Sidewalk Repair Project

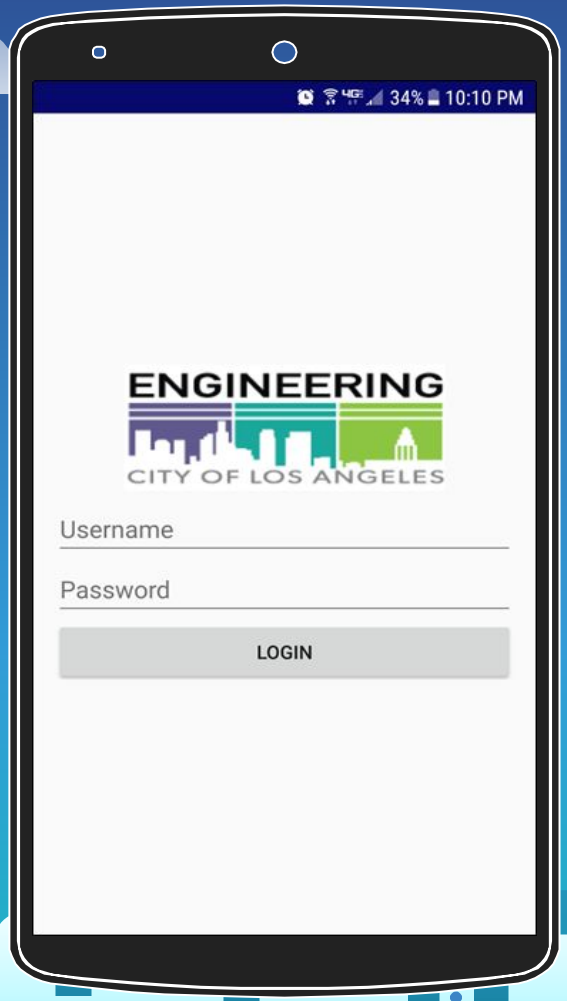
(LA City Bureau of Engineering)

By: Brian Kan, Kaila Mayho, Phillip Han, Sharon Lake, Araceli Lopez, Patricia Luz, Daniel Bollinger

Introduction

- **BEFORE_0014AX_20170801...jpg**
- **AFTER_0014AX_20171101....jpg**

Los Angeles Photo Archive App

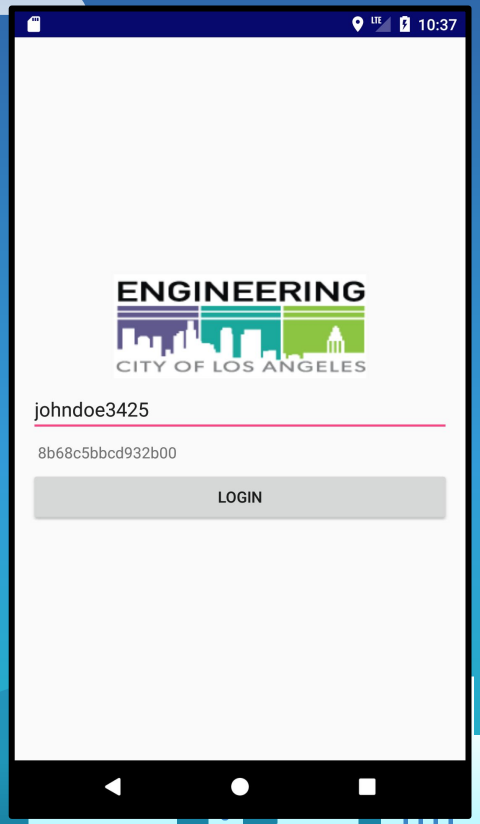


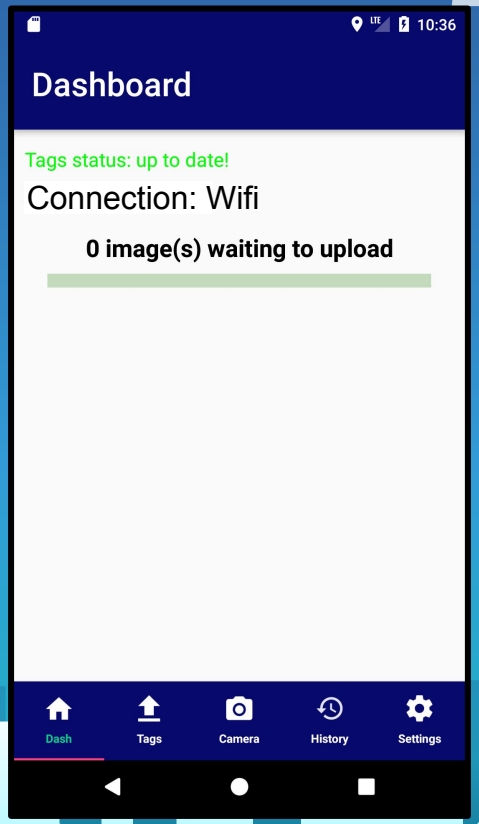
- **Document Sidewalk Photos**
  - Before/After Repairs
  - Repair Task ID
  - Permit Number
  - Latitude/Longitude
- **Azure Database**

Azure

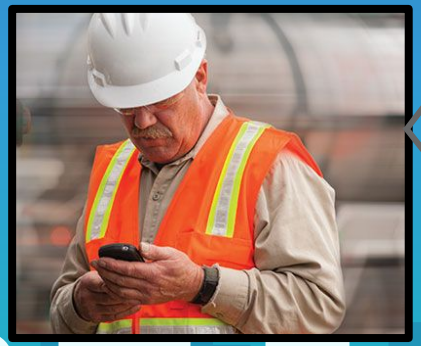
	Category	Field	Value
	Sidewalk Repair	Permit No. Work Order No. **Work Status** Coordinates/Lat Coordinates/Lon	#5678 #AB123 Initial Assessment 34.068438 -118.362771
	Sidewalk Repair	Ref No. Permit No. Work Status Coordinates/Lat Coordinates/Lon	#5645 #U5698 **Completed** 34.064404 -118.173100

Login Screen and Dashboard



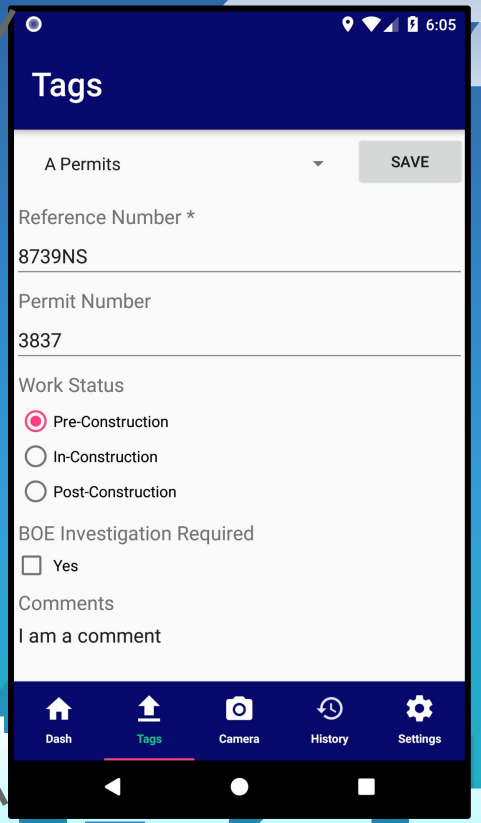


Categories and Uploading
Auto-Populating Fields from Database



BoE Database

BOE Investigation Required	Date	LAPA Link
No	10/21/2018	Link
No	10/21/2018	Link
No	10/21/2018	Link
No	10/21/2018	Link
No	10/21/2018	Link
No	10/21/2018	Link
No	10/25/2018	Link
No	10/26/2018	Link
No	10/27/2018	Link
No	10/21/2018	Link
No	10/21/2018	Link



Camera

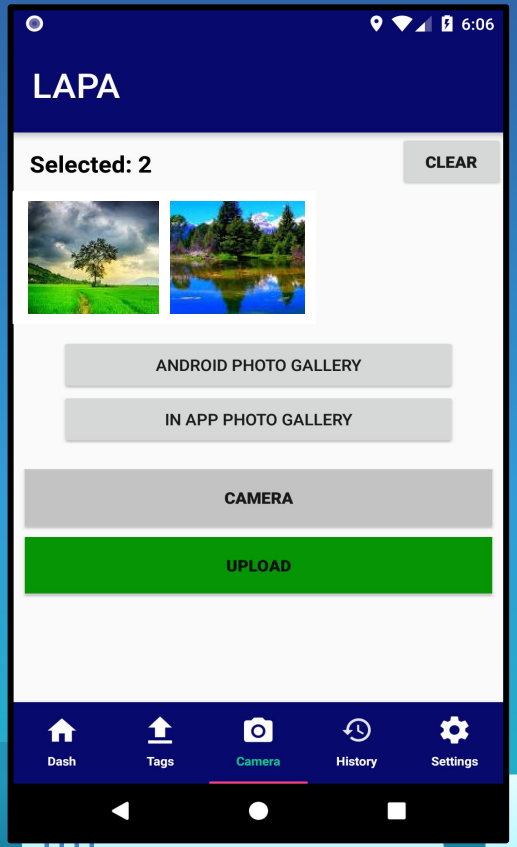
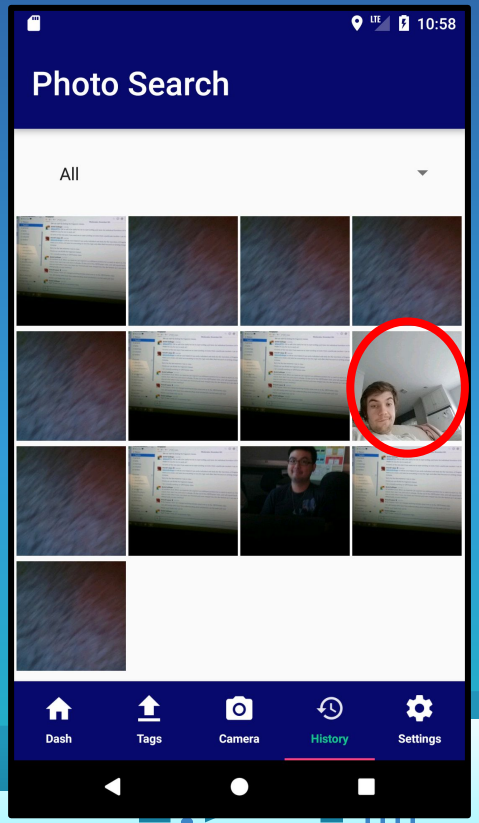
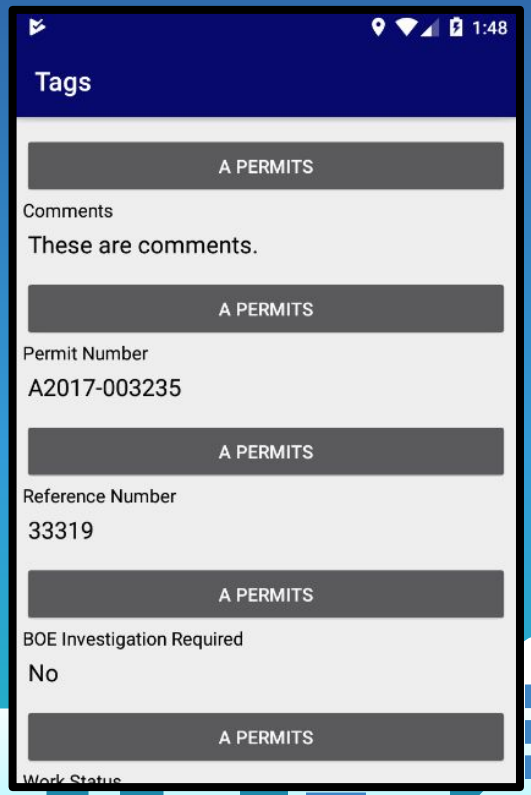
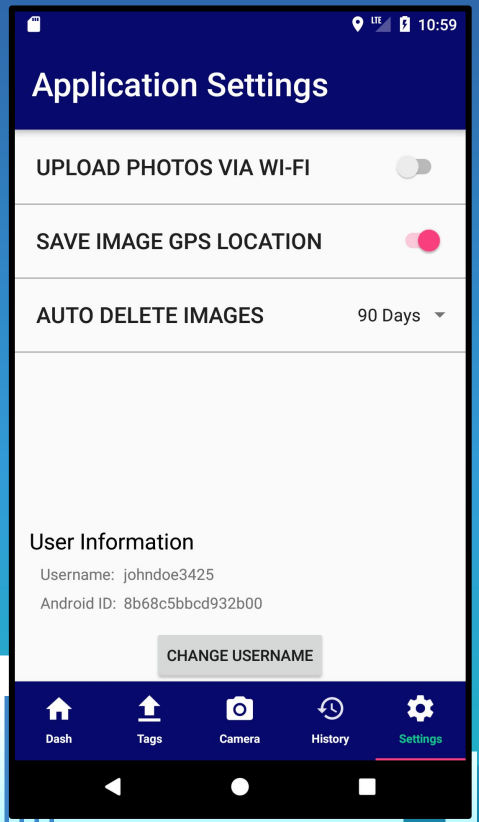

6:06
LAPA
Selected: 2
CLEAR
ANDROID PHOTO GALLERY
IN APP PHOTO GALLERY
CAMERA
UPLOAD
Dash
Tags
Camera
History
Settings

Image History & Tags Viewer



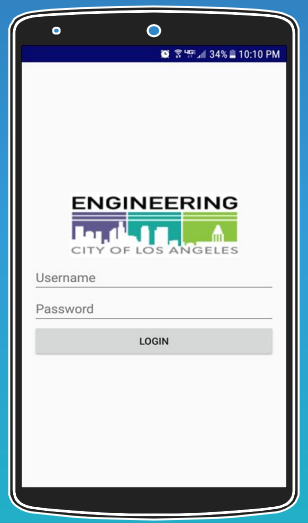


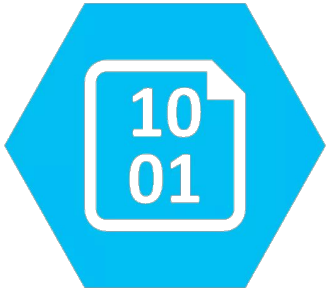
Settings Tab



How it Works : Image Storage

Azure





Blob Storage

SQL DB

How it Works : Image Retrieval

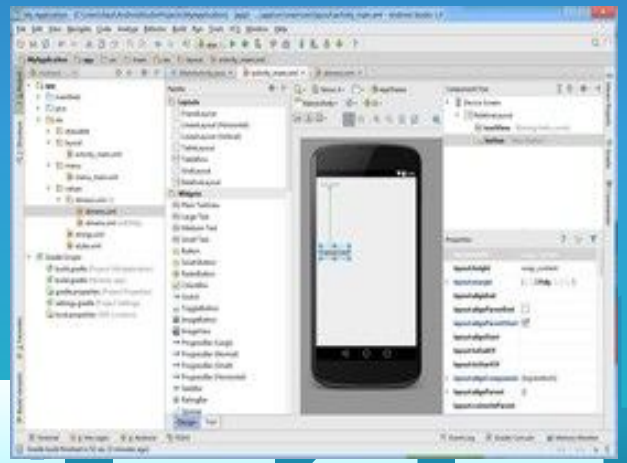
Id	ImageID	CategoryID	FieldID	Value	CreatedAt
12345asd	asd_image2	Scenery	ImageOf	A Lake	2018-03-06

Image2
Category: A Permits
Field: ImageOf
Value: A Lake.

Field: Comments
Value: This is a picture of a beautiful scenery.

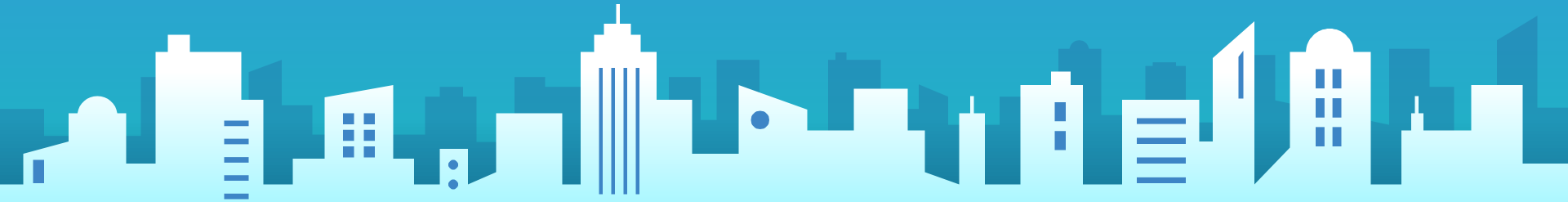
Android Studio

1. Android Java
2. Provided a suite of tools to work on layout
3. Easy to manage tablet layout
4. Check Device Storage
5. Provides Emulation for Testing



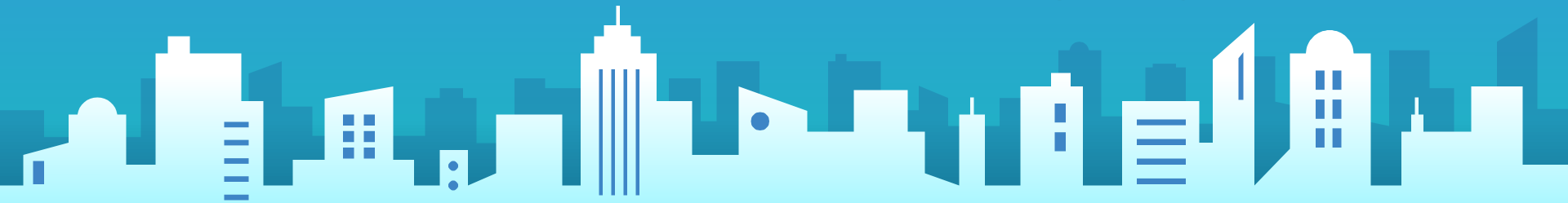
Visual Studio 2017

1. C# Web Service
2. Used to design and host the Azure Backend Web Service
3. Uses an MVC approach
4. Instant Web Publishing



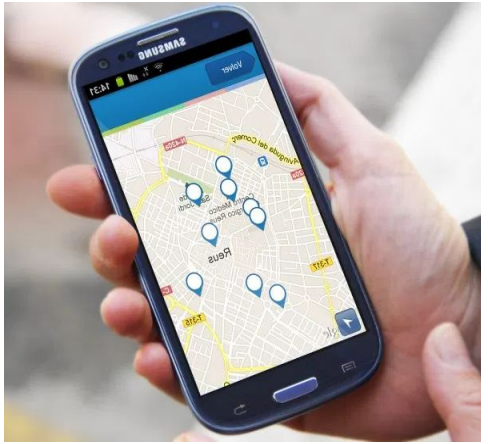
Lessons Learned

1. Learning New IDEs and Cloud Services
2. Establishing naming convention
3. Working as a team



Future Potential Improvements

1. Search by Tags Filter
2. Geolocation for Photos
3. Offline Caching



Thank You!

Special Thanks to the
LA City Bureau of Engineering!