Lecture 5: User Input, Debugging

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Previous Lecture

- ScrollView
- FlatList
- SectionList
- Controlled vs Uncontrolled components
- TextInput
User Input

- Controlled vs uncontrolled components
  - Where is the source of truth for the value of an input?
- React recommends always using controlled components
- Pass value and onChangeText props

https://facebook.github.io/react-native/docs/textinput.html
Handling multiple inputs

- `<form>` exists in HTML, but not in React Native
- With controlled components, we maintain an object with all inputs’ values
- We can define a function that handles the data to submit
Validating Input

- Conditionally set state based on input value
- Validate form before submitting
- Validate form after changing single input value
  - `this.setState()` can take a callback as the second argument
  - `componentDidUpdate()`
KeyboardAvoidingView

- Native component to handle avoiding the virtual keyboard
- Good for simple/short forms
  - The view moves independent of any of its child TextInput
Debugging

- React errors/warnings
- Chrome Developer Tools (devtools)
- React Native Inspector
- react-devtools
React Errors and Warnings

- Errors show up as full page alerts
  - Trigger with `console.error()`

- Warnings are yellow banners
  - Trigger with `console.warn()`
  - Does not appear in production mode
Chrome Devtools

- Google Chrome has amazing developer tools (debugger)
- We can run the JavaScript inside a Chrome tab
  - Separate threads for native and JavaScript
  - Communicate asynchronously through bridge
  - No reason that the JavaScript needs to be run on device
React Native Inspector

- Analogous to the Chrome element inspector
- Allows you to inspect data associated with elements, such as margin, padding, size, etc.
- Does not allow you to live-edit elements
react-devtools

- “Inspect the React component hierarchy, including component props and state.”
- Install with `npm install -g react-devtools`
- Run with `react-devtools`
- Allows us to make live-edits to style, props, etc.

https://github.com/facebook/react-devtools
External Libraries

- Libraries are code written outside the context of your project that you can bring into your project.
- Since React Native is just JavaScript, you can add any JavaScript library.
- Install using `npm install <library>``
  - Use the --save flag for npm@"<5"
  - Use the -g flag to install things globally
- Import into your project
  - import React from 'react'