**Portfolio (Week-9)**

In this week lab, we will learn how to create react class component and use them. We willFor the first step, we will create react app with the help of npx create-react-app command in our week 9 folder and then we will create a class component that records the facebook emotions like love, like and happy emojis. We will create a file named Facebookemoji.js, now we will write some code in the file with the help of week 9 lab pdf:

A screen shot of a computer

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Now we will call this component in our index file by importing it in the file, for that we will first import the class into the index file with the import command and then we will remove the app tag and replace it with the FacebookEmojiCounter and we will call it three times as it we need to change the type of the prop we are taking in:

Calling the component in the index file:

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We will run the app with the npm start command and the result will be:

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Now we will create a file named ToggleModeComponent.js and will add the code from the pdf provided for the lab task:

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I hade some issue with my code so, I had to change the code in other files as well:

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And finally this is the output of our program:

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**Challenges and Solutions**

**1. Props Handling in Class Components**

* **Issue:** Initially, I forgot to pass props correctly in the FacebookEmojiCounter component.
* **Solution:** Reviewed the class component syntax and ensured props were passed to the constructor and used with this.props.

**2. State Management**

* **Issue:** Encountered a bug where state updates were not reflected immediately in the ToggleModeComponent.
* **Solution:** Learned that setState is asynchronous and resolved the issue by correctly using this.state.

**Reflections and Learning Outcomes**

This week’s lab reinforced the importance of React class components, particularly for stateful logic. Key takeaways include:

1. **Class Components:** Understanding their structure, lifecycle methods, and how they manage state.
2. **Props and State:** Differentiating between props (data passed from parent to child) and state (component-specific data).
3. **Dynamic Styling:** Implementing conditional styling for light and dark modes.