

TW-010 STUDENT VERSION (Sprint-7 Week-1)



CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

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

Teamwork Schedule

Ice-breaking

5m

- 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.

Team work

5m

- Ask what exactly each student does for the team, if they know each other, if they care for each other, if they follow and talk with each other etc.

Ask Questions

15m

1. Consider the following code from React Router. What do you call `:id` in the path prop?

```
<Route path="/:id" />
```

- A. This is a route modal
- B. This is a route parameter
- C. This is a route splitter
- D. This is a route link

2. If a function component should always render the same way given the same props, what is a simple performance optimization available for it?

- A. Wrap it in the `React.memo` higher-order component.
- B. Implement the `useReducer` Hook.
- C. Implement the `useRouter` Hook.
- D. Implement the `shouldComponentUpdate` lifecycle method.

3. What can you use to handle code splitting?

- A. `React.memo`
- B. `React.split`
- C. `React.lazy`
- D. `React.fallback`

4. When might you use `React.PureComponent`?

- A. when you do not want your component to have props
- B. when you have sibling components that need to be compared
- C. when you want a default implementation of `shouldComponentUpdate()`
- D. when you do not want your component to have state

5. You have written the following code but nothing is rendering. How do you fix this problem?

```
const Heading = () => {  
  <h1>Hello!</h1>;  
};
```

- A. Add a render function.
- B. Change the curly braces to parentheses or add a return statement before the `h1` tag.
- C. Move the `h1` to another component.
- D. Surround the `h1` in a `div`.

6. Which option is correct for State vs Props

- A. Props is something that the parent doesn't need and decide to throw around among other parents; State is the parent's favorite child and something the component wants to nurture.
- B. Props get passed to the component using naming conventions, like a function parameter; State is managed within the component and holds some information that may change over the lifetime of the component.
- C. Props is a copy of real DOM; State is the definition of the real DOM.
- D. Prop is managed within the component and holds some information that may change over the lifetime of the component; State gets passed to the component, like a function parameter

7. What is styled-component styling in React?

- A. These styles are written as attributes and are passed to the element.
- B. It is a JavaScript library for styling React applications. It removes the mapping between styles and components, and lets you write actual CSS augmented with JavaScript.
- C. It is basically a `.css` file that is compiled. When compiled, it produces two outputs. One is CSS that is a modified version of input CSS with the renamed class names. The other is a JavaScript object that maps the original CSS name with the renamed name.
- D. It offers a different approach in which no CSS needs to be written to style an application. Instead, It uses utility classes for each CSS property that you can use directly in your HTML or JSX.

8. What is `[e.target.id]` called in the following code snippet?

```
handleChange(e) {  
  this.setState({ [e.target.id]: e.target.value })  
}
```

- A.a computed property name
- B.a set value
- C.a dynamic key
- D.a JSX code string

9. What is sent to an `Array.map()` function?

- A.a callback function that is called once for each element in the array
- B.the name of another array to iterate over
- C.the number of times you want to call the function
- D.a string describing what the function should do

10. What package contains the `render()` function that renders a React element tree to the DOM?

- A.React
- B.ReactDOM
- C.Render
- D.DOM

11. What do you need to change about this code to get it to run?

```
class clock extends React.Component {  
  render() {  
    return <h1>Look at the time: {this.props.time}</h1>;  
  }  
}
```

- A.Add quotes around the return value
- B.Remove `this`
- C.Remove the render method
- D.Capitalize `clock`

12. How do you invoke `setDone` only when component mounts, using hooks?

```
function MyComponent(props) {  
  const [done, setDone] = useState(false);  
  
  return <h1>Done: {done}</h1>;  
}
```

- A. `useEffect(() => { setDone(true); });`
- B. `useEffect(() => { setDone(true); }, []);`
- C. `useEffect(() => { setDone(true); }, [setDone]);`
- D. `useEffect(() => { setDone(true); }, [done, setDone]);`

13. Which of the following click event handlers will allow you to pass the name of the person to be hugged?

```
class Huggable extends React.Component {  
  hug(id) {  
    console.log("hugging " + id);  
  }  
  
  render() {  
    let name = "kittteh";  
    let button = // Missing Code  
    return button;  
  }  
}
```

- A. `<button onClick={ (name) => this.hug(name)} >Hug Button</button>`
- B. `<button onClick={this.hug(e, name)} >Hug Button</button>`
- C. `<button onClick={ (e) => hug(e, name)} >Hug Button</button>`
- D. `<button onClick={ (e) => this.hug(name,e)} >Hug Button</button>`

14. Which answer best describes a function component?

- A. A function component is the same as a class component.
- B. A function component accepts a single props object and returns a React element.
- C. A function component is the only way to create a component.
- D. A function component is required to create a React component.

15. You have created a new method in a class component called handleClick, but it is not working. Which code is missing?

```
class Button extends React.Component{  
  
  constructor(props) {  
    super(props);  
    // Missing line  
  }  
  
  handleClick() {...}  
}
```

- A. `this.handleClick.bind(this);`
- B. `props.bind(handleClick);`
- C. `this.handleClick.bind();`
- D. `this.handleClick = this.handleClick.bind(this);`

Interview Questions

15m

1. What is the difference between Element and Component?
2. What is the difference between state and props?
3. What is the difference between Shadow DOM and Virtual DOM?
4. What are the lifecycle methods of React?
5. What is React Router?

Coding Challenge

20m

- [Coding Challenge: JS-CC-015: Sliding Window Maximum](#)



Coffee Break

10m



Videos of the Week

5m

- [What to do in an interview](#)
- [React Router Setup in 5 minutes](#)

Retro Meeting on a personal and team level

5m

Ask the questions below:

- What went well?
- What went wrong?
- What is the improvement areas?

Case study/Project

15m

Case study should be explained to the students during the weekly meeting and has to be completed in one week by the students. Students should work in small teams to complete the case study.

- [RC-004 Random User App](#)

Closing

5m

-Next week's plan

-QA Session
