

TW-16 STUDENT VERSION



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. How do you fix the syntax error that results from running this code?

```
const person =(firstName, lastName) =>
{
  first: firstName,
  last: lastName
}
console.log(person("Jill", "Wilson"))
```

- A. Wrap the object in parentheses.
- B. Call the function from another file.
- ☒ C. Add a return statement before the first curly brace.
- D. Replace the object with an array.

3. If you see the following import in a file, what is being used for state management in the component?

```
import React, { useState } from "react";
```

- ☒ A. React Hooks
- ☐ B. stateful components
- ☐ C. math
- ☐ D. class components

4. 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}}

5. 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. const [first] = ["cooking", "art", "history"]

6. How do you handle passing through the component tree without having to pass props down manually at every level?

- ☐ A. React Send
- ☐ B. React Pinpoint
- ☐ C. React Router
- ☒ D. React Context

7. Why might you use `useReducer` over `useState` in a React component?

- A. when you want to replace Redux
- ☒ B. when you need to manage more complex state in an app
- C. when you want to improve performance
- D. when you want to break your production app

8. If you created a component called `Dish` and rendered it to the DOM, what type of element would be rendered?

```
function Dish() {  
  return <h1>Mac and Cheese</h1>;  
}  
  
ReactDOM.render(<Dish />, document.getElementById("root"));
```

- A. div
- B. section
- ☒ C. component
- D. h1

9. What does this React element look like given the following function? (Alternative: 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>`

10. What do you call the message wrapped in curly braces below?

```
const message = "Hi there";  
const element = <p>{message}</p>;
```

- A. a JS function
- B. a JS element
- ☒ C. a JS expression
- D. a JSX wrapper

11. What is the difference between the click behaviors of these two buttons (assuming that `this.handleClick` is bound correctly)?

- A. `<button onClick={this.handleClick}>Click Me</button>`
- B. `<button onClick={event => this.handleClick(event)}>Click Me</button>`

- A. Button A will not have access to the event object on click of the button.
- ☒ B. Button B will not fire the handler `this.handleClick` successfully.
- C. Button A will not fire the handler `this.handleClick` successfully.
- D. There is no difference.

12. 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>; }`

13. 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

14. What is the children prop?

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

15. Which of these terms commonly describe React applications?

- A.** declarative
- B.** integrated
- C.** closed
- D.** imperative

Interview Questions**15m****1. What is the difference between state and props?**

In React, state and props are both used to store data that a component needs to render its output, but they differ in their source, scope, and mutability.

2. What are the lifecycle methods of ReactJS class components?

ReactJS class components have several lifecycle methods that allow developers to execute code at specific points during a component's lifecycle.

3. What are the different phases of ReactJS component lifecycle?

These methods can be grouped into three main phases: Mounting, Updating, and Unmounting.

4. What is prop drilling and how can you avoid it?

Prop drilling is a pattern in React where data is passed down through multiple layers of nested components via props, even when some of the intermediate components do not actually need the data. This can lead to unnecessary complexity, as well as making it harder to maintain and refactor the codebase.

Coding Challenge**15m**

There will be no code challenge this week. Students will catch up on any React topic gaps.

**Coffee Break****10m****Case study/Project****15m**

This week there won't be any projects. Students will catch up on any React topic gaps.

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
