



Introduction to React

React Session-1

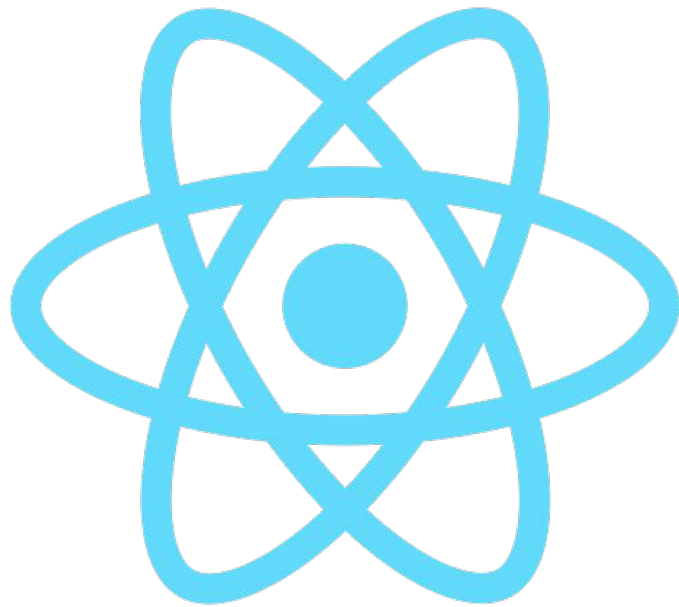


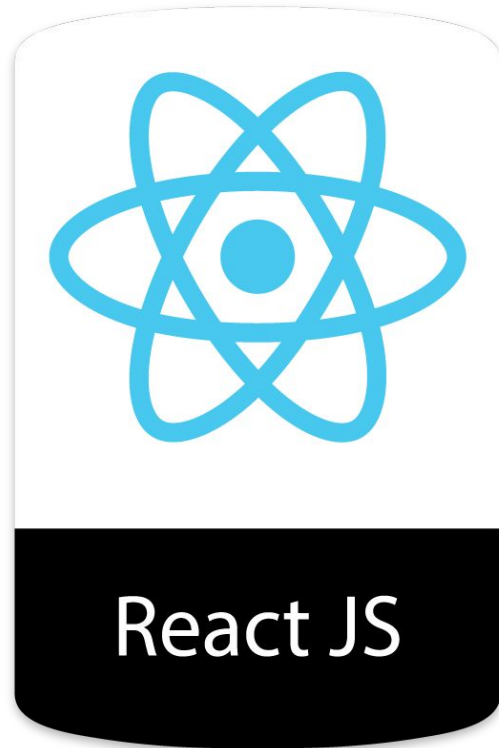
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Did you finish
React
pre-class
material?





Kahoot!



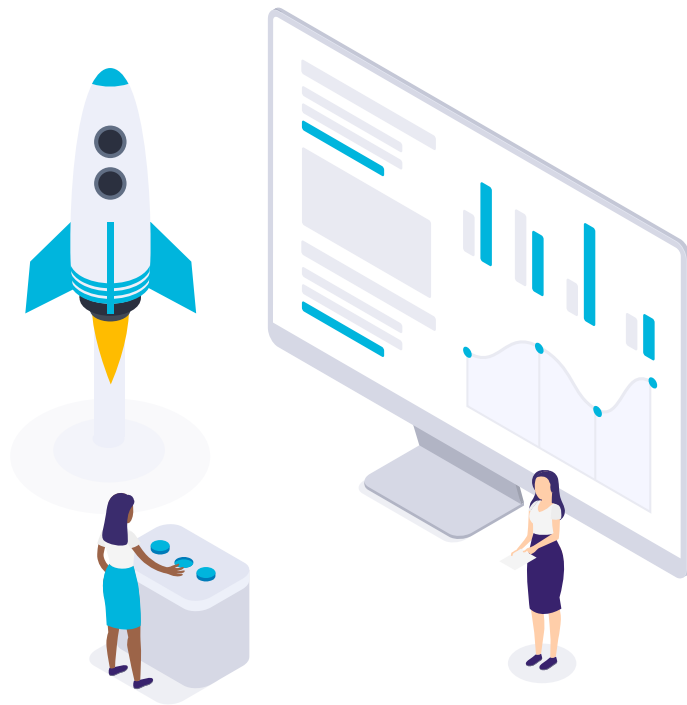
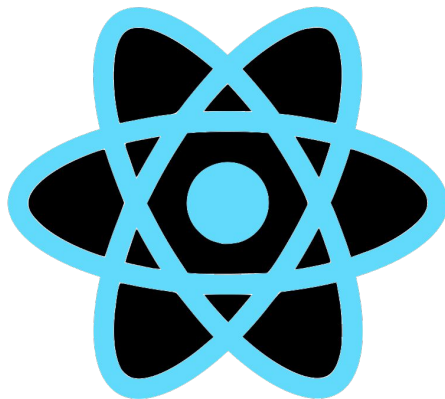
Is React a framework?





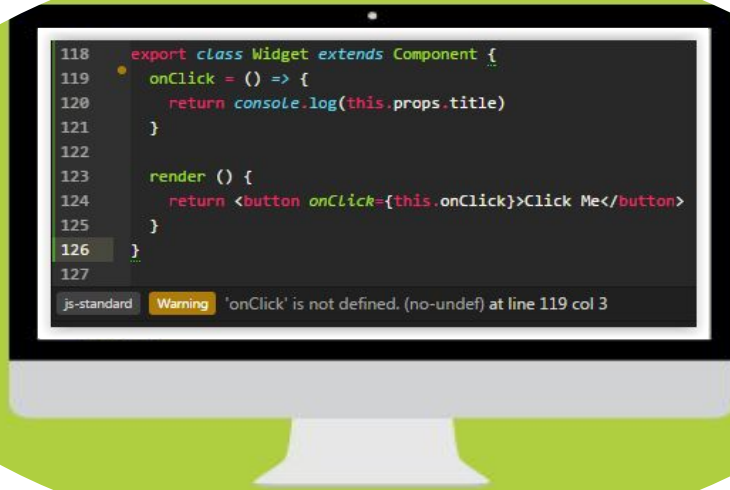
1

What is React?





What is React?



What is React?



React is a view layer library, not a framework like Angular etc.

Developed by Facebook at 2011.

You can't use React to build a fully-functional web app.

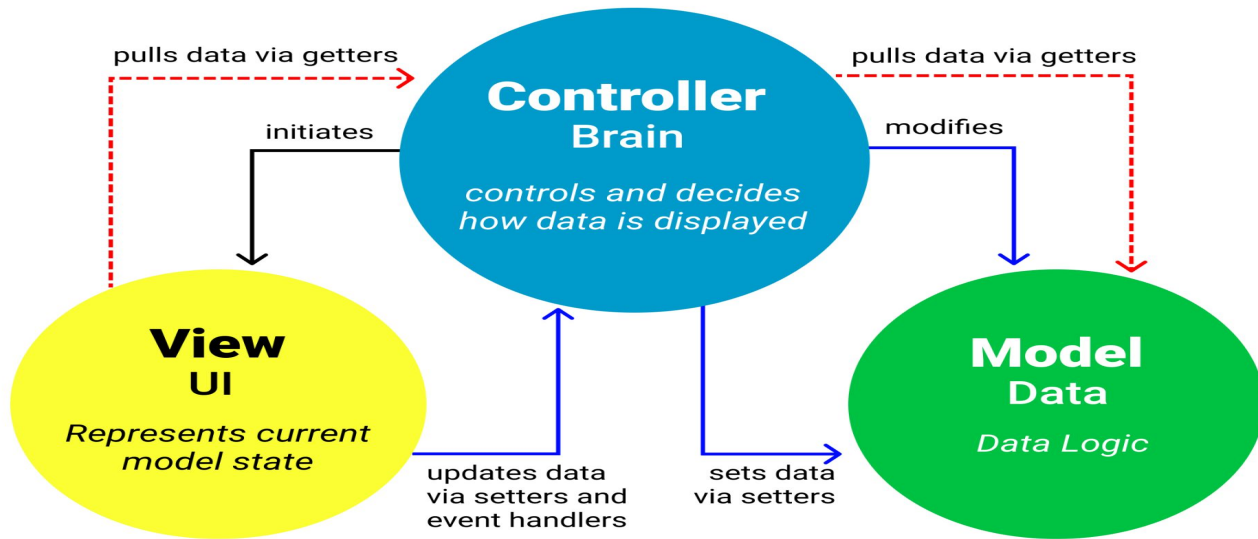




What is React?

MVC Architecture Pattern

MVC



V : ReactJS



2

Who uses React?





Who uses React?

8739 companies reportedly use **React** in their tech stacks, including **Uber**, **Airbnb**, and **Facebook**.





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Why should I use React?

Why should I use React?

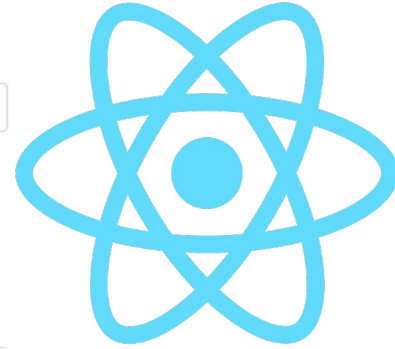
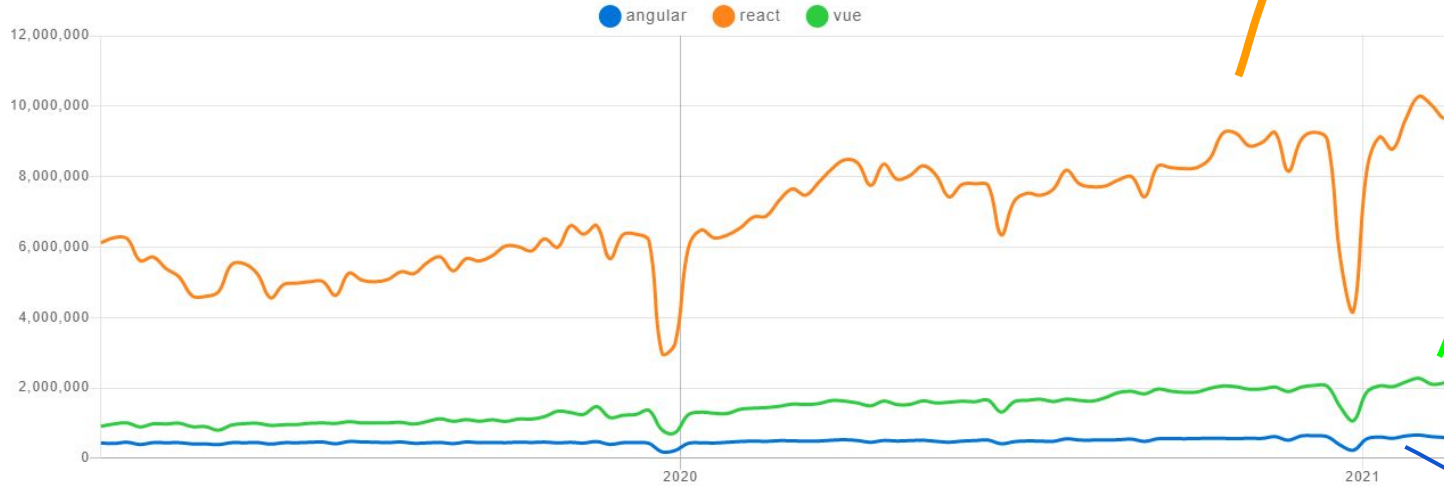


angular vs react vs vue

Enter an npm package...

angular x react x vue x + @angular/core + ember-source

Downloads in past 2 Years ▾



Why should I use React?



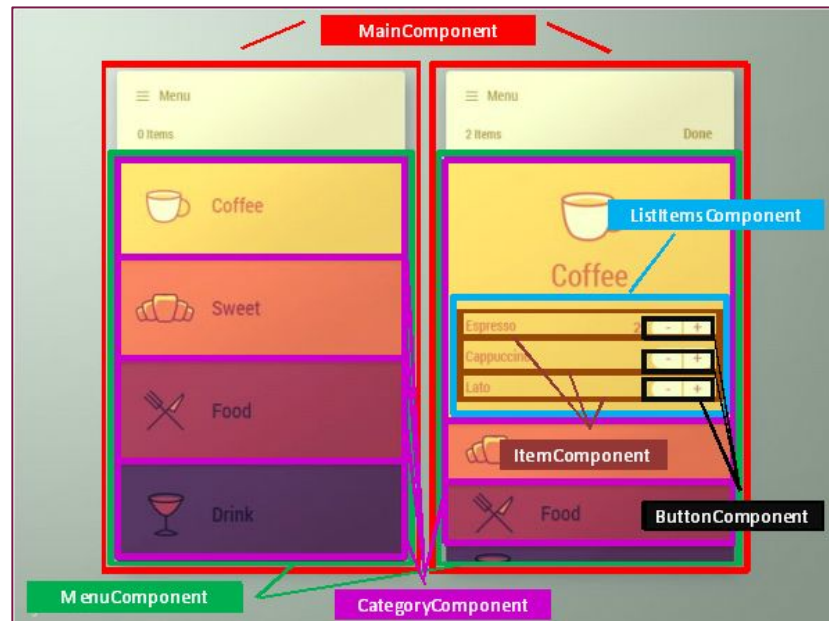
Easy to read and understand views

Concept of components is the **future** of web development

If your page uses a lot of fast updating data or real time data - React is the way to go

Once you and your team is over the React's learning curve, developing your app will become a lot faster

It is maintained by Facebook and a community of individual developers and companies.





► React: the good

- **Real DOM is slow but React uses Virtual and Virtual DOM and Virtual DOM is fast**
- **Easy to understand what a component will render.**
- **Easy to mix HTML and JS (JSX)**
- **Uses full power of JS**



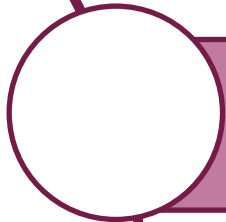


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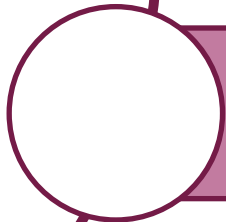
How does React work?



How does React work?



React creates a VIRTUAL DOM in memory.

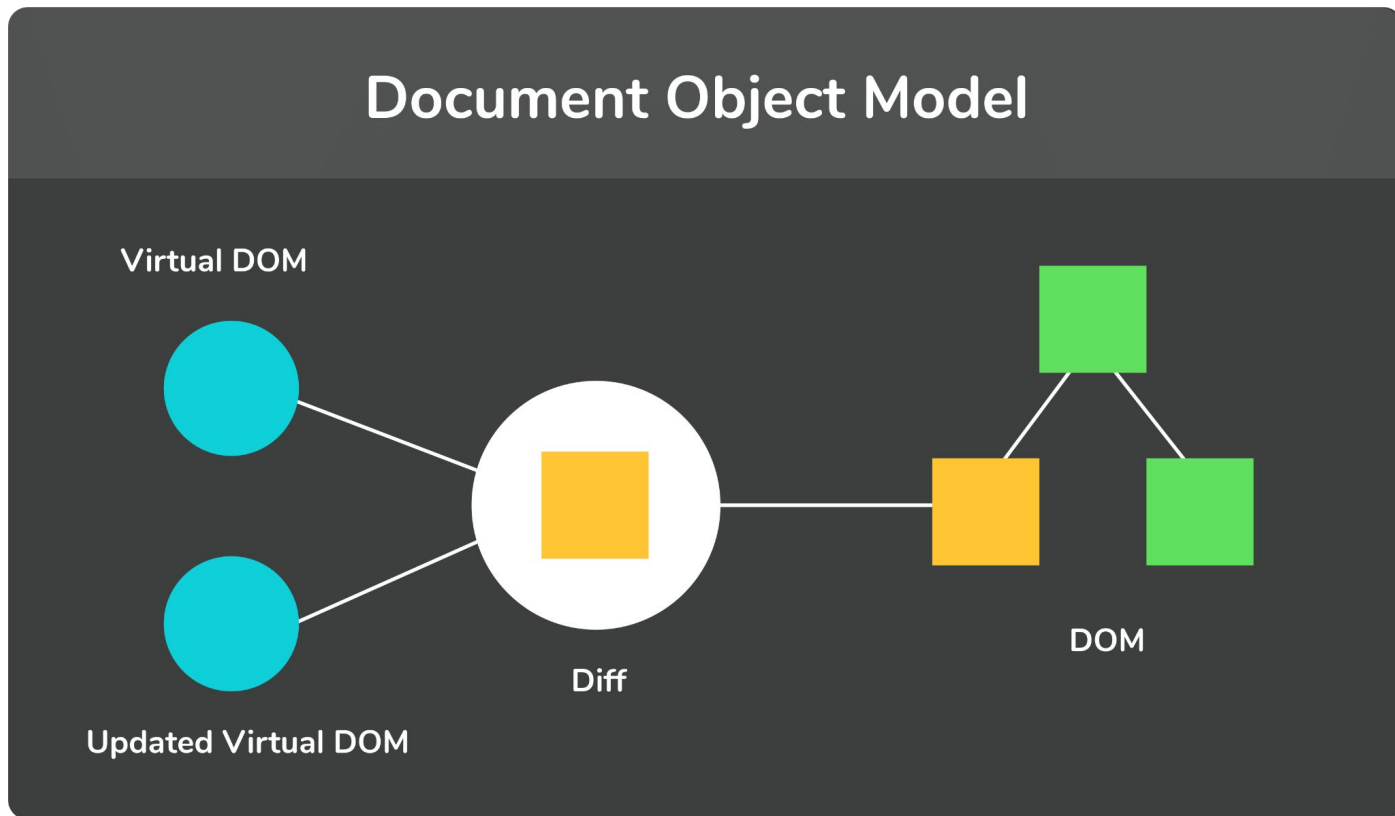


React only changes what needs to be changed!





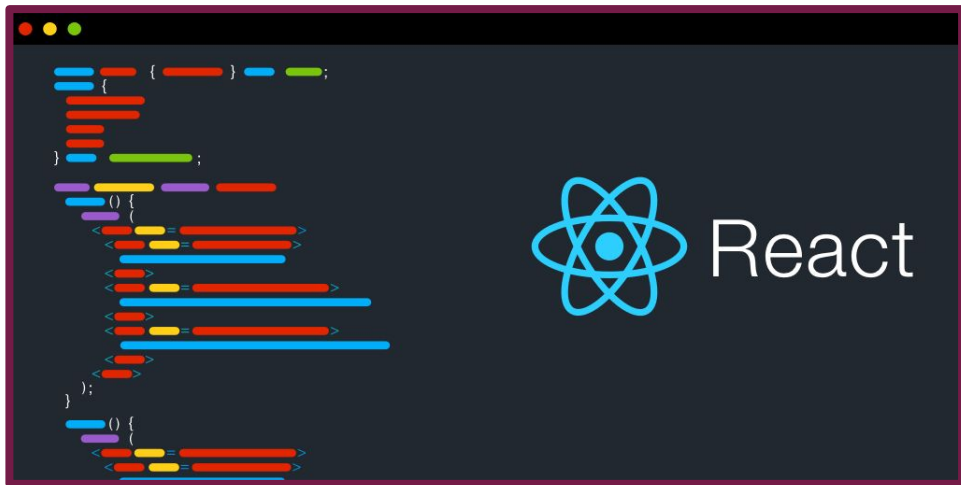
How does React work?





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Setup Development Environment



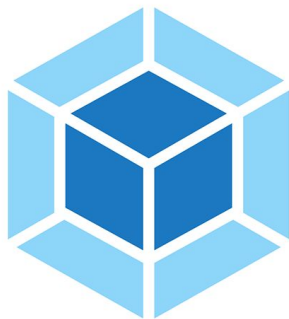
Setup Development Environment

- Download and install  (Already everybody did it.)
- Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser.
- We will install packages via 



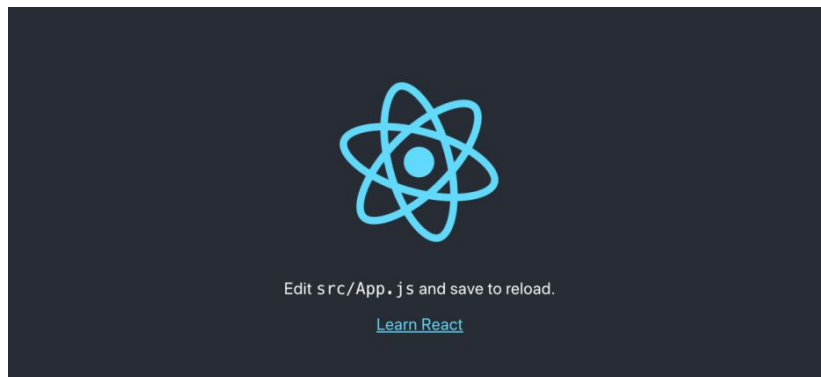
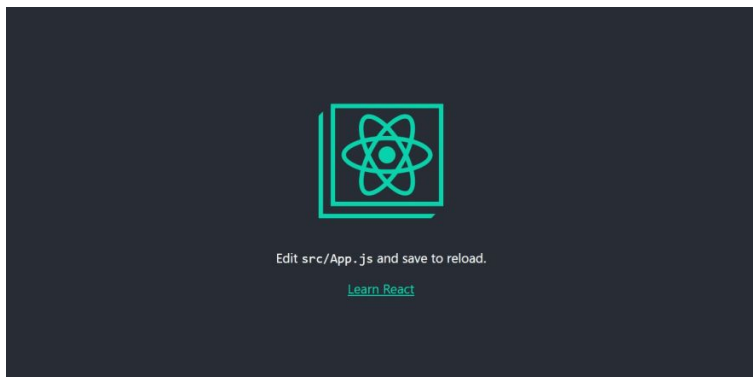
Setup Development Environment »

- `create-react-app` is a project aimed at getting you up to speed with React in no time. It provides a ready-made React application starter, so you can dive into building your app without having to deal with **Webpack** and **Babel** configurations.



Setup Development Environment

- Create React App doesn't handle backend logic or databases; it just creates a frontend build pipeline, so you can use it with any backend you want. Under the hood, it uses Babel and webpack, but you don't need to know anything about them.



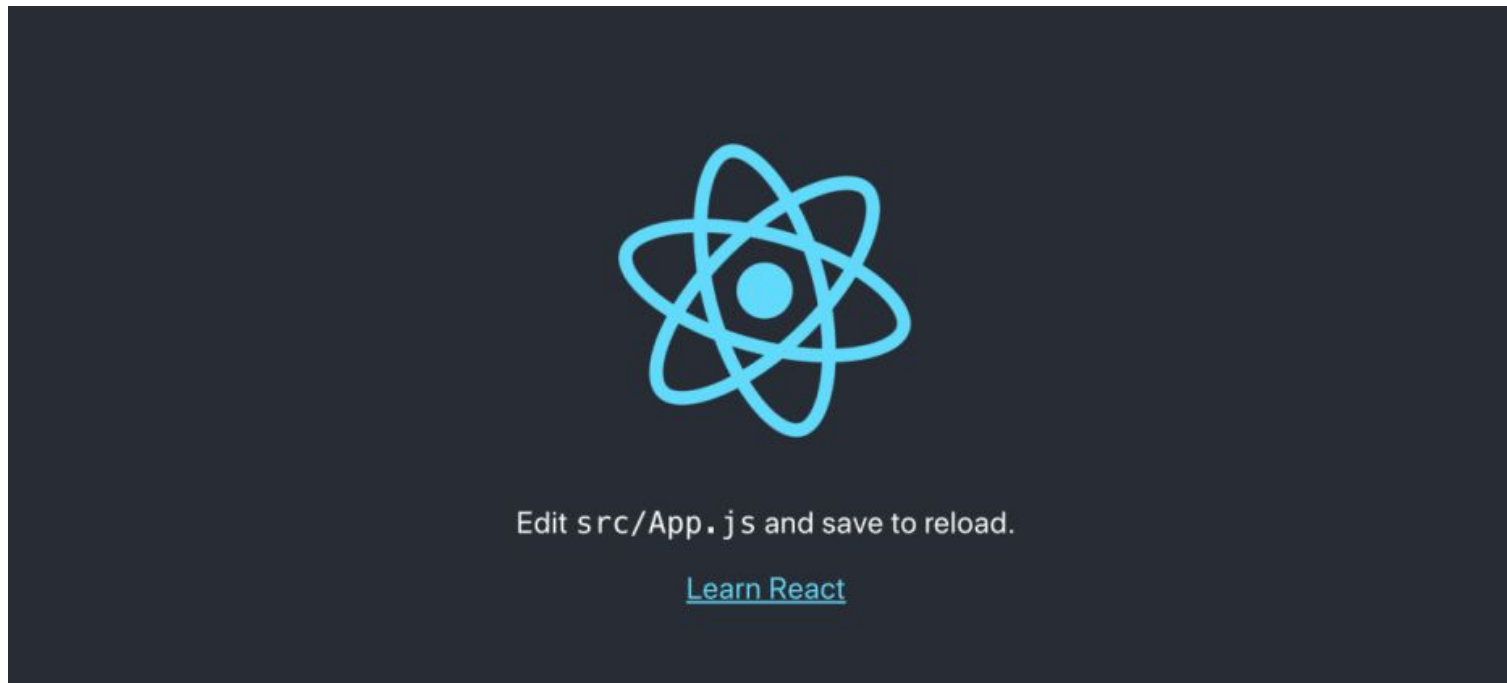
Setup Development Environment »

- `npx create-react-app my-first-app`
- `cd my-first-app`
- `npm start`



- `npm i -g yarn` (once)
- `yarn start`
- **Yarn** is a new secure dependency management client for JavaScript. **Yarn** is an open source collaboration between **Facebook, Exponent, Google, and Tilde.**

Setup Development Environment »



If you see this page on your screen, you have installed ReactJS app successfully. Congrats!



VSCode Extensions For React



The screenshot shows the extension page for 'ES7 React/Redux/GraphQL/React-Native snippets' by dsnajder. The extension is installed and enabled globally. It has 2,655,409 downloads, a 5-star rating, and version 3.1.1. The description states it provides simple extensions for React, Redux, and GraphQL in JS/TS with ES7 syntax. The interface includes tabs for Details, Feature Contributions, and Changelog. A summary bar shows 265,5517 installs, 119,875,93 downloads, and a 4.25/5 rating from 32 reviews. The main title is 'VS Code ES7 React/Redux/React-Native/JS snippets'. The description mentions JavaScript and React/Redux snippets in ES7+ with Babel plugin features for VS Code. There are sections for Installation and Visual Studio Marketplace, and a 'Launch Quick Open:' prompt.

ES7 React/Redux/GraphQL/React-Native snippets dsnajder.es7-react-js-snippets

dsnajder | 2,655,409 | ★★★★★ | Repository | v3.1.1

Simple extensions for React, Redux and Graphql in JS/TS with ES7 syntax

[Disable](#) [Uninstall](#) [Settings](#) This extension is enabled globally.

[Details](#) [Feature Contributions](#) [Changelog](#)

Visual Studio Marketplace **v3.1.1** installs **2655517** downloads **11987593** rating **4.25/5 (32)**

VS Code ES7 React/Redux/React-Native/JS snippets

JavaScript and React/Redux snippets in ES7+ with Babel plugin features for [VS Code](#)

Installation

Visual Studio Marketplace

Launch *Quick Open*:

- ES7 React/ Redux/ GraphQL/ React-Native snippets



Folder-File Schema

For the project to build, these files must exist with exact filenames:

- `public/index.html` is the page template;
- `src/index.js` is the JavaScript entry point.

You can delete or rename the other files.

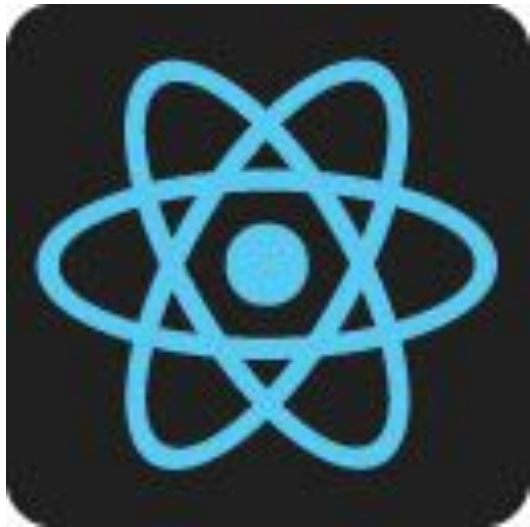
```
▸ node_modules
▸ public
  ★ favicon.ico
  <> index.html
  {} manifest.json
▸ src
  # App.css
  JS App.js
  JS App.test.js
  # index.css
  JS index.js
  🖼 logo.svg
  JS registerServiceWorker.js
  💎 .gitignore
  {} package-lock.json
  {} package.json
  ⓘ README.md
```



Chrome Extensions For React



React Developer Tools



Redux DevTools





Last Notes...

- You should install or prepared a ReactJS project before every lesson.
- In this way, we don't wait anybody for installing new project.





Last Notes...

You can access in-class codes in our github. You can copy from there.

The screenshot shows a GitHub repository interface. At the top, there are tabs for 'main', '1 branch', and '0 tags'. Below these are buttons for 'Go to file', 'Add file', and 'Code'. The repository name 'Pizza Restaurant Website' is visible on the right. The file list shows a commit by 'edwardBenedict' with the following files:

File	Commit	Time
public	third commit	4 months ago
src	third commit	4 months ago
.gitignore	third commit	4 months ago
README.md	third commit	4 months ago
package.json	third commit	4 months ago
yarn.lock	third commit	4 months ago

The README.md file is selected and its content is displayed below. It includes the title 'Getting Started with Create React App', a note about bootstrapping with 'Create React App', and a section for 'Available Scripts' showing the command 'yarn start' and instructions on how to run the app and view it in the browser.

Getting Started with Create React App

This project was bootstrapped with [Create React App](#).

Available Scripts

In the project directory, you can run:

```
yarn start
```

Runs the app in the development mode.
Open <http://localhost:3000> to view it in the browser.

About
Pizza Restaurant Website
[Readme](#)

Releases
No releases published
[Create a new release](#)

Packages
No packages published
[Publish your first package](#)

Languages
JavaScript 89.3% HTML 10.7%



THANKS!

Any questions?

