***NAME: HUZAIFA SHAHID***

***GROUP: ALI HAIDER***

***REPORT #: W:7,D:5***

***TASK TITLE Conditional Styling, Component Libraries (e.g., Tailwind, Bootstrap)***

## **1. Conditional Styling in React**

Conditional styling means **changing styles dynamically** based on a certain condition (state, props, etc.).

### ****Ways to Apply Conditional Styling****

* **Inline ternary operators**

<div style={{ color: isActive ? "green" : "red" }}>

{isActive ? "Active" : "Inactive"}

</div>

* **Dynamic class names**

<div className={isActive ? "bg-blue-500" : "bg-gray-500"}>

Button

</div>

* **Using libraries like classnames**

import classNames from "classnames";

<div className={classNames({ "active-class": isActive, "inactive-class": !isActive })}>

Text

</div>

**Benefit:** Helps make UI **interactive and responsive** to state changes.

## **2. Component Libraries**

Component libraries provide **pre-built UI components** (buttons, modals, forms) so you don’t have to code them from scratch.

### ****a) Tailwind CSS****

* **Utility-first** CSS framework.
* Uses class names for styling (bg-blue-500, p-4, etc.).
* Highly **customizable** but requires learning the utility syntax.
* Example:

<button className="bg-blue-500 text-white px-4 py-2 rounded">

Click Me

</button>

### ****b) Bootstrap****

* Popular **responsive** front-end framework.
* Comes with ready-to-use CSS + JS components.
* Uses predefined class names (btn, btn-primary, etc.).
* Example:

<button className="btn btn-primary">Click Me</button>