TW-15 GROUP VERSION

TEAMWORK

CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

- Icebreaking
- Questions
- Interview Questions
- Coffee Break
- Coding Challenge
- Video of the week
- Retro meeting
- Case study / project

Teamwork Schedule

Ice-breaking 10m

- Personal Questions (Study Environment, Kids etc.)
- Any challenges (Classes, Coding, studying, etc.)
- Ask how they're studying, give personal advice.
- Remind that practice makes perfect.

Ask Questions 15m

1. If you want to import just the Component from the React library, what syntax do you use?

A. `import React.Component from 'react'`
B. `import [ Component ] from 'react'`
C. `import Component from 'react'`
D. `import { Component } from 'react'`

2. Using object literal enhancement, you can put values back into an object. When you log person to the console, what is the output?

```
const name = 'Rachel';
const age = 31;
const person = { name, age };
console.log(person);
```

A. `{{name: "Rachel", age: 31}}`
B. `{name: "Rachel", age: 31}`
C. `{person: "Rachel", person: 31}}`
D. `{person: {name: "Rachel", age: 31}}`

3. To get the first item from the array ("cooking") using array destructuring, how do you adjust this line?

```
const topics = ['cooking', 'art', 'history'];
```

A. `const first = ["cooking", "art", "history"]`
B. `const [] = ["cooking", "art", "history"]`
C. `const [first] = ["cooking", "art", "history"]`
D. gr`const [, first]["cooking", "art", "history"]`ey

4. Given the following code, what does this React element look like?

```
React.createElement('h1', null, "What's happening?");
```

A. `<h1 props={null}>What's happening?</h1>`
B. `<h1>What's happening?</h1>`
C. `<h1 id="component">What's happening?</h1>`
D. `<h1 id="element">What's happening?</h1>`

5. When do you use `useLayoutEffect`?

A. to optimize for all devices
B. to complete the update
C. to change the layout of the screen
D. when you need the browser to paint before the effect runs

6. How do you destructure the properties that are sent to the Dish component?

```
function Dish(props) {
  return (
    <h1>
      {props.name} {props.cookingTime}
    </h1>
  );
}
```

A. `function Dish([name, cookingTime]) { return <h1>{name} {cookingTime}</h1>; }`
B. `function Dish({name, cookingTime}) { return <h1>{name} {cookingTime}</h1>; }`
C. `function Dish(props) { return <h1>{name} {cookingTime}</h1>; }`
D. `function Dish(...props) { return <h1>{name} {cookingTime}</h1>; }`

7. Why is it important to avoid copying the values of props into a component's state where possible?

A. because you should never mutate state
B. because `getDerivedStateFromProps()` is an unsafe method to use
C. because you want to allow a component to update in response to changes in the props
D. because you want to allow data to flow back up to the parent

8. What is the children prop?

A. a property that adds child components to state
B. a property that lets you set an array as a property
C. a property that lets you pass data to child elements
D. a special property that JSX creates on components that contain both an opening tag and a closing tag, referencing it's contents.

9. React components are composed to create a user interface. How are components composed?

A. by nesting components
B. by putting them in the same file
C. with webpack
D. with code splitting

10. Which library does the `fetch()` function come from?

A. FetchJS
B. ReactDOM
C. No library. `fetch()` is supported by most browsers.
D. React

Interview Questions 15m

1. What is React?

Answer:
React is an efficient, flexible, and open-source JavaScript framework library that allows developers to the creation of simple, fast, and scalable web applications. Jordan Walke, a software engineer who was working for Facebook created React. It was first deployed on the news feed of Facebook in 2011 and on Instagram in 2012. Developers from the Javascript background can easily develop web applications with the help of React.

2. Explain React state and props.

Props	State
Immutable	Owned by its component
Has better performance	Locally scoped
Can be passed to child components	Writeable/Mutable
	has setState() method to modify properties
	Changes to state can be asynchronous
	can only be passed as props

React State :
Every component in react has a built-in state object, which contains all the property values that belong to that component.
In other words, the state object controls the behaviour of a component. Any change in the property values of the state object leads to the re-rendering of the component.
Note- State object is not available in functional components but, we can use React Hooks to add state to a functional component.

React Props :
Every React component accepts a single object argument called props (which stands for "properties"). These props can be passed to a component using HTML attributes and the component accepts these props as an argument.

Using props, we can pass data from one component to another.

3. What are the rules that must be followed while using React Hooks?

Answer:
There are 2 rules which must be followed while you code with Hooks:

- React Hooks must be called only at the top level. It is not allowed to call them inside the nested functions, loops, or conditions.
- It is allowed to call the Hooks only from the React Function Components.

4. What are Custom Hooks?

Answer:
A Custom Hook is a function in Javascript whose name begins with 'use' and which calls other hooks. It is a part of React v16.8 hook update and permits you for reusing the stateful logic without any need for component hierarchy restructuring.

In almost all of the cases, custom hooks are considered to be sufficient for replacing render props and HoCs (Higher-Order components) and reducing the amount of nesting required. Custom Hooks will allow you for avoiding multiple layers of abstraction or wrapper hell that might come along with Render Props and HoCs.

The disadvantage of Custom Hooks is it cannot be used inside of the classes.is unnecessary to bind 'this' inside the constructor when using an arrow function. This prevents bugs caused by the use of 'this' in React callbacks.

Coffee Break **10m**

Video of the Week 10m

- Basic of React Router

Case study/Project 15m

- RP-03 Appointment App
- RP-04 To-Do App

Retro Meeting on a personal and team level 10m

Ask the questions below:

- What went well?
- What could be improved?
- What will we commit to do better in the next week?

Closing 5m

- Next week's plan
- QA Session
