WEEK :6

1.Ex**plain React components:**  
React components are reusable blocks of code that return JSX to render UI.

2.**Difference between components and JavaScript functions:**

* Components return UI (JSX), functions return data.
* Components manage state and lifecycle; functions don’t.

3.**Types of components:**

* **Class components** – use class, have lifecycle methods.
* **Function components** – use function or arrow syntax, can use hooks.

4.**Explain class component:**  
A component written using ES6 class syntax, has methods like constructor() and render().

5.**Explain function component:**  
A simpler way to define components using functions or arrow functions. Supports hooks like useState.

6.**Define component constructor:**  
A method in class components used to initialize state and bind methods.

7.**Define render() function:**  
The method that returns the JSX UI for a class component.

App.js:

import React from 'react';

import './App.css';

import CalculateScore from './Components/CalculateScore';

function App() {

  return (

    <div className="App">

      <CalculateScore name="Harshita" school="ABC School" total={450} goal={5} />

    </div>

  );

}

export default App;

Style.css:

.score-box {

  background-color: #f0f8ff;

  border: 2px solid #ccc;

  padding: 20px;

  border-radius: 8px;

  width: 300px;

  margin: auto;

  font-family: Arial, sans-serif;

}

Calculatorscore.js:

import React from 'react';

import '../Stylesheets/mystyle.css';

const CalculateScore = (props) => {

  const average = props.total / props.goal;

  return (

    <div className="score-box">

      <h2>Student Score Summary</h2>

      <p><strong>Name:</strong> {props.name}</p>

      <p><strong>School:</strong> {props.school}</p>

      <p><strong>Total Score:</strong> {props.total}</p>

      <p><strong>Goal:</strong> {props.goal}</p>

      <p><strong>Average Score:</strong> {average}</p>

    </div>

  );

};

export default CalculateScore;

Output:

