```
Npx create-react-app driver-safety-dashboard

Cd driver-safety-dashboard

Npm start

import React from “react”;

Import ReactDOM from “react-dom”;

Import App from “./App”; // Importing the main App
component


// Rendering the App component inside the root element

ReactDOM.render(<App />,
document.getElementById(“root”));

import React from “react”;

Import Dashboard from “./components/Dashboard”; //
Importing the Dashboard component


// Main App component that serves as the root of the
application

Function App() {

  Return (

    <div>

      <h1 style={{ textAlign: “center”, color: “#2E3A46” }}>

        🚗 Driver Safety Monitoring Dashboard
      </h1>
      <Dashboard /> {/* Embedding the Dashboard
component */}
    </div>
  );
}

Export default App;
import React, { useState, useEffect } from “react”;
Import SensorData from “./SensorData”; // Importing
SensorData component
Import AlertBox from “./AlertBox”; // Importing AlertBox
component

// Dashboard component to manage real-time data and
display it
Const Dashboard = () => {
  // State to store sensor data
  Const [data, setData] = useState({
    heartRate: 70,
    temperature: 36.5,
    drowsiness: 3
```

```
 });

 // useEffect to simulate real-time sensor data updates
every 5 seconds
 useEffect(() => {
  const interval = setInterval(() => {
   setData({
    heartRate: Math.floor(60 + Math.random() * 50), //
Random heart rate (60-110)
    temperature: (35.5 + Math.random() * 3).toFixed(1), //
Random temperature (35.5 – 38.5°C)
    drowsiness: Math.floor(Math.random() * 10) //
Random drowsiness level (0-10)
   });
  }, 5000); // Updates every 5 seconds

  Return () => clearInterval(interval); // Cleanup interval on
unmount
 }, []);

 Return (
    <div style={{ padding: “20px”, maxWidth: “600px”,
margin: “auto” }}>
      <SensorData data={data} /> {/* Displays real-time
sensor readings */}
      <AlertBox data={data} /> {/* Displays alerts if issues are
detected */}
    </div>
  );
};

Export default Dashboard;
import React from “react”;

// Component to display live sensor readings
Const SensorData = ({ data }) => {
  Return (
    <div
      Style={{
        Border: “2px solid #2E3A46”,
        Padding: “15px”,
        borderRadius: “10px”,
        background: “#f0f8ff”,
        marginBottom: “10px”
      }}
    >
      <h3>📊 Live Sensor Data</h3>
      <p>❤️ Heart Rate: <strong>{data.heartRate}
bpm</strong></p>
      <p>🌡️ Temperature:
<strong>{data.temperature}°C</strong></p>
      <p>😴 Drowsiness Level:
<strong>{data.drowsiness}/10</strong></p>
    </div>
  );
};

Export default SensorData;
import React from “react”;

// Component to display alerts if sensor readings indicate
health risks
Const AlertBox = ({ data }) => {
  Const { heartRate, temperature, drowsiness } = data;
  Const alerts = [];

  // Checking for abnormal heart rate
  If (heartRate < 50 || heartRate > 120) alerts.push("⚠
Abnormal heart rate detected!");

  // Checking for high temperature
  If (temperature > 38.0) alerts.push("⚠ High body
temperature detected!");

  // Checking for drowsiness warning
  If (drowsiness >= 7) alerts.push("⚠ Driver drowsiness
detected!");

  Return (
    <div
      Style={{
        Border: "2px solid red",
        Padding: "15px",
        borderRadius: "10px",
      background: alerts.length > 0 ? “#ffcccb” : “#d4edda”
     }}
   >
     <h3>🚨 Alert System</h3>
     {alerts.length > 0
       ? alerts.map((alert, index) => <p
key={index}>{alert}</p>)
       : <p>✅ No issues detected</p>}
   </div>
  );
};

Export default AlertBox;
body {
  Font-family: Arial, sans-serif;
  Background-color: #f8f9fa;
  Margin: 0;
  Padding: 0;
}
npm start
```