

# Architecture & WEB

## TD ANGULAR

**Sujet** : Lister les cryptos monnaies.

Créer un formulaire de recherche.

Afficher le détail d'une crypto sélectionnée.

URL des API utilisées :

<https://api.coinmarketcap.com/v2/listings/>

<https://api.coinmarketcap.com/v2/ticker/>

## Installation

Créer un Blank workspace sous Cloud9

```
> nvm install node
> node -v
> npm install -g npm
> npm install -g @angular/cli
> ng new crypto
> cd crypto
> ng serve --host 0.0.0.0 --port 8080 --disableHostCheck

> ng new crypto
> cd crypto
> ng serve -o
```

<http://localhost:4200>

## Les COMPOSANTS

```
> ng g c header
```

**app.module.ts :**

```
import { FormsModule } from "@angular/forms";
imports: [ FormsModule ]
```

```
> ng g c recherche
```

## Le DATABINDING

**recherche.component.html :**

```
<label>Nom crypto : </label>
```

```
<input [(ngModel)]="nomcrypto">
```

```
<button (click)="onClick()"
[disabled]="nomcrypto==''">Chercher</button>
<div>La recherche s'effectue sur : {{nomcrypto}}</div>
```

Copier les classes models dans l'arborescence

## Les DIRECTIVES

**recherche.component.ts :**

```
nomcrypto : String = "BITCOIN";
```

```
listCryptoMock : Data = {"data":[{"id":1,"name":"BITCOIN","symbol":
"BTC","website_slug":""},{ "id":2,"name":"LITCOIN","symbol":
"LC","website_slug":""}]};
```

```
onClick () {
    console.log ("Clique : " + this.nomcrypto );
}
```

**recherche.component.ts :**

```
listCrypto : Coin [] = this.listCryptoMock.data;
```

**recherche.component.html**

```
<div *ngFor = "let c of listCrypto">
    <div *ngIf =
"c.name.toLowerCase().includes(nomcrypto.toLowerCase())">
        {{c.name}}
    </div>
</div>
```

```
> ng g c crypto
```

## Le DATABINDING

**recherche.component.html :**

```
<app-crypto [coin]="c" ></app-crypto>
```

**crypto.component.ts :**

```
import { Component, OnInit, Input } from '@angular/core';
import { Coin} from '../model/Coin'
```

**crypto.component.ts :**

```
@Input () coin : Coin;
```

**crypto.component.html :**

```
<div [ngStyle]="{'color': getColor()}">
    {{coin.name}}
</div>
```

**crypto.component.ts :**

```
getColor () : String {  
    return "red";  
}
```

## **Les PIPES**

**crypto.component.html :**

```
{{coin.name | lowercase}}
```

## **Les SERVICES**

```
> ng g s comapi
```

**comapi.service.ts**

```
public getListCrypto () : Coin [] {  
    var listCryptoMock : Data =  
    {"data":[{"id":1,"name":"BITCOIN","symbol":  
"BTC","website_slug":""},{id":2,"name":"LITCOIN","symbol":  
"LC","website_slug":""}]};  
  
    return listCryptoMock.data;  
}
```

## **L'INJECTION**

**recherche.component.ts**

```
constructor( private compai: ComapiService ) { }
```

**recherche.component.ts**

```
listCrypto : Coin [];  
onclick () {  
    console.log ("Clique : " + this.nomcrypto );  
    this.listCrypto = this.compai.getListCrypto ();  
}
```

## **Le HTTP**

**app.module.ts**

```
import { HttpClientModule } from '@angular/common/http';  
imports: [ HttpClientModule ]
```

**comapi.service.ts**

```
import {HttpClient } from '@angular/common/http'  
import {Observable } from 'rxjs';
```

## Les OBSERVABLES

### **comapi.service.ts**

```
urlListCrypto = "https://api.coinmarketcap.com/v2/listings/";
urlDetailCrypto = "https://api.coinmarketcap.com/v2/ticker";
```

```
constructor(private httpClient : HttpClient) { }
```

```
public getListCrypto () : Observable<Data> {
  return this.httpClient.get<Data>(this.urlListCrypto)
}
```

### **recherche.component.ts**

```
onClick () {
  this.comapi.getListCrypto().subscribe(d => {this.listCrypto =
d.data; console.log(this.listCrypto);});
}
```

## Le ROUTING

### **app.module.ts**

```
import {RouterModule, Routes} from '@angular/router';
```

```
const appRoutes: Routes = [
  {path: 'recherche', component: RechercheComponent },
  { path: 'detail/:id', component: DetailComponent}
];
```

### **app.module.ts**

```
imports: [ RouterModule.forRoot (appRoutes)],
```

### **crypto.component.html**

```
<a [routerLink]="['/detail',coin.id]"> {{coin.name | lowercase}}
</a>
```

### **app.component.html**

```
<router-outlet ></router-outlet>
```

### **detail.component.ts**

```
import {ActivatedRoute } from '@angular/router';
```

### **detail.component.ts**

```
constructor(private route: ActivatedRoute) { }
id : number = 0;
```

```
ngOnInit() {
  this.id = +this.route.snapshot.paramMap.get('id');
}
```

### **detail.component.html**

```
<span>Id :</span> {{id}}
```

### recherche.component.ts

```
import {Router} from '@angular/router'
```

### recherche.component.ts

```
constructor(private comapi : ComapiService,private router: Router) {
}
```

### recherche.component.html

```
<label>Nom crypto : </label>
```

```
<input [(ngModel)]="nomcrypto">
```

```
<button (click)="onclick()" [disabled]="nomcrypto==''"
```

```
routerLink="/">Chercher</button>
```

```
<div>La recherche s'effectue sur : {{nomcrypto}}</div>
```

```
<div *ngIf="router.url == '/'">
```

```
<div *ngFor = "let c of listCrypto">
```

```
  <div *ngIf =
```

```
"c.name.toLowerCase().includes(nomcrypto.toLowerCase())">
```

```
    <app-crypto [coin]="c" ></app-crypto>
```

```
  </div>
```

```
</div>
```

```
</div>
```