

# TW-15 TEAM LEAD 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. Why should you use React Router's Link component instead of a basic `<a>` tag in React?

- A. The link component allows the user to use the browser's `Back` button.
- B. There is no difference--the `Link` component is just another name for the `<a>` tag.
- C. The `<a>` tag will cause an error when used in React.
- D. The `<a>` tag triggers a full page reload, while the `Link` component does not.

Answer: D

### 2. 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

Answer: B

### 3. What is React Router used for?

- A. Managing the state of a React application
- B. Building a database for a React application
- C. Handling routing in a React application
- D. Loading a React Page

Answer: C

Explanation: React Router is a library used to handle routing in a React application.

**4. What is the difference between `<History.push>` in React Router?**

- A.** `<Redirect>` changes the URL and pushes a new history entry, while `<History.push>` only changes the URL.
- B.** `<History.push>` changes the URL and pushes a new history entry, while only changes the URL.
- C.** `<Redirect>` and `<History.push>` are identical and can be used interchangeably.
- D.** None of the above.

*Answer: A*

Explanation: `<Redirect>` changes the URL and pushes a new history entry, while `<History.push>` only changes the URL.

**5. How do you pass parameters in React Router?**

- A.** By using the `<Params>` component
- B.** By passing them as props to the `<Route>` component
- C.** By using the `<Parameters>` component
- D.** None of the above

*Answer: B*

Explanation: You can pass parameters in React Router by passing them as props to the `<Route>` component.

**6. Which of the following is an example of a programmatic navigation using React Router?**

- A.** `<Link to="/about">About`
- B.** `<Route path="/about" component={About} />`
- C.** `history.push('/about')`
- D.** All of the above

*Answer: C*

Explanation: `history.push('/about')` is an example of programmatic navigation using React Router.

**7. Which of the following is a hook provided by React Router?**

- A.** `useRoute`
- B.** `useLocation`
- C.** `useRouter`
- D.** None of the above

*Answer: B*

Explanation: `useLocation` is a hook provided by React Router that returns the current location object.

## 8. How do you handle a 404 error in React Router?

- A. By creating a new component for the 404 error page and rendering it in a `<Route>` component with no path specified
- B. By using the `<Error404>` component provided by React Router
- C. By using the `<NotFound>` component provided by React Router
- D. By creating a new route with a path of `'*'` and rendering a 404 error page component in it

Answer: D

Explanation: To handle a 404 error in React Router, you can create a new route with a path of `'*'` and render a 404 error page component in it.

## 9. What are Styled Components in React?

- A. Components that allow you to create custom styles for React components using CSS classes
- B. Components that allow you to create custom styles for React components using inline styles
- C. Components that allow you to create custom styles for React components using CSS-in-JS
- D. Components that allow you to create custom styles for React components using SASS

Answer: C

Explanation: Styled Components are a popular library in React that allow you to create custom styles for React components using CSS-in-JS.

## 10. How do you create a styled component in React?

- A. By defining a new CSS class and passing it to the component as a prop
- B. By defining a new styled component using the `styled()` function provided by the Styled Components library
- C. By using the `<StyledComponent>` component provided by React Styled Components
- D. By defining a new React component and passing it to the `styled()` function as an argument

Answer: B

Explanation: You can create a styled component in React by defining a new styled component using the `styled()` function provided by the Styled Components library.

## 11. How do you pass props to a styled component in React?

- A. By using the props object inside the CSS template literal
- B. By passing them as props to the component rendered by the styled component
- C. By using the `${props => ...}` syntax inside the CSS template literal
- D. All of the above

*Answer: D*

Explanation: You can pass props to a styled component in React by using the props object inside the CSS template literal, passing them as props to the component rendered by the styled component, or using the `{props => ...}` syntax inside the CSS template literal.

## **12. What are the benefits of using Styled Components in React?**

- A.** It allows you to write cleaner and more maintainable CSS code
- B.** It provides better performance and smaller bundle sizes compared to traditional CSS stylesheets
- C.** It allows you to create reusable and composable styles for React components
- D.** All of the above

*Answer: D*

Explanation: The benefits of using Styled Components in React include writing cleaner and more maintainable CSS code, better performance and smaller bundle sizes compared to traditional CSS stylesheets, and creating reusable and composable styles for React components.

## **13. What is the purpose of the "ThemeProvider" component in Styled Components?**

- A.** It allows you to define a global theme object that can be used in your styled components
- B.** It allows you to define custom CSS properties that can be used in your styled components
- C.** It allows you to define global CSS rules that apply to all components in your application
- D.** It allows you to define custom CSS animations that can be used in your styled components

*Answer: A*

Explanation: The "ThemeProvider" component in Styled Components allows you to define a global theme object that can be used in your styled components. This can help you maintain a consistent visual style throughout your application.

## **14. What is the purpose of unit testing in React?**

- A.** To test the entire application from end-to-end
- B.** To test individual components in isolation
- C.** To test the interaction between components
- D.** To test the performance of the application

*Answer: B*

Explanation: Unit testing in React involves testing individual components in isolation, rather than testing the entire application from end-to-end. This allows you to identify and isolate any bugs or issues within a specific component.

**15. Which testing library is commonly used for testing React applications?**

- A. Jest
- B. Mocha
- C. Jasmine
- D. Chai

Answer: A

Explanation: Jest is a popular testing library for React applications. It is developed by Facebook and provides a comprehensive set of testing utilities and features, including snapshot testing, mocking, and coverage reporting.

**Interview Questions****15m****1. What is React Router?**

React Router is a library that helps developers manage and navigate different routes in their React applications. React Router makes it easy to declare and render different components for each route, and also keeps your application's state updated as you navigate between routes.

**2. How does browser history work in React Router?**

React Router uses browser history in order to keep track of the current location within the app. This allows the user to use the back and forward buttons in their browser in order to navigate through the app.

**3. What is nested routing?**

Nested routing is when you have routes within other routes. This can be useful if you want to create a hierarchy of pages, for example if you have a blog with different categories and you want each category to have its own page with a list of posts. To do this, you would create a route for each category, and then nest the route for the posts within that.

**4. What do you understand about the 'to' attribute in React Router?**

The `to` attribute is used to specify the route that the user should be redirected to when they click on a link. The value of the 'to' attribute can either be a string, which will be interpreted as a relative path, or an object, which can specify the absolute path, query parameters, and so on.

**5. What does it mean for a component to be mounted in React?**

It has a corresponding element created in the DOM and is connected to that.

**6. What is the difference between state and props?**

Both props and state are plain JavaScript objects. While both of them hold information that influences the output of render, they are different in their functionality with respect to component.

- Props get passed to the component similar to function parameters
- State is managed within the component similar to variables declared within a function.

## Coding Challenge

15m

- [RC-CC-04 Web Site with Router](#)



## Coffee Break

10m



## Video of the Week

10m

- [Basics of React Router](#)

## Case study/Project

15m

- [RP-09 Movie 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

---