

**MICHIGAN STATE**  

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**UNIVERSITY**

# Alpha Presentation

## Audit Management System

### The Capstone Experience

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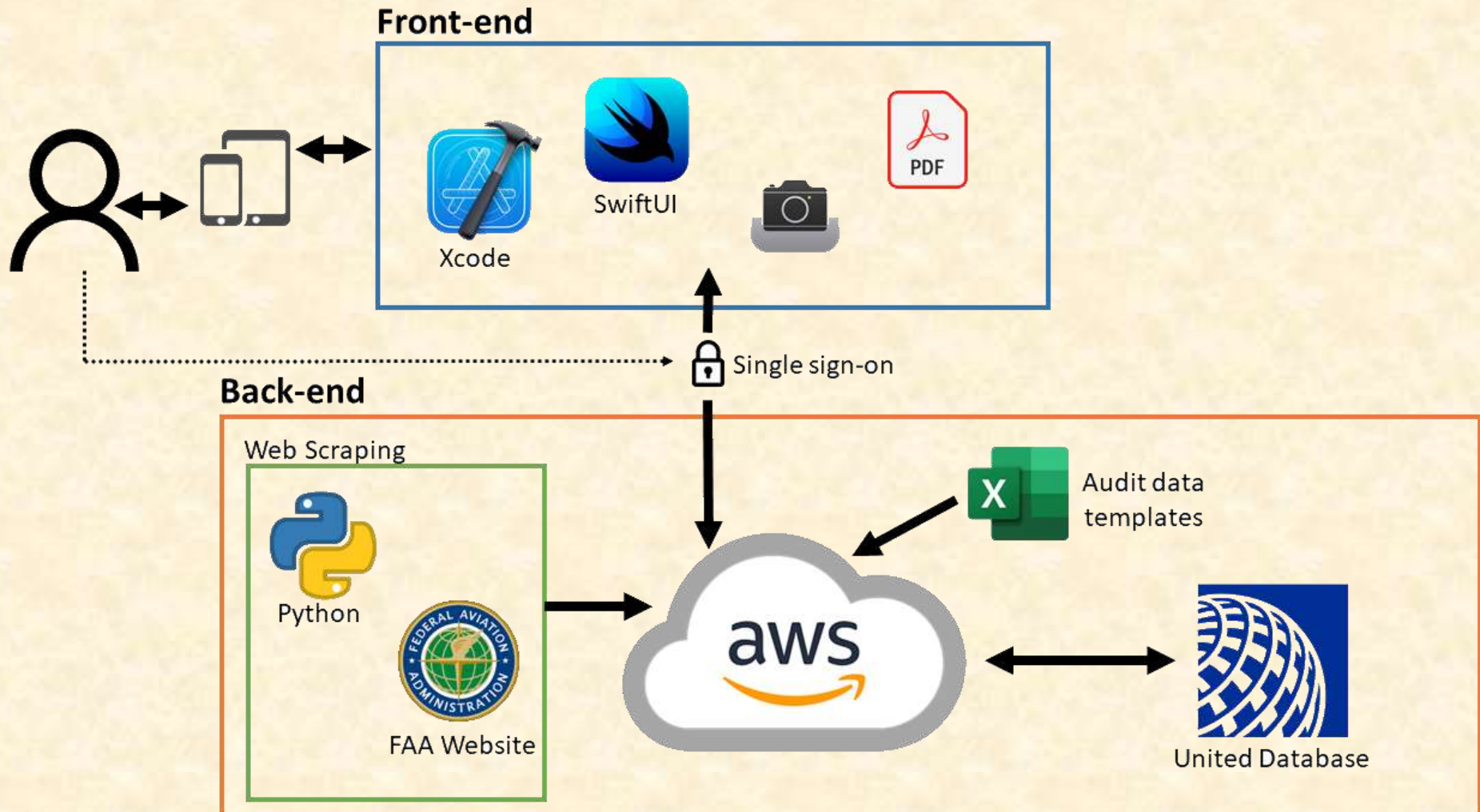
*From Students...  
...to Professionals*

# Project Overview

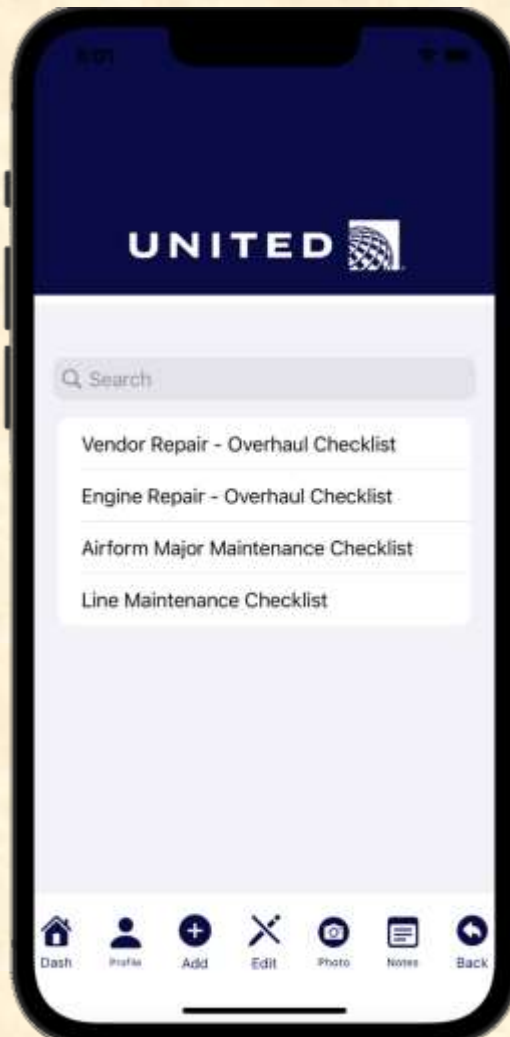
- Modernize the audit process through an iOS application
- Allow managers to
  - Assign audits to their auditors
  - Choose specific checklists to be completed
- Allow auditors to
  - Complete their assigned audits
  - Upload audit-related images
  - Generate audit documents based on the audit data



# System Architecture



# Edit Audit



# Audit Information

8:10 PM Thu Feb 17 100%

[Back](#)

## Audit Information

AUDIT DETAILS

Date Feb 17, 2022

Gilbert Benson

Michigan

Audit - N783

837921A

North Air

29371-82

Left airplane wing is not lifting correctly

Audit Status Open >

Audit Info  Checklist  In-Process  Table Data



# Technical Data

The screenshot shows a mobile application interface for 'Technical Data'. At the top, the status bar displays '8:50 PM Thu Feb 17', signal strength, and '100%' battery. A blue '< Back' button is in the top left. The title 'Technical Data' is centered. Below are five input fields: 'PART NUMBER/AIRCRAFT/ENG EFFECTIVELY NUM.' with value '7835-29', 'MANUFACTURER' with value 'Doeing', 'ATA/DOCUMENT ID:' with value '87', 'REV. LEVEL' with value '2', and 'REV. DATE' with value '10-19-2020'. At the bottom is a navigation bar with icons and labels: 'Technical Data' (selected), 'Rom', 'Calibration', 'Training', 'Traceability', 'Shelf Life', 'Audit Info', 'Checklist', 'In-Process', and 'Table Data' (selected). A small icon with a speech bubble is in the bottom right corner.



# Checklist

7:28 PM Tue Feb 22 100%

< Back

## Engine Checklist 11

Save

### Section 1: Policy / Certifications

1: Obtain and review a copy of the current FAA Air Agency, or Transport Canada AMD certificate, and Operations Specifications (if applicable). Are they accurate? [49 CFR 180.205(c)] [145.1] [2A]

Yes  No  N/A

2: If the repair station has "Limited Ratings," does the vendor have a capabilities listing that satisfies the standard (Housing, Facility, Tool & Test, Material, Equipment, Tech Data, Processes, & trained Personnel)? Obtain [145.61] [145.215] [2C]

Yes  No  N/A

3: Does the vendor only perform work authorized on its Operations Specifications? [2A]

Yes  No  N/A

4: Does the vendor have an FAA approved and active anti-drug and alcohol misuse prevention program (A449 and/or Registration)? [2D, E] 14CFR120

Yes  No  N/A

5: Does the vendor have a process to ensure that their U.S. based sub-contracted maintenance / preventative maintenance providers, at all tiers (certificated and non-certificated), are actively participating in a U.S. DOT active anti-drug and alcohol misuse prevention program (A449 and / or registration). [2D] 14CFR120

Yes  No  N/A

### Section 2: Quality Program

1: Does the vendor have an FAA / NAA accepted Repair Station Manual (or equivalent) and does it meet the requirements of the 1-A Standard? [3D] [145.207]

Yes  No  N/A

2: Does the vendor have an FAA / NAA accepted Quality Control Manual (or equivalent) and does it meet the requirements of the 1-A Standard? [3C] [145.211 (a),(c)]

Yes  No  N/A

3: Does the Quality Control Manual include references, where applicable, to manufacturer's inspection standards? [3C] [145.211 (2)]

Yes  No  N/A

4: Does the Quality Control Manual include samples of and instructions for completing maintenance and inspection forms, or reference a separate forms manual? [3C] [145.211 (3)]

● Section 1 - 5 ● Section 6 - 10 ● Section 11 - 15 ● Section 16 - 20 ● Section 21 - 25 ● Section 26 - 30

● A449 info ● **Checklist** ● In-Process ● Table Data





# What's left to do?

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- Continue integrating front end with back end
- Create admin view for admin capabilities
- PDF generation
- Integrate single sign-on with our user pool





# Questions?

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