

Design a mini online quiz interface that updates scores dynamically.

App.jsx

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

function App() {
  const questions = [
    {
      question: "What does HTML stand for?",
      options: [
        "Hyper Text Markup Language",
        "High Text Machine Language",
        "Hyperlinks and Text Markup Language",
        "Home Tool Markup Language",
      ],
      correct: 0,
    },
    {
      question: "Which language is used for styling web pages?",
      options: ["HTML", "JQuery", "CSS", "XML"],
      correct: 2,
    },
    {
      question: "Which is a JavaScript framework?",
      options: ["React", "Laravel", "Django", "Flask"],
      correct: 0,
    },
  ];
}

const [currentQuestion, setCurrentQuestion] = useState(0);
const [score, setScore] = useState(0);
const [selected, setSelected] = useState(null);
const [showResult, setShowResult] = useState(false);
```

```
const handleOptionClick = (index) => {
  setSelected(index);

  if (index === questions[currentQuestion].correct) {
    setScore(score + 1);
  }
};

const nextQuestion = () => {
  setSelected(null);

  if (currentQuestion + 1 < questions.length) {
    setCurrentQuestion(currentQuestion + 1);
  } else {
    setShowResult(true);
  }
};

return (
  <div className="app">
    <h1>🧠 Mini Online Quiz</h1>

    {!showResult ? (
      <div className="quiz-box">
        <h2>
          Question {currentQuestion + 1} / {questions.length}
        </h2>
        <p className="question">
          {questions[currentQuestion].question}
        </p>
      </div>
    ) : (
      <div className="options">
        {questions[currentQuestion].options.map((option, index) => (

```

```
<button
  key={index}
  className={`option-btn ${{
    selected === index ? "selected" : ""
  }}`}
  onClick={() => handleOptionClick(index)}
  disabled={selected === null}
>
  {option}
</button>
))}

</div>

<button
  className="next-btn"
  onClick={nextQuestion}
  disabled={selected === null}
>
  Next
</button>

<p className="score">Score: {score}</p>
</div>
) : (
<div className="result-box">
  <h2>🎉 Quiz Completed!</h2>
  <p>
    Your Score: <strong>{score}</strong> / {questions.length}
  </p>
  <button onClick={() => window.location.reload()}>
    Restart Quiz
  </button>
</div>
)}
```

```
</div>
);
}

export default App;
```

App.css

```
body {
  background-color: #f4f6f8;
  font-family: Arial, sans-serif;
}

.app {
  text-align: center;
  padding: 30px;
}

.quiz-box,
.result-box {
  background: white;
  max-width: 500px;
  margin: auto;
  padding: 25px;
  border-radius: 10px;
  box-shadow: 0 4px 10px rgba(0, 0, 0, 0.1);
}

.question {
  font-size: 18px;
  margin-bottom: 20px;
}

.options {
```

```
display: flex;
flex-direction: column;
}

.option-btn {
padding: 10px;
margin: 6px 0;
font-size: 16px;
cursor: pointer;
border-radius: 5px;
border: 1px solid #ccc;
background: #f9f9f9;
}

.option-btn:hover {
background: #eaeaea;
}

.option-btn.selected {
background: #4caf50;
color: white;
}

.next-btn {
margin-top: 15px;
padding: 10px 20px;
font-size: 16px;
cursor: pointer;
}

.score {
margin-top: 15px;
font-weight: bold;
}
```

Mini Online Quiz

Question 1 / 3

What does HTML stand for?

Hyper Text Markup Language
 High Text Machine Language
 Hyperlinks and Text Markup Language
 Home Tool Markup Language

[Next](#)

Score: 1

Mini Online Quiz

Question 2 / 3

Which language is used for styling web pages?

HTML
 JQuery
 CSS
 XML

[Next](#)

Score: 2

Mini Online Quiz

Question 3 / 3

Which is a JavaScript framework?

React
 Laravel
 Django
 Flask

[Next](#)

Score: 3

Mini Online Quiz

 **Quiz Completed!**

Your Score: 3 / 3

[Restart Quiz](#)

Task 4: Implement a real-time polling system for classroom use.

App.jsx

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

const channel = new BroadcastChannel("classroom-poll");

export default function App() {
  const [poll, setPoll] = useState({
    question: "Do you understand today's lesson?",
    options: {
      Yes: 0,
      No: 0,
      Somewhat: 0,
    },
  });
  // Listen for real-time updates
  useEffect(() => {
    channel.onmessage = (event) => {
      setPoll(event.data);
    };
  });

  return () => channel.close();
}, []);

const vote = (option) => {
  const updatedPoll = {
    ...poll,
    options: {
      ...poll.options,
      [option]: poll.options[option] + 1,
    },
  };
  setPoll(updatedPoll);
  channel.postMessage(updatedPoll); // broadcast update
};
```

```
const resetPoll = () => {
  const reset = {
    ...poll,
    options: Object.fromEntries(
      Object.keys(poll.options).map((key) => [key, 0])
    ),
  };
};

setPoll(reset);
channel.postMessage(reset);
};

return (
  <div className="app">
    <h1>📊 Classroom Live Poll</h1>
    <h2>{poll.question}</h2>

    <div className="options">
      {Object.keys(poll.options).map((option) => (
        <button key={option} onClick={() => vote(option)}>
          {option}
        </button>
      ))}
    </div>

    <div className="results">
      <h3>Live Results</h3>
      {Object.entries(poll.options).map(([key, value]) => (
        <p key={key}>
          {key}: <strong>{value}</strong>
        </p>
      ))}
    </div>

    <button className="reset" onClick={resetPoll}>
      Reset Poll (Teacher)
    </button>
  </div>
);
```

App.css

```
body {  
  margin: 0;  
  background: #f4f6fb;  
  font-family: Arial, sans-serif;  
}
```

```
.app {  
  max-width: 500px;  
  margin: auto;  
  text-align: center;  
  padding: 30px;  
}
```

```
h1 {  
  color: #333;  
}
```

```
.options button {  
  display: block;  
  width: 100%;  
  margin: 10px 0;  
  padding: 12px;  
  font-size: 16px;  
  cursor: pointer;  
  border-radius: 6px;  
  border: 1px solid #ccc;  
  background: white;  
}
```

```
.options button:hover {  
  background: #e3f2fd;  
}
```

```
.results {  
  margin-top: 20px;  
  text-align: left;  
}
```

```
.reset {
```

```
margin-top: 25px;  
padding: 10px 18px;  
background: #e53935;  
color: white;  
border: none;  
border-radius: 6px;  
cursor: pointer;  
}
```

Classroom Live Poll

Do you understand today's lesson?

Live Results

Yes: 1
No: 0
Somewhat: 0

Classroom Live Poll

Do you understand today's lesson?

Live Results

Yes: 2
No: 0
Somewhat: 1

Classroom Live Poll

Do you understand today's lesson?

Live Results

Yes: 0
No: 0
Somewhat: 0

Task 5: Design a feedback form interface that displays submitted data dynamically on the screen.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [name, setName] = useState("");
  const [rating, setRating] = useState("");
  const [comment, setComment] = useState("");
  const [feedbackList, setFeedbackList] = useState([]);

  const handleSubmit = (e) => {
    e.preventDefault();

    if (!name || !rating || !comment) return;

    const newFeedback = {
      id: Date.now(),
      name,
      rating,
      comment,
    };

    setFeedbackList([newFeedback, ...feedbackList]);

    // Clear form
    setName("");
    setRating("");
    setComment("");
  };

  return (
    <div className="app">
      <h1> Feedback Form</h1>

      <form className="form" onSubmit={handleSubmit}>
        <input
          type="text"

```

```
placeholder="Your Name"
value={name}
onChange={(e) => setName(e.target.value)}
/>

<select
  value={rating}
  onChange={(e) => setRating(e.target.value)}
>
  <option value="">Select Rating</option>
  <option value="Excellent">Excellent</option>
  <option value="Good">Good</option>
  <option value="Average">Average</option>
  <option value="Poor">Poor</option>
</select>

<textarea
  placeholder="Your Feedback"
  value={comment}
  onChange={(e) => setComment(e.target.value)}
/>

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

<div className="feedback-section">
  <h2>📢 Submitted Feedback</h2>

  {feedbackList.length === 0 && (
    <p>No feedback submitted yet.</p>
  )}

  {feedbackList.map((item) => (
    <div key={item.id} className="feedback-card">
      <h3>{item.name}</h3>
      <p className="rating">Rating: {item.rating}</p>
      <p>{item.comment}</p>
    </div>
  ))}
</div>
```

```
</div>
);
}
```

App.css

```
body {
  margin: 0;
  background: #f5f7fb;
  font-family: Arial, sans-serif;
}
```

```
.app {
  max-width: 600px;
  margin: auto;
  padding: 30px;
}
```

```
h1 {
  text-align: center;
  color: #333;
}
```

```
.form {
  background: white;
  padding: 20px;
  border-radius: 8px;
  box-shadow: 0 4px 10px rgba(0, 0, 0, 0.1);
}
```

```
.form input,
.form select,
.form textarea {
  width: 100%;
  margin-bottom: 12px;
  padding: 10px;
  font-size: 15px;
  border-radius: 5px;
  border: 1px solid #ccc;
}
```

```
.form textarea {  
    resize: none;  
    height: 80px;  
}
```

```
.form button {  
    width: 100%;  
    padding: 12px;  
    background: #1976d2;  
    color: white;  
    border: none;  
    border-radius: 6px;  
    font-size: 16px;  
    cursor: pointer;  
}
```

```
.form button:hover {  
    background: #125aa3;  
}
```

```
.feedback-section {  
    margin-top: 30px;  
}
```

```
.feedback-card {  
    background: white;  
    padding: 15px;  
    margin-bottom: 12px;  
    border-radius: 8px;  
    box-shadow: 0 2px 6px rgba(0, 0, 0, 0.1);  
}
```

```
.rating {  
    font-weight: bold;  
    color: #1976d2;  
}
```

Feedback Form

Your Name

Select Rating

Your Feedback

Submit Feedback

Submitted Feedback

No feedback submitted yet.

Feedback Form

Navi

Excellent

I Appreciate the efforts undergone !

Submit Feedback

Submitted Feedback

No feedback submitted yet.

Feedback Form

Your Name

Select Rating

Your Feedback

Submit Feedback

Submitted Feedback

Navi

Rating: Excellent

I Appreciate the efforts undergone !

Task 6: Implement a simple course enrollment form that updates the enrolled course list in real time.

App.jsx

```
import { useState } from "react";
import "./App.css";
```

```
export default function App() {
  const [studentName, setStudentName] = useState("");
  const [course, setCourse] = useState("");
  const [enrollments, setEnrollments] = useState([]);

  const handleEnroll = (e) => {
    e.preventDefault();

    if (!studentName || !course) return;

    const newEnrollment = {
      id: Date.now(),
      studentName,
      course,
    };

    setEnrollments([...enrollments, newEnrollment]);

    // Clear form
    setStudentName("");
    setCourse("");
  };

  return (
    <div className="app">
      <h1> Course Enrollment</h1>

      <form className="form" onSubmit={handleEnroll}>
        <input
          type="text"
          placeholder="Student Name"
          value={studentName}
          onChange={(e) => setStudentName(e.target.value)}
        />

        <select
          value={course}
          onChange={(e) => setCourse(e.target.value)}
        >
          <option value="">Select Course</option>
        
```

```

<option value="Mathematics">Mathematics</option>
<option value="Computer Science">Computer Science</option>
<option value="Physics">Physics</option>
<option value="Chemistry">Chemistry</option>
</select>

<button type="submit">Enroll</button>
</form>

<div className="enrollment-section">
  <h2>  Enrolled Students </h2>

  {enrollments.length === 0 && (
    <p>No students enrolled yet.</p>
  )}

  <ul>
    {enrollments.map((item) => (
      <li key={item.id}>
        <strong>{item.studentName}</strong> — {item.course}
      </li>
    )));
  </ul>
</div>
</div>
);

}

```

App.css

```

body {
  margin: 0;
  background: #f3f6fb;
  font-family: Arial, sans-serif;
}

.app {
  max-width: 600px;
  margin: auto;
  padding: 30px;
}

```

```
}
```

```
h1 {  
    text-align: center;  
    color: #333;  
}
```

```
.form {  
    background: white;  
    padding: 20px;  
    border-radius: 8px;  
    box-shadow: 0 4px 10px rgba(0, 0, 0, 0.1);  
}
```

```
.form input,  
.form select {  
    width: 100%;  
    margin-bottom: 12px;  
    padding: 10px;  
    font-size: 15px;  
    border-radius: 5px;  
    border: 1px solid #ccc;  
}
```

```
.form button {  
    width: 100%;  
    padding: 12px;  
    background: #2e7d32;  
    color: white;  
    border: none;  
    border-radius: 6px;  
    font-size: 16px;  
    cursor: pointer;  
}
```

```
.form button:hover {  
    background: #1b5e20;  
}
```

```
.enrollment-section {
```

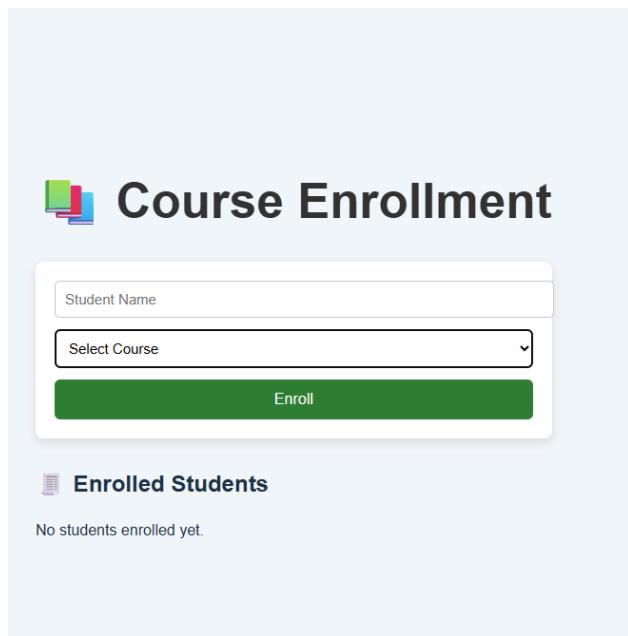
```

margin-top: 30px;
}

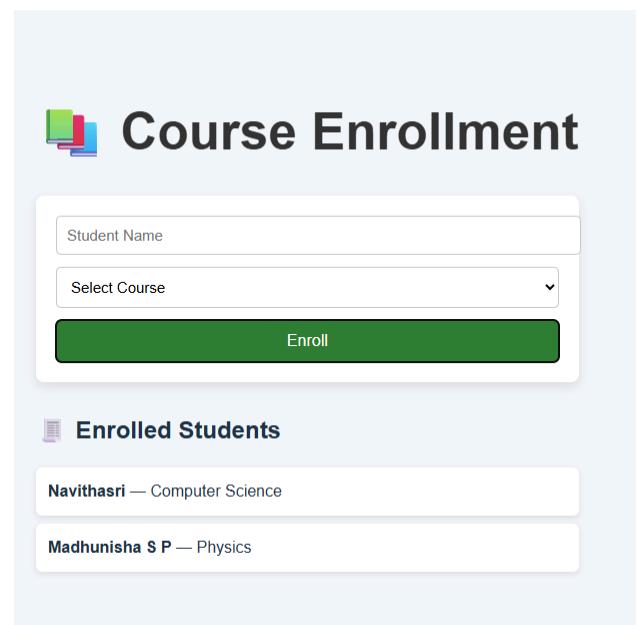
.enrollment-section ul {
list-style: none;
padding: 0;
}

.enrollment-section li {
background: white;
padding: 12px;
margin-bottom: 8px;
border-radius: 6px;
box-shadow: 0 2px 6px rgba(0, 0, 0, 0.1);
}

```



The screenshot shows the initial state of the course enrollment application. It features a header with a logo and the text "Course Enrollment". Below the header is a form with three fields: "Student Name" (input type="text"), "Select Course" (dropdown menu), and a green "Enroll" button. Underneath the form is a section titled "Enrolled Students" which displays the message "No students enrolled yet."



The screenshot shows the state of the application after two students have been enrolled. The "Enrolled Students" section now lists two entries: "Navithasri — Computer Science" and "Madhunisha S P — Physics".

Task 7: Simulate an attendance tracker interface that marks students present or absent dynamically.

App.jsx

```

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

```

```
export default function App() {
  const [students, setStudents] = useState([
    { id: 1, name: "Alice", present: false },
    { id: 2, name: "Bob", present: false },
    { id: 3, name: "Charlie", present: false },
    { id: 4, name: "Diana", present: false },
  ]);
}

const toggleAttendance = (id) => {
  setStudents(
    students.map((student) =>
      student.id === id
        ? { ...student, present: !student.present }
        : student
    )
  );
};

const presentCount = students.filter((s) => s.present).length;
const absentCount = students.length - presentCount;

return (
  <div className="app">
    <h1>📅 Attendance Tracker</h1>

    <div className="summary">
      <p>Present: <strong>{presentCount}</strong></p>
      <p>Absent: <strong>{absentCount}</strong></p>
    </div>

    <ul className="student-list">
      {students.map((student) => (
        <li key={student.id} className="student-item">
          <span>{student.name}</span>

          <button
            className={student.present ? "present" : "absent"}
            onClick={() => toggleAttendance(student.id)}
          >
        
      ))}
    </ul>
  </div>
)
```

```
        {student.present ? "Present" : "Absent"}  
      </button>  
    </li>  
  ))}  
 </ul>  
</div>  
);  
}
```

App.css

```
body {  
  margin: 0;  
  background: #f4f6fb;  
  font-family: Arial, sans-serif;  
}  
  
.app {  
  max-width: 500px;  
  margin: auto;  
  padding: 30px;  
}  
  
h1 {  
  text-align: center;  
  color: #333;  
}  
  
.summary {  
  display: flex;  
  justify-content: space-around;  
  margin-bottom: 20px;  
  background: white;  
  padding: 15px;  
  border-radius: 8px;  
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);  
}  
  
.student-list {  
  list-style: none;
```

```
padding: 0;
}

.student-item {
background: white;
padding: 12px 15px;
margin-bottom: 10px;
border-radius: 8px;
display: flex;
justify-content: space-between;
align-items: center;
box-shadow: 0 2px 6px rgba(0, 0, 0, 0.1);
}

.student-item span {
font-size: 16px;
}

button {
padding: 8px 16px;
border: none;
border-radius: 6px;
cursor: pointer;
color: white;
font-size: 14px;
}

button.present {
background: #2e7d32;
}

button.absent {
background: #c62828;
}
```

The image contains two side-by-side screenshots of a mobile application titled "Attendance Tracker".

Left Screenshot Data:

- Present: 3
- Absent: 1
- Alice: Present
- Bob: Present
- Charlie: Absent
- Diana: Present

Right Screenshot Data:

- Present: 0
- Absent: 4
- Alice: Absent
- Bob: Absent
- Charlie: Absent
- Diana: Absent

Task 8: Develop a simple task list dashboard that allows adding and removing tasks.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [task, setTask] = useState("");
  const [tasks, setTasks] = useState([]);

  const addTask = (e) => {
    e.preventDefault();

    if (!task.trim()) return;

    const newTask = {
      id: Date.now(),
      text: task,
    };

    setTasks([...tasks, newTask]);
    setTask("");
  };
}
```

```
const removeTask = (id) => {
  setTasks(tasks.filter((t) => t.id !== id));
};

return (
  <div className="app">
    <h1>📝 Task List Dashboard</h1>

    <form className="task-form" onSubmit={addTask}>
      <input
        type="text"
        placeholder="Enter a new task"
        value={task}
        onChange={(e) => setTask(e.target.value)}
      />
      <button type="submit">Add</button>
    </form>

    <ul className="task-list">
      {tasks.length === 0 && <p>No tasks added yet.</p>}

      {tasks.map((t) => (
        <li key={t.id} className="task-item">
          <span>{t.text}</span>
          <button
            className="delete"
            onClick={() => removeTask(t.id)}
          >
            ✘
          </button>
        </li>
      ))}
    </ul>
  </div>
);

}
```

App.css

```
body {  
  margin: 0;  
  background: #f5f7fb;  
  font-family: Arial, sans-serif;  
}
```

```
.app {  
  max-width: 500px;  
  margin: auto;  
  padding: 30px;  
}
```

```
h1 {  
  text-align: center;  
  color: #333;  
}
```

```
.task-form {  
  display: flex;  
  gap: 10px;  
  margin-bottom: 20px;  
}
```

```
.task-form input {  
  flex: 1;  
  padding: 10px;  
  font-size: 15px;  
  border-radius: 5px;  
  border: 1px solid #ccc;  
}
```

```
.task-form button {  
  padding: 10px 18px;  
  font-size: 15px;  
  background: #1976d2;  
  color: white;  
  border: none;  
  border-radius: 6px;  
  cursor: pointer;
```

```
}
```

```
.task-form button:hover {
```

```
    background: #125aa3;
```

```
}
```

```
.task-list {
```

```
    list-style: none;
```

```
    padding: 0;
```

```
}
```

```
.task-item {
```

```
    background: white;
```

```
    padding: 12px;
```

```
    margin-bottom: 8px;
```

```
    border-radius: 6px;
```

```
    display: flex;
```

```
    justify-content: space-between;
```

```
    align-items: center;
```

```
    box-shadow: 0 2px 6px rgba(0, 0, 0, 0.1);
```

```
}
```

```
.delete {
```

```
    background: #e53935;
```

```
    border: none;
```

```
    border-radius: 6px;
```

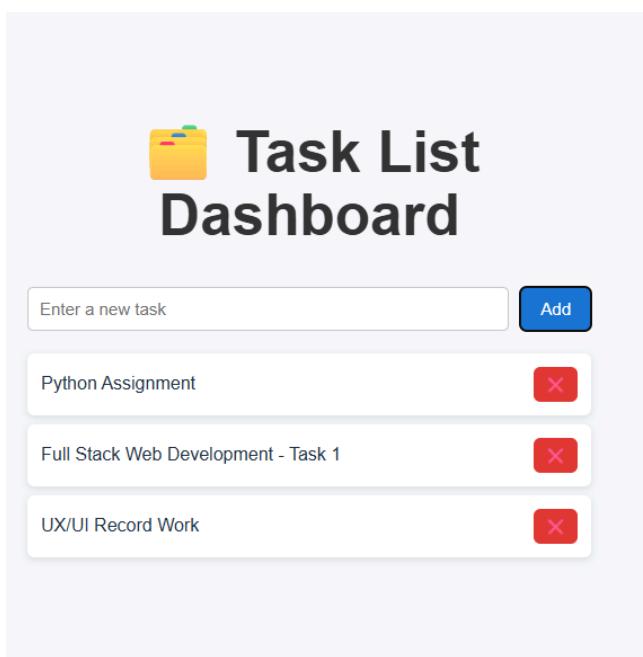
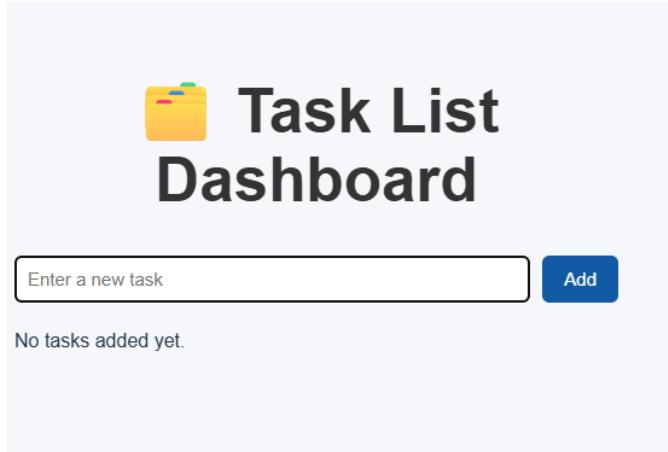
```
    color: white;
```

```
    cursor: pointer;
```

```
    padding: 6px 10px;
```

```
    font-size: 14px;
```

```
}
```



Task 9: Flight Ticket Booking using JavaScript Dialog Boxes. (Alerts, Confirmations, and User Input (Prompt) Dialogs).

App.jsx

```
import "./App.css";

export default function App() {
  const bookTicket = () => {
    const name = prompt("Enter your name:");
    if (!name) {
```

```

        alert("Booking cancelled: Name is required.");
        return;
    }

    const destination = prompt("Enter destination city:");
    if (!destination) {
        alert("Booking cancelled: Destination is required.");
        return;
    }

    const confirmBooking = confirm(
        `Confirm booking?\n\nPassenger: ${name}\nDestination: ${destination}`
    );

    if (confirmBooking) {
        alert(
            `✅ Booking Confirmed!\n\nPassenger: ${name}\nDestination: ${destination}\nHave a
safe journey ✈️`
        );
    } else {
        alert("❌ Booking cancelled by user.");
    }
};

return (
    <div className="app">
        <h1>✈️ Flight Ticket Booking</h1>
        <p>Click the button below to book your flight ticket.</p>

        <button onClick={bookTicket}>Book Flight Ticket</button>
    </div>
);
}

```

App.css

```

body {
    margin: 0;
    background: #f4f6fb;
    font-family: Arial, sans-serif;
}

```

```
.app {  
  max-width: 500px;  
  margin: auto;  
  padding: 40px;  
  text-align: center;  
}
```

```
h1 {  
  color: #333;  
}
```

```
p {  
  margin-bottom: 20px;  
  font-size: 16px;  
}
```

```
button {  
  padding: 14px 22px;  
  font-size: 16px;  
  background: #1976d2;  
  color: white;  
  border: none;  
  border-radius: 8px;  
  cursor: pointer;  
}
```

```
button:hover {  
  background: #125aa3;  
}
```



Flight Ticket Booking

Click the button below to book your flight ticket.

[Book Flight Ticket](#)

localhost:5177 says

Enter your name:

Navitha

OK

Cancel

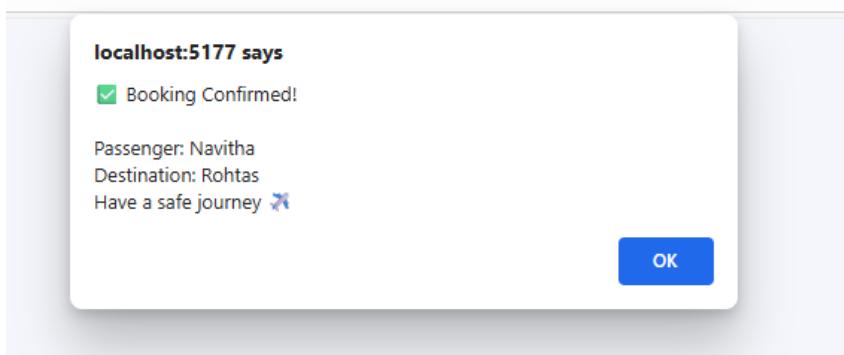
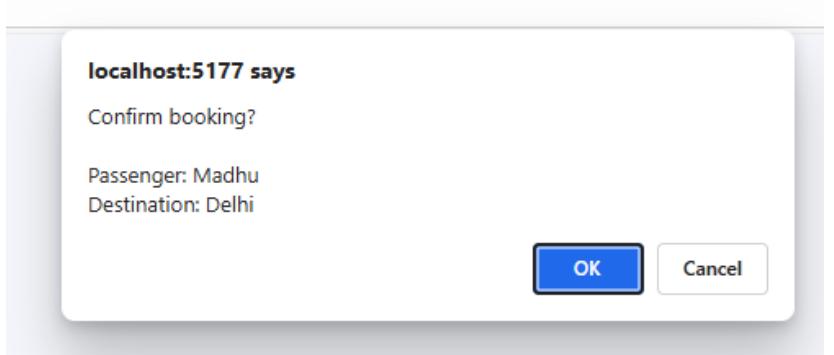
localhost:5177 says

Enter destination city:

Rohtas

OK

Cancel



Task 10: Hotel Reservation System using JavaScript Dialog Boxes

App.jsx

```
import "./App.css";

export default function App() {
  const reserveRoom = () => {
    const name = prompt("Enter guest name:");
    if (!name) {
      alert("Reservation cancelled: Name is required.");
      return;
    }

    const roomType = prompt(
      "Enter room type (Single / Double / Suite):"
    );
    if (!roomType) {
      alert("Reservation cancelled: Room type is required.");
    }
  }
}
```

```

    return;
}

const nights = prompt("Enter number of nights:");
if (!nights || isNaN(nights) || nights <= 0) {
    alert("Reservation cancelled: Invalid number of nights.");
    return;
}

const confirmReservation = confirm(
`Confirm Reservation?\n\nGuest: ${name}\nRoom Type: ${roomType}\nNights: ${nights}`
);

if (confirmReservation) {
    alert(
        `⭐ Reservation Confirmed!\n\nGuest: ${name}\nRoom: ${roomType}\nNights: ${nights}\nEnjoy your stay!`
    );
} else {
    alert("❌ Reservation cancelled by user.");
}
};

return (
<div className="app">
    <h1>⭐ Hotel Reservation System</h1>
    <p>Click the button below to reserve a hotel room.</p>

    <button onClick={reserveRoom}>Reserve Room</button>
</div>
);
}

```

App.css

```

body {
    margin: 0;
    background: #f5f7fb;
    font-family: Arial, sans-serif;
}

```

```
.app {  
  max-width: 500px;  
  margin: auto;  
  padding: 40px;  
  text-align: center;  
}
```

```
h1 {  
  color: #333;  
}
```

```
p {  
  margin-bottom: 20px;  
  font-size: 16px;  
}
```

```
button {  
  padding: 14px 24px;  
  font-size: 16px;  
  background: #2e7d32;  
  color: white;  
  border: none;  
  border-radius: 8px;  
  cursor: pointer;  
}
```

```
button:hover {  
  background: #1b5e20;  
}
```

Hotel Reservation System

Click the button below to reserve a hotel room.

[Reserve Room](#)

localhost:5178 says
Enter guest name:

OK **Cancel**

localhost:5178 says
Enter room type (Single / Double / Suite):

OK **Cancel**

localhost:5178 says
Enter number of nights:

OK **Cancel**

localhost:5178 says
Confirm Reservation?
Guest: Kalai
Room Type: Double
Nights: 10
OK **Cancel**

localhost:5178 says
📍 Reservation Confirmed!
Guest: Kalai
Room: Double
Nights: 10
Enjoy your stay!
OK

Task 11: Online Cab Booking Application using JavaScript Dialog Boxes.

App.jsx

```
import "./App.css";

export default function App() {
  const bookCab = () => {
    const name = prompt("Enter your name:");
    if (!name) {
      alert("Booking cancelled: Name is required.");
      return;
    }
  }
}
```

```

const pickup = prompt("Enter pickup location:");
if (!pickup) {
    alert("Booking cancelled: Pickup location is required.");
    return;
}

const drop = prompt("Enter drop location:");
if (!drop) {
    alert("Booking cancelled: Drop location is required.");
    return;
}

const confirmBooking = confirm(
    `Confirm Cab Booking?\n\nPassenger: ${name}\nPickup: ${pickup}\nDrop: ${drop}`
);

if (confirmBooking) {
    alert(
        `🚕 Cab Booking Confirmed!\n\nPassenger: ${name}\nPickup: ${pickup}\nDrop: ${drop}\nDriver will arrive shortly.`
    );
} else {
    alert("❌ Booking cancelled by user.");
}
};

return (
    <div className="app">
        <h1>🚕 Online Cab Booking</h1>
        <p>Click the button below to book your cab.</p>

        <button onClick={bookCab}>Book Cab</button>
    </div>
);
}

```

App.css

```

body {
    margin: 0;
    background: #f4f6fb;
}

```

```
    font-family: Arial, sans-serif;  
}
```

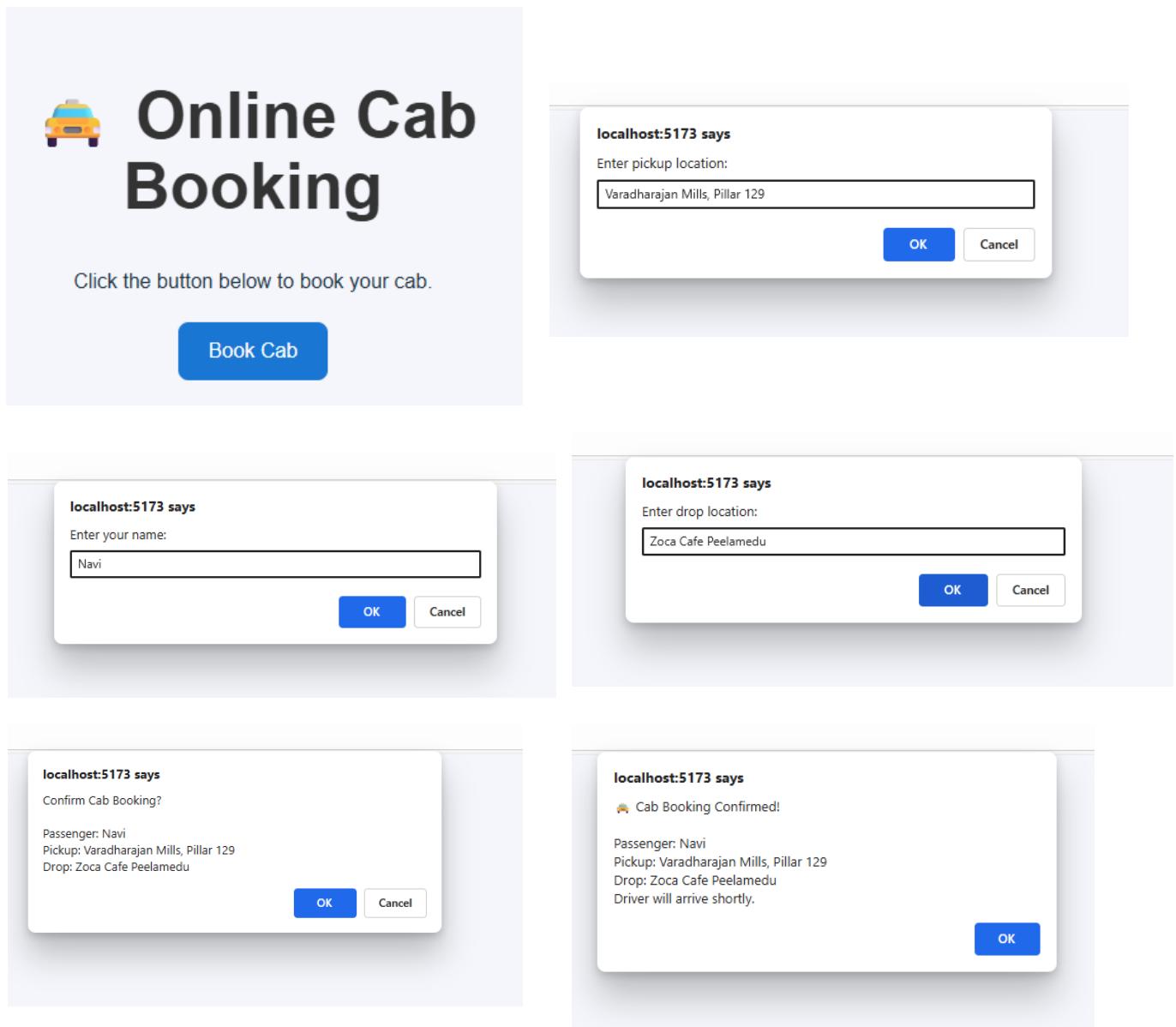
```
.app {  
  max-width: 500px;  
  margin: auto;  
  padding: 40px;  
  text-align: center;  
}
```

```
h1 {  
  color: #333;  
}
```

```
p {  
  margin-bottom: 20px;  
  font-size: 16px;  
}
```

```
button {  
  padding: 14px 24px;  
  font-size: 16px;  
  background: #1976d2;  
  color: white;  
  border: none;  
  border-radius: 8px;  
  cursor: pointer;  
}
```

```
button:hover {  
  background: #125aa3;  
}
```



Task 12: Design an event registration interface with confirmation alerts.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [name, setName] = useState("");
  const [email, setEmail] = useState("");
  const [eventType, setEventType] = useState("");
```

```

const [registrations, setRegistrations] = useState([]);

const handleRegister = (e) => {
  e.preventDefault();

  if (!name || !email || !eventType) {
    alert("✖ Please fill all fields before registering.");
    return;
  }

  const newRegistration = { id: Date.now(), name, email, eventType };
  setRegistrations([newRegistration, ...registrations]);

  alert(
    `✓ Registration Successful!\n\nName: ${name}\nEmail: ${email}\nEvent: ${eventType}`
  );
}

// Clear form
setName("");
setEmail("");
setEventType("");
};

return (
  <div className="app">
    <h1>🎉 Event Registration</h1>

    <form className="form" onSubmit={handleRegister}>
      <input
        type="text"
        placeholder="Your Name"
        value={name}
        onChange={(e) => setName(e.target.value)}
      />

      <input
        type="email"
        placeholder="Your Email"
        value={email}
        onChange={(e) => setEmail(e.target.value)}
      />
    </form>
  </div>
);

```

```

/>

<select
  value={eventType}
  onChange={(e) => setEventType(e.target.value)}
>
  <option value="">Select Event</option>
  <option value="Workshop">Workshop</option>
  <option value="Seminar">Seminar</option>
  <option value="Webinar">Webinar</option>
</select>

<button type="submit">Register</button>
</form>

<div className="registration-list">
  <h2> Registered Participants</h2>
  {registrations.length === 0 && <p>No registrations yet.</p>}

  {registrations.map((r) => (
    <div key={r.id} className="registration-card">
      <p><strong>Name:</strong> {r.name}</p>
      <p><strong>Email:</strong> {r.email}</p>
      <p><strong>Event:</strong> {r.eventType}</p>
    </div>
  )));
  </div>
</div>
);

}

```

App.css

```

body {
  margin: 0;
  background: #f4f6fb;
  font-family: Arial, sans-serif;
}

.app {

```

```
max-width: 600px;
margin: auto;
padding: 30px;
text-align: center;
}

h1 {
color: #333;
margin-bottom: 20px;
}

.form {
background: white;
padding: 20px;
border-radius: 8px;
box-shadow: 0 4px 10px rgba(0,0,0,0.1);
margin-bottom: 30px;
}

.form input,
.form select {
width: 100%;
margin-bottom: 12px;
padding: 10px;
font-size: 15px;
border-radius: 5px;
border: 1px solid #ccc;
}

.form button {
width: 100%;
padding: 12px;
background: #1976d2;
color: white;
border: none;
border-radius: 6px;
font-size: 16px;
cursor: pointer;
}
```

```

.form button:hover {
  background: #125aa3;
}

.registration-list {
  text-align: left;
}

.registration-card {
  background: white;
  padding: 12px 15px;
  margin-bottom: 10px;
  border-radius: 6px;
  box-shadow: 0 2px 6px rgba(0,0,0,0.1);
}

```

Event Registration

Register

Registered Participants

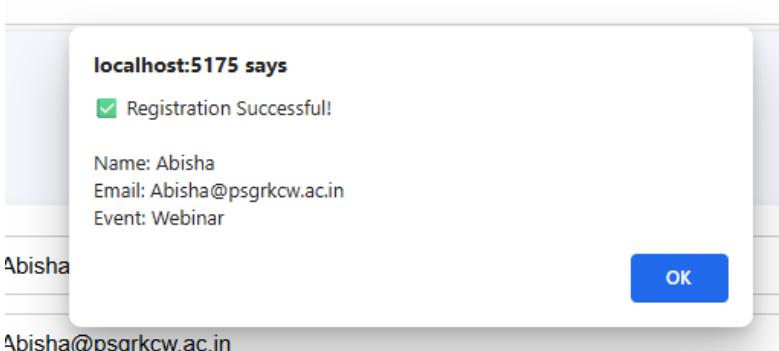
No registrations yet.

Event Registration

Register

Registered Participants

No registrations yet.



The screenshot shows a web-based event registration system. At the top, there's a header with a small icon and the text "Event Registration". Below the header is a registration form containing fields for "Your Name", "Your Email", and a dropdown menu for "Select Event". A large blue "Register" button is at the bottom of the form. Below the form, under the heading "Registered Participants", there's a card displaying the details of a single participant: Name: Abisha, Email: Abisha@psgrkcw.ac.in, and Event: Webinar.

Task 13: Implement a simple user profile editing system with form validation.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [profile, setProfile] = useState({
    name: "John Doe",
    email: "john@example.com",
    phone: "1234567890",
  });

  const [form, setForm] = useState(profile);
  const [errors, setErrors] = useState({});

  const validate = () => {
    const newErrors = {};

    if (!form.name.trim()) newErrors.name = "Name is required.";
    if (!form.email.match(/^\S+@\S+\.\S+$/)) newErrors.email = "Invalid email.";
    if (!form.phone.match(/^\d{10}$/)) newErrors.phone = "Phone must be 10 digits.";

    setErrors(newErrors);
    return Object.keys(newErrors).length === 0;
  }
}
```

```
};

const handleSave = (e) => {
  e.preventDefault();
  if (!validate()) return;
  setProfile(form);
  alert("✅ Profile updated successfully!");
};

return (
  <div className="app">
    <h1>👤 User Profile</h1>

    <form className="form" onSubmit={handleSave}>
      <label>Name:</label>
      <input
        type="text"
        value={form.name}
        onChange={(e) => setForm({ ...form, name: e.target.value })}
      />
      {errors.name && <p className="error">{errors.name}</p>}

      <label>Email:</label>
      <input
        type="email"
        value={form.email}
        onChange={(e) => setForm({ ...form, email: e.target.value })}
      />
      {errors.email && <p className="error">{errors.email}</p>}

      <label>Phone:</label>
      <input
        type="text"
        value={form.phone}
        onChange={(e) => setForm({ ...form, phone: e.target.value })}
      />
      {errors.phone && <p className="error">{errors.phone}</p>}

      <button type="submit">Save Profile</button>
    </form>
)
```

```
<div className="profile-display">
  <h2> Current Profile</h2>
  <p><strong>Name:</strong> {profile.name}</p>
  <p><strong>Email:</strong> {profile.email}</p>
  <p><strong>Phone:</strong> {profile.phone}</p>
</div>
</div>
);
}
```

App.css

```
body {
  margin: 0;
  font-family: Arial, sans-serif;
  background: #f4f6fb;
}
```

```
.app {
  max-width: 500px;
  margin: auto;
  padding: 30px;
}
```

```
h1 {
  text-align: center;
  color: #333;
  margin-bottom: 20px;
}
```

```
.form {
  background: white;
  padding: 20px;
  border-radius: 8px;
  box-shadow: 0 4px 10px rgba(0,0,0,0.1);
  margin-bottom: 30px;
}
```

```
.form label {
  display: block;
```

```
margin-top: 10px;
font-weight: bold;
}

.form input {
width: 100%;
padding: 10px;
margin-top: 4px;
border-radius: 5px;
border: 1px solid #ccc;
}

button {
margin-top: 20px;
width: 100%;
padding: 12px;
background: #1976d2;
color: white;
border: none;
border-radius: 6px;
font-size: 16px;
cursor: pointer;
}

button:hover {
background: #125aa3;
}

.error {
color: #e53935;
margin-top: 4px;
font-size: 14px;
}

.profile-display {
background: white;
padding: 20px;
border-radius: 8px;
box-shadow: 0 2px 6px rgba(0,0,0,0.1);
}
```

User Profile

Name: John Doe

Email: john@example.com

Phone: 1234567890

Save Profile

Current Profile

Name: John Doe
Email: john@example.com
Phone: 1234567890

User Profile

Name: Navitha

Email: Navitha@gmail.com

Phone: 9876543210

Save Profile

localhost:5176 says
✓ Profile updated successfully!

OK

Task 14: Design a dynamic registration form for an online workshop with live preview.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [form, setForm] = useState({
```

```
name: "",  
email: "",  
topic: "",  
experience: "",  
});  
  
const handleChange = (e) => {  
  setForm({ ...form, [e.target.name]: e.target.value });  
};  
  
const handleSubmit = (e) => {  
  e.preventDefault();  
  
  if (!form.name || !form.email || !form.topic || !form.experience) {  
    alert("✖ Please fill all fields before submitting.");  
    return;  
  }  
  
  alert(  
    `✓ Registration Successful!\n\nName: ${form.name}\nEmail: ${form.email}\nTopic:  
${form.topic}\nExperience: ${form.experience}`  
);  
  
  setForm({ name: "", email: "", topic: "", experience: "" });  
};  
  
return (  
  <div className="app">  
    <h1>💻 Workshop Registration</h1>  
  
    <div className="container">  
      <form className="form" onSubmit={handleSubmit}>  
        <input  
          type="text"  
          name="name"  
          placeholder="Your Name"  
          value={form.name}  
          onChange={handleChange}  
        />  
    
```

```

<input
  type="email"
  name="email"
  placeholder="Your Email"
  value={form.email}
  onChange={handleChange}
/>

<select name="topic" value={form.topic} onChange={handleChange}>
  <option value="">Select Workshop Topic</option>
  <option value="React Basics">React Basics</option>
  <option value="Advanced JavaScript">Advanced JavaScript</option>
  <option value="UI/UX Design">UI/UX Design</option>
</select>

<select
  name="experience"
  value={form.experience}
  onChange={handleChange}
>
  <option value="">Select Experience Level</option>
  <option value="Beginner">Beginner</option>
  <option value="Intermediate">Intermediate</option>
  <option value="Advanced">Advanced</option>
</select>

<button type="submit">Register</button>
</form>

<div className="preview">
  <h2>Live Preview</h2>
  <p><strong>Name:</strong> {form.name || "-"}</p>
  <p><strong>Email:</strong> {form.email || "-"}</p>
  <p><strong>Workshop Topic:</strong> {form.topic || "-"}</p>
  <p><strong>Experience:</strong> {form.experience || "-"}</p>
</div>
</div>
</div>
);

}

```

App.css

```
body {  
  margin: 0;  
  font-family: Arial, sans-serif;  
  background: #f4f6fb;  
}  
  
.app {  
  max-width: 800px;  
  margin: auto;  
  padding: 30px;  
  text-align: center;  
}  
  
h1 {  
  color: #333;  
  margin-bottom: 20px;  
}  
  
.container {  
  display: flex;  
  gap: 20px;  
  justify-content: center;  
  flex-wrap: wrap;  
}  
  
.form {  
  background: white;  
  padding: 20px;  
  border-radius: 8px;  
  flex: 1;  
  min-width: 300px;  
  box-shadow: 0 4px 10px rgba(0,0,0,0.1);  
  display: flex;  
  flex-direction: column;  
}  
  
.form input,  
.form select {
```

```
margin-bottom: 12px;  
padding: 10px;  
font-size: 15px;  
border-radius: 5px;  
border: 1px solid #ccc;  
}
```

```
button {  
padding: 12px;  
background: #1976d2;  
color: white;  
border: none;  
border-radius: 6px;  
font-size: 16px;  
cursor: pointer;  
}
```

```
button:hover {  
background: #125aa3;  
}
```

```
.preview {  
background: white;  
padding: 20px;  
border-radius: 8px;  
flex: 1;  
min-width: 250px;  
box-shadow: 0 4px 10px rgba(0,0,0,0.1);  
text-align: left;  
}
```

```
.preview h2 {  
margin-top: 0;  
}
```

```
.preview p {  
margin: 6px 0;  
}
```

 **Workshop Registration**

Your Name

Your Email

Select Workshop Topic

Select Experience Level

Register

 **Live Preview**

Name: -
 Email: -
 Workshop Topic: -
 Experience: -

 **Workshop Registration**

 **Workshop Registration**

Navithasri

Your Email

Select Workshop Topic

Select Experience Level

Register

 **Live Preview**

Name: Navithasri
 Email: -
 Workshop Topic: -
 Experience: -

localhost:5173 says

 Registration Successful!

Name: Navithasri
 Email: Navitha@gmail.com
 Topic: React Basics
 Experience: Beginner

Task 15: Design a login interface that redirects users based on role selection.

App.jsx

```
import { useState } from "react";
import "./App.css";
```

```
export default function App() {
```

```
const [username, setUsername] = useState("");
const [password, setPassword] = useState("");
const [role, setRole] = useState("");

const handleLogin = (e) => {
  e.preventDefault();

  if (!username || !password || !role) {
    alert("✖ Please fill all fields and select a role.");
    return;
  }

  // Simulate role-based redirection
  if (role === "Admin") {
    alert(`✓ Welcome Admin ${username}! Redirecting to Admin Dashboard...`);
  } else {
    alert(`✓ Welcome ${username}! Redirecting to User Homepage...`);
  }

  // Clear form
  setUsername("");
  setPassword("");
  setRole("");
};

return (
  <div className="app">
    <h1>🔑 Login Interface</h1>

    <form className="login-form" onSubmit={handleLogin}>
      <input
        type="text"
        placeholder="Username"
        value={username}
        onChange={(e) => setUsername(e.target.value)}
      />

      <input
        type="password"
        placeholder="Password"
      />
    
```

```

        value={password}
        onChange={(e) => setPassword(e.target.value)}
      />

      <select value={role} onChange={(e) => setRole(e.target.value)}>
        <option value="">Select Role</option>
        <option value="Admin">Admin</option>
        <option value="User">User</option>
      </select>

      <button type="submit">Login</button>
    </form>
  </div>
);
}

```

App.css

```

body {
  margin: 0;
  font-family: Arial, sans-serif;
  background: #f4f6fb;
}

.app {
  max-width: 400px;
  margin: auto;
  padding: 50px 20px;
  text-align: center;
}

h1 {
  color: #333;
  margin-bottom: 30px;
}

.login-form {
  background: white;
  padding: 25px;
  border-radius: 8px;
  box-shadow: 0 4px 10px rgba(0,0,0,0.1);
}

```

```
display: flex;  
flex-direction: column;  
}
```

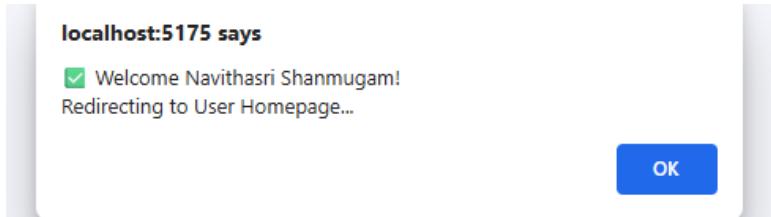
```
.login-form input,  
.login-form select {  
margin-bottom: 15px;  
padding: 12px;  
font-size: 15px;  
border-radius: 5px;  
border: 1px solid #ccc;  
}
```

```
button {  
padding: 12px;  
background: #1976d2;  
color: white;  
border: none;  
border-radius: 6px;  
font-size: 16px;  
cursor: pointer;  
}
```

```
button:hover {  
background: #125aa3;  
}
```

The initial state of the login interface shows three empty input fields: 'Username', 'Password', and 'Select Role'. A blue 'Login' button is at the bottom.

The state after entering credentials shows the 'Username' field containing 'Navithasri Shanmugam', the 'Password' field containing '.....', and the 'Select Role' dropdown set to 'User'. The blue 'Login' button is at the bottom.



Task 16: Simulate a basic authentication system with error alerts.

Apo.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [username, setUsername] = useState("");
  const [password, setPassword] = useState("");

  // Hardcoded credentials
  const validUser = {
    username: "admin",
    password: "12345",
  };

  const handleLogin = (e) => {
    e.preventDefault();

    if (!username || !password) {
      alert("✖ Please enter both username and password.");
      return;
    }

    if (username === validUser.username && password === validUser.password) {
      alert("✓ Login Successful! Welcome ${username}.");
      // Clear form
      setUsername("");
      setPassword("");
    } else {
      alert("✖ Invalid username or password.");
    }
  };
}
```

```
return (
  <div className="app">
    <h1>🔒 Basic Authentication</h1>

    <form className="auth-form" onSubmit={handleLogin}>
      <input
        type="text"
        placeholder="Username"
        value={username}
        onChange={(e) => setUsername(e.target.value)}
      />

      <input
        type="password"
        placeholder="Password"
        value={password}
        onChange={(e) => setPassword(e.target.value)}
      />

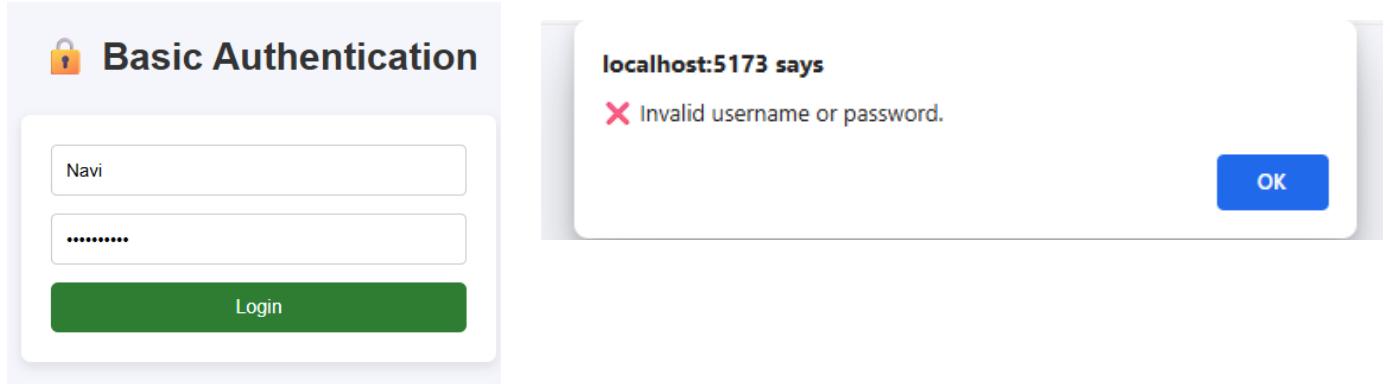
      <button type="submit">Login</button>
    </form>
  </div>
);
```

App.css

```
body {
  margin: 0;
  font-family: Arial, sans-serif;
  background: #f4f6fb;
}
```

```
.app {
  max-width: 400px;
  margin: auto;
  padding: 50px 20px;
  text-align: center;
}
```

```
h1 {  
  color: #333;  
  margin-bottom: 30px;  
}  
  
.auth-form {  
  background: white;  
  padding: 25px;  
  border-radius: 8px;  
  box-shadow: 0 4px 10px rgba(0,0,0,0.1);  
  display: flex;  
  flex-direction: column;  
}  
  
.auth-form input {  
  margin-bottom: 15px;  
  padding: 12px;  
  font-size: 15px;  
  border-radius: 5px;  
  border: 1px solid #ccc;  
}  
  
button {  
  padding: 12px;  
  background: #2e7d32;  
  color: white;  
  border: none;  
  border-radius: 6px;  
  font-size: 16px;  
  cursor: pointer;  
}  
  
button:hover {  
  background: #1b5e20;  
}
```



Task 17: Implement a student feedback system with a rating and comments section.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [name, setName] = useState("");
  const [rating, setRating] = useState("");
  const [comment, setComment] = useState("");
  const [feedbacks, setFeedbacks] = useState([]);

  const handleSubmit = (e) => {
    e.preventDefault();

    if (!name || !rating || !comment) {
      alert("✖ Please fill all fields before submitting.");
      return;
    }

    const newFeedback = {
      id: Date.now(),
      name,
      rating,
      comment,
    };

    setFeedbacks([newFeedback, ...feedbacks]);
  }
}
```

```
        alert("✅ Feedback submitted successfully!");

        // Clear form
        setName("");
        setRating("");
        setComment("");
    };

    return (
        <div className="app">
            <h1>📝 Student Feedback System</h1>

            <form className="feedback-form" onSubmit={handleSubmit}>
                <input
                    type="text"
                    placeholder="Your Name"
                    value={name}
                    onChange={(e) => setName(e.target.value)}
                />

                <select value={rating} onChange={(e) => setRating(e.target.value)}>
                    <option value="">Select Rating</option>
                    <option value="1">1 ⭐</option>
                    <option value="2">2 ⭐⭐</option>
                    <option value="3">3 ⭐⭐⭐</option>
                    <option value="4">4 ⭐⭐⭐⭐</option>
                    <option value="5">5 ⭐⭐⭐⭐⭐</option>
                </select>

                <textarea
                    placeholder="Your Comments"
                    value={comment}
                    onChange={(e) => setComment(e.target.value)}
                />

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

            <div className="feedback-list">
```

```

<h2>Submitted Feedbacks</h2>
{feedbacks.length === 0 && <p>No feedback submitted yet.</p>}

{feedbacks.map((f) => (
  <div key={f.id} className="feedback-card">
    <p><strong>Name:</strong> {f.name}</p>
    <p><strong>Rating:</strong> {f.rating} ⭐</p>
    <p><strong>Comments:</strong> {f.comment}</p>
  </div>
))}

</div>
</div>

);
}

```

App.css

```

body {
  margin: 0;
  font-family: Arial, sans-serif;
  background: #f4f6fb;
}

.app {
  max-width: 600px;
  margin: auto;
  padding: 30px;
  text-align: center;
}

h1 {
  color: #333;
  margin-bottom: 20px;
}

.feedback-form {
  background: white;
  padding: 20px;
  border-radius: 8px;
  box-shadow: 0 4px 10px rgba(0,0,0,0.1);
  margin-bottom: 30px;
}

```

```
    display: flex;  
    flex-direction: column;  
}
```

```
.feedback-form input,  
.feedback-form select,  
.feedback-form textarea {  
    width: 100%;  
    margin-bottom: 12px;  
    padding: 10px;  
    font-size: 15px;  
    border-radius: 5px;  
    border: 1px solid #ccc;  
}
```

```
.feedback-form textarea {  
    resize: vertical;  
    min-height: 80px;  
}
```

```
button {  
    padding: 12px;  
    background: #1976d2;  
    color: white;  
    border: none;  
    border-radius: 6px;  
    font-size: 16px;  
    cursor: pointer;  
}
```

```
button:hover {  
    background: #125aa3;  
}
```

```
.feedback-list {  
    text-align: left;  
}
```

```
.feedback-card {  
    background: white;
```

```
padding: 12px 15px;  
margin-bottom: 10px;  
border-radius: 6px;  
box-shadow: 0 2px 6px rgba(0,0,0,0.1);  
}
```

Student Feedback System

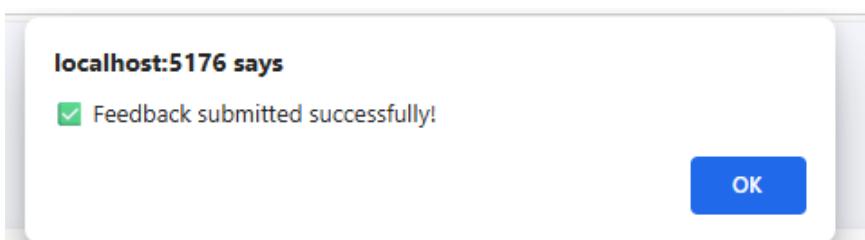
Submitted Feedbacks

No feedback submitted yet.

Student Feedback System

Submitted Feedbacks

No feedback submitted yet.



The screenshot displays a web-based application titled "Student Feedback System". The interface is divided into two main sections. The top section is a feedback submission form with fields for "Your Name", "Select Rating" (a dropdown menu), and "Your Comments" (a text area). A large blue button labeled "Submit Feedback" is positioned below these fields. The bottom section is titled "Submitted Feedbacks" and lists a single entry: "Name: Navi", "Rating: 3 ★", and "Comments: Good!".

Submitted Feedbacks

Name: Navi
Rating: 3 ★
Comments: Good!

Task 18: Simulate a notification system for a dashboard application.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [notifications, setNotifications] = useState([]);

  const addNotification = () => {
    const message = prompt("Enter notification message:");
    if (!message) return;

    const newNotification = {
      id: Date.now(),
      message,
```

```

};

setNotifications([newNotification, ...notifications]);
};

const dismissNotification = (id) => {
  setNotifications(notifications.filter((n) => n.id !== id));
};

return (
  <div className="app">
    <h1>FB Dashboard Notifications</h1>
    <button onClick={addNotification}>Add Notification</button>

    <div className="notifications">
      {notifications.length === 0 && <p>No notifications.</p>}

      {notifications.map((n) => (
        <div key={n.id} className="notification">
          <span>{n.message}</span>
          <button onClick={() => dismissNotification(n.id)}>Dismiss</button>
        </div>
      ))}
    </div>
)

```

App.css

```

body {
  margin: 0;
  font-family: Arial, sans-serif;
  background: #f4f6fb;
}

.app {
  max-width: 600px;
  margin: auto;
  padding: 40px 20px;
  text-align: center;
}

h1 {

```

```
color: #333;  
margin-bottom: 20px;  
}
```

```
button {  
padding: 12px 20px;  
margin-bottom: 20px;  
background: #1976d2;  
color: white;  
border: none;  
border-radius: 6px;  
font-size: 16px;  
cursor: pointer;  
}
```

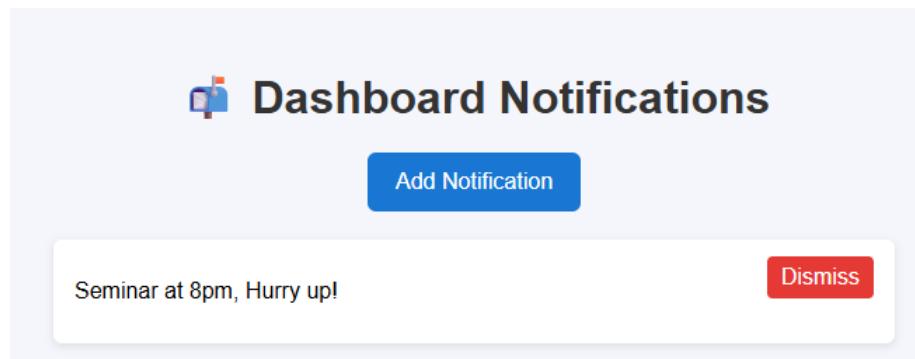
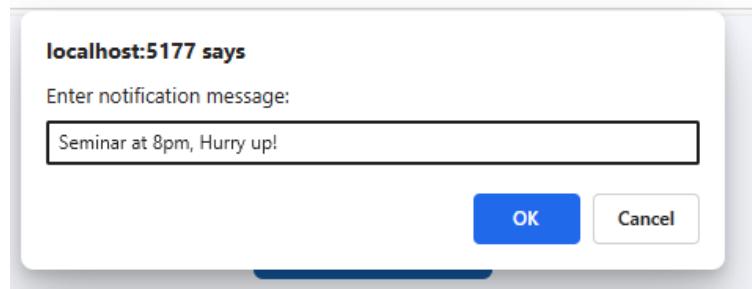
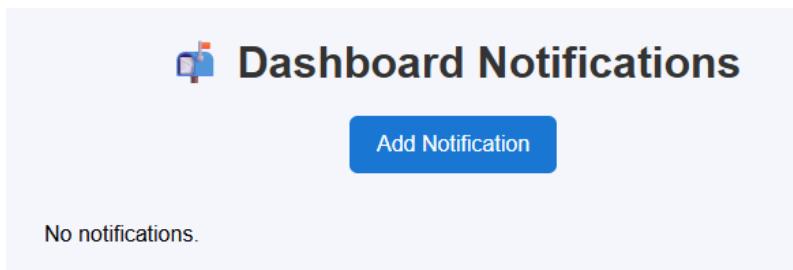
```
button:hover {  
background: #125aa3;  
}
```

```
.notifications {  
text-align: left;  
}
```

```
.notification {  
display: flex;  
justify-content: space-between;  
align-items: center;  
background: white;  
padding: 12px 15px;  
margin-bottom: 10px;  
border-radius: 6px;  
box-shadow: 0 2px 6px rgba(0,0,0,0.1);  
}
```

```
.notification button {  
padding: 6px 10px;  
background: #e53935;  
color: white;  
border: none;  
border-radius: 4px;
```

```
cursor: pointer;  
}  
  
.notification button:hover {  
background: #b71c1c;  
}
```



Task 19: Construct a responsive blog layout with real-time comment update.

App.jsx

```
import { useState } from "react";  
import "./App.css";
```

```
export default function App() {
  const [comments, setComments] = useState([]);
  const [commentInput, setCommentInput] = useState("");

  const handleCommentSubmit = (e) => {
    e.preventDefault();
    if (!commentInput.trim()) return;

    const newComment = {
      id: Date.now(),
      text: commentInput,
    };

    setComments([newComment, ...comments]);
    setCommentInput("");
  };

  return (
    <div className="app">
      <h1> My Blog</h1>

      <div className="blog-post">
        <h2>Understanding React Basics</h2>
        <p>
          React is a popular JavaScript library for building user interfaces.
          It allows developers to create reusable UI components and manage
          application state efficiently.
        </p>
      </div>

      <div className="comments-section">
        <h3> Comments</h3>
        <form onSubmit={handleCommentSubmit}>
          <input
            type="text"
            placeholder="Add a comment..."
            value={commentInput}
            onChange={(e) => setCommentInput(e.target.value)}
          />
          <button type="submit">Submit</button>
        </form>
      </div>
    </div>
  );
}
```

```
</form>

{comments.length === 0 && <p>No comments yet.</p>}
{comments.map((c) => (
  <div key={c.id} className="comment">
    {c.text}
  </div>
))}

</div>
</div>
);

}
```

App.css

```
body {
  margin: 0;
  font-family: Arial, sans-serif;
  background: #f4f6fb;
}

.app {
  max-width: 800px;
  margin: auto;
  padding: 20px;
}

h1 {
  text-align: center;
  color: #333;
  margin-bottom: 30px;
}

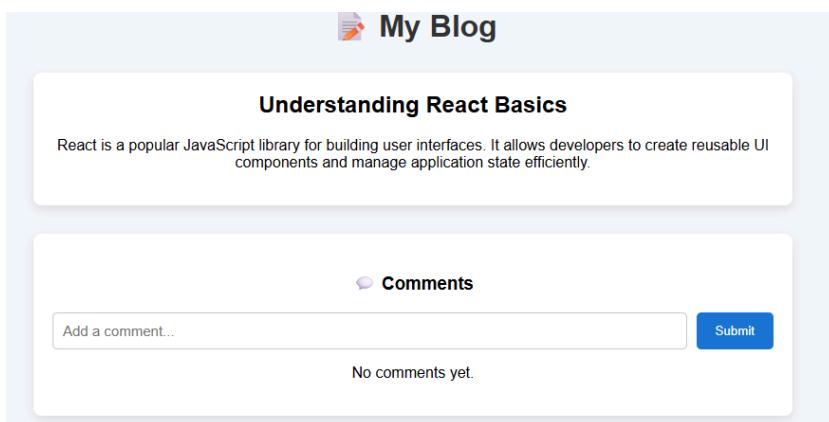
.blog-post {
  background: white;
  padding: 20px;
  border-radius: 8px;
  margin-bottom: 30px;
  box-shadow: 0 4px 10px rgba(0,0,0,0.1);
}
```

```
.blog-post h2 {  
    margin-top: 0;  
}  
  
.comments-section {  
    background: white;  
    padding: 20px;  
    border-radius: 8px;  
    box-shadow: 0 4px 10px rgba(0,0,0,0.1);  
}  
  
.comments-section form {  
    display: flex;  
    flex-wrap: wrap;  
    margin-bottom: 15px;  
}  
  
.comments-section input {  
    flex: 1;  
    padding: 10px;  
    font-size: 15px;  
    border-radius: 5px;  
    border: 1px solid #ccc;  
    margin-right: 10px;  
}  
  
.comments-section button {  
    padding: 10px 20px;  
    background: #1976d2;  
    color: white;  
    border: none;  
    border-radius: 5px;  
    cursor: pointer;  
}  
  
.comments-section button:hover {  
    background: #125aa3;  
}  
  
.comment {
```

```
background: #f0f4ff;
padding: 10px 15px;
margin-bottom: 10px;
border-radius: 6px;
word-wrap: break-word;
}

/* Responsive */
@media (max-width: 600px) {
.comments-section form {
flex-direction: column;
}

.comments-section input {
margin-right: 0;
margin-bottom: 10px;
}
}
```





Task 20: Simulate a basic e-commerce product listing interface with add-to-cart feature.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const products = [
    { id: 1, name: "Laptop", price: 750 },
    { id: 2, name: "Smartphone", price: 500 },
    { id: 3, name: "Headphones", price: 100 },
    { id: 4, name: "Smartwatch", price: 200 },
  ];

  const [cart, setCart] = useState([]);

  const addToCart = (product) => {
    setCart([...cart, product]);
  };

  return (
    <div className="app">
      <h1>🛒 E-Commerce Store</h1>

      <div className="product-list">
        {products.map((p) => (
          <div key={p.id} className="product-card">
```

```

<h3>{p.name}</h3>
<p>Price: ${p.price}</p>
<button onClick={() => addToCart(p)}>Add to Cart</button>
</div>
))}
</div>

<div className="cart">
  <h2>🛒 Cart Items ({cart.length})</h2>
  {cart.length === 0 && <p>No items in cart.</p>}
  {cart.map((item, index) => (
    <p key={index}>
      {item.name} - ${item.price}
    </p>
  ))}
</div>
</div>
);
}

```

App.css

```

body {
  margin: 0;
  font-family: Arial, sans-serif;
  background: #f4f6fb;
}

.app {
  max-width: 900px;
  margin: auto;
  padding: 30px 20px;
  text-align: center;
}

h1 {
  color: #333;
  margin-bottom: 20px;
}

.product-list {

```

```
display: flex;
flex-wrap: wrap;
gap: 20px;
justify-content: center;
margin-bottom: 30px;
}

.product-card {
background: white;
padding: 20px;
border-radius: 8px;
width: 180px;
box-shadow: 0 4px 10px rgba(0,0,0,0.1);
}

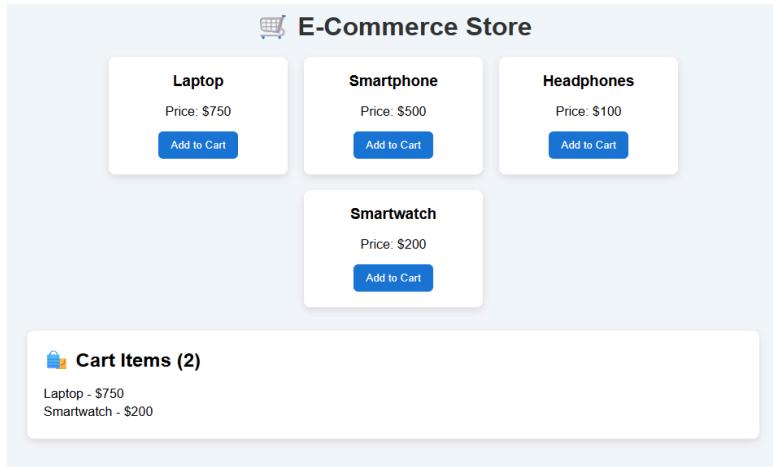
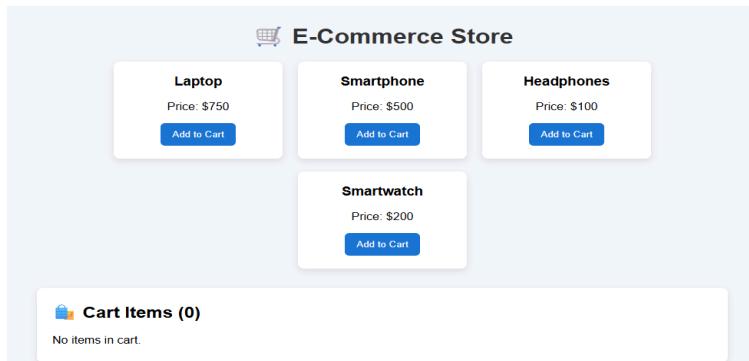
.product-card h3 {
margin-top: 0;
}

.product-card button {
padding: 10px 15px;
background: #1976d2;
color: white;
border: none;
border-radius: 6px;
cursor: pointer;
}

.product-card button:hover {
background: #125aa3;
}

.cart {
background: white;
padding: 20px;
border-radius: 8px;
box-shadow: 0 4px 10px rgba(0,0,0,0.1);
text-align: left;
}
```

```
.cart h2 {  
  margin-top: 0;  
}  
  
 .cart p {  
  margin: 5px 0;  
}
```



Task 21: Design a simple student management dashboard with navigation and data display.

App.jsx

```
import { useState } from "react";  
import "./App.css";  
  
export default function App() {  
  const [activeTab, setActiveTab] = useState("Dashboard");  
  
  // ...  
}
```

```

const students = [
  { id: 1, name: "Alice Johnson", grade: "A" },
  { id: 2, name: "Bob Smith", grade: "B" },
  { id: 3, name: "Charlie Brown", grade: "A" },
  { id: 4, name: "Diana Prince", grade: "C" },
];

```

```

const renderContent = () => {
  switch (activeTab) {
    case "Dashboard":
      return (
        <div>
          <h2> Dashboard</h2>
          <p>Total Students: {students.length}</p>
          <p>Average Grade: {calculateAverageGrade()}</p>
        </div>
      );
    case "Students":
      return (
        <div>
          <h2> Students List</h2>
          <table>
            <thead>
              <tr>
                <th>ID</th>
                <th>Name</th>
                <th>Grade</th>
              </tr>
            </thead>
            <tbody>
              {students.map((s) => (
                <tr key={s.id}>
                  <td>{s.id}</td>
                  <td>{s.name}</td>
                  <td>{s.grade}</td>
                </tr>
              )))
            </tbody>
          </table>
        </div>
      );
  }
}

```

```

);
case "Settings":
  return (
    <div>
      <h2>⚙️ Settings</h2>
      <p>Here you can configure dashboard settings.</p>
    </div>
  );
default:
  return null;
}
};

const calculateAverageGrade = () => {
  const gradePoints = { A: 4, B: 3, C: 2, D: 1, F: 0 };
  const total = students.reduce((acc, s) => acc + gradePoints[s.grade], 0);
  return (total / students.length).toFixed(2);
};

return (
  <div className="app">
    <h1>🎓 Student Management Dashboard</h1>
    <div className="tabs">
      {[ "Dashboard", "Students", "Settings" ].map((tab) => (
        <button
          key={tab}
          className={activeTab === tab ? "active" : ""}
          onClick={() => setActiveTab(tab)}
        >
          {tab}
        </button>
      )));
    </div>

    <div className="content">{renderContent()}</div>
  </div>
);
}

```

App.css

```
body {  
  margin: 0;  
  font-family: Arial, sans-serif;  
  background: #f4f6fb;  
}
```

```
.app {  
  max-width: 900px;  
  margin: auto;  
  padding: 30px 20px;  
  text-align: center;  
}
```

```
h1 {  
  color: #333;  
  margin-bottom: 20px;  
}
```

```
.tabs {  
  display: flex;  
  justify-content: center;  
  margin-bottom: 20px;  
  flex-wrap: wrap;  
  gap: 10px;  
}
```

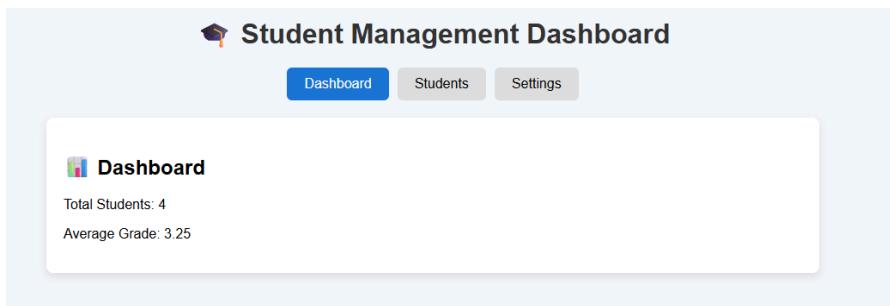
```
.tabs button {  
  padding: 10px 20px;  
  border: none;  
  border-radius: 6px;  
  background: #e0e0e0;  
  cursor: pointer;  
  font-size: 16px;  
}
```

```
.tabs button.active {  
  background: #1976d2;  
  color: white;  
}
```

```
.tabs button:hover {  
    background: #bdbdbd;  
}  
  
.content {  
    background: white;  
    padding: 20px;  
    border-radius: 8px;  
    box-shadow: 0 4px 10px rgba(0,0,0,0.1);  
    text-align: left;  
}  
  
table {  
    width: 100%;  
    border-collapse: collapse;  
    margin-top: 10px;  
}  
  
table, th, td {  
    border: 1px solid #ccc;  
}  
  
th, td {  
    padding: 10px;  
    text-align: left;  
}  
  
th {  
    background: #f0f0f0;  
}  
  
 @media (max-width: 600px) {  
    table, th, td {  
        font-size: 14px;  
    }  
  
.tabs button {  
    padding: 8px 12px;  
    font-size: 14px;  
}
```

```
}
```

```
}
```



The screenshot shows the same "Student Management Dashboard" application. The "Students" tab is now highlighted in blue. The main content area is titled "Students List" with a student icon. It displays a table with four rows of student data:

ID	Name	Grade
1	Alice Johnson	A
2	Bob Smith	B
3	Charlie Brown	A

Task 22: Simulate a simple product browsing page with category-based routing.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const categories = ["All", "Electronics", "Fashion", "Books"];

  const products = [
    { id: 1, name: "Laptop", category: "Electronics", price: 750 },
    { id: 2, name: "Smartphone", category: "Electronics", price: 500 },
    { id: 3, name: "T-Shirt", category: "Fashion", price: 25 },
    { id: 4, name: "Jeans", category: "Fashion", price: 40 },
    { id: 5, name: "Novel", category: "Books", price: 15 },
    { id: 6, name: "Notebook", category: "Books", price: 5 },
  ];
}
```

```

const [activeCategory, setActiveCategory] = useState("All");

const filteredProducts =
  activeCategory === "All"
    ? products
    : products.filter((p) => p.category === activeCategory);

return (
  <div className="app">
    <h1>🛍️ Product Browser</h1>

    <div className="category-buttons">
      {categories.map((cat) => (
        <button
          key={cat}
          className={activeCategory === cat ? "active" : ""}
          onClick={() => setActiveCategory(cat)}
        >
          {cat}
        </button>
      )));
    </div>

    <div className="product-list">
      {filteredProducts.map((p) => (
        <div key={p.id} className="product-card">
          <h3>{p.name}</h3>
          <p>Category: {p.category}</p>
          <p>Price: ${p.price}</p>
        </div>
      )));
      {filteredProducts.length === 0 && <p>No products in this category.</p>}
    </div>
  </div>
);
}

```

App.css

```
body {
```

```
margin: 0;  
font-family: Arial, sans-serif;  
background: #f4f6fb;  
}
```

```
.app {  
max-width: 900px;  
margin: auto;  
padding: 30px 20px;  
text-align: center;  
}
```

```
h1 {  
color: #333;  
margin-bottom: 20px;  
}
```

```
.category-buttons {  
margin-bottom: 20px;  
display: flex;  
justify-content: center;  
flex-wrap: wrap;  
gap: 10px;  
}
```

```
.category-buttons button {  
padding: 10px 20px;  
border: none;  
border-radius: 6px;  
background: #e0e0e0;  
cursor: pointer;  
font-size: 16px;  
}
```

```
.category-buttons button.active {  
background: #1976d2;  
color: white;  
}
```

```
.category-buttons button:hover {
```

```
background: #bdbdbd;
}

.product-list {
  display: flex;
  flex-wrap: wrap;
  gap: 20px;
  justify-content: center;
}

.product-card {
  background: white;
  padding: 20px;
  border-radius: 8px;
  width: 180px;
  box-shadow: 0 4px 10px rgba(0,0,0,0.1);
}

.product-card h3 {
  margin-top: 0;
}

.product-card p {
  margin: 5px 0;
}

/* Responsive */
@media (max-width: 600px) {
  .product-card {
    width: 100%;
  }
}
```

Product Browser

All Electronics Fashion Books

Laptop Category: Electronics Price: \$750	Smartphone Category: Electronics Price: \$500	T-Shirt Category: Fashion Price: \$25
Jeans Category: Fashion Price: \$40	Novel Category: Books Price: \$15	Notebook Category: Books Price: \$5

Product Browser

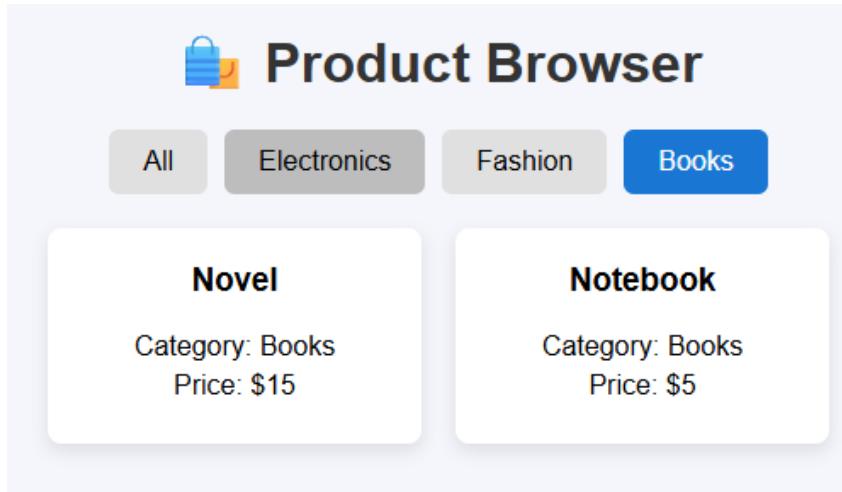
All Electronics **Fashion** Books

T-Shirt Category: Fashion Price: \$25	Jeans Category: Fashion Price: \$40
---	---

Product Browser

All Electronics Fashion **Books**

Novel Category: Books Price: \$15	Notebook Category: Books Price: \$5
---	---



Task 23: Design a multi-page student dashboard with navigation using React Router.

App.jsx

```
import { useState } from "react";
import "./App.css";

export default function App() {
  const [activeTab, setActiveTab] = useState("Dashboard");

  const students = [
    { id: 1, name: "Alice Johnson", grade: "A" },
    { id: 2, name: "Bob Smith", grade: "B" },
    { id: 3, name: "Charlie Brown", grade: "A" },
    { id: 4, name: "Diana Prince", grade: "C" },
  ];

  const renderContent = () => {
    switch (activeTab) {
      case "Dashboard":
        return (
          <div className="page">
            <h2>🏠 Dashboard Home</h2>
            <p>Total Students: {students.length}</p>
            <p>Average Grade: {calculateAverageGrade()}</p>
          </div>
        );
    }
  };
}
```

```

case "Students":
  return (
    <div className="page">
      <h2>👤 Students List</h2>
      <table>
        <thead>
          <tr>
            <th>ID</th>
            <th>Name</th>
            <th>Grade</th>
          </tr>
        </thead>
        <tbody>
          {students.map((s) => (
            <tr key={s.id}>
              <td>{s.id}</td>
              <td>{s.name}</td>
              <td>{s.grade}</td>
            </tr>
          )))
        </tbody>
      </table>
    </div>
  );
}

case "Reports":
  return (
    <div className="page">
      <h2>📊 Reports</h2>
      <p>View analytics and performance reports of students.</p>
    </div>
  );
}

default:
  return null;
}
};

const calculateAverageGrade = () => {
  const gradePoints = { A: 4, B: 3, C: 2, D: 1, F: 0 };
  const total = students.reduce((acc, s) => acc + gradePoints[s.grade], 0);
  return (total / students.length).toFixed(2);
}

```

```

};

return (
  <div className="app">
    <h1>🎓 Student Dashboard</h1>

    <div className="tabs">
      {"Dashboard", "Students", "Reports"].map((tab) => (
        <button
          key={tab}
          className={activeTab === tab ? "active" : ""}
          onClick={() => setActiveTab(tab)}
        >
          {tab}
        </button>
      )));
    </div>

    <div className="content">{renderContent()}</div>
  </div>
);
}

```

App.css

```

body {
  margin: 0;
  font-family: Arial, sans-serif;
  background: #f4f6fb;
}

```

```

.app {
  max-width: 900px;
  margin: auto;
  padding: 30px 20px;
  text-align: center;
}

```

```

h1 {
  color: #333;
}

```

```
    margin-bottom: 20px;
}

.tabs {
  display: flex;
  justify-content: center;
  gap: 15px;
  margin-bottom: 20px;
  flex-wrap: wrap;
}

.tabs button {
  padding: 10px 20px;
  border: none;
  border-radius: 6px;
  background: #e0e0e0;
  cursor: pointer;
  font-size: 16px;
}

.tabs button.active {
  background: #1976d2;
  color: white;
}

.tabs button:hover {
  background: #bdbdbd;
}

.content {
  background: white;
  padding: 20px;
  border-radius: 8px;
  box-shadow: 0 4px 10px rgba(0,0,0,0.1);
  text-align: left;
}

.page h2 {
  margin-top: 0;
}
```

```
table {  
    width: 100%;  
    border-collapse: collapse;  
    margin-top: 10px;  
}
```

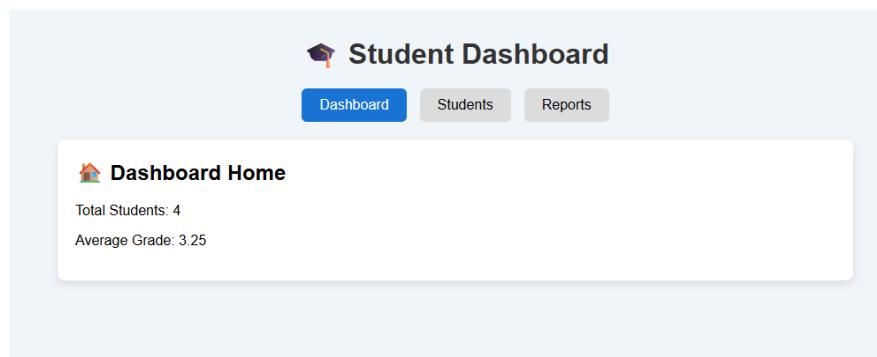
```
table, th, td {  
    border: 1px solid #ccc;  
}
```

```
th, td {  
    padding: 10px;  
    text-align: left;  
}
```

```
th {  
    background: #f0f0f0;  
}
```

```
@media (max-width: 600px) {  
    table, th, td {  
        font-size: 14px;  
    }  
}
```

```
.tabs button {  
    padding: 8px 12px;  
    font-size: 14px;  
}  
}
```



Student Dashboard

Dashboard Students Reports

Students List

ID	Name	Grade
1	Alice Johnson	A
2	Bob Smith	B
3	Charlie Brown	A
4	Diana Prince	C

Student Dashboard

Dashboard Students Reports

Reports

View analytics and performance reports of students.