# APPMOB - Image Upload

Olivier Liechti & Simon Oulevay
COMEM Applications Mobiles

heig-vd
Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

# Using the Cordova Camera API

heig-vd
Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

http://learn.ionicframework.com/formulas/cordova-camera/

# Add the Plugin

heig-vd
Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

## Add the plugin (from your project directory):

```
$> cordova plugin add org.apache.cordova.camera
```

## Create a service to wrap the native functionality:

```javascript
.factory("CameraService", function($q) {
  return {
    getPicture: function(options) {
      var deferred = $q.defer();

      navigator.camera.getPicture(function(result) {
        // do any magic you need
        deferred.resolve(result);
      }, function(err) {
        deferred.reject(err);
      }, options);

      return deferred.promise;
    }
  }
});
```

# Take Pictures

```
.controller("AnyController", function(CameraService) {

  CameraService.getPicture({
    quality: 75,
    targetWidth: 400,
    targetHeight: 300,
    destinationType: Camera.DestinationType.DATA_URL
  }).then(function(imageData) {
    // do something with imageData
  });

});
```

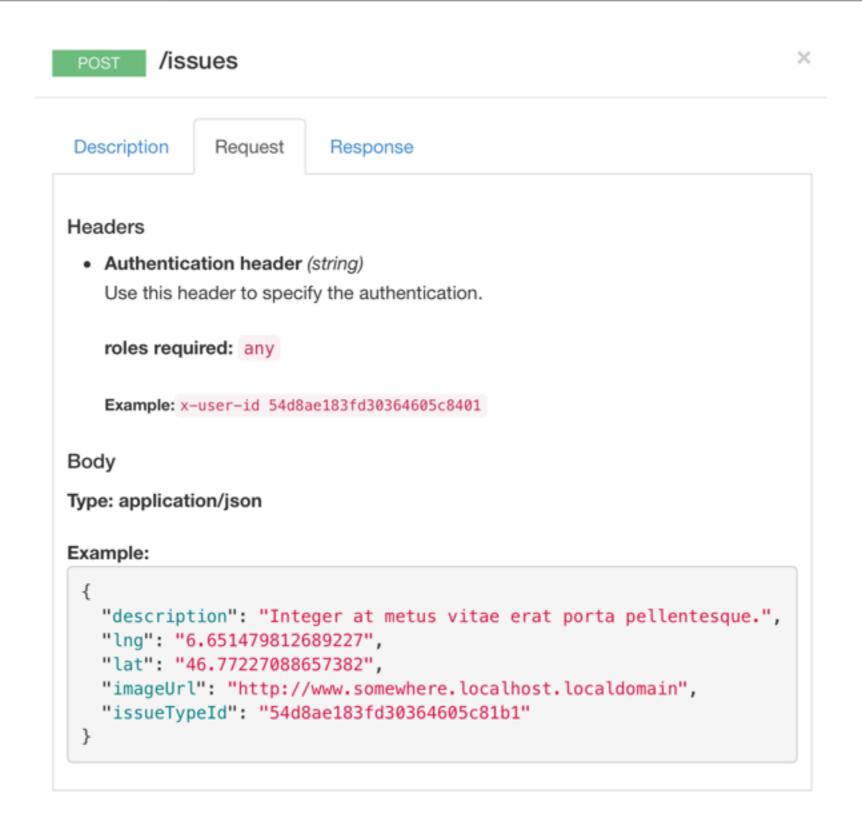heig-vd
Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

# Remember!

Taking pictures will only work on an actual phone or tablet. It will **not** work in your browser or in an emulator.

# Adding Images to Issues

heig-vd
Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

POST /issues ✕

Description    Request    Response

## Headers

- **Authentication header** *(string)*
  Use this header to specify the authentication.

  **roles required:** any

  Example: x-user-id 54d8ae183fd30364605c8401

## Body

**Type: application/json**

**Example:**

```
{
  "description": "Integer at metus vitae erat porta pellentesque.",
  "lng": "6.651479812689227",
  "lat": "46.77227088657382",
  "imageUrl": "http://www.somewhere.localhost.localdomain",
  "issueTypeId": "54d8ae183fd30364605c81b1"
}
```

# Image Upload

heig-vd
Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

The API only accepts an image URL.

So you have to:
- take the picture
- upload it somewhere and get an URL
- create the issue with the image URL

Flickr?

Image Shack?

Amazon S3?

# Quick Image Service

## GitHub Repository

https://github.com/SoftEng-HEIGVD/qimg/

## API Documentation

http://softeng-heigvd.github.io/qimg/

## API Endpoint

https://warm-bastion-3094.herokuapp.com/api

# qimg Limitations

heig-vd
Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

Images cannot be larger than 2MB.

You cannot store more than 50 images (per user).

# qimg API Credentials

heig-vd
Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

Ask for an authentication token by e-mail:

simon.oulevay@heig-vd.ch

# qimg Configuration

## You will need to add some configuration:

In:
- config/development.json
- config/production.json

```
{
  // ...
  "qimgUrl": "…",
  "qimgToken": "…",
}
```

In constants.js (root directory of the app):

```
angular.module("citizen-engagement.constants", [])
  // ...
  .constant("qimgUrl", "@qimgUrl@")
  .constant("qimgToken", "@qimgToken@")
;
```

In gulpfile.js:

```
// ...
.pipe(replace(/@qimgUrl@/, config.qimgUrl))
.pipe(replace(/@qimgToken@/, config.qimgToken))
```

Don't forget to re-run `gulp config-development` or `gulp config-production` to apply the new configuration.

## In development, you will need a proxy.

In `config/development.json`, the URL should be:

```
{
  // ...
  "qimgUrl": "http://localhost:8100/qimg-proxy",
}
```

Add a proxy to `ionic.project`:

```
{
  "name": "...",
  "proxies": [
    { ... },
    {
      "path": "/qimg-proxy",
      "proxyUrl": "https://warm-bastion-3094.herokuapp.com/api"
    }
  ]
}
```

Restart `ionic serve` if it's running.

# Sample Code

```javascript
.controller("AnyController", function(CameraService, $http, qimgUrl, qimgToken) {

  // take the picture
  CameraService.getPicture({
    quality: 75,
    targetWidth: 400,
    targetHeight: 300,
    // return base64-encoded data instead of a file
    destinationType: Camera.DestinationType.DATA_URL
  }).then(function(imageData) {

    // upload the image
    $http({
      method: "POST",
      url: qimgUrl + "/images",
      headers: {
        Authorization: "Bearer " + qimgToken
      },
      data: {
        data: imageData
      }
    }).success(function(data) {

      var imageUrl = data.url;
      // do something with imageUrl
    });
  });
})
```