# Intro to React.js

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### What is React?

React is a <u>Javascript library</u> created by Facebook and is used for building user interfaces (UIs) and front-end applications

React is often called a <u>framework</u> because of its behavior and capabilities

React is the most popular framework in the industry (for now)

## Why use it?

- Makes front-end JavaScript much easier
- Uses self contained, independent components with their own state
- Much more interactive UIs
- Virtual DOM
- JSX Easily incorporate JS in markup
- Easy to work with teams

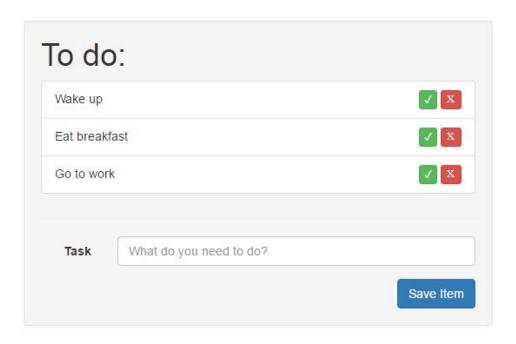
### What should you know before learning React?

**JavaScript Fundamentals (Objects, Arrays, Conditionals, etc)** 

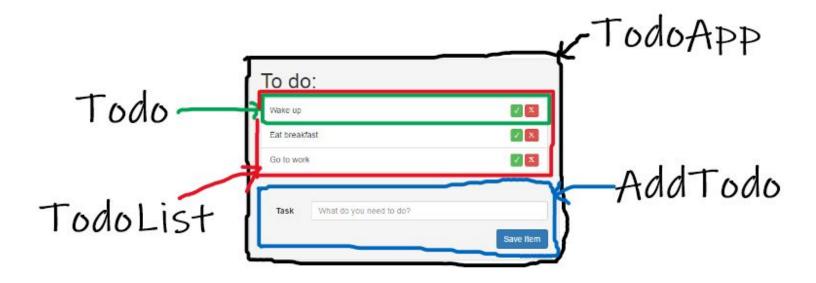
#### It may help to learn these first

- Classes
- Destructuring
- High Order Array Methods for Each, map, filter
- Arrow Functions
- Fetch API & Promises

### Simple Todo-List..



### Thinking in Components



#### React State

- Components can have state which is an object that determines how that component renders and behaves
- We can also have "application level" state by using a state manager like Redux or Reacts own
   context API

```
const state = {
   title: 'xxx',
   body: 'xxx',
   isFeatured: true
};
```

### Create-React-App

- CLI Tool for creating React applications
- Comes bundled with a dev server with auto reload
- "npm run build" will compile all your code to something that the browser can read

### Anatomy of a Component

```
Class Post extends React.Component {
   state = {
      title: 'Post One',
      body: 'This is my post'
   render() {
      return (
         <div>
         <h3>{ this.state.title }</h3>
         {p>{ this.state.title }
         </div>
```

### Before we get started...

- Install Node.js (which comes with Node Package Manager npm)
- Git (with gitbash)
- A text editor or IDE (e.g. VS Code, Atom, Sublime, WebStorm etc.)

### Let's get started!

Clone this repository by executing the following command in your Gitbash terminal:

```
Hassan@DESKTOP-HASSAN98 MINGW64 ~/Desktop
$ git clone https://github.com/webdvt/react-todolist.git
```

After that...

```
Hassan@DESKTOP-HASSAN98 MINGW64 ~/myWorkshop/WDVT/React
$ cd react-todolist
```

#### Continue

Install the npm packages listed in "package.json" by executing this command:

Hassan@DESKTOP-HASSAN98 MINGW64 ~/myWorkshop/WDVT/React/todolist
\$ npm install

After that, let's try running our application:

Hassan@DESKTOP-HASSAN98 MINGW64 ~/myWorkshop/WDVT/React/todolist (master)
\$ npm start

### Thank you!

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