FrontEnd : partie visible au Client

interface

- HTML
  - HyperText Markup Lg
    - ↳ créat° des pages web
- CSS
  - Cascading Style Sheet
    - → styling/mise en page
- JS
  - JavaScript
    - → Lg de pgmt°
      - ↳ interactivité

Backend : partie invisible au client

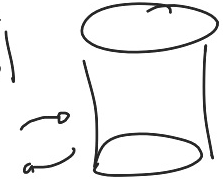
côté serveur (server side)

BE

① Serveur → machine

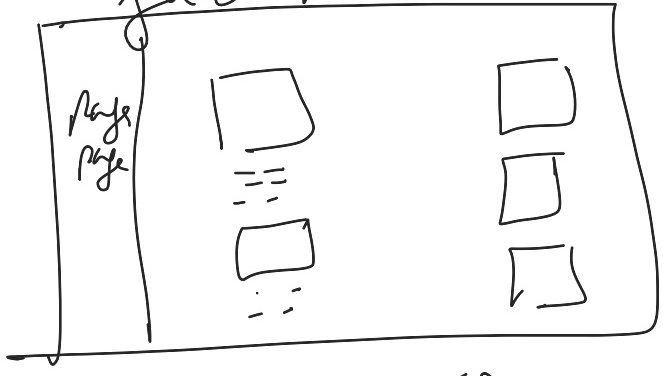
② Traitement logique des Requêtes

③ DataBase



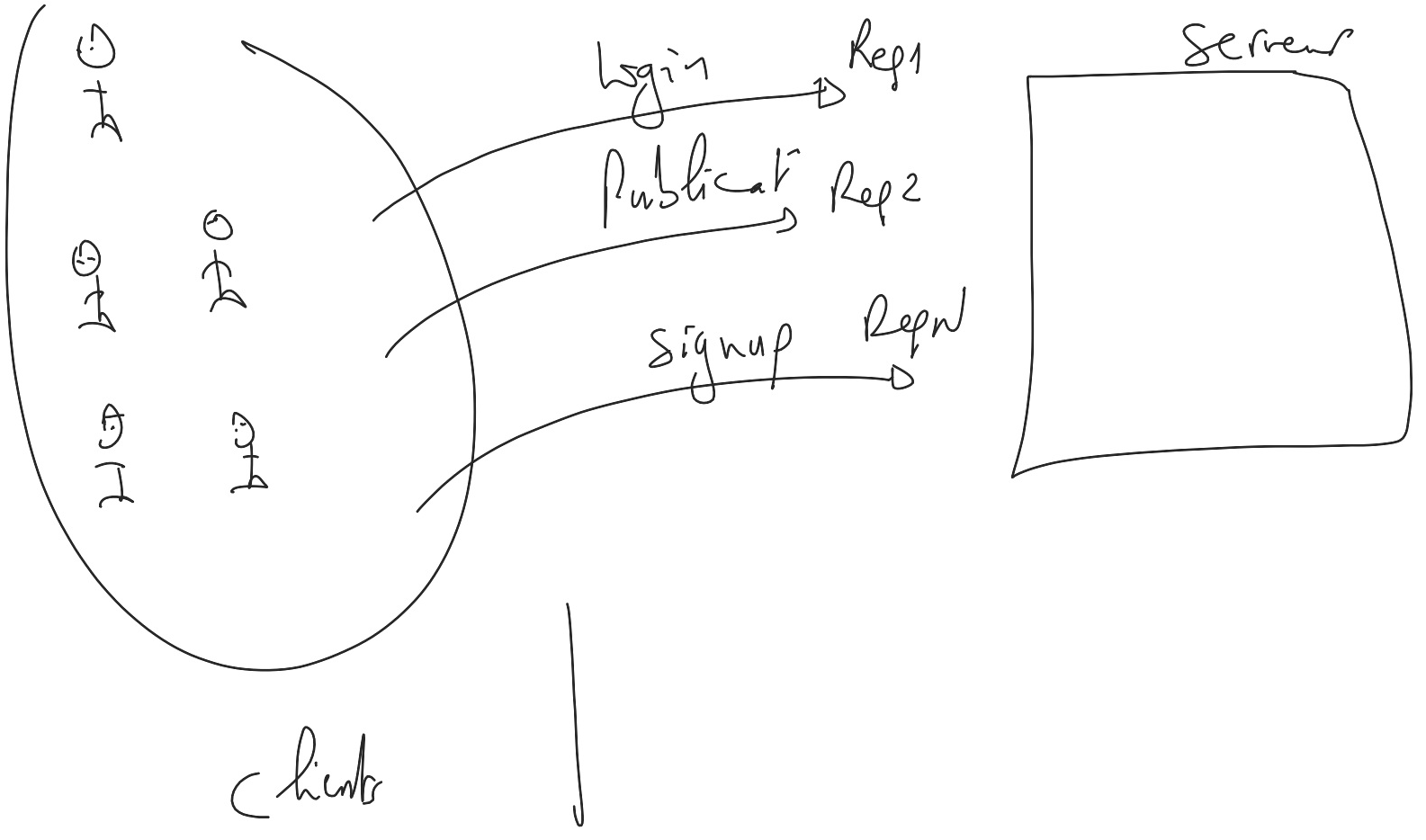
(client side)

facebook.com



<img <p

<table <form <input


Login
Rep1
Publicat
Rep2
Signup
RepN
Server
Clients

Angular : Framework FrontEnd JS

côté client

le de pgmt°

→ cadre de travail

→ / structure prédéfinie d'— projet

→ ensemble de modules / = packages / = dependencies → ensemble de fonctions prédéfinies

⇒ faciliter le travail des développeurs.

Env :

① VSCode : IDE

Integrated Develop_t

Envi_t

(IntellJ, Eclipse,)

Netbeans, Atom, STS

phpStorm, ---

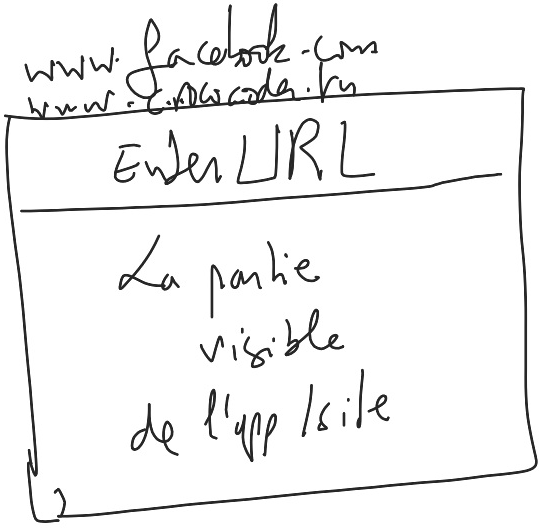
Ts les type de projets

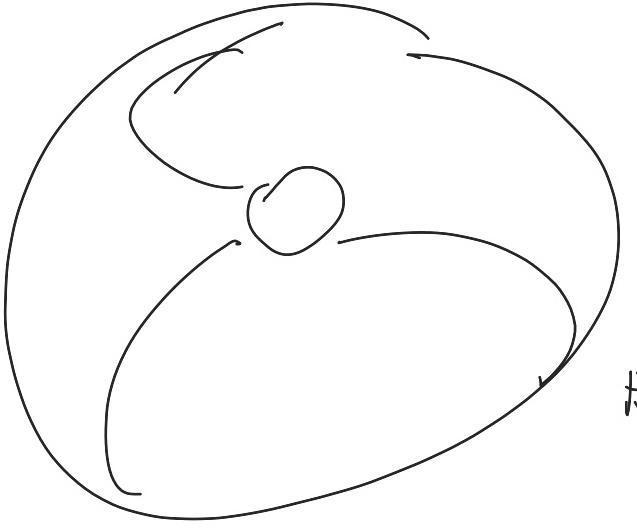
35 K extensions (BlackBox AI)

Free

② NodeJS : Runtime Env.

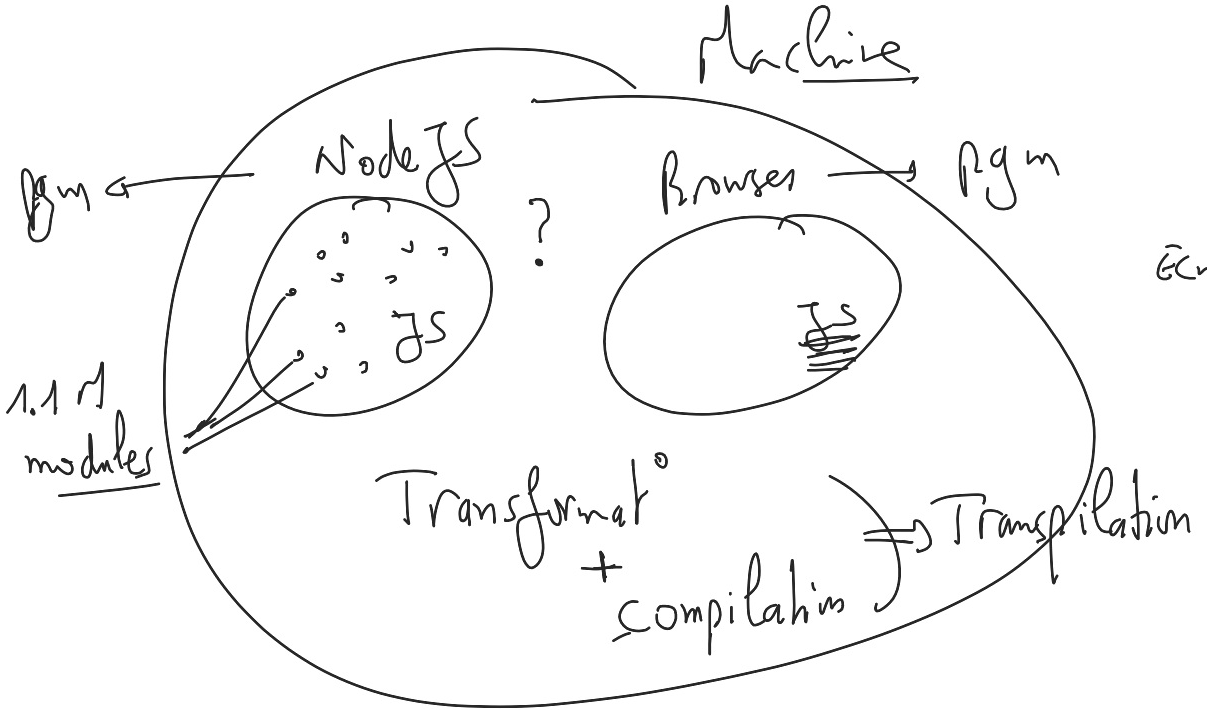
[Env. d'exécution du code JS en dehors du Browser.

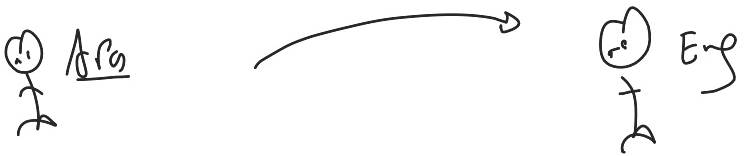




Google Chrome :

HTML CSS JS





- JS : le de pgmt°

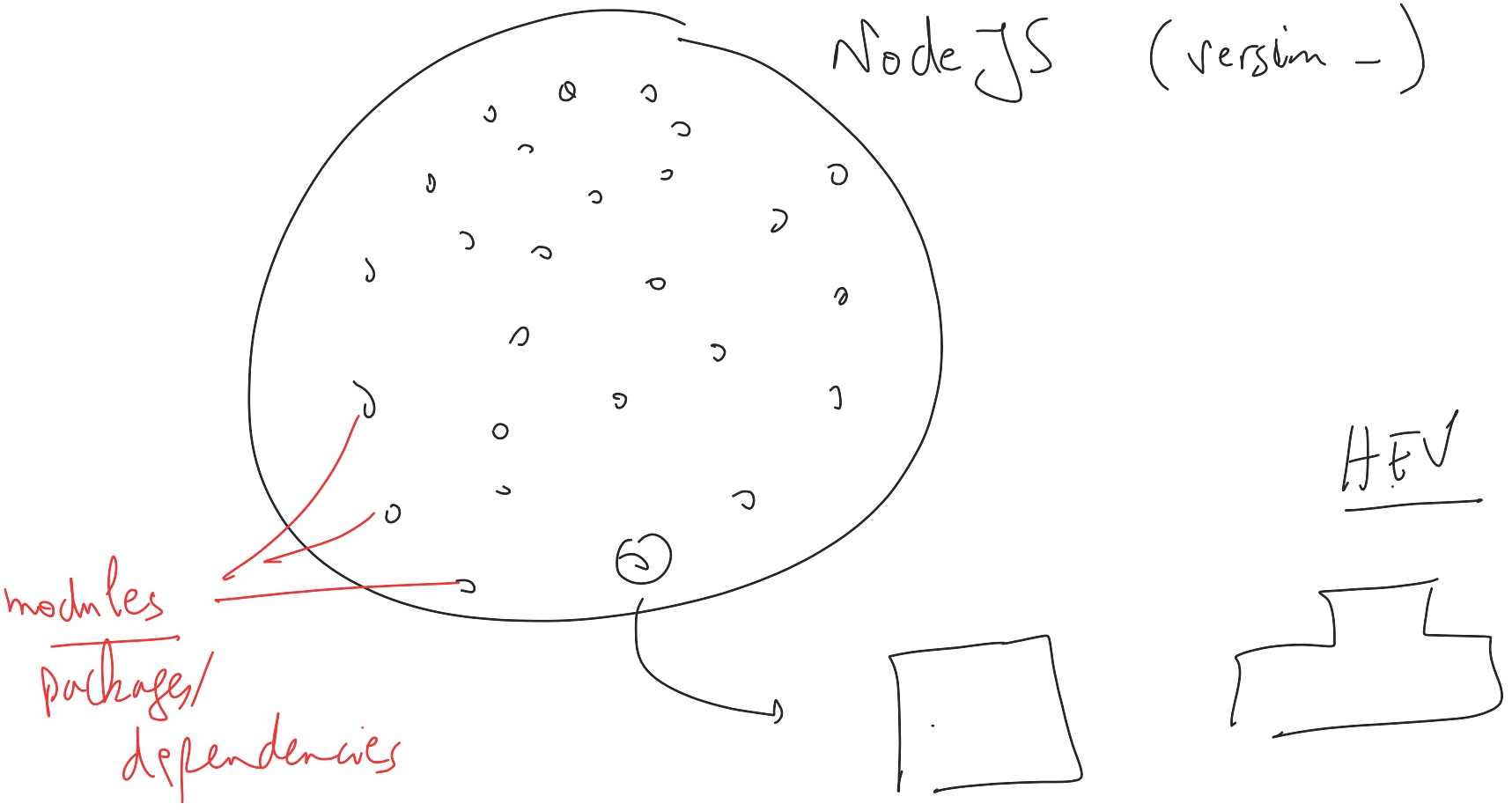
ES6 — ECmaScript

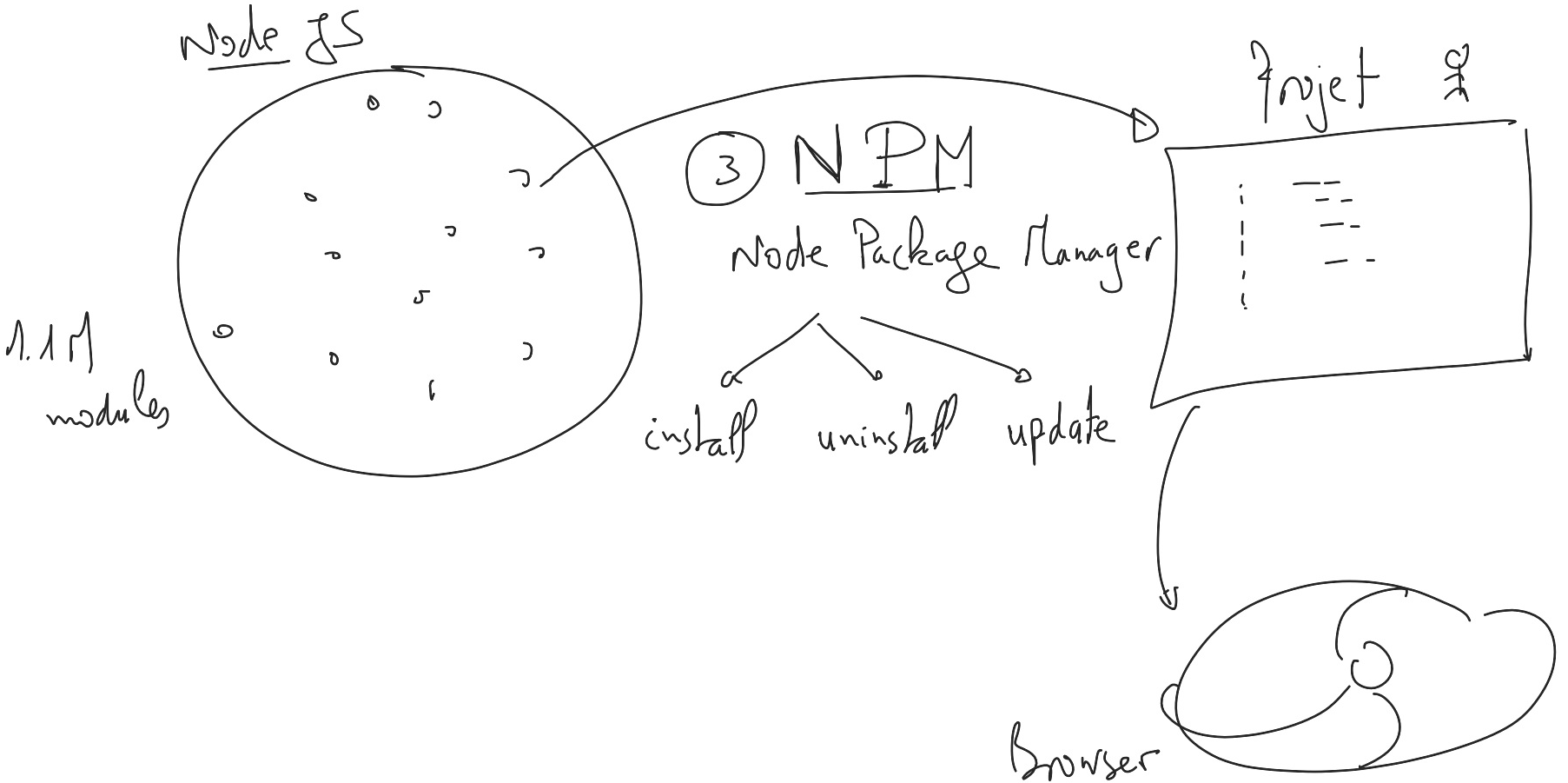
TS — TypeScript

JSX

des versions du JS

-


NodeJS (version _)
modules
packages/
dependencies
HEV


Node JS
1.1 M
modules
3 NPM
Node Package Manager
install
uninstall
update
Projet
Browser

4

Git Bash : Terminal / Console

→ pgm pour exécuter des cmds

($ npm install ..)
$ cd ..
$ mkdir ..
$ touch ..
$ rmdir
...

GitHub
GitLab : plateforme Cloud dans laquelle, on stocke nos projets / partage

Git

→ système de gestion de versions

(5) $ npm install -g @angular/cli@version

module

Node : nodejs.org 14.15.0

git-scm.com : → Git Bash

$ node ␣ -v ✓

14.17.0

$ npm ␣ -v ✓

6.14.8

VS code ✓

GitBash ✓

$ npm i -g @angular/cli@14.2.1

npm → Manager du Node

i → installation d'un module

-g → globally

@angular/cli → nom du module

@14.2.1 → version du module

$ npm i nomModule → Last version

+ @angular/cli added ✓

$ ng v → ...
...

VSCode : Créer un projet Angular

powershell : cmd du windows

Bash → gitBash

Exécute toutes les cmds

Cmd

$ pwd → chemin actuel

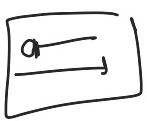
print working directory

$ ls → affiche tous les dossiers / les fichiers ds le path / chemin actuel

list

$ cd NomDossier → accéder à un dossier

change directory

 Tab

~ : C / Users / NomUser

C / Users / CrocCoder

$ cd␣ .. → retour en arrière

$ mkdir NomDossier → créat° d'- dossier

July-Spring

→ make directory

$ touch nomfichier.ext → créat° d'fichier

~/Desktop/july-spring/ page.html
style.css
script.js

Générat° d'un projet Angular :

$ ng new NomProjet

Une commande qui permet la création d'un projet Angular.

resto
isamm
manger
E-commerce
sport ✓

Desktop/
july-spring

① would you like to add angular Routing?

y

Routes

Navigat°

② which stylesheet would you like to use?

CSS

Comment ouvrir un dossier avec VSCode ?

File

open Folder

:: select Folder

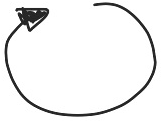
Sport

- node_modules : contient l'ensemble des modules / packages
  ⚠ A ne pas toucher ⚠
- src : code source
  - app : application
  - assets : images, vidéos, css, fonts, JS

index.html → page web principale

MPA

Multiple Page Application



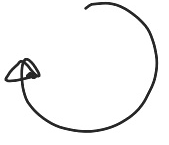
reload page

chargement
- HTML
- CSS
- JS

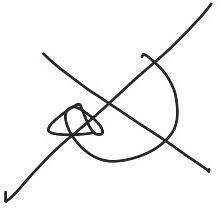
+ Data

SPA

Single Page Application



chargement 1ère fois



pas de reload

Google / facebook

Angular

React

Data

2,5 MD repo/b

4,7 MD users

Un projet Angular se compose d'une

seule page web nommée : index.html

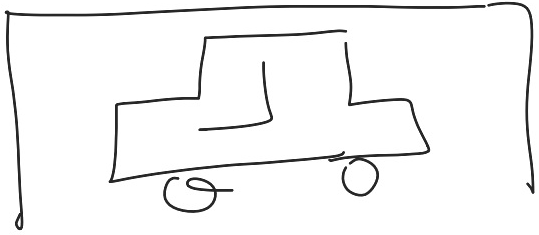
qui est notre SPA.

Comment lancer le serveur d'un projet Angular ?

① Se pointer sur le projet Angular

pwd : ----- /sport

② $ ng serve



$ npm i @types/node@14.14.31

Corriger l'erreur par l'installat° du module @types/node

→ Se pointer sur le projet

→ $ ng serve

build

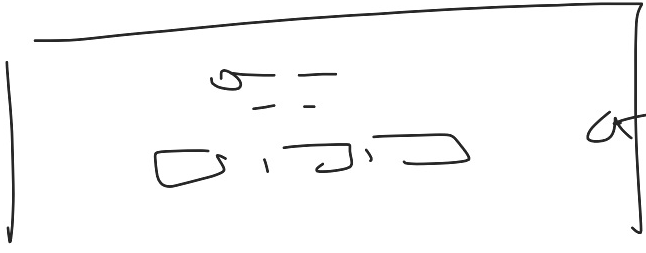
compiled succ—fly

$

URL http:=localhost:4200

Base URL : http : // localhost : 4200

- http → HyperText Transfert Protocol
- localhost → Serveur local (notre machine)
- 4200 → Port (par défaut angular)



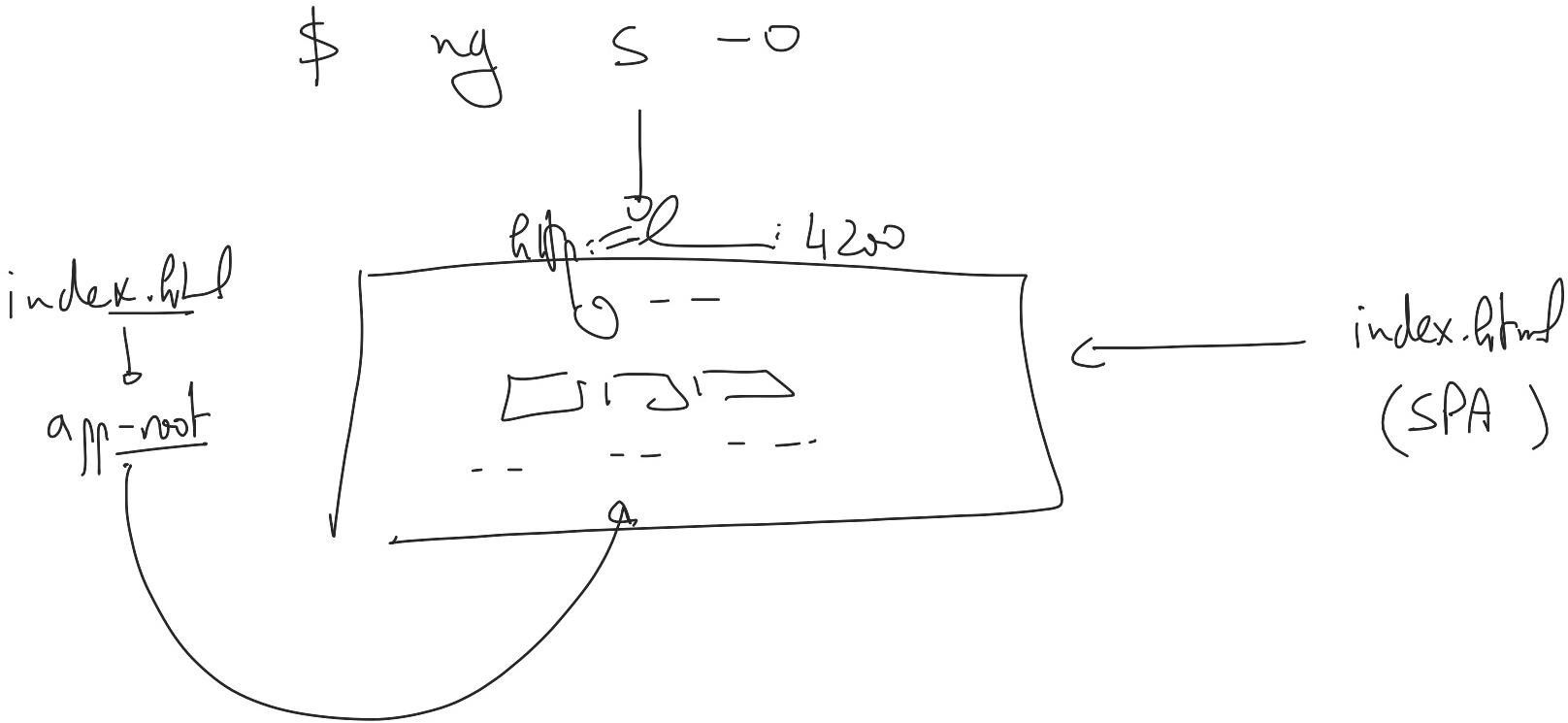
index.html (SPA)

shutdown : ctrl + c

```
$ ng serve
$ ng s
$ ng s -o
```

↳ open Browser Auto

```
$ ng s -o --port=4203
```


$ ng s -o
http://localhost:4200
index.html
app-root
index.html
(SPA)

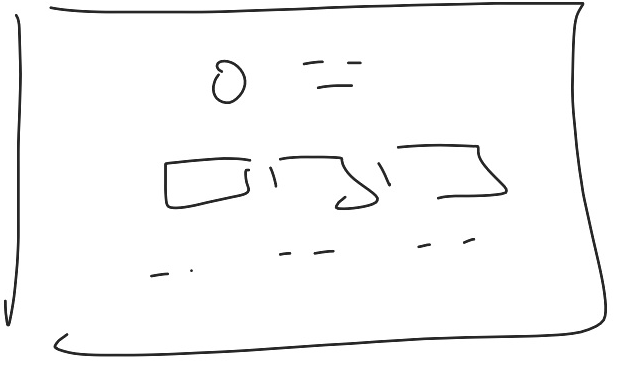
index.html (SPA)

<app-root> </app-root> : Balise paire

app.component.html

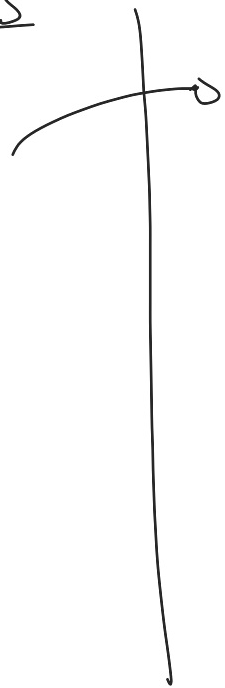
app.component.css

app.component.ts



a.css

.red {
-- : -- ;
-- -- ;
}



.html

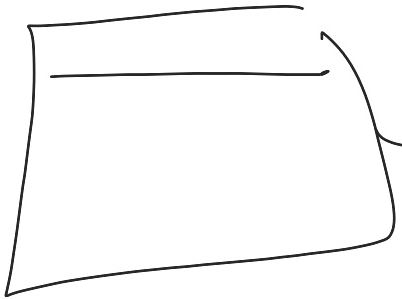
<link href="a.css" >

-- --

$ ng s

⋮

http://localhost:4200



index.html

<app-root></app-root>

app-component.html + ——— .css + ——— .js

1

un Component

Component : → ensemble de fichiers liés entre eux.

.html .css et .ts

→ partie graphique partie logique

→ bloc d'une page web

→ réutilisable

Comment créer / générer des components ?

src

app

components ← créer ce dossier

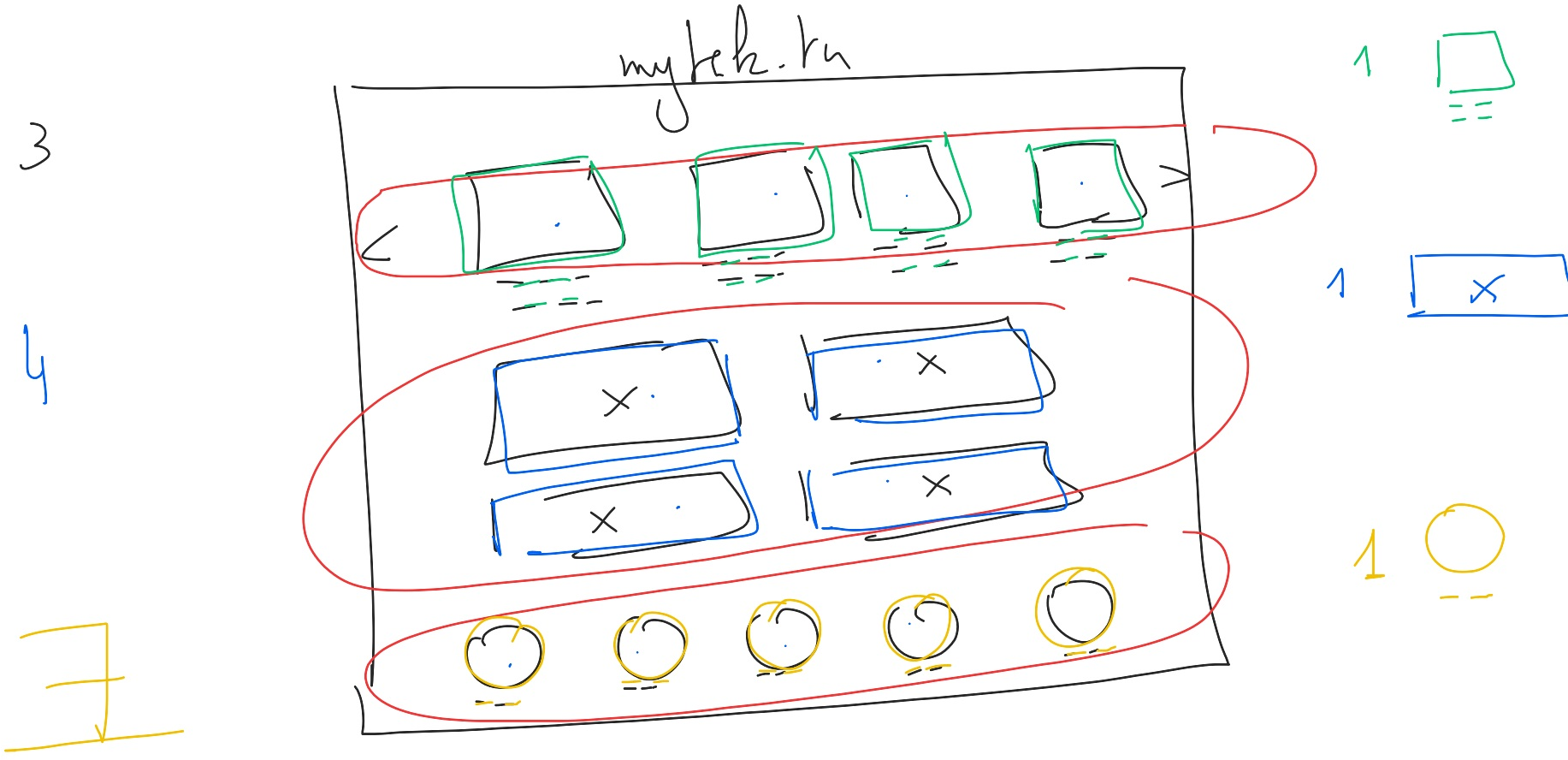
se pointer sur le dossier components

ctrl + j : hide / show Terminal

$ ng generate component NomComp

ou

$ ng g c NomComp


mytek.ru
3
4
1
1
1

src

app

Comp

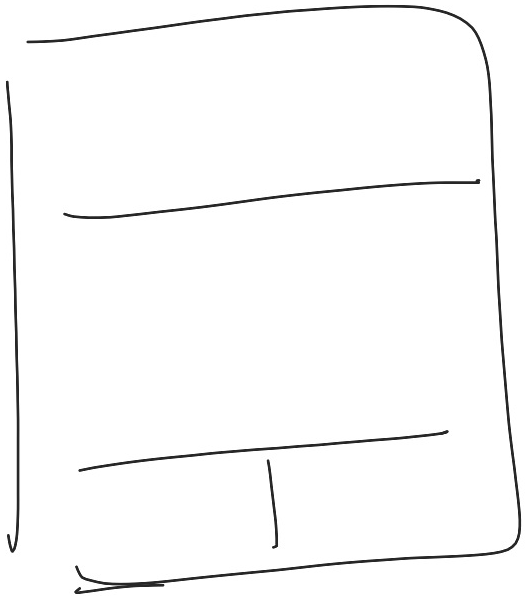
Directives

Pipes

modules

Services

Routing



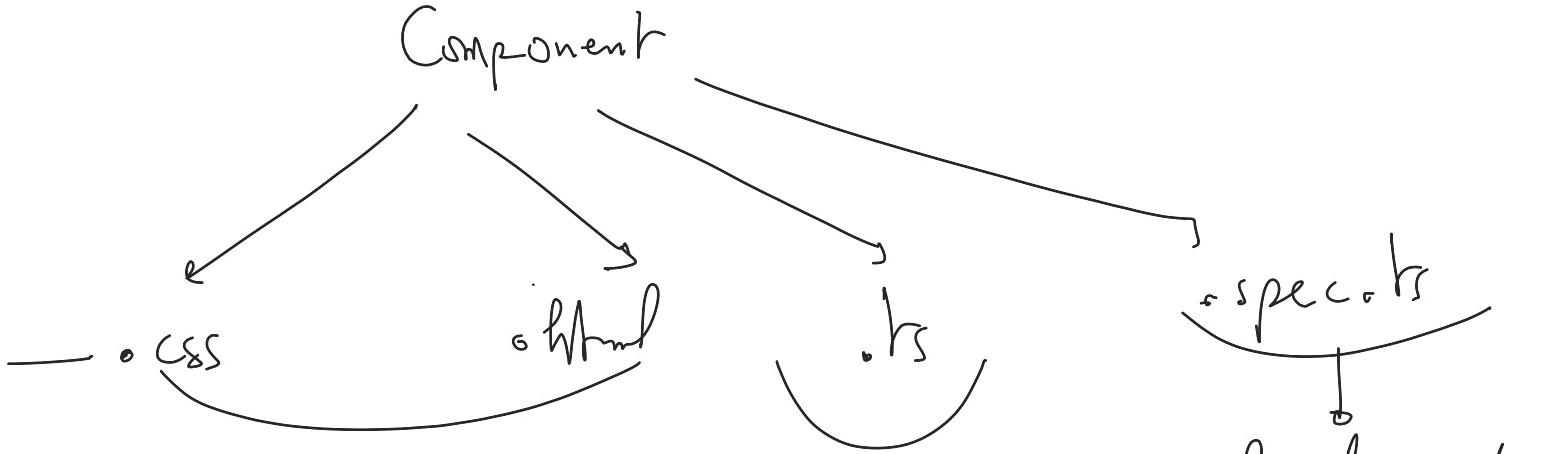
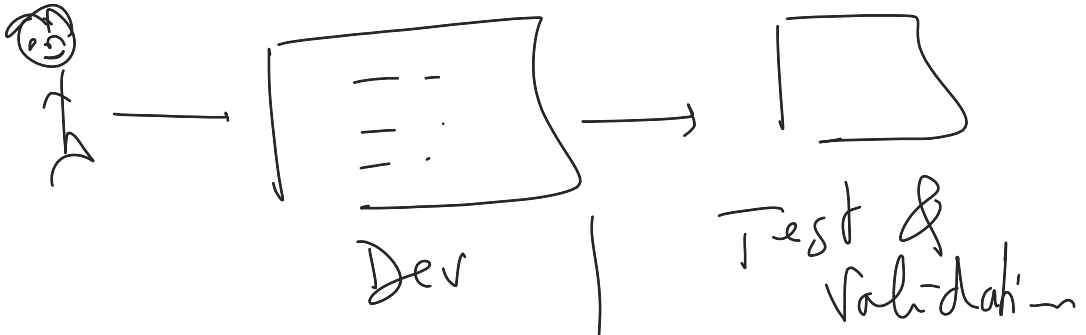
$ ng g c header

footer

home

login

signup



un fichier de test unitaire d'un Component