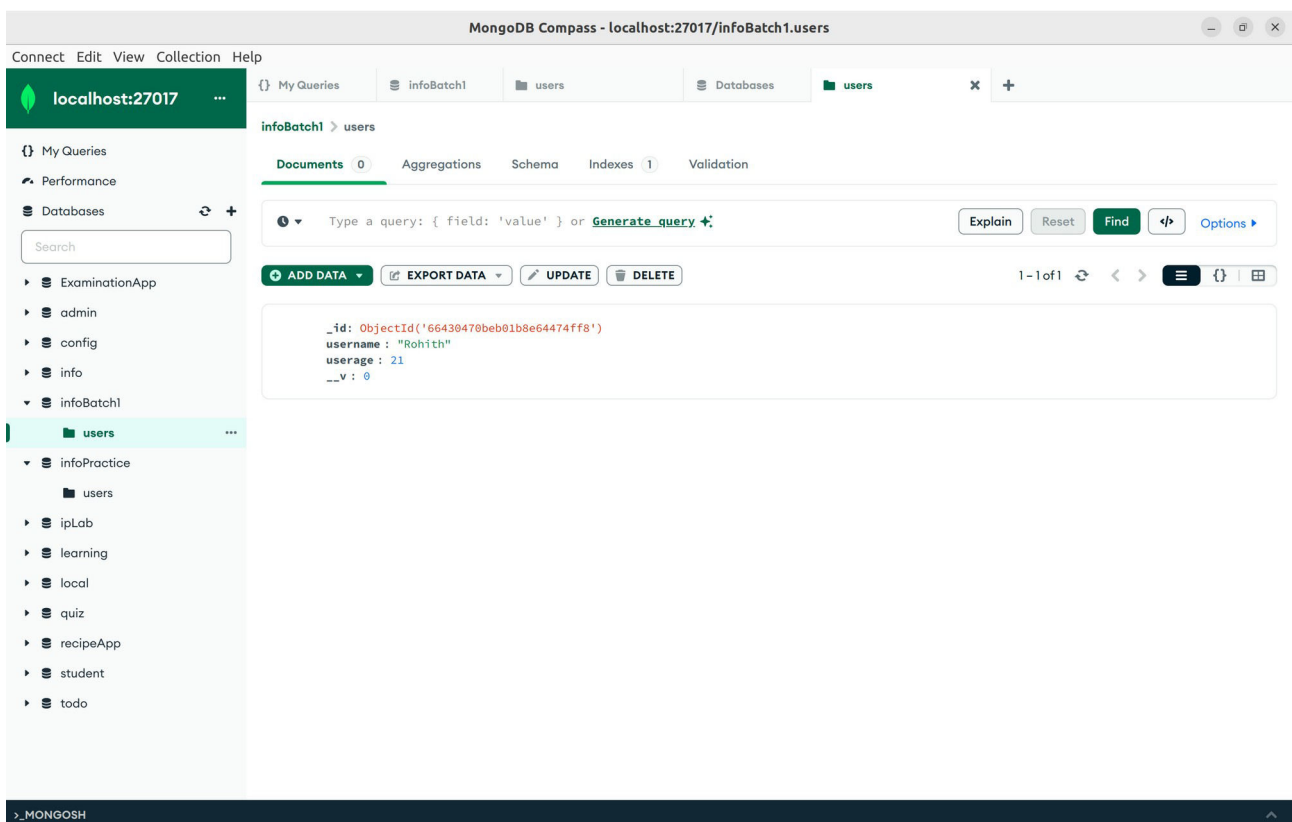


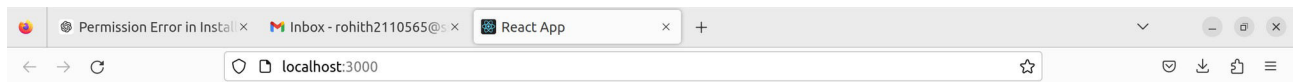
MVC ARCHITECTURE PRACTICE





MVC ARCHITECTURE PRACTICE

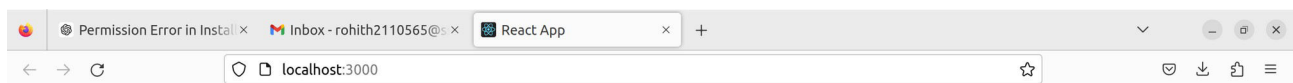




MVC ARCHITECTURE PRACTICE

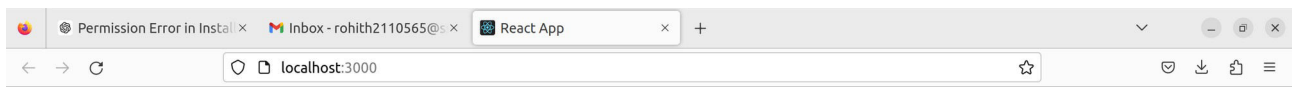
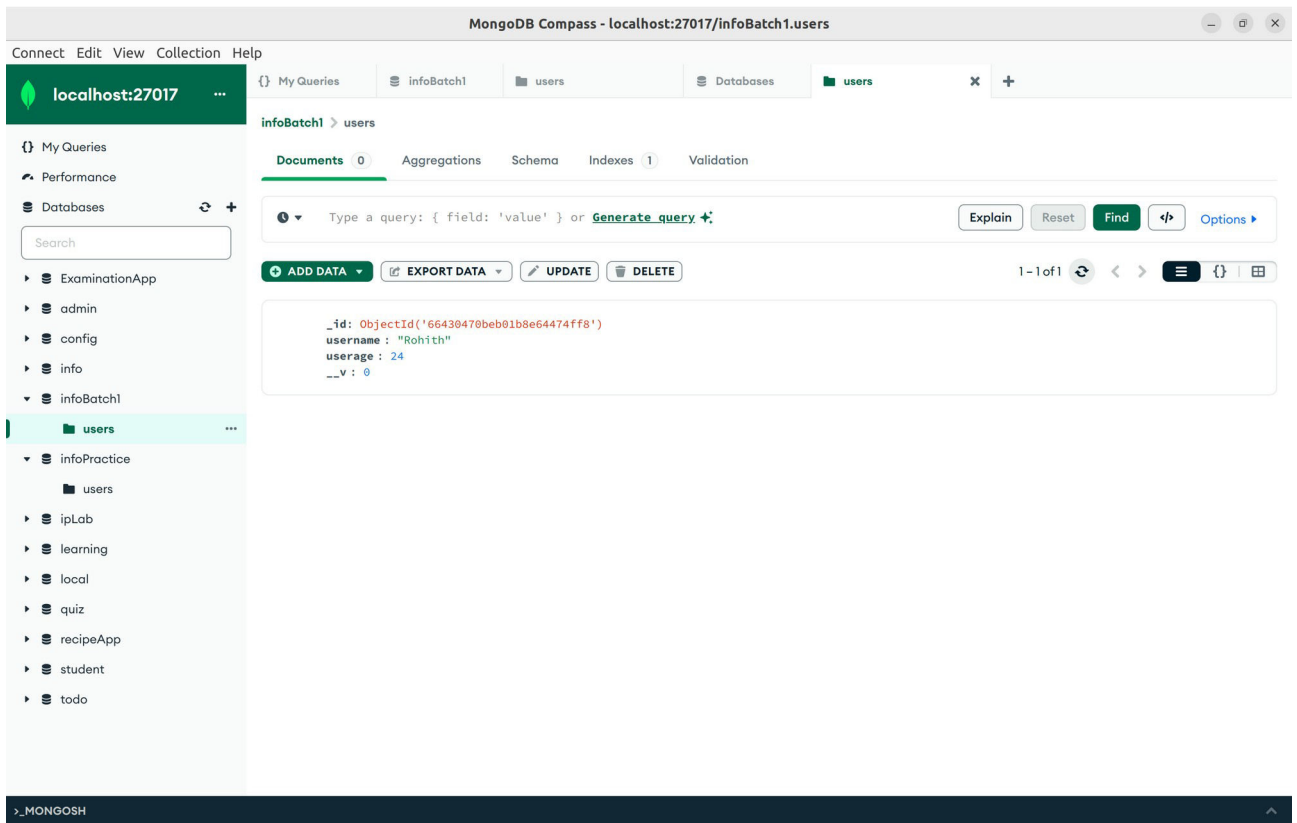
<input type="text" value="Rohith"/>	<input type="text" value="21"/>
<input type="button" value="Search"/>	
<input type="button" value="Insert"/>	
<input type="button" value="Delete"/>	
<input type="text" value="New Username"/>	<input type="text" value="New Age"/> <input type="button" value="Update"/>

Rohith aged 21 is Present



MVC ARCHITECTURE PRACTICE

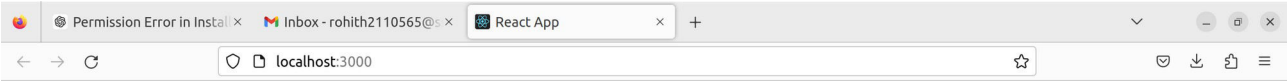
<input type="text" value="Rohith"/>	<input type="text" value="21"/>
<input type="button" value="Search"/>	
<input type="button" value="Insert"/>	
<input type="button" value="Delete"/>	
<input type="text" value="Rohith"/>	<input type="text" value="24"/> <input type="button" value="Update"/>



MVC ARCHITECTURE PRACTICE

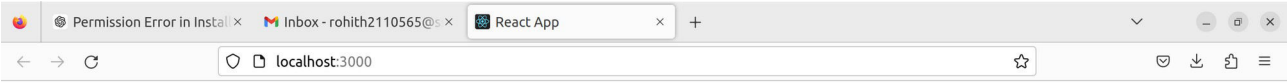
<input type="text" value="Rohith"/>	<input type="text" value="24"/>
<input type="button" value="Search"/>	
<input type="button" value="Insert"/>	
<input type="button" value="Delete"/>	
<input type="text" value="New Username"/>	<input type="text" value="New Age"/> <input type="button" value="Update"/>

Rohith aged 24 is Present

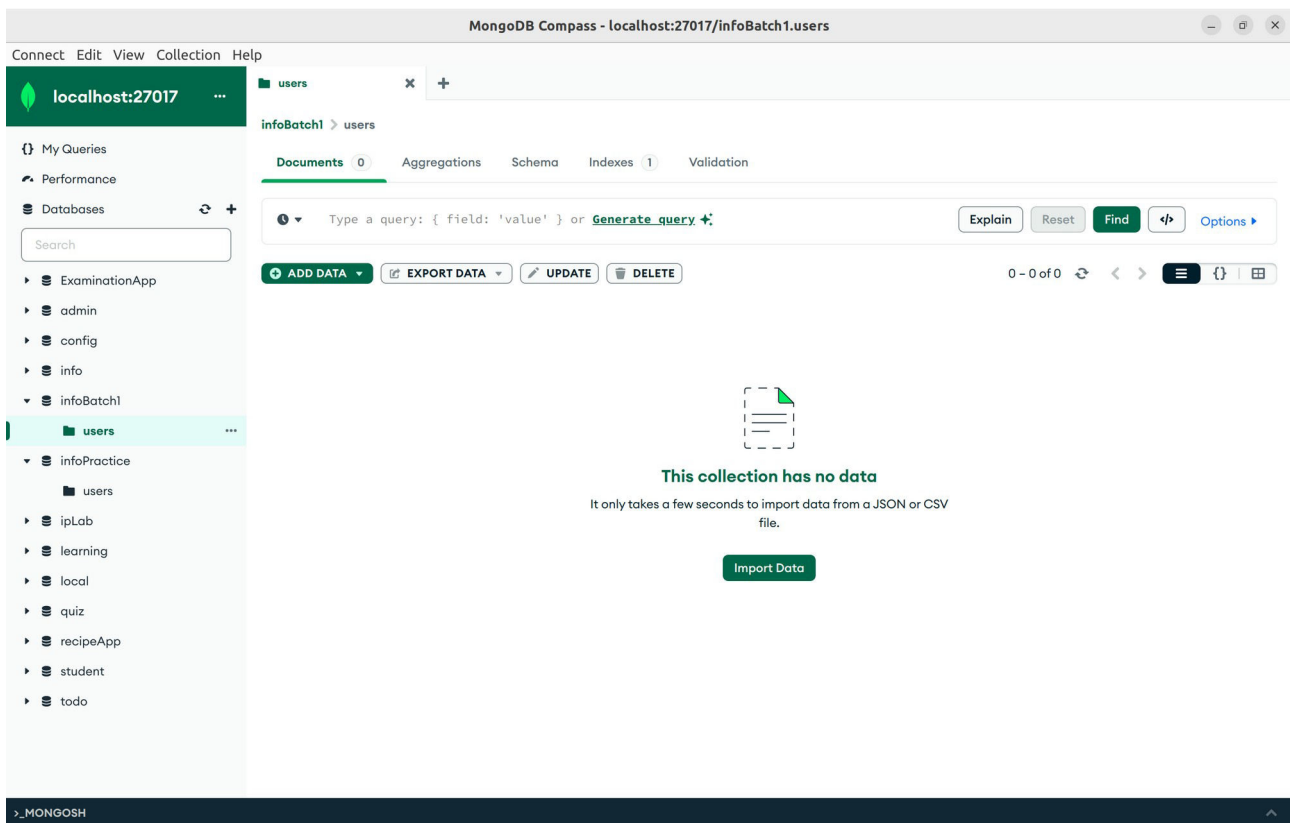


MVC ARCHITECTURE PRACTICE

User Not Found



MVC ARCHITECTURE PRACTICE



```
rohith@rohith: ~/Desktop/IP Lab/MidModel/Batch-1/server
rohith@rohith: ~/Desktop/IP Lab/MidM... x rohith@rohith: ~/Desktop/IP Lab/MidM... x
rohith@rohith:~/Desktop/IP Lab/MidModel/Batch-1/server$ node server.js
Server is running on PORT 3002
Inserting Rohith aged 21
Updating Rohith aged 21 to Rohith aged 24
Updating aged to Karthi aged 24
Deleting Rohith aged 24
Updating Rohith aged 24 to Rohith aged 24
Updating Rohith aged 24 to Rohith aged 24
Updating Rohith aged 24 to Rohith aged 24
Inserting Rohith aged 21
Searching for Rohith aged 21
Updating Rohith aged 21 to Rohith aged 24
Searching for Rohith aged 24
Searching for Rohith aged 21
```