

MICHIGAN STATE

UNIVERSITY

Beta Presentation

Audit Management System

The Capstone Experience

Team United Airlines Quality Assurance

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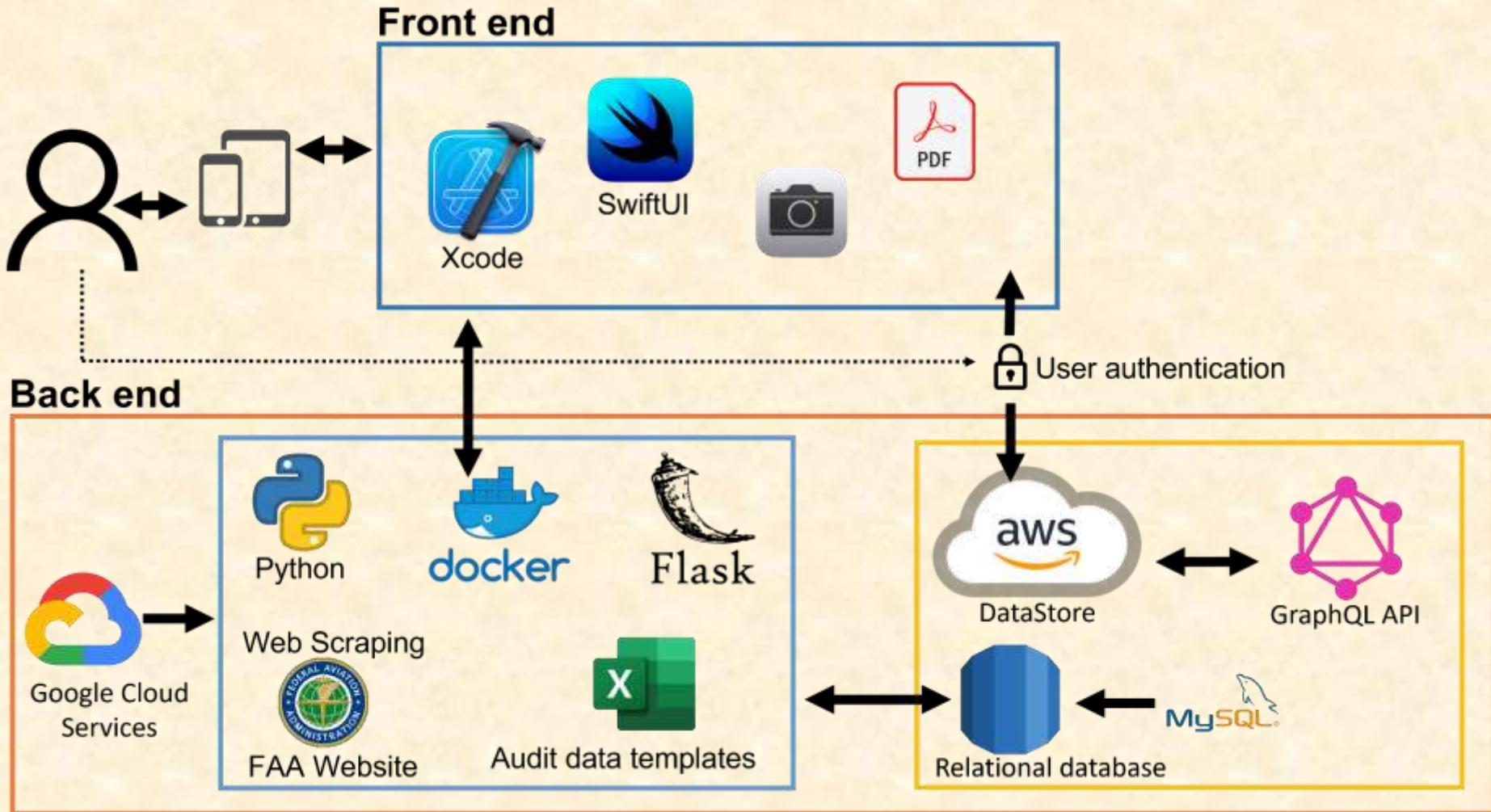
*From Students...
...to Professionals*

Project Overview

- Modernize the audit process through an iOS application
- Allow auditors to
 - Choose a checklist for the audit
 - Complete the audit
 - Capture and upload audit-related images
 - Generate audit documents based on the audit data
 - Take notes



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' and '100%' battery. A 'Back' button is in the top left. The title 'Technical Data' is centered. Below are several 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 '4', and 'REV. DATE' with value '10-19-2020'. At the bottom is a navigation bar with icons for 'Technical Data' (selected), 'Item', 'Calibration', 'Training', 'Traceability', 'Shelf Life', 'Audit Info', 'Checklist', 'In-Process', and 'Table Data' (selected). A floating action button is in the bottom right corner.



Checklist

4:00 PM Sun Apr 3 100%

< Back

Line Maintenance - Checklist 005 Rev 59 Save

Section 1 : Audit Preparation

1 : (HF1) Lack of Communication _____ (HF2) Complacency _____ (HF3) Lack of Knowledge _____ (HF4) Distractions _____ (HF5) Lack of Teamwork _____ (HF6) Fatigue _____ (HF7) Lack of Resources _____ (HF8) Pressure _____ (HF9) Lack of Assertiveness _____ (HF10) Stress _____ (HF11) Lack of Awareness _____ (HF12) Norms _____ [Record the observed contributing Human Factors at time of finding. (Up to 4 can be recorded)]

Yes No N/A

Comment:

2 : Review the fleet types and level of maintenance requested for approval or currently authorized at this station. Determine support functions that are available such as oxygen servicing, sheet metal, composites, aircraft wash, IFE, fuel tank entry, towbarless towing.

Yes No N/A

All support functions
Comment: are maintained and well functioning

3 : Review the support functions that are available such as oxygen servicing, sheet metal, composites, aircraft wash, IFE, fuel tank entry and repair, towbarless towing, etc. scQAEC and MTISE

Yes No N/A

Comment:

4 : Determine if any additional checklists are required for this station: 058-Line MRO / 019-Stores / 066-GSE / . GMM 04-15-15. (If additional audits are required and they are not assigned, contact either the Manager or Scheduler for assignment.)

Audit Add Checklist In Progress Tasks Done

What's left to do?

- Stretch Goals
 - Manager role
 - Single sign-on
 - Integration with United's database
- Other Tasks
 - UI tweaks
 - PDF formatting



Questions?

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