### **Detector Application**

### How It Works

After the user navigates to Detector tab, they can tap/click on the camera button to open up the device's camera. After taking or selecting a photo, it's stored permanently into the device's filesystem. When the user reopens the app at a later time, the photo images are loaded from the filesystem and displayed again in the gallery.

#### Feature Overview

- App framework: Angular
- UI components: Ionic Framework
  - Camera button: Floating Action Button (FAB)
  - Photo Gallery display: Grid
  - Delete Photo dialog: Action Sheet
- Native runtime: Capacitor
  - Taking photos: Camera API
  - Writing photo to the filesystem: Filesystem API
  - Storing photo gallery metadata: Storage API

### Configuration

```
## Template
$ ionic start camera tabs --type=angular --capacitor
$ cd camera

## Installing Capacitor and PWA frameworks
$ npm install @capacitor/camera @capacitor/storage @capacitor/filesystem
$ npm install @ionic/pwa-elements

## Generating photo service template
$ ionic generate service services/photo

##
```

### Running in emulator

\$ ionic cap run android -l --external

#### Application overview

After opening the application, click the 'Camera' bottun. Then, one can take the photo and can analyze it.



Figure 1: Detector Application  $\overset{\circ}{2}$ 



Figure 2: Detector Mode  $\overset{\circ}{3}$ 



Figure 3: Taking photo  $\frac{1}{4}$ 



Figure 4: Before Photo Analyzer  ${}^5_{\phantom{0}}$ 

# Reference

 $\bullet \ \, \rm https://ionic framework.com/docs/angular/your-first-app$ 

# History

 $\bullet~$  Ver. 0.1 - 2022. Apr.08, Prototype for a testbed.

### License