React Day 2

Please try and sit near the front!

Agenda

- Modules
- Modifying Our React App
- Props

What happens when I change my UMD Password?

On Windows: Go to Credentials Manager

On Mac: Finder > Go > Utilities > Keychain Access

Then: Modify the password, but make sure your directory ID does **not** include @umd.edu

Important Vocabulary

Babel- JavaScript compiler that can translate elements into JavaScript.

JSX- An extension of JavaScript that merges the gap between HTML and JavaScript

React- JavaScript library created for dynamically creating User Interfaces.

React Modules

Open Modules Example!

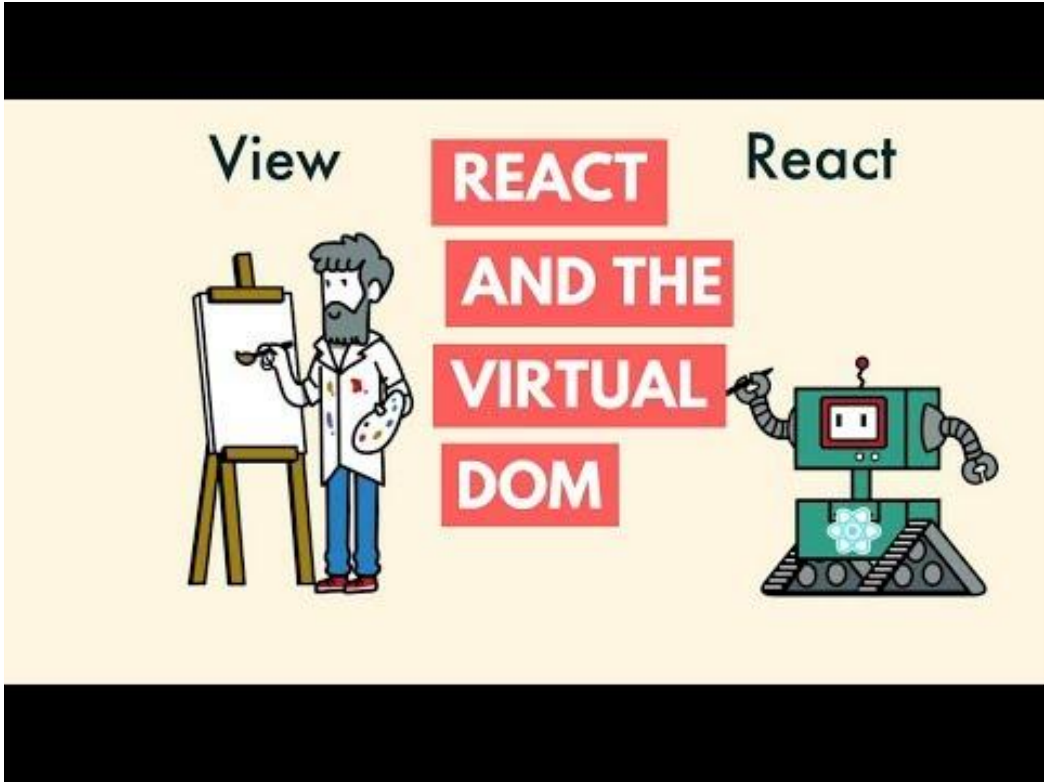
Importing Modules

Please always include:

import React from ‘react’

import React.DOM from ‘react-dom’

Virtual DOM



Before we begin

Make sure you have Node.js installed!

We will be using the *Node Package Manager (npm)* a lot, which comes automatically installed with Node.

- npm install <package>
- npm start
- npm run build

Let’s Create an app!

In gitbash/terminal run:

- npm i -g create-react-app (might have to use sudo)
- npx create-react-app testApp
- cd testApp
- nwpm start

Open Your App in Visual Studio!

Make sure your terminal is also open and in the app’s folder.

React rendering

Use ReactDOM.render(*item*, *location*);

Example:

```
ReactDOM.render(<h1>Hi</h1>,
    document.getElementByID(‘root’));
```

For now, our first argument will contain JSX!
Location will use vanilla JS

General Rules of Thumb

- If you are embedding data use {data}

- Do **not** use quotes around the html you are rendering
  - “<h1>Words</h1>”

- When you return JSX, surround your text with parenthesis

Let’s create our own app and render!

Checkpoint #1

Create an ordered list of your top 3 movies, and render with ReactDOM.render()

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Create an ordered list of your top 3 movies, and render with ReactDOM.render()

...What if I want two lists?

Rendering with Functions

- More formally called “Functional Components”

- Functions **must** be “pure”

Pro tip: Use self closing tags for now! <tag />

Rendering with Classes

class ComponentName extends React.Component{}

Make sure you have a render() method, where your return the JSX you would like to use.

Props

Now, when we call our components we can pass data through the properties (props).

```
<Item data = “Data”></Item> or <Item data = “Data” />
```

WTWAW (What To Walk Away With)

- Be able to create and export a module
- Be able to render simple JSX
- Create a Functional Component
- Create a Class Component
- Use props to pass information