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TP1 – Firebase Authentication

SERVERLESS ET CLOUD NATIVE APPLICATIONS

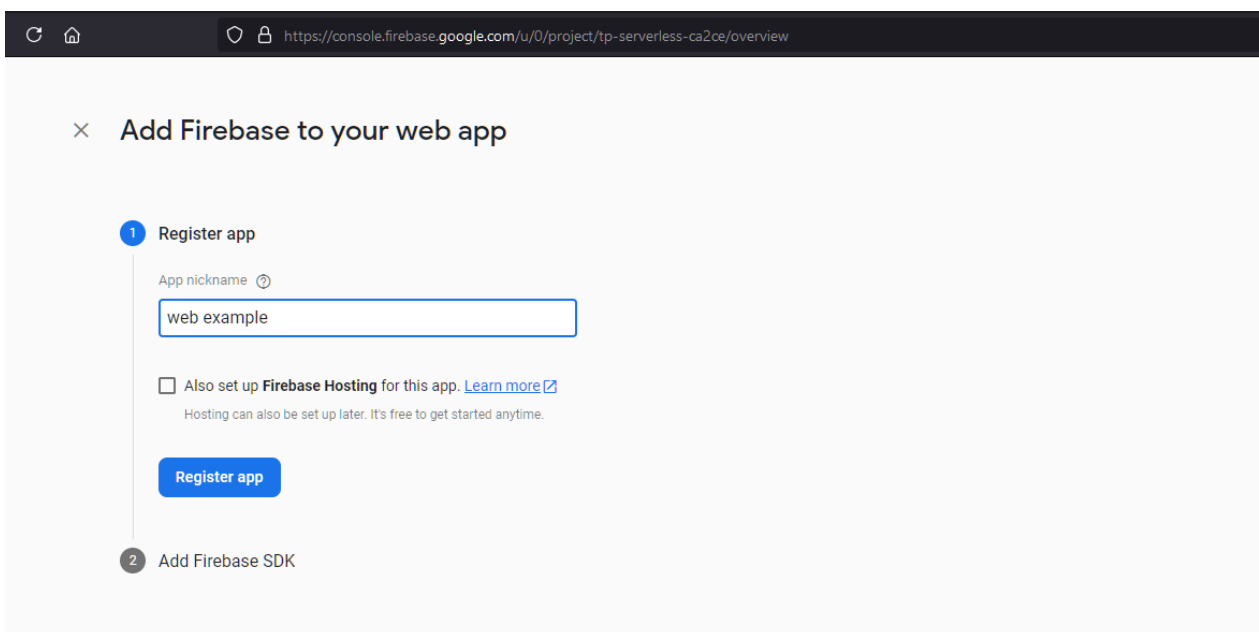
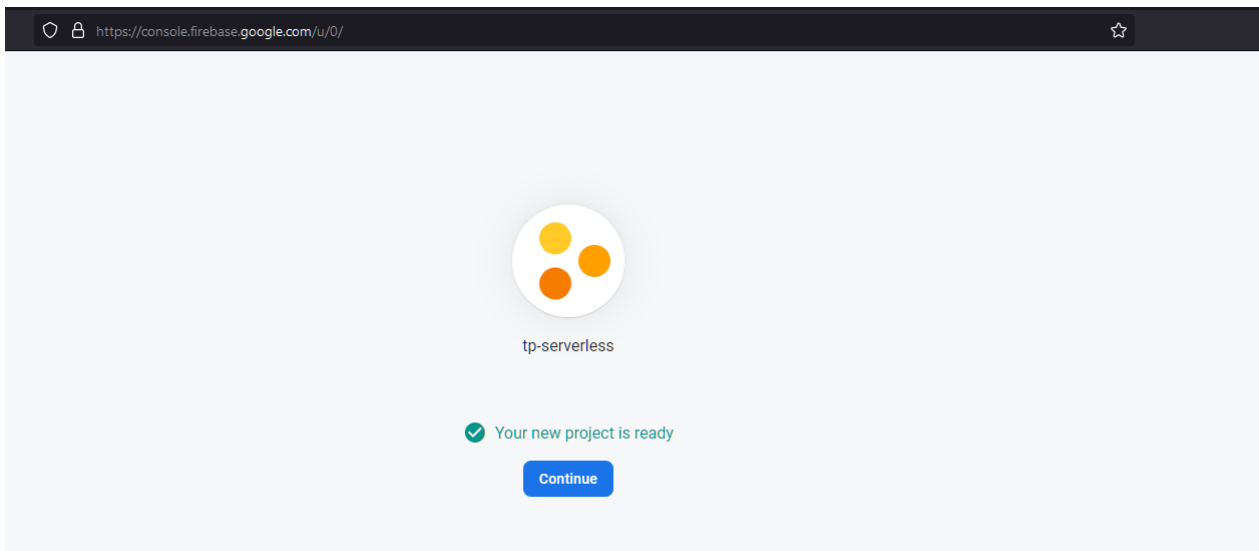
Réalisé par :

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INE2 ASEDs

Lien vers le code source : https://github.com/yibizzi/TPs_Cloud_Native

1- Création du projet Firebase



2- Ajout du projet à l'application web :

```
PS C:\Users\Admin\Desktop\cs\rapports\INE2\s4p2\SERVERLESS ET CLOUD NATIVE APPLICATIONS\TP1 PAAS\serverless-naruto-app> npm install firebase @angular/fire
npm WARN EBADENGINE Unsupported engine {
  package: 'inpt-cloud-mangas@0.0.0',
  required: { node: '12.13.0', npm: '6.12.0' },
  current: { node: 'v15.13.0', npm: '7.7.6' }
}
npm WARN EBADENGINE }

added 1542 packages, and audited 1543 packages in 3m

70 vulnerabilities (3 low, 53 moderate, 12 high, 2 critical)

To address issues that do not require attention, run:
  npm audit fix

To address all issues (including breaking changes), run:
  npm audit fix --force

Run 'npm audit' for details.
npm notice
```

```
environment.ts - serverless-naruto-app - Visual Studio Code

src > environments > TS environments > environment > firebase
1 // This file can be replaced during build by using the 'fileReplacements' array.
2 // 'ng build --prod' replaces 'environment.ts' with 'environment.prod.ts'.
3 // The list of file replacements can be found in 'angular.json'.
4
5 export const environment = {
6   production: false,
7   firebase: {
8     apiKey: "AIzaSyDYMjUHI6FCeKMLFNFrVbeWESS_eKBr10U",
9     authDomain: "tp-serverless-ca2ce.firebaseio.com",
10    projectId: "tp-serverless-ca2ce",
11    storageBucket: "tp-serverless-ca2ce.appspot.com",
12    messagingSenderId: "437839586335",
13    appId: "1:437839586335:web:43fc887161984c22f6a12a"
14  }
15 };
16
17 /*
18  * For easier debugging in development mode, you can import the following file
19  * to ignore zone related error stack frames such as 'zone.run', 'zoneDelegate.invokeTask'.
20  *
21  * This import should be commented out in production mode because it will have a negative impact
22  * on performance if an error is thrown.
23  */
24 // import 'zone.js/dist/zone-error'; // Included with Angular CLI.
25
```

```
app.module.ts - serverless-naruto-app - Visual Studio Code

src > app > TS app.module.ts > AppModule
1 import { environment } from '../environments/environment';
2 import { BrowserModule } from '@angular/platform-browser';
3 import { NgModule } from '@angular/core';
4
5 import { AppRoutingModule } from './app-routing.module';
6 import { AppComponent } from './app.component';
7 import { AngularFireModule } from '@angular/fire';
8
9 @NgModule({
10   declarations: [
11     AppComponent
12   ],
13   imports: [
14     BrowserModule,
15     AppRoutingModule,
16     AngularFireModule.initializeApp(environment.firebase),
17   ],
18   providers: [],
19   bootstrap: [AppComponent]
20 })
21 export class AppModule { }
22
```


3- Activation de Firebase Authentication :

tp-serverless ▾

Authentication

Users [Sign-in method](#) Templates Usage

Sign-in providers

Provider	Status
 Email/Password	Enabled

4- Ajout de firebase auth à l'app

```
<> index.html M TS environment.ts M TS app.module.ts M
src > app > TS app.module.ts > AppModule
1 import { BrowserModule } from '@angular/platform-browser';
2 import { NgModule } from '@angular/core';
3
4
5 import { AppRoutingModule } from './app-routing.module';
6 import { AppComponent } from './app.component';
7 import { AngularFireModule } from '@angular/fire';
8 import { AngularFireAuthModule } from '@angular/fire/auth';
9
10 import { AngularFireStorageModule } from '@angular/fire/storage';
11 import { AngularFireMessagingModule } from '@angular/fire/messaging';
12
13 @NgModule({
14   declarations: [
15     AppComponent
16   ],
17   imports: [
18     BrowserModule,
19     AppRoutingModule,
20     AngularFireModule.initializeApp(environment.firebase),
21     AngularFireAuthModule,
22     AngularFireMessagingModule,
23     AngularFireStorageModule
24   ],
25   providers: [],
26   bootstrap: [AppComponent]
```

5- Ajout du service d'auth

```
TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE
PS C:\Users\Admin\Desktop\cs\rapports\INE2\s4p2\SERVERLESS ET CLOUD NATIVE APPLICATIONS\TP1 PAAS\serverless-naruto-app> ng g s service/auth
Your global Angular CLI version (11.2.7) is greater than your local version (11.0.4). The local Angular CLI version is used.

To disable this warning use "ng config -g cli.warnings.versionMismatch false".
CREATE src/app/service/auth.service.spec.ts (347 bytes)
CREATE src/app/service/auth.service.ts (133 bytes)
PS C:\Users\Admin\Desktop\cs\rapports\INE2\s4p2\SERVERLESS ET CLOUD NATIVE APPLICATIONS\TP1 PAAS\serverless-naruto-app>
```

```
auth.service.ts - serverless-naruto-app - Visual Studio Code
<> index.html M TS environment.ts M TS app.module.ts M TS app.component.ts 2 TS auth.service.ts U X
src > app > service > TS auth.service.ts > AuthService > signup > catch() callback
3 import { AngularFireAuth } from '@angular/fire/auth';
4
5 @Injectable({
6   providedIn: 'root'
7 })
8 export class AuthService {
9
10   user: Observable<any>;
11
12
13   constructor(private firebaseAuth: AngularFireAuth) {
14
15     this.user = firebaseAuth.authState;
16
17   }
18
19   signup(email: string, password: string) {
20
21     this.firebaseAuth.createUserWithEmailAndPassword(email, password).then((value) => {
22
23       console.log("Account Created Successfully.");
24
25     }).catch((error) => {
26       console.error((error));
27     })
28   }
29 }
```


6- Création du composant d'authentification :

```
app.component.ts - serverless-naruto-app - Visual Studio Code
index.html M TS environment.ts M TS app.module.ts M TS app.component.ts X
src > app > TS app.component.ts > AppComponent
1 import { Component } from '@angular/core';
2 import { AuthService } from '../service/auth.service';
3
4 @Component({
5   selector: 'app-root',
6   templateUrl: './app.component.html',
7   styleUrls: ['./app.component.scss']
8 })
9 export class AppComponent {
10   title = 'inpt-cloud-mangas';
11
12   email: string = "";
13   password: string = "";
14
15   constructor(public authService: AuthService) {
16
17   }
18
19   signup() {
20     this.authService.signup(this.email, this.password);
21     this.email = this.password = "";
22   }
23
24 }
```

```
app.component.html - serverless-naruto-app - Visual Studio Code
index.html M TS environment.ts M TS app.module.ts M TS app.component.ts M app.component.html M X
src > app > app.component.html > table > tr
12 | | | /tr
13 </table>
14
15
16 <div>
17
18   <h1 *ngIf="authService.user | async">
19     Welcome User: {{(authService.user | async).email }}
20   </h1>
21
22   <div *ngIf="!authService.user | async">
23
24     <label for="email">Email: </label>
25     <input id="email" type="text" [(ngModel)]="email" />
26
27     <label for="password">Password: </label>
28     <input id="password" type="text" [(ngModel)]="password" />
29
30     <button (click)="login()" [disabled]="!email || !password"> Login</button>
31     <button (click)="signup()" [disabled]="!email || !password"> Signup</button>
32   </div>
33
34   <button (click)="logout()" *ngIf="authService.user | async">Logout</button>
35
36 </div>
```


Résultat :

Naruto SHIPPUDDEN

image	name	caracteristique
	Naruto UZUMAKI	Kyubi

Email: Password: [Login](#) [Signup](#)

Naruto SHIPPUDDEN

image	name	caracteristique
	Naruto UZUMAKI	Kyubi

Welcome User: **ibizzi.younes@inemail.ine.inpt.ma**

[Logout](#)

tp-serverless Go to doc

Authentication

[Users](#) [Sign-in method](#) [Templates](#) [Usage](#)

[Prototype and test end-to-end with the Local Emulator Suite, now with Firebase Authentication](#) [Get started](#)

[Add user](#) [Refresh](#) [More](#)

Identifier	Providers	Created	Signed In	User UID
ibizzi.younes@inemail.ine.i...		Jun 13, 2021	Jun 13, 2021	2JwPx0pktSPYIToeVYfrTqUccy1


Rows per page: 50 1 - 1 of 1

7- Déploiement sur Heroku :

```
PS C:\Users\Admin\Desktop\cs\rapports\INE2\s4p2\SERVERLESS ET CLOUD NATIVE APPLICATIONS\TP1 PAAS\serverless-naruto-app> heroku create tp1-serverless-aseds
» Warning: heroku update available from 7.38.2 to 7.54.0.
Creating • tp1-serverless-aseds... done
```

```
PS C:\Users\Admin\Desktop\cs\rapports\INE2\s4p2\SERVERLESS ET CLOUD NATIVE APPLICATIONS\TP1 PAAS\serverless-naruto-app> git checkout -b master
Switched to a new branch 'master'
PS C:\Users\Admin\Desktop\cs\rapports\INE2\s4p2\SERVERLESS ET CLOUD NATIVE APPLICATIONS\TP1 PAAS\serverless-naruto-app> git push heroku master
Total 0 (delta 0), reused 0 (delta 0)
remote: Compressing source files... done.
remote: Building source:
remote:
remote: ----> Building on the Heroku-20 stack
remote: ----> Determining which buildpack to use for this app
remote: ----> Node.js app detected
remote:
remote: ----> Creating runtime environment
remote:
```

Naruto SHIPPUDDEN

image	name	caracteristique
	Naruto UZUMAKI	Kyubi

Email: Password: [Login](#) [Signup](#)