

## Full Stack IV - Lab (React)

- Functional & Class Components
- Component Props, State & Events
- Controlled Components

### Developer Note:

- Work can be done in the same create-react-app application. Remember to not include node\_modules in the GitHub submission.

Demo can be found here  
<https://youtu.be/5Vur82tsaiU>

### References:

<https://reactjs.org/>  
<https://www.npmjs.com/package/react-moment>

## Simple Tweeter Application

Build an application with the following requirements:

- Create 4 components, **TweetContainer**, **Comment**, **Timer** and **LikeButton**

### App.js

- Imports **TweetContainer** component
- Renders 3 **TweetContainer** components and passing in a different **status** for each component

## **TweetContainer Component                      25%**

Build a container component which has the following requirements:

- Imports the **Comment** component
- Displays the **status** passed into the component *(as a prop from the parent App control)*
- Contains a **Comment Form** and **Post** button *(this can be an inline form in the jsx)*
  - when the comment text is entered and Post button clicked, a new comment component containing the text is created and displayed in Comment list
- Renders a list of Comment components

[Hint: The Form and input textbox should be controlled components there should have two functions:](#)

[1. handleFormSubmit](#) - that will handle the form submit event and keep track of the list or array of comments added.

2. `handleTextChange` - that will track the controlled textbox component value (ie. comment text), so that when the form is submitted the React component knows which new comment to add

## **Comment Component                      25%**

**Build a container component which has the following requirements:**

- Imports the **LikeButton** and the **Timer Component**
- Renders the comment text passed in as a prop (*from the parent `TweeterContainer` component*)
- Renders the **LikeButton Component** and **Timer Component**

[Hint: The comment text passed in from the parent `TweeterContainer` component is a read-only prop.](#)

## **Timer Component              25%**

**Build a component which has the following requirements:**

- Imports the **Moment from `react-moment`**
- Calculates the current date
- Use React Moment to display the current time in format (Hour, Minutes, Seconds)

[Hint: The component can be stateless and just render the current time.](#)

## **LikeButton Component              25%**

**Build a component which has the following requirements:**

- Has internal state to keep track of number Like clicks
- Has a click handler function to update the Like counter
- Displays the number of Likes

[Hint: This component should have state and keep track of the number of clicks. It should have an event handler to handle the button click event.](#)

The **`TweeterContainer`** component should display as follows:

## At home, binge watching Breaking Bad for second time!

22:35:32 **You need to watch Narcos**  3 Likes

22:35:32 **I don't have a Netflix account**  1 Likes

### **Bonus 5%**

Solve the problem with the Timer component updating, when the Comment component state is updating on every user text input into the Comment post control. The Timer time should not change once rendered.

Specification	Percentage
1: <u>TweeterContainer Component</u>	25%
2: <u>Comment Component</u>	25%
3: <u>Timer Component</u>	25%
4: <u>Like Button Component</u>	25%
Bonus	5%
<b>Total</b>	<b>100%</b>