

MICHIGAN STATE

U N I V E R S I T Y

Alpha Presentation

Gate Hazard Geo-Mapping

The Capstone Experience

Team United Airlines Airport Operations

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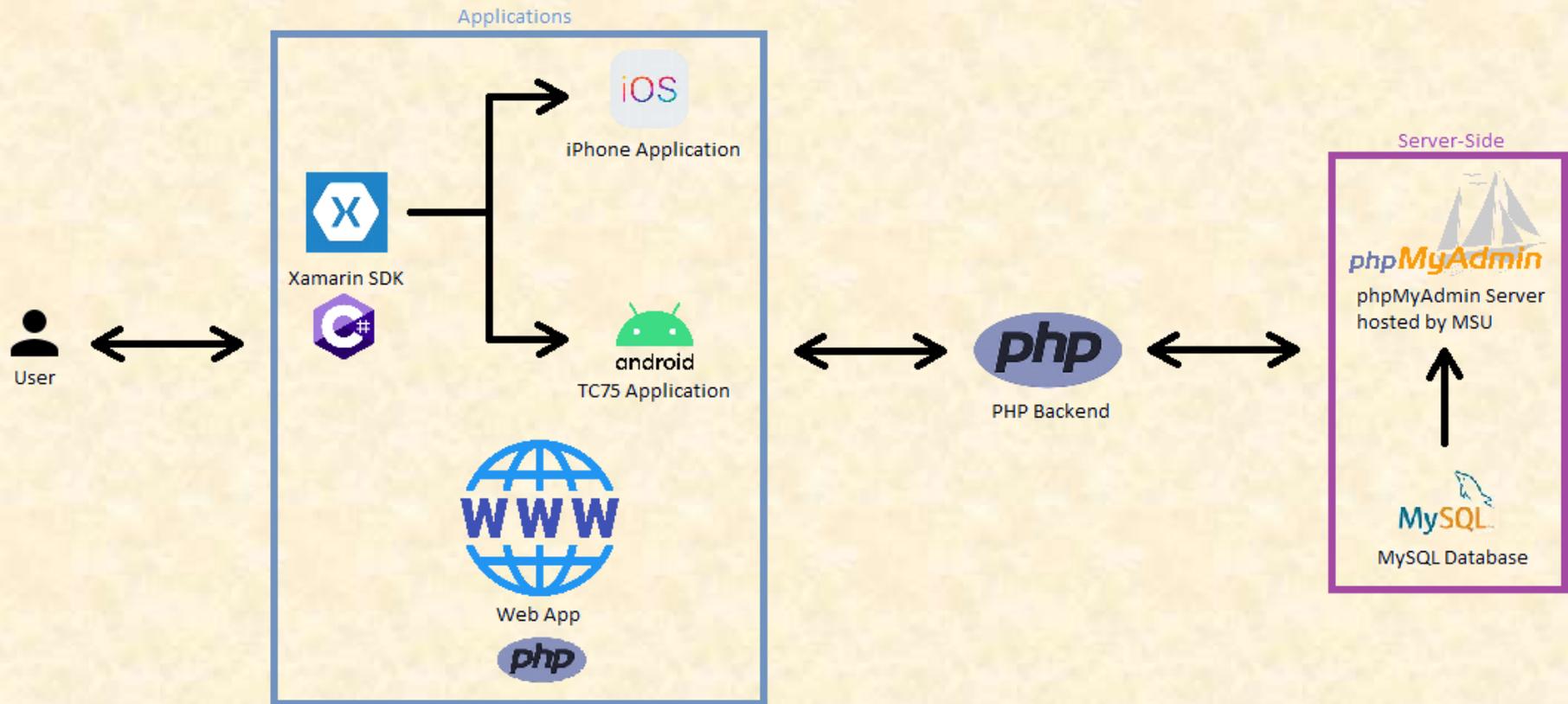
*From Students...
...to Professionals*

Project Overview

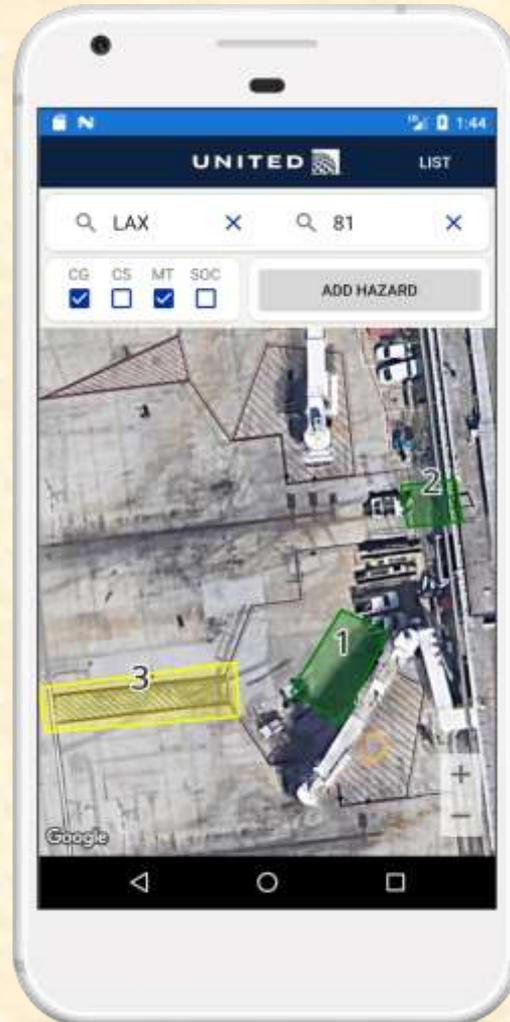
- United Airlines is a leading American airline headquartered in Chicago, Illinois.
- United Airlines Safety & Compliance staff record data on hazards faced at each airport gate.
- Our software unifies the hazard-data recording process, visualization, and allows geo-mapping of the entries.
- This is accomplished through an Android and iOS mobile app, as well as a website.



System Architecture



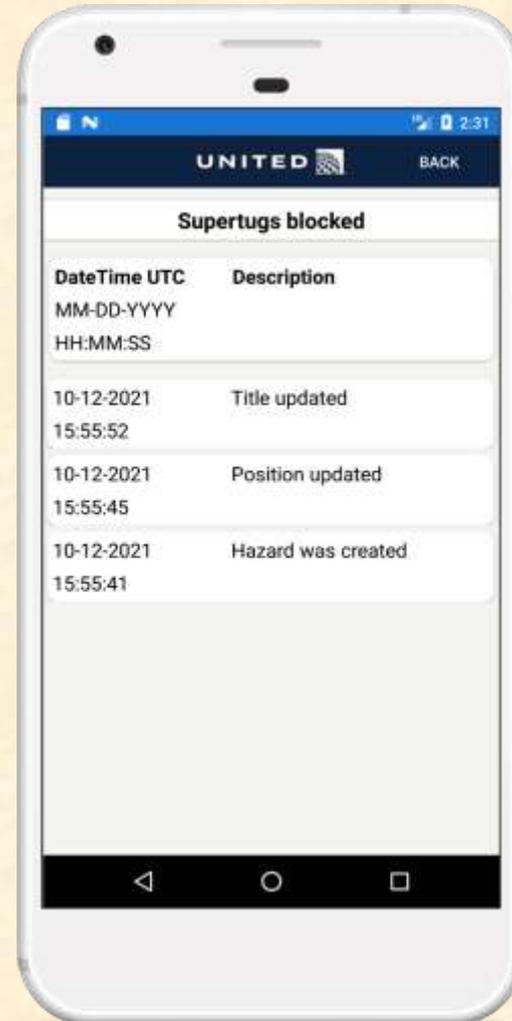
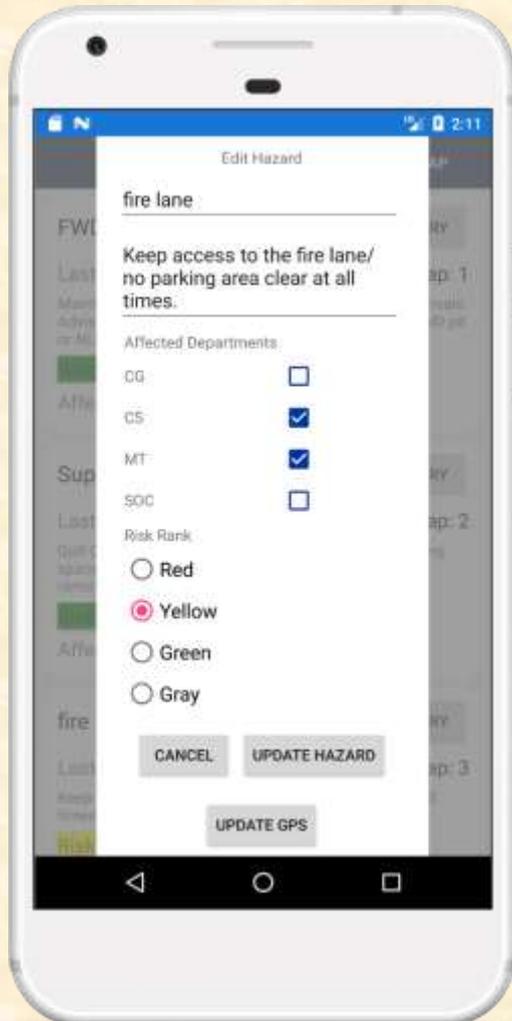
Main Map View



Hazard List View



Edit & History Pages



Website – Add Hazard Page

Download Excel Template

Upload Excel Sheet:

Choose File No file chosen Upload Excel Sheet

Select Airport:
LAX

Select Gate:
30

Hazard Title
Water Pooling

Describe Hazard:
Pooling of water in this location after rain events or from PC air condensate runoff. Ensure HPU cable head is not touching the ground or in the water. Could lead to APC flash.

Affected Departments:

- CS
- CG
- MT
- SOC

Select Risk Rank:
Value

Submit Hazard



What's left to do?

- Custom pins on iOS
- CSV upload error handling
- CSV upload change log implementation
- Printing tables on website
- Login on mobile and website
- Mitigate against any SQL injections



Questions?

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