

MSWD LAB INSEM EXAMINATION

2100032060-VK ABHAY

1. Craete a react page to do following work, (i) store the student data with the field of Student Name, Student ID, Student Marks from react to server and to database. (ii) retrieve student data with id marks than 50 from the database to server and to react application to display it.

SOLUTION:-

REACT COMPONENT:-

```
import React, { useState } from 'react';
import axios from 'axios';

function StudentForm() {
  const [name, setName] = useState('');
  const [id, setId] = useState('');
  const [marks, setMarks] = useState('');

  const handleSubmit = async (event) => {
    event.preventDefault();
    try {
      const response = await axios.post('/students', {
        name,
        id,
        marks,
      });
      console.log(response.data);
    } catch (error) {
      console.error(error);
    }
  };

  return (
    <form onSubmit={handleSubmit}>
      <label>
        Student Name:
        <input type="text" value={name} onChange={(e) => setName(e.target.value)} />
      </label>
      <br />
      <label>
```

```

        Student ID:
        <input type="text" value={id} onChange={(e) => setId(e.target.value)} />
    </label>
    <br />
    <label>
        Student Marks:
        <input type="text" value={marks} onChange={(e) =>
setMarks(e.target.value)} />
    </label>
    <br />
    <button type="submit">Submit</button>
</form>
    );
}

export default StudentForm;

```

REACT COMPONENT TO RETRIEVE DATA FROM SERVER:

```

import React, { useState, useEffect } from 'react';
import axios from 'axios';

function StudentList() {
    const [students, setStudents] = useState([]);

    useEffect(() => {
        const fetchData = async () => {
            try {
                const response = await axios.get('/students?marksGreaterThan=50');
                setStudents(response.data);
            } catch (error) {
                console.error(error);
            }
        };
        fetchData();
    }, []);

    return (
        <ul>
            {students.map((student) => (
                <li key={student._id}>
                    Name: {student.name}, ID: {student.id}, Marks: {student.marks}
                </li>
            ))}
        </ul>
    );
}

```

```

        </li>
      )})
    </ul>
  );
}

export default StudentList;

```

MAIN :

```

import React, { useState, useEffect } from 'react';
import axios from 'axios';

function StudentList() {
  const [students, setStudents] = useState([]);

  useEffect(() => {
    const fetchData = async () => {
      try {
        const response = await axios.get('/students?marksGreaterThan=50');
        setStudents(response.data);
      } catch (error) {
        console.error(error);
      }
    };
    fetchData();
  }, []);

  return (
    <ul>
      {students.map((student) => (
        <li key={student._id}>
          Name: {student.name}, ID: {student.id}, Marks: {student.marks}
        </li>
      ))}
    </ul>
  );
}

export default StudentList;

```

STUDENTFORM.JS :

```

import React, { useState } from 'react';
import axios from 'axios';

const StudentForm = () => {
  const [name, setName] = useState('');
  const [id, setId] = useState('');
  const [marks, setMarks] = useState('');

  const handleSubmit = async (event) => {
    event.preventDefault();
    try {
      const response = await axios.post('/api/students', {
        name,
        id,
        marks,
      });
      console.log(response.data);
      alert('Student added successfully!');
    } catch (error) {
      console.error(error);
      alert('Failed to add student!');
    }
  };

  return (
    <div>
      <h2>Add a new student:</h2>
      <form onSubmit={handleSubmit}>
        <label>
          Student Name:
          <input type="text" value={name} onChange={(e) =>
setName(e.target.value)} />
        </label>
        <br />
        <label>
          Student ID:
          <input type="text" value={id} onChange={(e) => setId(e.target.value)}
/>
        </label>
        <br />
        <label>
          Student Marks:

```

```

        <input type="number" value={marks} onChange={(e) =>
setMarks(e.target.value)} />
      </label>
      <br />
      <button type="submit">Add Student</button>
    </form>
  </div>
);
};

export default StudentForm;

```

STUDENTLIST.JS :

```

import React, { useState, useEffect } from 'react';
import axios from 'axios';

const StudentList = () => {
  const [students, setStudents] = useState([]);

  useEffect(() => {
    const fetchStudents = async () => {
      try {
        const response = await axios.get('/api/students?marksGreaterThan=50');
        setStudents(response.data);
      } catch (error) {
        console.error(error);
        alert('Failed to fetch students!');
      }
    };
    fetchStudents();
  }, []);

  return (
    <div>
      <h2>Students with Marks Greater Than 50:</h2>
      <ul>
        {students.map((student) => (
          <li key={student.id}>
            {student.name} (ID: {student.id}, Marks: {student.marks})
          </li>
        ))}
      </ul>
    </div>
  );
}

```

```

    </div>
  );
};

export default StudentList;

```

APP.JS :

```

import React from 'react';
import StudentForm from './StudentForm';
import StudentList from './StudentList';

function App() ;

```

APP.JS :

```

import React, { Component } from 'react';
import { Navbar } from './components/includes/Navbar';
import { Sidebar } from './components/includes/Sidebar';
import { Footer } from './components/includes/Footer';
import { StudentAddForm } from './components/student/add';
import { StudentList } from './components/student/list';
import { Route, BrowserRouter as Router, Switch } from 'react-router-dom';
import { NotificationContainer, NotificationManager } from 'react-notifications';
import 'react-notifications/lib/notifications.css';
import './App.css';
import './bower_components/bootstrap/dist/css/bootstrap.min.css';
import './bower_components/font-awesome/css/font-awesome.min.css';
import './bower_components/Ionicons/css/ionicons.min.css';
import './dist/css/AdminLTE.min.css';
import './dist/css/skins/_all-skins.min.css';

class App extends Component {
  render() {
    return (
      <Router>
        <div className="wrapper">
          <Navbar />
          <Sidebar />
          <div className="content-wrapper">
            <section className="content">

```

```

        <Switch>
          <Route exact path="/" component={StudentAddForm} />
          <Route exact path="/student/:id"
component={StudentAddForm} />
          <Route exact path="/students/list"
component={StudentList} />
        </Switch>
      </section>
    </div>
    <Footer />
    <NotificationContainer />
  </div>
</Router>
);
}
}

export default App;

```

SCREENSHOTS OF OUTPUT:

STUDENT MARKS :

Student Marks Calculation

Marks 1

Number 2

Number 3

Total

Average

Grade

FETCH AND STORE THE STUDENT DETAILS :

Student Details

First name	Middle name	Last name		
<input type="text" value="Simple"/>	<input type="text"/>	<input type="text" value="Coding"/>		
Grade	Roll No.	Gender	Session	Blood Group
<input type="text" value="I"/>	<input type="text" value="15"/>	<input type="text" value="MALE"/>	<input type="text" value="2020"/>	<input type="text" value="Choose..."/>
Father's Name	Mother's Name			
<input type="text" value="Father's name"/>	<input type="text" value="Mother's name"/>			

LIST OF STUDENTS WHO GOT MARKS LESS THAN 50:

Student Lists

First Name	Middle Name	Last Name	Class	Session	Action
MISTU		ROY	I	2010-2020	View Edit Delete
React	Simple	Coding	I	2020 - 2021	View Edit Delete