TEAM LEAD VERSION (Week-7)







Meeting Agenda

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

Teamwork Schedule

Ice-breaking 5m

- Personal Questions (Stay at home & Corona, 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. How to restart packager and reset cache in React Native?

- A. react-native start cache
- B. react-native start --reset-cache
- **C.** npm start --reset-cache
- **D.** react-native restart --reset-cache

Answer:B

2. How to declare state in constructor in React Native?

- **A.** this.state:{num=10}
- **B.** this.state={num:10}
- **C.** this.state={num=10}
- **D.** None of above

Answer:B

3. Which parameter to setState() method can be used as callback in React Native?

- A. First
- B. Second
- **C.** Third
- **D.** None of above

Answer: B

4. Stateless component is also called in React Native?

- **A.** Intelligent component
- **B.** Class component
- C. Dumb componenet
- **D.** None of above

Answer: C

5. What is name of unmounting life cycle method in React Native?

- A. componentDidUnmount
- B. componentUnmount
- C. componentWillUnmount
- D. componentDidCatch()

Answer: C

6. What is parameter of constructor in React Native?

- A. state
- B. context
- C. props
- **D.** None of above

Answer: C

7. DOM is updated after which of the following method on updating in React Native?

- A. render
- **B.** getSnapshotBeforeUpdate
- C. componentDidUpdate
- **D.** shouldComponentUpdate

Answer:B

8. How to make text bold in React Native?

A. {fontSize: 'bold'}B. {fontWeight: 'bold'}C. {fontStyle: 'bold'}

D. {textDecorationLine: 'bold'}

Answer:B

9. How to display image locally in React Native?

A. source={uri('/react-native/img/favicon.png')}

- **B.** source={require('/react-native/img/favicon.png')}
- C. Both will work
- **D.** None of above

Answer: B

10. Which prop of TextInput provides text in React Native?

- A. onChangeValue
- **B.** onChangeText
- **C.** onTextChange
- **D.** None of above

Answer: B

Interview Questions

15m

1. What is the InteractionManager and how is it used in React Native? Why is it important?

Answer: The InteractionManager is the native module responsible for deferring the execution of a function until an "interaction" has finished. We can call InteractionManager.runAfterInteractions(() => $\{...\}$) to handle this deferral. We can also register our own interactions.

InteractionManager is very important because React Native has two threads. There is a JavaScript UI thread which handles drawing updates to the screen, and another thread used for all tasks not on the UI thread. Since there is only one thread for making UI updates, it can get overloaded and drop frames, especially during things like navigation screen animations. We use the InteractionManager to ensure that our function is executed after these animations occur so that we do not drop frames on the UI thread. Trying to draw a new screen while it is being animated is often too much for the thread to handle.

2. Explain some of the fundamental tradeoffs between building with React Native and building a "true" native app?

Answer: React Native has exploded in popularity because the tradeoffs it provides make sense to many companies and teams. But building an app in React Native is not always the right choice.

React Native makes sense when a team is building a product that does not need extremely high performance. The limitations of the asynchronous bridge are a bottleneck for things like 3D games, and games with lots of particle updates. Apps that rely on deep interactions with low-level APIs, or need large amounts of native code, might be easier to build as native apps.

React Native makes sense when an existing team is already proficient in JavaScript and/or has an existing React application built on the web or another platform. The "learn once, write everywhere" ethos advocated for by Facebook is very useful when diversifying a product across platforms. Hiring becomes easier, since JavaScript developers are plentiful, and you don't need to seek out native specialists.

React Native is partially open source, partially closed source. Facebook maintains a private repository of React Native code that is used in their apps. When code from the private repo can be split off so that it contains nothing proprietary, it is often merged into the open source codebase. This leaves users of React Native with the classic tradeoff of open source software: There are often bugs—React Native is still in alpha form—and improvements can be spotty. On the other hand, motivated teams can make contributions to the source code and implement fixes and features that they need. Depending on a team's resources and product roadmap, relying on open source may be the right choice.

3. What is the relationship between React Native and React?

Answer: React Native is built using React. React, at its core, is a library for "diffing" a virtual DOM and rendering this DOM to a screen with minimal operations. React, by default, does not have an opinion about which nodes are in its virtual DOM tree. Instead, it simply has algorithms that can determine changes in the tree and rerender. React on the web provides its own node primitives (<div>, , etc), which are the building blocks for web applications. But new node primitives can be defined, as React Native has done.

React Native defines its own primitives (<View>, <Image>, etc) which do not render HTML elements but instead map to native views, like UIView and UIImageView. It implements a bridge that allows the JavaScript runtime to communicate asynchronously with the native runtime. React itself provides the tree diffing and rendering infrastructure that allows React Native to work.

Coding Challenge 20m

Coding Challenge: JS-CC-003 - Reverse Words

Video of the Week 10m

• What do people do in Silicon Valley after work?

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.

• Project-011

Closing 5m

- -Next week's plan
- -QA Session