# Introduction à React.js

HETIC P2023



# Grégoire Mielle

Twitter: @greeeg

GitHub: @greeeg

Nello@greeeg.com

- **Étudiant en H5**
- Software Engineer @PayFit
- **Freelance**

Une expertise pour tout le monde

Une compétence pour vos futurs projets & stages

Si vous êtes perdu, dites-le

Challengez-moi!

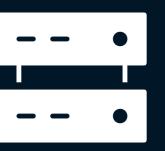
# Méthodologie

- Must read
- Must watch
- Must learn
- Action time

# Un peu d'histoire...

Comment fonctionne l'affichage d'une page web?







Quel est le lien entre toutes ces technologies?

# Technologies client-side

Interfaces plus complexes

Beaucoup plus d'interactions

## Les besoins côté utilisateur ont évolué

Expérience mobile (3G, offline, etc.)

Sources de données nombreuses

## craigslist

post to classifieds my account

#### search craigslist

#### event calendar

MTWTFSS 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

help, fag, abuse, legal avoid scams & fraud personal safety tips terms of use privacy policy system status

about craigslist craigslist is hiring in sf craigslist open source craigslist blog best-of-craigslist crainslist TV

### SF bay area w sfc sby eby pen nby scz

### community

activities local news artists lost+found childcare musicians classes pets politics events general rideshare volunteers groups

#### personals

strictly platonic women seek women women seeking men men seeking women men seeking men misc romance casual encounters missed connections rants and raves

#### discussion forums

apple photo arts history p.o.c. atheist politics housing autos psych beauty iokes queer bikes kink recover celebs legal religion comp linux romance crafts m4m science diet manners spirit divorce marriage sports

#### housing

apts / housing housing swap housing wanted office / commercial parking / storage real estate for sale rooms / shared rooms wanted sublets / temporary vacation rentals

#### for sale

antiques farm+garden free appliances arts+crafts furniture atv/utv/sno garage sale auto parts general baby+kid heavy equip barter household beauty+hlth jewelry materials bikes boats motorcycles books music instr business photo+video cars+trucks rvs+camp cds/dvd/vhs sporting cell phones tickets clothes+acc tools collectibles toys+games

#### jobs

accounting+finance admin / office arch / engineering art / media / design biotech / science business / mgmt customer service education food / bev / hosp general labor government human resources internet engineers legal / paralegal manufacturing marketing / pr / ad medical / health nonprofit sector real estate retail / wholesale sales / biz dev salon / spa / fitness security skilled trade / craft software / qa / dba systems / network technical support transport tv / film / video

web / info design

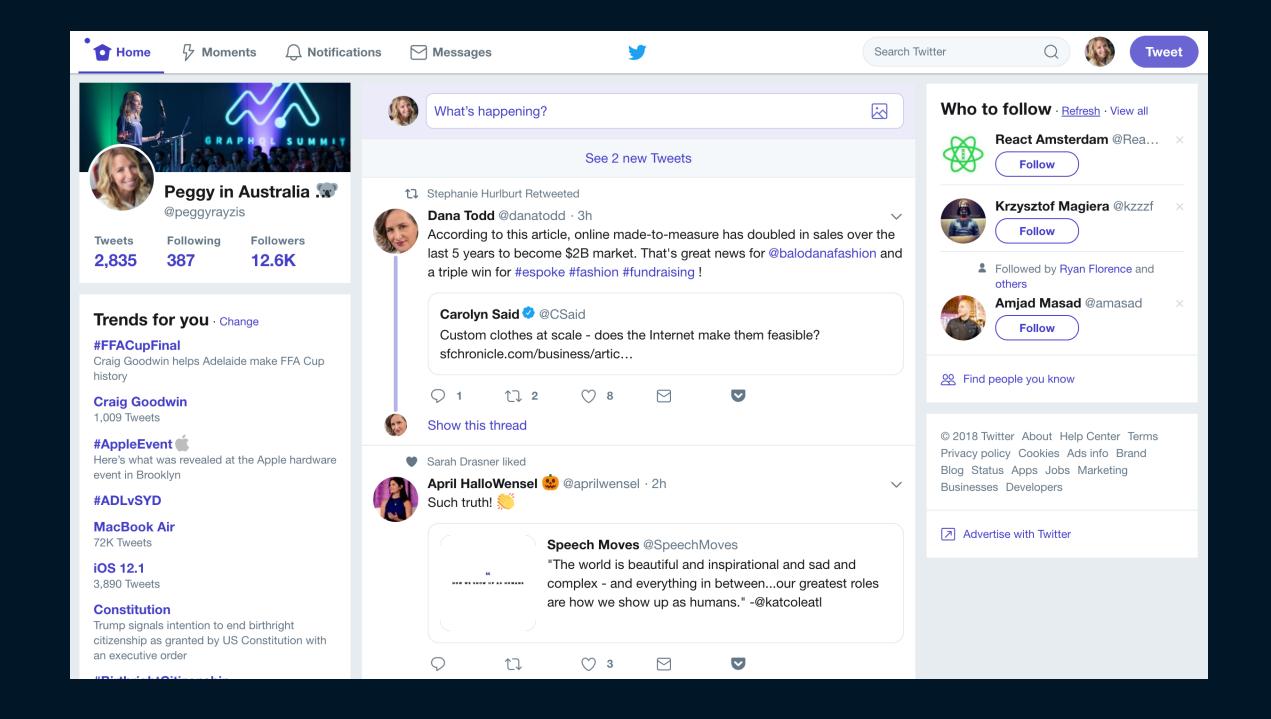
#### nearby cl

english

bakersfield chico fresno gold country hanford humboldt inland empire klamath falls las vegas los angeles medford mendocino co merced modesto monterey orange co palm springs redding reno roseburg sacramento san luis obispo santa barbara santa maria siskiyou co stockton susanville ventura visalia-tulare yuba-sutter

us cities

us states



## De nouvelles solutions ont émergé

**Jquery (2006)** 

Angular.js (2009)

Ember.js (2011)

React.js (2013)

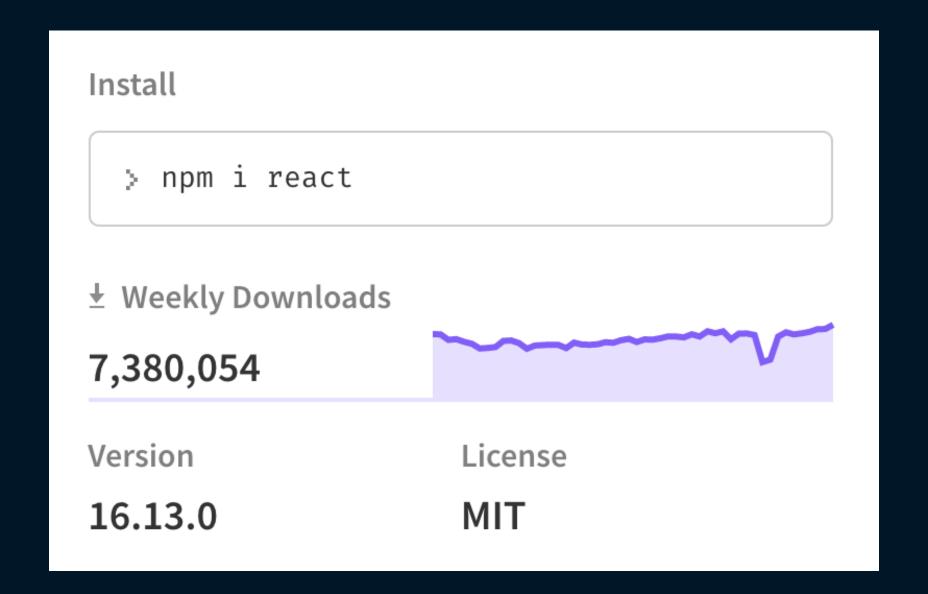
Vue.js (2014)

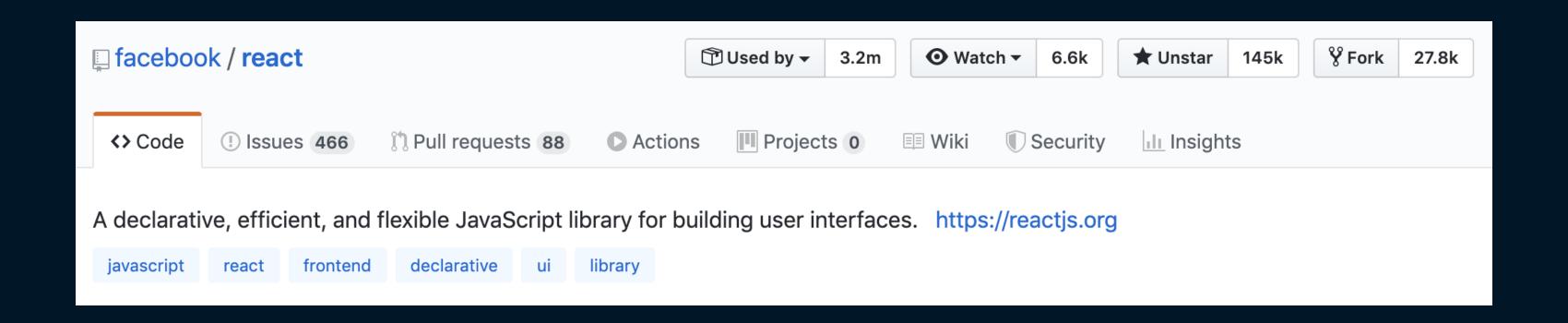


Comment bien les choisir?

Quelles différences/ressemblances?

State of JS - 2019 Edition







## React Developer Tools

Proposé par : Facebook



Outils de développement



2000000+ utilisateurs

# React.js

A JavaScript library for building user interfaces

Declarative

Component-Based

Learn Once, Write Anywhere

## Declarative vs Imperative

Dessine un chat. vs Fais un trait noir, puis un arrondi vers le bas, etc.

## Imperative



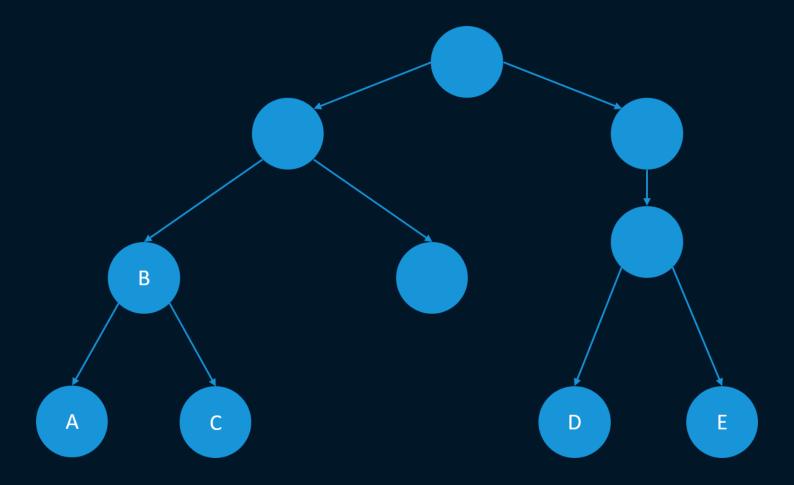
On doit effectuer un calcul à chaque modification d'une des 2 variables qui définissent "fullname"

## Declarative

fx			
	Α	В	С
1	Last name	Firstname	Full name
2	John	Doe	John Doe
3			

On déclare comment "fullname" est défini sans jamais le modifier manuellement

## Component-based



## Learn Once, Write Anywhere







## Qui l'utilise?

Facebook (FB.com, WhatsApp, Instagram)

**American Express** 

Apple

Baidu

Netflix

Uber

# Qui l'utilise?

Skype

Tesla

Slack

Discord

Walmart

**Pinterest** 

# Qui l'utilise?

**Twitter** 

PayPal

Tinder

AirBnB

Dropbox

PayFit

# Hello World

# Comment crée-t-on un élément du DOM en Javascript?

On l'ajoute dans le parent

# Avec React.js

On l'ajoute dans le parent

# Pour utiliser React.js on a donc besoin de 2 packages

React: La logique pour construire des interfaces

React DOM: Les logiques d'interaction avec le DOM

Du HTML dans du Javascript 🤥

## Le JSX

Une extension syntaxique au Javascript

Transpilé par Babel en Javascript

Permet de définir des composants React simplement



```
const root = document.getElementById('root')

const text = "Hello World"

const attributes = {
   className: "container",
   style: {
      color: "red"
   }
}

const element = <div {...attributes}>{text.toUpperCase()}</div>
ReactDOM.render(element, root)
```

# Les composants React.js