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**
<table>
<thead>
<tr>
<th>Category</th>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewalk Repair</td>
<td>Permit No.</td>
<td>#5678</td>
</tr>
<tr>
<td></td>
<td>Work Order No.</td>
<td>#AB123</td>
</tr>
<tr>
<td></td>
<td>Work Status</td>
<td>Initial Assessment</td>
</tr>
<tr>
<td></td>
<td>Coordinates/Lat</td>
<td>34.068438</td>
</tr>
<tr>
<td></td>
<td>Coordinates/Lon</td>
<td>-118.362771</td>
</tr>
<tr>
<td>Sidewalk Repair</td>
<td>Ref No.</td>
<td>#5645</td>
</tr>
<tr>
<td></td>
<td>Permit No.</td>
<td>#U5698</td>
</tr>
<tr>
<td></td>
<td>Work Status</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>Coordinates/Lat</td>
<td>34.064404</td>
</tr>
<tr>
<td></td>
<td>Coordinates/Lon</td>
<td>-118.173100</td>
</tr>
</tbody>
</table>
Login Screen and Dashboard

Dashboard

Tags status: up to date!

Connection: Wifi

0 image(s) waiting to upload
Categories and Uploading
Auto-Populating Fields from Database

BoE Database

<table>
<thead>
<tr>
<th>BOE Investigation Required</th>
<th>Date</th>
<th>LAPA Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
<tr>
<td>No</td>
<td>10/21/2018</td>
<td>Link</td>
</tr>
</tbody>
</table>
Image History & Tags Viewer

- **Photo Search**
  - All

- **Tags**
  - Comments:
    - These are comments.
  - Permit Number:
    - A2017-003235
  - Reference Number:
    - 33319
  - BOC Investigation Required:
    - No
Settings Tab

Application Settings

- Upload Photos via Wi-Fi
- Save Image GPS Location
- Auto Delete Images: 90 Days

User Information
Username: john doe 3425
Android ID: 8b68c5bbca932b00

Change Username
How it Works: Image Storage

Blob Storage

SQL DB
How it Works : Image Retrieval

<table>
<thead>
<tr>
<th>Id</th>
<th>ImageID</th>
<th>CategoryID</th>
<th>FieldID</th>
<th>Value</th>
<th>CreatedAt</th>
</tr>
</thead>
<tbody>
<tr>
<td>12345asd</td>
<td>asd_image2</td>
<td>Scenery</td>
<td>ImageOf</td>
<td>A Lake</td>
<td>2018-03-06</td>
</tr>
</tbody>
</table>

**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
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!