React.js

When, Where and How to Use It

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Resource for this talk

Slides:

Code: https://github.com/dottertrotter/MidwestJs

What is React

View framework from Facebook

http://facebook.github.io/react/index.html

High Level Benefits

- Automatically reduces constant DOM updating by keeping a virtual DOM and only updating those parts that have changed or those that you explicitly say to update
- Produces highly reusable components
- Provides a "pure" javascript templating option

What React Is Not

- React is not an all inclusive MVC framework like Angular
    - Controllers can be created in whatever fashion you choose
    - Components have states and props, but are not Models

Hello World Examples

- http://0.0.0.0:3000/examples/hello
- http://0.0.0.0:3000/examples/hello-2

Components

- React Classes are capitalized to make the XML compatible and so it is not mistaken for an HTML tag
- React Class render method returns a SINGLE element
- Single element can contain many nested elements including other components

Components (continued)

- When finished loading will call:
  - componentDidMount

State and Props

- States are component data that the component sets itself via:
  - getInitialState
  - this.setState
- Props are select pieces of data that are passed to child components from a parent and are immutable by the child
  - <HelloWorld message="Hello Cruel World" />

State and Props (continued)

● When deciding whether to use state or props
  ○ http://facebook.github.io/react/docs/interactivity-and-dynamic-uis.html#what-components-should-have-state

Tic Tac Toe

A slightly more complex Hello World

http://0.0.0.0:3000/

React Native

Offshoot of the React project that allows you to use javascript to write native iOS applications

https://facebook.github.io/react-native/

Additional Reading

- In depth tutorial on creating a voting site using React, Mongo DB and Socket.IO
  - http://sahatyalkabov.com/create-a-character-voting-app-using-react-nodejs-mongodb-and-socketio/
- React.js Introduction For People Who Know Just Enough jQuery To Get By
  - http://reactfordesigners.com/labs/reactjs-introduction-for-people-who-know-just-enough-jquery-to-get-by/

Additional Reading (continued)

- Angular vs. React - the tie breaker
  - https://www.airpair.com/angularjs/posts/angular-vs-react-the-tie-breaker

Questions

Hopefully you have some.