

Program 5 :

Develop the application that sends fruit name and price data from client side to Node.js server using Ajax.

//Client side

//index.js

```
import React from 'react'; // Imports the React library.

import ReactDOM from 'react-dom/client'; // Imports the ReactDOM library, which provides methods to
interact with the browser's DOM.

import './index.css'; // Imports CSS for styling

import App from './App'; // Imports the main component of your application, App.js

import reportWebVitals from './reportWebVitals'; // Imports a function for measuring performance

const root = ReactDOM.createRoot(document.getElementById('root')); // Creates a root for
the React application to render into. It finds the HTML element with the ID 'root'

root.render(

  <React.StrictMode>

  <App />

  </React.StrictMode>

);
```

//App.js

```
import React, { useState } from "react";

import axios from "axios";

function App() {

  const [name, setName] = useState(""); // Creates a state variable name to store the fruit name,
  initialized as an empty string. setName is the function to update this state.

  const [price, setPrice] = useState("");

  const url = "http://localhost:5000"; // Defines the URL of your Node.js server.

  const handleSubmit = async (e) => {

    e.preventDefault(); // Prevents the default browser form submission, which would cause a page
    reload.

    try {
```

```

await axios.post(`${url}/api/fruits`, { name, price });

console.log("Data sent successfully");

// Optionally, you can reset the form fields here
} catch (error) {
  console.error("Error sending data:", error);
}
};

return (
  <div>

    <h1>Fruit Data Form</h1>

    <form onSubmit={handleSubmit}>

      <label> Fruit Name: <input type="text" value={name} onChange={(e) =>
        setName(e.target.value)}

      />

    </label>

    <br />

    <label> Price: <input type="text" value={price} onChange={(e) =>
      setPrice(e.target.value)}

    />

    </label>

    <br />

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

    </form>

  </div>

);
}

export default App;

//server side ->file named as server.js

const express = require("express");

```

```
const bodyParser = require("body-parser");
const cors = require("cors");
const app = express();
const PORT = 5000;
app.use(bodyParser.json());
app.use(cors());
// Handle POST request to '/api/fruits'
app.post("/api/fruits", (req, res) => {
  const { name, price } = req.body;
  console.log(`Received data from client: Name - ${name}, Price - ${price}`);
  res.status(200).send("Data received successfully");
});
app.listen(PORT, () => {
  console.log(`Server is running on http://localhost:${PORT}`);
});
```

Note:

To create this program:

First give the following command in the terminal

```
npx create-react-app fruit-client
```

```
cd fruit-client
```

```
npm init -y // initialize node js project
```

```
npm install express
```

```
npm install axios
```

```
npm install cors
```

type all the contents...

In one terminal give `node server.js` to run the server

```
PS E:\Pgm6> cd fruit-client
PS E:\Pgm6\fruit-client> node server.js
Server is running on http://localhost:5000
```

In another terminal give npm start ////to run the client

```
PS E:\Pgm6> cd fruit-client
PS E:\Pgm6\fruit-client> npm start

> fruit-client@0.1.0 start
> react-scripts start
```

Fruit Data Form

Fruit Name:

Price:

In browser what data you have selected appears in the server terminal

```
PS E:\Pgm6> cd fruit-client
PS E:\Pgm6\fruit-client> node server.js
Server is running on http://localhost:5000
Received data from client: Name - Apple, Price - 600
```

