React Native

Syllabus

- Hello React Native
 - O What is React Native?
 - O What does it do for us? Why choose it?
 - Pros and cons
 - Architecture
 - Sharing with web projects
 - What React Native code looks like
 - Leveraging your React knowledge
- React and Redux reviews (when needed)
 - Redux reminder

- Reducers, actions, state, store, and middleware
- React reminder
- SFCs vs class-based components
- Composition
- JSX structure and rules
- Props
- state
- Controlled and uncontrolled components
- Virtual DOM vs the real DOM

The Development Process

- O Where do I even start?
- react-native vs. create-react-nativeapp
- Which is better for given situations
- The React Native team's recommendations
- O What is expo?
- Creating a new React Native app
- How to run it on a tethered device

- How to run it on a wireless device
- How to run it in an Android emulator
- How to run it on an iOS simulator
- Debugging in a browser window
- Logging, breakpoints, stepping through
- YellowBoxes and RedBoxes

Single-value Controls

- Components overview
- Categories of components
- Text
 - Text props and events
 - TextInput
 - props and events and the eventobject
 - Image
 - Differences between HTML and React Native images
 - Reserving space for them

- Local images vs remote images
- o resizeMode

Platform-specific Development

- How can we develop differently on the different platforms?
- O Why would we ever do this?
- Technical roadblocks
- The DatePicker iOS vs Android
- Using the Platform module

Layout Components

- Components review
- View
- SafeAreaView
- ScrollView
- Pinch-to-zoom

- KeyboardAvoidingView
- How to create modal views
- Controlling the OS's status bar

Flexbox for Native Layouts

- O Why flexbox?
- Where it came from
- Flexbox on the web is NOT flexbox on native
- Containers and items
- o flexDirection
- flexBasis vs width/height
- o flexShrink, flexGrow
- The flex shorthand
- justifyContent and alignContent
- flexWrap

Styling React Native Apps

- How React Native styles differ from CSS
- How to apply styles

- How to control style inheritance
- Style arrays
- Four methods of defining styles
- Common properties
- Cross-platform fonts
- Conditional and programmatic styles

Navigation

- O What is navigation, really?
- How to get React Navigation
- The three types of navigators
- StackNavigator
- Routing object
- Navigation config
- How to pass params when navigating
- TabNavigators
- Three types of TabNavigators
- How to set icons
- DrawerNavigator

Examples and demos



Ajax in React Native

- Why it must be different on a device
- The fetch API
- How to show a loading indicator
- How to make requests and populate affordances
- Security in a native environment

List Components

- Components review
- Pickers
- FlatList
- SectionList

Touchables and Buttons

○ The Button API

- Button events and props
- O Why touchables?
- TouchableWithoutFeedback
- TouchableNativeFeedback
- TouchableOpacity
- TouchableHighlight
- How to disable a touchable