WEEK 4 ASSMT. ANSWERS

**REACT**

1. What does "UI is a function of state" mean? When a change is made, (e.g. adding a contact) should your JavaScript code directly update the **UI** or the **state**?
   1. Look for something like this: The UI (or HTML) is determined by the state (or data). When the state/data changes, React automatically updates the UI/HTML. We don’t manipulate the HTML directly.
   2. Your JS code should update state directly.
2. What is the difference between state and props?
   1. State belongs to the component itself. The component can change its own state. Props are passed from a parent component. The component should not change its props.
3. Write a very basic React component named Greet that takes a property called name, and produces an HTML greeting specific to that name. For example if called with name “Grant”, it will produce the HTML <h3>Hello Grant!</h3>.
   1. class Greet extends Component {  
       render() {  
       return <h3>Hello {this.props.name}!</h3>;  
       }  
      }
   2. const Greet = ({name}) => <h3>Hello {name}!</h3>;
4. Write JSX that **uses** the component in question 3, passing it the name “World”.
   1. <Greet name="World" />
5. Assume a component has a property called things that takes an array of objects. Each object in the array has id and name. Use JSX to create an ordered list of all the array items’ names. Use the items’ ids as keys.
   1. <ol>  
       { this.props.things.map(item =>  
       <li key={item.id}>{item.name}</li>) }  
      </ol>
6. Assume a component has a property called onGo that takes a function. Using JSX, create a button that, when clicked, calls that onGo function. The text on the button should be “Go”.
   1. <button onClick={this.props.onGo}>Go</button>
7. In regards to an HTML form text input change event handler, what does event.target.value give you?
   1. It gives you the value of the element that changed. Whatever the user has just entered.
8. With Redux, we dispatch (a)\_\_\_\_\_\_\_\_. When this happens the (b)\_\_\_\_\_\_\_\_ function is called to make updates to the state.
   1. Actions / reducer
9. In regards to routing, clicking a <Link> component changes the \_\_\_\_\_\_\_\_.
   1. URL path (just “URL” would also be acceptable)
10. With Redux, we typically make 3 action functions for each AJAX call. What are the three, and what is the purpose of each?
    1. fetch - trigger the process, make the request, and call the other two actions. REQUEST - Allow the reducer to update the state when the request starts loading. RECEIVE - Allow the reducer to update the state when the request finishes and brings back data.
    2. They don’t have to use the exact words “fetch”, “request” and “receive”. But they should have the general concept for each of the three.