Ionic4 example CRUD Angular con SQLite - R.Oliva 12.08.2020

Uso de Ionic / samples 12-08-20
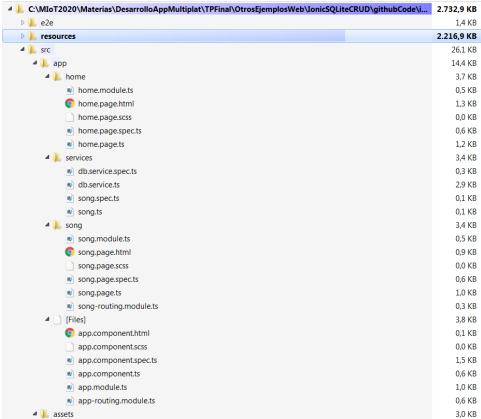
1) **# ionic-sqlite-app**
In this tutorial, we will learn how to create Ionic 4 Angular CRUD application and implement SQLite Native plugin to store the data in the SQLite Database. We will create the Create, Read, Update and Delete operation to manage the data in the database. Moreover, we will also learn to load the dummy data from the sql database file using HttpClient service.
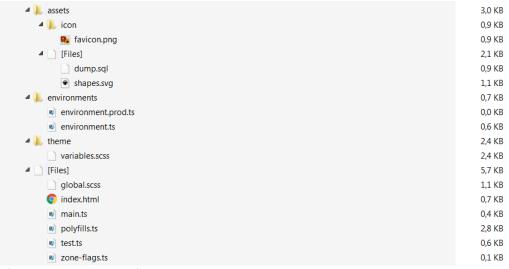[Ionic 4 SQLite Database CRUD App Example Tutorial]
https://www.positronx.io/ionic-sqlite-database-crud-app-example-tutorial/
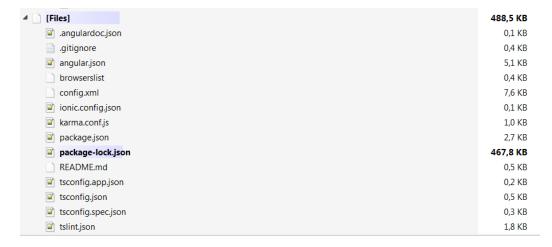
2) File Tree / hasta Assets:

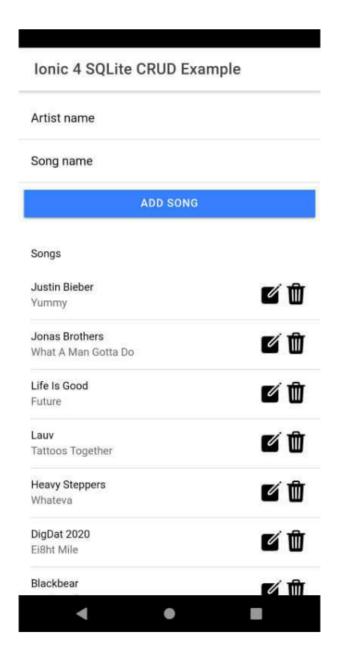|	
C:\MIoT2020\Materias\DesarrolloAppMultiplat\TPFinal\OtrosEjemplosWeb\IonicSQLiteCRUD\githubCode\i...	2.732,9 KB
▷ e2e	1,4 KB
▷ resources	2.216,9 KB
▲ src	26,1 KB
▲ app	14,4 KB
▲ home	3,7 KB
home.module.ts	0,5 KB
home.page.html	1,3 KB
home.page.scss	0,0 KB
home.page.spec.ts	0,6 KB
home.page.ts	1,2 KB
▲ services	3,4 KB
db.service.spec.ts	0,3 KB
db.service.ts	2,9 KB
song.spec.ts	0,1 KB
song.ts	0,1 KB
▲ song	3,4 KB
song.module.ts	0,5 KB
song.page.html	0,9 KB
song.page.scss	0,0 KB
song.page.spec.ts	0,6 KB
song.page.ts	1,0 KB
song-routing.module.ts	0,3 KB
▲ [Files]	3,8 KB
app.component.html	0,1 KB
app.component.scss	0,0 KB
app.component.spec.ts	1,5 KB
app.component.ts	0,6 KB
app.module.ts	1,0 KB
app-routing.module.ts	0,6 KB
▲ assets	3,0 KB

Android+IOS (→)

2) Detalle Assets y files dentro de /app:

▲ assets	3,0 KB
▲ icon	0,9 KB
favicon.png	0,9 KB
▲ [Files]	2,1 KB
dump.sql	0,9 KB
shapes.svg	1,1 KB
▲ environments	0,7 KB
environment.prod.ts	0,0 KB
environment.ts	0,6 KB
▲ theme	2,4 KB
variables.scss	2,4 KB
▲ [Files]	5,7 KB
global.scss	1,1 KB
index.html	0,7 KB
main.ts	0,4 KB
polyfills.ts	2,8 KB
test.ts	0,6 KB
zone-flags.ts	0,1 KB

3) Detalle directorio raíz de proyecto ionic:

[Files]	488,5 KB
.angulardoc.json	0,1 KB
.gitignore	0,4 KB
angular.json	5,1 KB
browserslist	0,4 KB
config.xml	7,6 KB
ionic.config.json	0,1 KB
karma.conf.js	1,0 KB
package.json	2,7 KB
package-lock.json	**467,8 KB**
README.md	0,5 KB
tsconfig.app.json	0,2 KB
tsconfig.json	0,5 KB
tsconfig.spec.json	0,3 KB
tslint.json	1,8 KB

4) Aspecto:

Ionic 4 SQLite CRUD Example

Artist name

Song name

ADD SONG

Songs

Justin Bieber
Yummy

Jonas Brothers
What A Man Gotta Do

Life Is Good
Future

Lauv
Tattoos Together

Heavy Steppers
Whateva

DigDat 2020
Ei8ht Mile

Blackbear

5) Primera parte de Config.xml (después siguen cosas específicas de Android e IOS)

```xml
1  <?xml version='1.0' encoding='utf-8'?>
2  <widget id="io.ionic.starter" version="0.0.1" xmlns="http://www.w3.org/ns/widgets" xmlns:cdv="http://cordova.apache.org/ns/1.0">
3      <name>MyApp</name>
4      <description>An awesome Ionic/Cordova app.</description>
5      <author email="hi@ionicframework.com" href="http://ionicframework.com/">Ionic Framework Team</author>
6      <content src="index.html" />
7      <access origin="*" />
8      <allow-intent href="http://*/*" />
9      <allow-intent href="https://*/*" />
10     <allow-intent href="tel:*" />
11     <allow-intent href="sms:*" />
12     <allow-intent href="mailto:*" />
13     <allow-intent href="geo:*" />
14     <preference name="ScrollEnabled" value="false" />
15     <preference name="android-minSdkVersion" value="19" />
16     <preference name="BackupWebStorage" value="none" />
17     <preference name="SplashMaintainAspectRatio" value="true" />
18     <preference name="FadeSplashScreenDuration" value="300" />
19     <preference name="SplashShowOnlyFirstTime" value="false" />
20     <preference name="SplashScreen" value="screen" />
21     <preference name="SplashScreenDelay" value="3000" />
22     <platform name="android">
```

6) Primera parte de packages.json

```json
1  {
2    "name": "ionic-sqlite-app",
3    "version": "0.0.1",
4    "author": "Ionic Framework",
5    "homepage": "https://ionicframework.com/",
6    "scripts": {
7      "ng": "ng",
8      "start": "ng serve",
9      "build": "ng build",
10     "test": "ng test",
11     "lint": "ng lint",
12     "e2e": "ng e2e"
13   },
14   "private": true,
15   "dependencies": {
16     "@angular/common": "~8.1.2",
17     "@angular/core": "~8.1.2",
18     "@angular/forms": "~8.1.2",
19     "@angular/platform-browser": "~8.1.2",
20     "@angular/platform-browser-dynamic": "~8.1.2",
21     "@angular/router": "~8.1.2",
22     "@ionic-native/core": "^5.23.0",
23     "@ionic-native/splash-screen": "^5.23.0",
24     "@ionic-native/sqlite": "^5.23.0",
25     "@ionic-native/sqlite-porter": "^5.23.0",
26     "@ionic-native/status-bar": "^5.23.0",
27     "@ionic/angular": "^5.0.5",
28     "cordova-android": "8.1.0",
29     "cordova-browser": "^6.0.0",
30     "cordova-sqlite-storage": "^4.0.0",
31     "core-js": "^2.5.4",
32     "rxjs": "~6.5.1",
33     "tslib": "^1.11.1",
34     "uk.co.workingedge.cordova.plugin.sqliteporter": "^1.1.1",
35     "zone.js": "~0.9.1"
36   },
```

7) ionic.config.json

```json
1  {
2      "name": "ionic-sqlite-app",
3      "integrations": {
4          "cordova": {}
5      },
6      "type": "angular"
7  }
8
```

8) Primera parte de angular.json

```json
1  {
2    "$schema": "./node_modules/@angular/cli/lib/config/schema.json",
3    "version": 1,
4    "defaultProject": "app",
5    "newProjectRoot": "projects",
6    "projects": {
7      "app": {
8        "root": "",
9        "sourceRoot": "src",
10       "projectType": "application",
11       "prefix": "app",
12       "schematics": {},
13       "architect": {
14         "build": {
15           "builder": "@angular-devkit/build-angular:browser",
16           "options": {
17             "outputPath": "www",
18             "index": "src/index.html",
19             "main": "src/main.ts",
20             "polyfills": "src/polyfills.ts",
21             "tsConfig": "tsconfig.app.json",
22             "assets": [
23               {
24                 "glob": "**/*",
25                 "input": "src/assets",
26                 "output": "assets"
27               },
28               {
```

9) index.html , donde en el body sólo se llama a <app-root>

```html
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="utf-8" />
    <title>Ionic App</title>

    <base href="/" />

    <meta name="viewport" content="viewport-fit=cover, width=device-width, initia
    <meta name="format-detection" content="telephone=no" />
    <meta name="msapplication-tap-highlight" content="no" />

    <link rel="icon" type="image/png" href="assets/icon/favicon.png" />

    <!-- add to homescreen for ios -->
    <meta name="apple-mobile-web-app-capable" content="yes" />
    <meta name="apple-mobile-web-app-status-bar-style" content="black" />
</head>

<body>
    <app-root></app-root>
</body>

</html>
```

10) main.ts es el controlador base → básicamente solo llama a AppModule dentro de /app

```typescript
import { enableProdMode } from '@angular/core';
import { platformBrowserDynamic } from '@angular/platform-browser-dynamic';

import { AppModule } from './app/app.module';
import { environment } from './environments/environment';

if (environment.production) {
    enableProdMode();
}

platformBrowserDynamic().bootstrapModule(AppModule)
    .catch(err => console.log(err));
```

11) Global.scss es el global stylesheet, para toda la aplicacion:

```scss
/*
 * App Global CSS
 * ----------------------------------------------------------------------------
 * Put style rules here that you want to apply globally. These styles are for
 * the entire app and not just one component. Additionally, this file can be
 * used as an entry point to import other CSS/Sass files to be included in the
 * output CSS.
 * For more information on global stylesheets, visit the documentation:
 * https://ionicframework.com/docs/layout/global-stylesheets
 */

/* Core CSS required for Ionic components to work properly */
@import "~@ionic/angular/css/core.css";

/* Basic CSS for apps built with Ionic */
@import "~@ionic/angular/css/normalize.css";
@import "~@ionic/angular/css/structure.css";
@import "~@ionic/angular/css/typography.css";
@import '~@ionic/angular/css/display.css';

/* Optional CSS utils that can be commented out */
@import "~@ionic/angular/css/padding.css";
@import "~@ionic/angular/css/float-elements.css";
@import "~@ionic/angular/css/text-alignment.css";
@import "~@ionic/angular/css/text-transformation.css";
@import "~@ionic/angular/css/flex-utils.css";
```

12) Los dos archivos de /environments se refieren a la versión de producción:

```
export const environment = {
  production: true
};
```

13) Dentro de /themes, está el variables.scss de Ionic:

```scss
// Ionic Variables and Theming. For more info, please see:
// http://ionicframework.com/docs/theming/

/** Ionic CSS Variables **/
:root {
  /** primary **/
  --ion-color-primary: #3880ff;
  --ion-color-primary-rgb: 56, 128, 255;
  --ion-color-primary-contrast: #ffffff;
  --ion-color-primary-contrast-rgb: 255, 255, 255;
  --ion-color-primary-shade: #3171e0;
  --ion-color-primary-tint: #4c8dff;

  /** secondary **/
  --ion-color-secondary: #0cd1e8;
  --ion-color-secondary-rgb: 12, 209, 232;
  --ion-color-secondary-contrast: #ffffff;
  --ion-color-secondary-contrast-rgb: 255, 255, 255;
```

14) Dentro de /assets, hay imágenes, y lo mas relevante es la base de datos SQLite con la inserción de 8 canciones:

```sql
CREATE TABLE IF NOT EXISTS songtable(
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    artist_name TEXT,
    song_name TEXT
);

INSERT or IGNORE INTO songtable(id, artist_name, song_name) VALUES (1, 'Justin Bieber', 'Yummy');
INSERT or IGNORE INTO songtable(id, artist_name, song_name) VALUES (2, 'Jonas Brothers', 'What A Man Gotta Do');
INSERT or IGNORE INTO songtable(id, artist_name, song_name) VALUES (3, 'Life Is Good', 'Future');
INSERT or IGNORE INTO songtable(id, artist_name, song_name) VALUES (4, 'Lauv', 'Tattoos Together');
INSERT or IGNORE INTO songtable(id, artist_name, song_name) VALUES (5, 'Heavy Steppers', 'Whateva');
INSERT or IGNORE INTO songtable(id, artist_name, song_name) VALUES (6, 'DigDat 2020', 'Ei8ht Mile');
INSERT or IGNORE INTO songtable(id, artist_name, song_name) VALUES (7, 'Blackbear', 'me & ur ghost');
INSERT or IGNORE INTO songtable(id, artist_name, song_name) VALUES (8, 'Hailee Steinfeld', 'Wrong Direction');
```

15) Dentro de /app están los archivos propios de la aplicación

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