CaseStudy1:

Online Food Ordering System

App.js:

```
import logo from './logo.svg';
import './App.css';
import FoodApp from './components/FoodApp/FoodApp';
import ELearning from './components/ELearning/ELearning';
import FitnessTracker from './components/FitnessTracker/FitnessTracker';
import HotelBooking from './components/HotelBooking/HotelBooking';
import MovieBooking from './components/MovieBooking/MovieBooking';

function App() {
  return (
    <div className="App">
      {/* <FoodApp/> */}
      {/* <ELearning/> */}
      {/* <FitnessTracker/> */}
      {/* <HotelBooking/> */}
      <MovieBooking/>
    </div>
  );
}

export default App;
```

FoodApp.js:

```
import React, { useState } from "react";
import "./FoodApp.css";
const FoodCard = ({ item, addToCart }) => (
  <div className="food-card">
    <h3>{item.name}</h3>
    <p>{item.description}</p>
    <p>Price: ₹{item.price}</p>
    <button onClick={() => addToCart(item)}>Add to Cart</button>
  </div>
);

const Cart = ({ cart }) => {
  const total = cart.reduce((sum, item) => sum + item.price * item.quantity, 0);
  return (
    <div className="cart">
      <h2>🛒 Cart</h2>
      {cart.map((c, i) => (
        <p key={i}>
          {c.name} x {c.quantity} = ₹{c.price * c.quantity}
        </p>
      ))}
      <h3>Total: ₹{total}</h3>
    </div>
  );
};

const FoodApp = () => {
  const foods = [
    { name: "Pizza", description: "Cheese & tomato", price: 200 },
    { name: "Burger", description: "Veg loaded", price: 150 },
    { name: "Pasta", description: "Creamy white sauce", price: 180 }
  ];

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

  const addToCart = (food) => {
    setCart((prev) => {
      const exists = prev.find((item) => item.name === food.name);
      if (exists) {
        return prev.map((item) =>
          item.name === food.name ? { ...item, quantity: item.quantity + 1 } : item
        );
      } else {
        return [...prev, { ...food, quantity: 1 }];
      }
    });
  };

  return (
    <div className="food-app">
      <h1 className="food-title">Online Food Ordering</h1>
      <div className="food-list">
        {foods.map((f, i) => (
          <FoodCard key={i} item={f} addToCart={addToCart} />
        ))}
      </div>
      <Cart cart={cart} />
    </div>
  );
```

```
};

export default FoodApp;
```

FoodApp.css:

```
.food-app {
  font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
  text-align: center;
  padding: 20px;
  background-color: #fafafa;
  min-height: 100vh;
}

.food-title {
  font-size: 2rem;
  color: #333;
  margin-bottom: 20px;
}

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

.food-card {
  background: white;
  border: 1px solid #ddd;
  border-radius: 10px;
  padding: 15px;
  width: 200px;
  transition: transform 0.2s ease, box-shadow 0.2s ease;
  box-shadow: 0 2px 6px rgba(0, 0, 0, 0.1);
}

.food-card:hover {
  transform: translateY(-5px);
  box-shadow: 0 5px 15px rgba(0, 0, 0, 0.2);
}

.food-card h3 {
  color: #222;
  margin: 10px 0;
}

.food-card p {
  color: #555;
  font-size: 14px;
}

.food-card button {
  margin-top: 10px;
  padding: 8px 12px;
  background: #ff9800;
  color: white;
  border: none;
  border-radius: 5px;
  cursor: pointer;
}

.food-card button:hover {
  background: #e68900;
}

.cart {
  margin-top: 30px;
  padding: 20px;
  background: #fff8e1;
  border: 1px solid #ffecb3;
  border-radius: 10px;
  display: inline-block;
  text-align: left;
}

.cart h2 {
  margin-bottom: 15px;
  color: #333;
}

.cart p {
  margin: 5px 0;
  font-size: 15px;
}
```

```
.cart h3 {
  margin-top: 10px;
  color: #d84315;
}
```

CaseStudy2:

E-Learning Platform:

ELearning.js:

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

const CourseCard = ({ course, enrollCourse }) => (
  <div className="course-card">
    <h3>{course.title}</h3>
    <p>Author: {course.author}</p>
    <p>Duration: {course.duration}</p>
    <button onClick={() => enrollCourse(course)}>
      {course.enrolled ? "Already Enrolled" : "Enroll"}
    </button>
    {course.enrolled && (
      <div className="progress-bar">
        <div
          className="progress-bar-fill"
          style={{ width: `${course.progress}%` }}
        ></div>
      </div>
    )}
  </div>
);

const ELearning = () => {
  const [courses, setCourses] = useState([
    { title: "React Basics", author: "John Doe", duration: "3h", enrolled: false, progress: 0 },
    { title: "Node.js", author: "Jane Smith", duration: "4h", enrolled: false, progress: 0 },
    { title: "MongoDB", author: "Sam Lee", duration: "2h", enrolled: false, progress: 0 }
  ]);

  const enrollCourse = (course) => {
    setCourses((prev) =>
      prev.map((c) =>
        c.title === course.title ? { ...c, enrolled: true, progress: 40 } : c
      )
    );
  };

  return (
    <div className="elearning-app">
      <h1 className="elearning-title"> E-Learning Platform</h1>
      <div className="course-list">
        {courses.map((c, i) => (
          <CourseCard key={i} course={c} enrollCourse={enrollCourse} />
        ))}
      </div>
    </div>
  );
```

```
};

export default ELearning;
```

ELearning.css:

```
.elearning-app {
  font-family: Arial, sans-serif;
  text-align: center;
  padding: 20px;
  background: #f4f8ff;
  min-height: 100vh;
}

.elearning-title {
  font-size: 2rem;
  margin-bottom: 20px;
  color: #2b3a67;
}

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

.course-card {
  background: white;
  border-radius: 10px;
  border: 1px solid #ccc;
  padding: 15px;
  width: 220px;
  text-align: left;
  transition: transform 0.2s ease;
  box-shadow: 0 2px 8px rgba(0, 0, 0, 0.1);
}

.course-card:hover {
  transform: translateY(-5px);
}

.course-card h3 {
  color: #2b3a67;
}

.course-card p {
  font-size: 14px;
  color: #555;
}

.course-card button {
  margin-top: 10px;
  padding: 8px 12px;
  background: #1976d2;
  color: white;
  border: none;
  border-radius: 6px;
  cursor: pointer;
}

.course-card button:hover {
  background: #145ca1;
}

.progress-bar {
  height: 10px;
  background: #e0e0e0;
  border-radius: 5px;
  margin-top: 10px;
  overflow: hidden;
}

.progress-bar-fill {
  height: 100%;
  background: #4caf50;
  width: 0%;
  transition: width 0.3s ease;
}
```

Case-Study3:

Movie-Tickets Booking

MovieBooking.js:

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

```
const Seat = ({ seat, toggleSeat }) => (
  <div
    className={`seat ${seat.selected ? "selected" : ""}`}
    onClick={() => toggleSeat(seat.id)}
  >
    {seat.id}
  </div>
);

const MovieBooking = () => {
  const [seats, setSeats] = useState(
    Array.from({ length: 24 }, (_, i) => ({ id: i + 1, selected: false }))
  );
  const [confirmed, setConfirmed] = useState(false);

  const toggleSeat = (id) => {
    setSeats((prev) =>
      prev.map((s) => (s.id === id ? { ...s, selected: !s.selected } : s))
    );
  };

  const selectedSeats = seats.filter((s) => s.selected);
  const total = selectedSeats.length * 120;

  return (
    <div className="movie-app">
      <h1 className="movie-title"> Movie Ticket Booking</h1>
      <div className="seat-grid">
```

```
        {seats.map((s) => (
          <Seat key={s.id} seat={s} toggleSeat={toggleSeat} />
        ))}
      </div>
      <div className="summary">
        <p>Selected Seats: {selectedSeats.map((s) => s.id).join(", ") || "None"}</p>
        <p>Total: ₹{total}</p>
        <button className="confirm-btn" onClick={() => setConfirmed(true)}>
          Confirm Booking
        </button>
        {confirmed && <p> Booking Confirmed!</p>}
      </div>
    </div>
  );
};

export default MovieBooking;
```

MovieBooking.css:

```
.movie-app {
  font-family: "Segoe UI", sans-serif;
  padding: 20px;
  text-align: center;
  background: #fff3f3;
  min-height: 100vh;
}

.movie-title {
  font-size: 2rem;
  margin-bottom: 20px;
  color: #c62828;
}

.seat-grid {
  display: grid;
  grid-template-columns: repeat(8, 40px);
  gap: 10px;
  justify-content: center;
  margin: 20px auto;
}

.seat {
  width: 40px;
  height: 40px;
  border-radius: 6px;
  border: 1px solid #aaa;
  background: #fff;
  cursor: pointer;
  transition: background 0.3s ease;
}

.seat:hover {
  background: #ffe0e0;
}

.seat.selected {
  background: #ef5350;
```

```css
  color: white;
}

.summary {
  margin-top: 20px;
  padding: 15px;
  border: 1px solid #ddd;
  background: #fff;
  border-radius: 8px;
  display: inline-block;
}

.confirm-btn {
  margin-top: 10px;
  padding: 8px 15px;
  background: #c62828;
  color: white;
  border: none;
  border-radius: 6px;
  cursor: pointer;
}

.confirm-btn:hover {
  background: #a31515;
}
```

CaseStudy4:

Fitness Tracker

FitnessApp.js:

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

export default function FitnessApp() {
  const [steps, setSteps] = useState(0);
  const [calories, setCalories] = useState(0);
  const [water, setWater] = useState(0);

  return (
    <div className="fitness-container">
      <h1>Fitness Tracker</h1>

      <div className="tracker-box">
        <h3>Steps: {steps}</h3>
        <button onClick={() => setSteps(steps + 500)}>+500 Steps</button>
      </div>

      <div className="tracker-box">
        <h3>Calories Burned: {calories}</h3>
        <button onClick={() => setCalories(calories + 50)}>+50 Calories</button>
      </div>

      <div className="tracker-box">
        <h3>Water: {water} glasses</h3>
        <button onClick={() => setWater(water + 1)}>+1 Glass</button>
      </div>

      <div className="summary">
```

```
        <h2>Summary</h2>
        <p>Steps: {steps}</p>
        <p>Calories: {calories}</p>
        <p>Water: {water} glasses</p>
      </div>
    </div>
  );
}
```

FitnessApp.css:

```
.fitness-container {
  text-align: center;
  padding: 20px;
}

.tracker-box {
  margin: 15px;
  padding: 10px;
  border: 1px solid #888;
  border-radius: 8px;
  display: inline-block;
}

.tracker-box button {
  margin-top: 8px;
  padding: 6px 12px;
  background: #007bff;
  color: white;
  border: none;
  border-radius: 5px;
  cursor: pointer;
}

.summary {
  margin-top: 20px;
  padding: 15px;
  border: 2px solid black;
}
```

CaseStudy5:

Hotel Room Booking

HotelApp.js:

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

export default function HotelApp() {
  const rooms = [
    { id: 1, type: "Deluxe", price: 2000 },
    { id: 2, type: "Suite", price: 5000 },
    { id: 3, type: "Standard", price: 1500 }
  ];

  const [selected, setSelected] = useState(null);
  const [dates, setDates] = useState({ checkIn: "", checkOut: "" });

  const nights =
    dates.checkIn && dates.checkOut
      ? (new Date(dates.checkOut) - new Date(dates.checkIn)) /
      (1000 * 60 * 60 * 24)
    : 0;

const total = selected ? nights * selected.price : 0;

return (
  <div className="hotel-container">
    <h1>Hotel Reservation</h1>

    <div className="date-picker">
      <label>
        Check-in:
        <input
          type="date"
          onChange={(e) => setDates({ ...dates, checkIn: e.target.value })}
        />
      </label>
      <label>
        Check-out:
        <input
          type="date"
          onChange={(e) => setDates({ ...dates, checkOut: e.target.value })}
        />
      </label>
    </div>

    <h2>Available Rooms</h2>
    <div className="room-list">
    {rooms.map((room) => (
     <div
      key={room.id}
      className={`room-card ${selected?.id === room.id ? "selected" : ""}`}
      onClick={() => setSelected(room)}
     >
      <h3>{room.type}</h3>
      <p>₹{room.price} / night</p>
     </div>
    ))}
   </div>

   <div className="summary">
    <h2>Booking Summary</h2>
    {selected && nights > 0 ? (
     <>
      <p>Room: {selected.type}</p>
      <p>Check-in: {dates.checkIn}</p>
      <p>Check-out: {dates.checkOut}</p>
      <p>Total: ₹{total}</p>
     </>
    ) : (
     <p>Please select room & dates</p>
    )}
   </div>
  </div>
 );
}
```

HotelApp.css:

```
.hotel-container {
  padding: 20px;
  text-align: center;
}

.date-picker {
  margin: 10px 0;
}

.room-list {
  display: flex;
  justify-content: center;
  gap: 15px;
  margin: 15px 0;
}

.room-card {
  border: 1px solid #888;
  padding: 15px;
  border-radius: 8px;
  cursor: pointer;
  width: 150px;
}

.room-card.selected {
  background: #ffeb3b;
}
```

```
.summary {
  margin-top: 20px;
  padding: 15px;
  border: 2px solid black;
}
```