



React JS

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Day 1

- ◆ Required Tools
- ◆ ES6+ Review
- ◆ In Class Challenges
- ◆ React Ecosystem
- ◆ Create React App
- ◆ Take Home Challenge

Required Tools

- ◆ Chrome browser
- ◆ Visual Studio Code (My Favorite VS Code Extensions)
- ◆ Git and Github
- ◆ NodeJs

What's the difference?

- ◆ JavaScript
- ◆ EcmaScript
- ◆ ES2021
- ◆ ES2020
- ◆ ES2019
- ◆ ES2018
- ◆ ES2017
- ◆ ES2016
- ◆ ES2015
- ◆ RS5? ES6?

Learn to Code on the Bleeding Edge

- ◆ Template Literals
- ◆ Destructuring objects
- ◆ Destructuring arrays
- ◆ Object literal
- ◆ For of loop
- ◆ Spread Operator
- ◆ Rest Operator
- ◆ Arrow Functions
- ◆ Default Params
- ◆ Includes
- ◆ let & const
- ◆ Import & Export
- ◆ padStart
- ◆ Classes
- ◆ Trailing
- ◆ Promises
- ◆ Async & Await
- ◆ Sets in ES6

In Class Challenge

- ◆ Sign up for an OMDB API key at <http://www.omdbapi.com>
- ◆ Write an arrow function called `getMoviesBySearchTerm` that takes a search string as input and uses `fetch` and `async/await` to get an array of movies with a matching title from omdb API.
- ◆ Write another arrow function called `getMoviedetailsById` that takes a valid OMDB movie id as input and uses `fetch` and `async/await` to get an object of detailed information about the specific movie.

What is React.js? Why would we use it?

- ◆ React is a JavaScript library for building user interfaces.
- ◆ React makes building complex, interactive and reactive user interfaces simpler.

What is React.js?

React.js

A client-side JavaScript
Library

All about building
modern, reactive user
interfaces for the web

Declarative, component-
focused approach

Why React instead of just JavaScript?

- ◆ React is highly initiative
- ◆ React is declarative
- ◆ React offers reusable components
- ◆ React is SEO-friendly
- ◆ React is effective data binding
- ◆ React is a JavaScript library

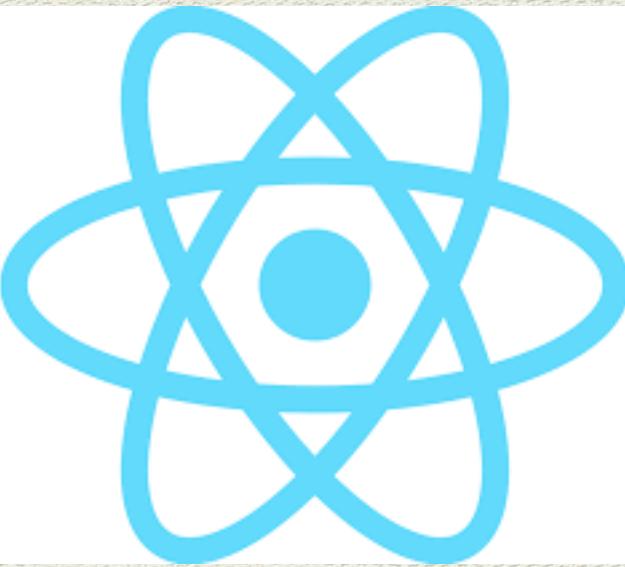
React.js alternatives

Angular



Complete component-based UI framework, packed with features. Uses TypeScript. Can be overkill for smaller project.

React.js



Lean and focused component-based UI library. Certain features (e.g. routing) are added via community packages.

Vue.js



Complete component-based UI framework, includes most core features. A bit less popular than React & Angular

React ecosystem

- ◆ Node.js
- ◆ NPM
- ◆ Babel
- ◆ Webpack
- ◆ ESLint
- ◆ React-create-app

Take Home Challenge

- ◆ Create an empty Github repository (without a README) and clone the repository to your computer.
- ◆ Inside the empty repository, initialize a new React application using the `create-react-app` command.
- ◆ Inside the `src`/folder, create a file called `utils.js`.
- ◆ Copy the functions from your In Class Challenge into `utils.js` and export the functions so they can be imported and used in other files. (Make sure to delete your API key for now so you don't commit it to Github, use `.env` and `.gitignore`).
- ◆ Launch the development server using the `npm run start` command to confirm that the boilerplate app works.
- ◆ Commit your changes and push them to your Github repository.

Main Concept

- ◆ Virtual DOM
- ◆ React Elements
- ◆ ReactDOM
- ◆ JSX
- ◆ Rendering elements
- ◆ Components and Props

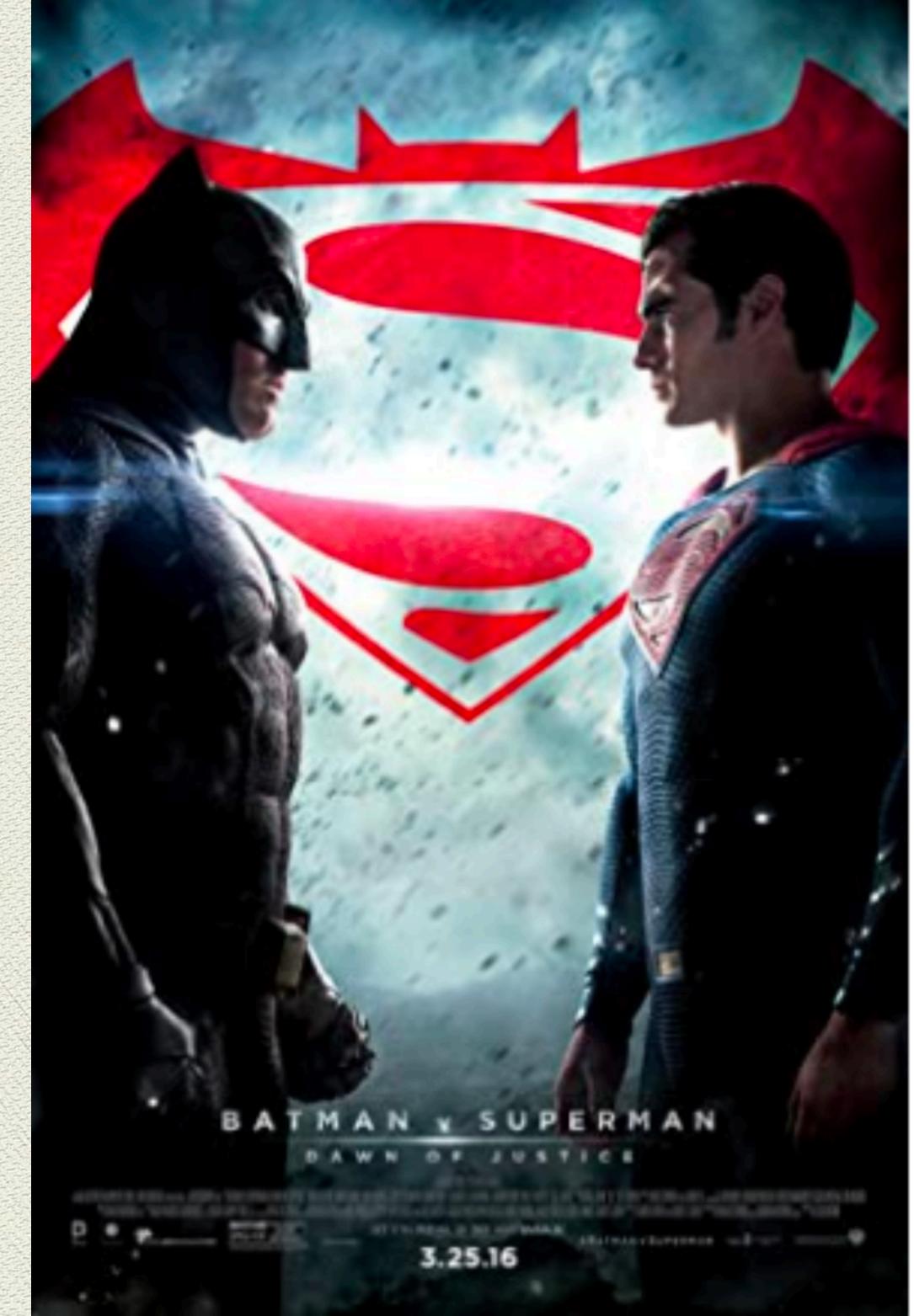
Take home challenge

- ◆ Create a new component called MovieCard.
- ◆ The component should take the following props: title, type, posterUrl.
- ◆ The component should render UI as shown beside (use style or className for styling).



Take home challenge

- ◆ Create a new component called MovieDetails.
- ◆ The component should take the following props: posterUrl, title, rated, runtime, genre, plot, actors, rating.
- ◆ The component should render UI as shown beside (use styles or className for styling).



Batman v Superman: 6.4
Dawn of Justice

PG-13 183 min

Action, Adventure, Sci-Fi

Plot

Fearing that the actions of Superman are left unchecked, Batman takes on the Man of Steel, while the world wrestles with what kind of a hero it really needs.

Actors

Ben Affleck, Henry Cavill, Amy Adams, Jesse Eisenberg

Take home challenge Bonus

- ◆ Add type checking to components using PropTypes.
- ◆ Add default values for props.
- ◆ Break components down into smaller components and use composition where it makes sense.
- ◆ The OMDB API provides a lot more information about movies than is included in the mockup of the MovieDetails component. Feel free to add more props to the MovieDetails component and render them.

Thank you!

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