

Task:01(using react)

### App.js:

```
import React, { useState } from "react";
import AddStudent from "../Components/AddStudent";
import EditStudent from "../Components/EditStudent";
import StudentTable from "../Components/StudentTable";
const App = () => {
  const [students, setStudents] = useState([
    { regNo: "23MCA25", name: "Priyanka", department: "Computer Science", class: "I-MCA" },
    { regNo: "23MCA23", name: "Pallavi", department: "Computer Science", class: "II - MCA" },
    { regNo: "23MCA26", name: "Rakshitha", department: "Comp. Sci", class: "III - CS" },
    { regNo: "23MBA17", name: "Sathya", department: "MBA", class: "I - MBA" },
    { regNo: "23MBA18", name: "Varshini", department: "MBA", class: "II - MBA" },
  ]);

  const [editing, setEditing] = useState(false);
  const [currentStudent, setCurrentStudent] = useState(null);

  const addStudent = (student) => {
    student.regNo = students.length + 101; // Auto-generate RegNo
    setStudents([...students, student]);
  };

  const deleteStudent = (regNo) => {
    setStudents(students.filter(student => student.regNo !== regNo));
  };

  const editStudent = (student) => {
    setEditing(true);
    setCurrentStudent(student);
  };

  const updateStudent = (updatedStudent) => {
    setStudents(
      students.map((student) =>
        student.regNo === updatedStudent.regNo ? updatedStudent : student
      )
    );
    setEditing(false);
    setCurrentStudent(null);
  };

  return (
    <div className="App">
```

```

<h1>Student Management System</h1>
{editing ? (
  <EditStudent
    currentStudent={currentStudent}
    updateStudent={updateStudent}
    setEditing={setEditing}
  />
) : (
  <AddStudent addStudent={addStudent} />
)}
<StudentTable
  students={students}
  deleteStudent={deleteStudent}
  editStudent={editStudent}
/>
</div>
);
};

export default App;

```

## Components:

### StudentTable.js:

```

import React from "react";
import './App.css';

const StudentTable = ({ students, deleteStudent, editStudent }) => {
  return (
    <div className="student-table">
      <table>
        <thead>
          <tr>
            <th>RegNo</th>
            <th>Name</th>
            <th>Department</th>
            <th>Class</th>
            <th>Action</th>
          </tr>
        </thead>
        <tbody>
          {students.map((student) => (
            <tr key={student.regNo}>
              <td>{student.regNo}</td>
              <td>{student.name}</td>
              <td>{student.department}</td>

```

```

        <td>{student.class}</td>
        <td className="actions">
          <button className="view-btn">
            View
          </button>
          <button
            className="edit-btn"
            onClick={() => editStudent(student)}
          >
            Edit
          </button>
          <button
            className="delete-btn"
            onClick={() => deleteStudent(student.regNo)}
          >
            Delete
          </button>
        </td>
      </tr>
    )}
  </tbody>
</table>
</div>
);
};

```

```
export default StudentTable;
```

### **AddStudent.js:**

```

import React, { useState } from "react";
import './App.css';

const AddStudent = ({ addStudent }) => {
  const initialState = { regNo: null, name: "", department: "", class: "" };
  const [student, setStudent] = useState(initialFormState);

  const handleInputChange = (event) => {
    const { name, value } = event.target;
    setStudent({ ...student, [name]: value });
  };

  const handleSubmit = (event) => {
    event.preventDefault();
    if (!student.name || !student.department || !student.class) return;
    addStudent(student);
  };

```

```

    setStudent(initialFormState);
  };

  return (
    <form onSubmit={handleSubmit} className="student-form">
      <label>Name</label>
      <input
        type="text"
        name="name"
        value={student.name}
        onChange={handleInputChange}
      />
      <label>Department</label>
      <input
        type="text"
        name="department"
        value={student.department}
        onChange={handleInputChange}
      />
      <label>Class</label>
      <input
        type="text"
        name="class"
        value={student.class}
        onChange={handleInputChange}
      />
      <button>Add Student</button>
    </form>
  );
};

export default AddStudent;

```

### **EditStudent.js:**

```

import React, { useState, useEffect } from "react";
import './App.css';

const EditStudent = ({ currentStudent, updateStudent, setEditing }) => {
  const [student, setStudent] = useState(currentStudent);

  useEffect(() => {
    setStudent(currentStudent);
  }, [currentStudent]);

  const handleInputChange = (event) => {

```

```

    const { name, value } = event.target;
    setStudent({ ...student, [name]: value });
  };

  const handleSubmit = (event) => {
    event.preventDefault();
    updateStudent(student);
  };

  return (
    <form onSubmit={handleSubmit} className="student-form">
      <label>Name</label>
      <input
        type="text"
        name="name"
        value={student.name}
        onChange={handleInputChange}
      />
      <label>Department</label>
      <input
        type="text"
        name="department"
        value={student.department}
        onChange={handleInputChange}
      />
      <label>Class</label>
      <input
        type="text"
        name="class"
        value={student.class}
        onChange={handleInputChange}
      />
      <button>Update Student</button>
      <button
        onClick={() => setEditing(false)}
        className="cancel-btn"
      >
        Cancel
      </button>
    </form>
  );
};

export default EditStudent;

```

**App.css**

```
.student-form {  
  margin: 10px 0;  
  padding: 20px;  
  border: 1px solid #ddd;  
  border-radius: 5px;
```

```
}
```

```
.student-form label {  
  display: block;  
  margin-bottom: 8px;  
  font-weight: bold;
```

```
}
```

```
.student-form input {  
  width: 100%;  
  padding: 8px;  
  margin-bottom: 12px;  
  border: 1px solid #ccc;  
  border-radius: 4px;
```

```
}
```

```
.student-form button {  
  padding: 10px 15px;  
  background-color: #007bff;  
  color: white;  
  border: none;  
  border-radius: 5px;  
  cursor: pointer;  
  margin-right: 10px;
```

```
}
```

```
.cancel-btn {  
  background-color: #dc3545;
```

```
}
```

```
.cancel-btn:hover, .student-form button:hover {  
  opacity: 0.8;
```

```
}
```

```
/* App.css */
```

```
.student-table {  
  width: 80%;
```

```
margin: 0 auto;
border-collapse: collapse;
margin-top: 20px;
}
```

```
.student-table table {
width: 100%;
border: 1px solid #ddd;
text-align: left;
}
```

```
.student-table th,
.student-table td {
padding: 12px 15px;
border: 1px solid #ddd;
}
```

```
.student-table th {
background-color: #f2f2f2;
color: #333;
font-weight: bold;
}
```

```
.student-table tr:nth-child(even) {
background-color: #f9f9f9;
}
```

```
.student-table tr:hover {
background-color: #f1f1f1;
}
```

```
.actions {
text-align: center;
}
```

```
.actions button {
margin: 0 5px;
padding: 8px 12px;
border: none;
border-radius: 4px;
cursor: pointer;
}
```

```
.view-btn {
background-color: #17a2b8;
color: white;
}
```

```
.edit-btn {  
  background-color: #007bff;  
  color: white;  
}
```

```
.delete-btn {  
  background-color: #dc3545;  
  color: white;  
}
```

```
.actions button:hover {  
  opacity: 0.8;  
}
```

## Output:

Student Management System

Name

Department

Class

Add Student!

RegNo	Name	Department	Class	Action
23MCA25	Priyanka	Computer Science	I-MCA	<button>View</button> <button>Edit</button> <button>Delete</button>
23MCA23	Pallavi	Computer Science	II - MCA	<button>View</button> <button>Edit</button> <button>Delete</button>
23MCA26	Rakshitha	Comp. Sci	III - CS	<button>View</button> <button>Edit</button> <button>Delete</button>
23MBA17	Sathya	MBA	I - MBA	<button>View</button> <button>Edit</button> <button>Delete</button>
23MBA18	Varshini	MBA	II - MBA	<button>View</button> <button>Edit</button> <button>Delete</button>

Activate Windows  
Go to Settings to activate Windows.