

MICHIGAN STATE
UNIVERSITY

Beta Presentation
Safety Reporting and QC Audit
Center Mobile App
The Capstone Experience

Team United Airlines Airport Operations

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From Students...
...to Professionals

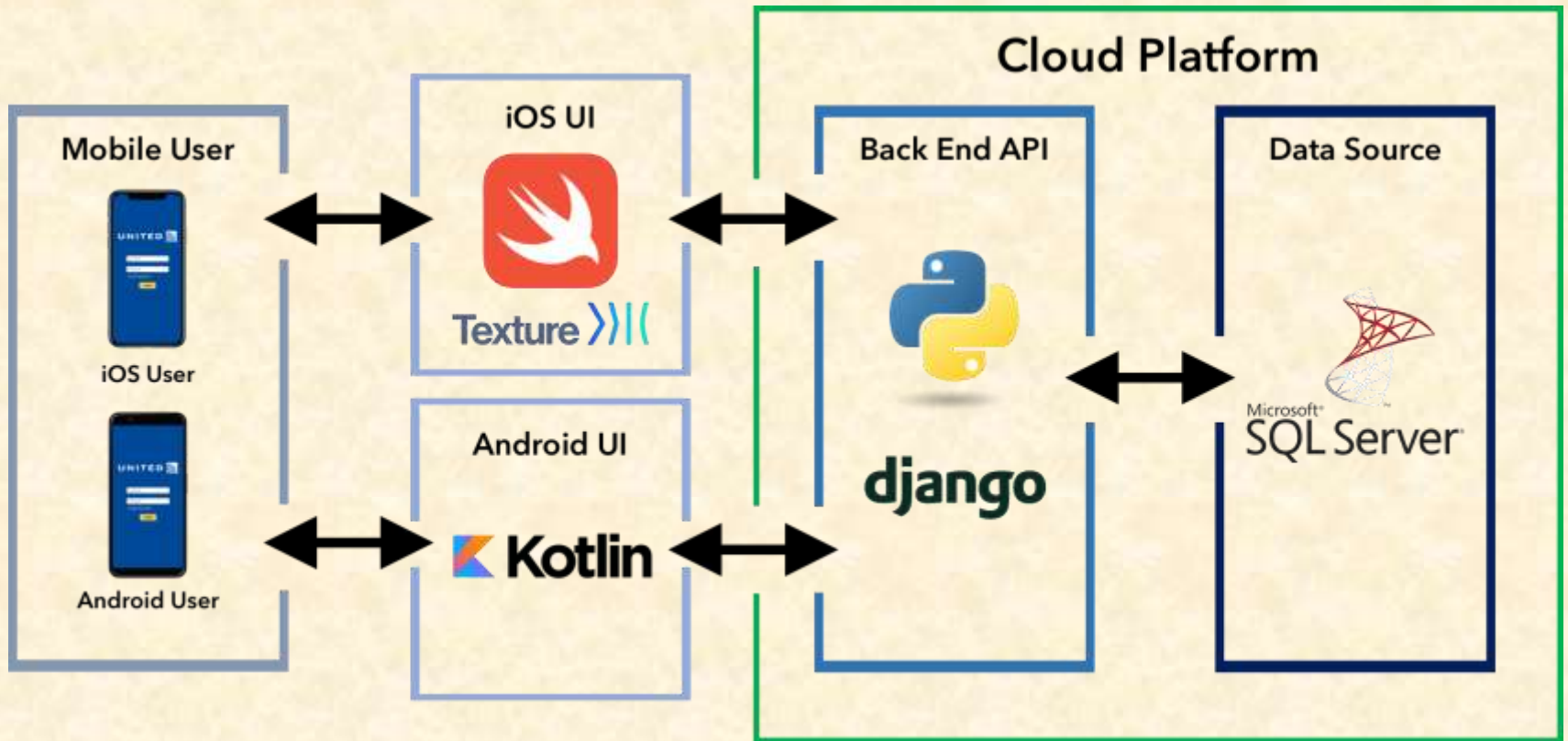
Department of Computer Science and Engineering
Michigan State University
Spring 2020

Project Overview

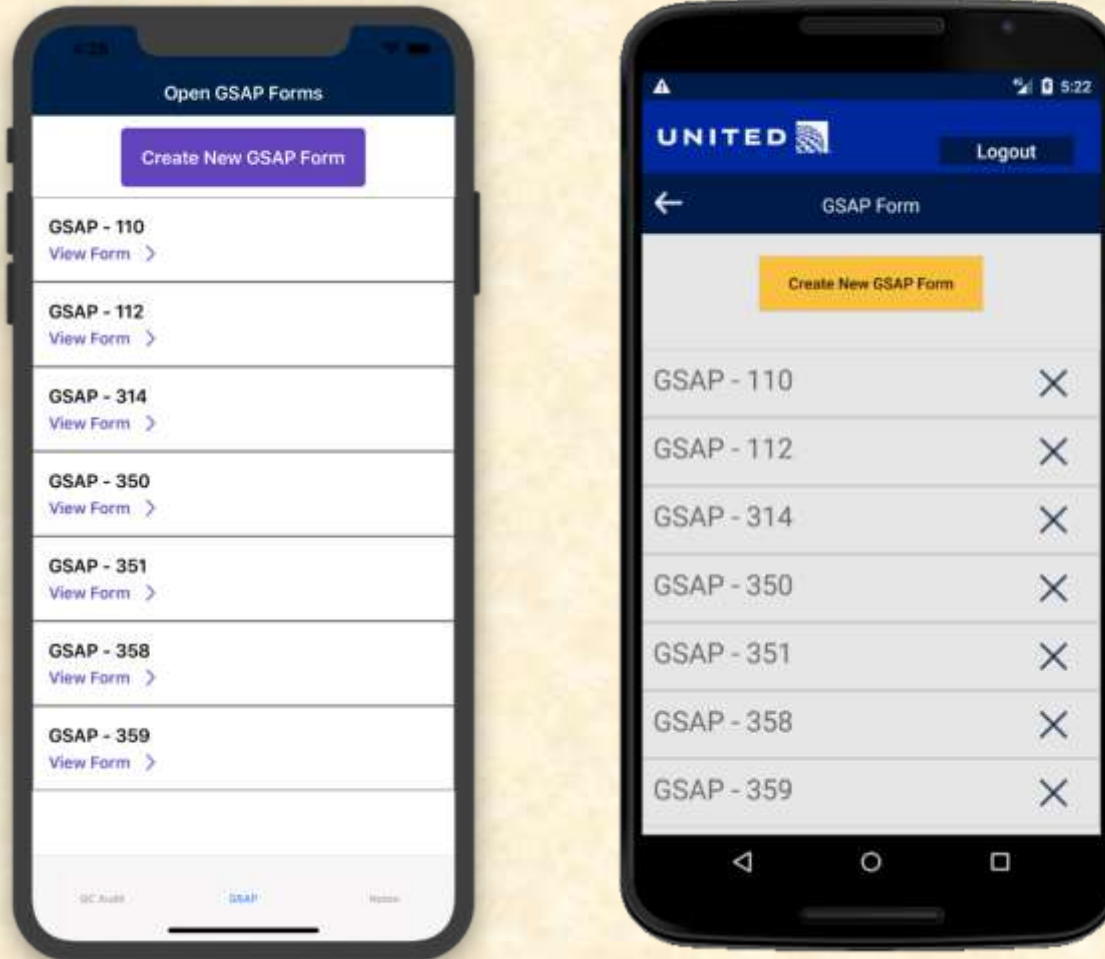
- Safety report forms require a computer to complete
- Quality control audits are filled out on paper and later entered in manually on a computer
- Both processes take extra time out of a user's work day
- Our mobile application allows users to track, manage, and submit forms in real time on the ground



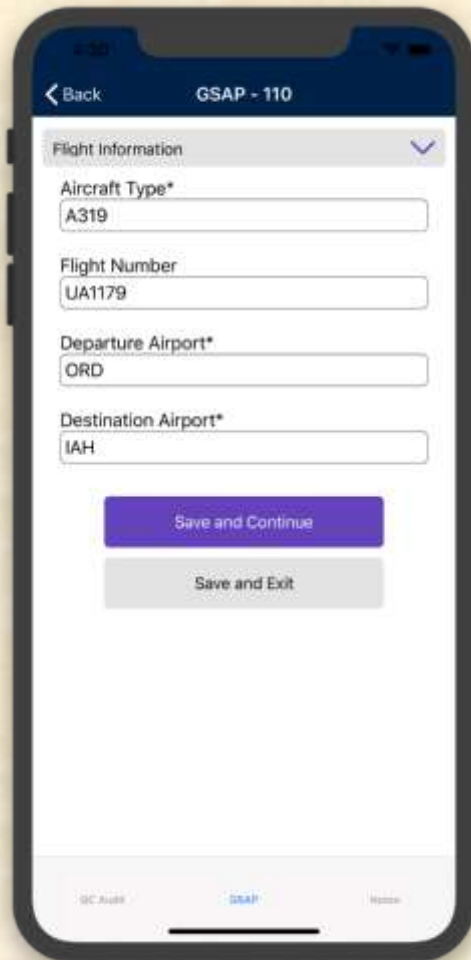
System Architecture



GSAP Form Selection



GSAP Fields



A smartphone screen displaying the 'GSAP - 110' form. The form has a dark blue header with a back arrow and the title 'GSAP - 110'. Below the header is a section titled 'Flight Information' with a dropdown arrow. The form contains four text input fields: 'Aircraft Type*' (filled with 'A319'), 'Flight Number' (filled with 'UA1179'), 'Departure Airport*' (filled with 'ORD'), and 'Destination Airport*' (filled with 'IAH'). At the bottom of the form are two buttons: a purple 'Save and Continue' button and a grey 'Save and Exit' button. The bottom of the screen shows a status bar with 'GSAP' and 'Report' links.

Back GSAP - 110

Flight Information

Aircraft Type*
A319

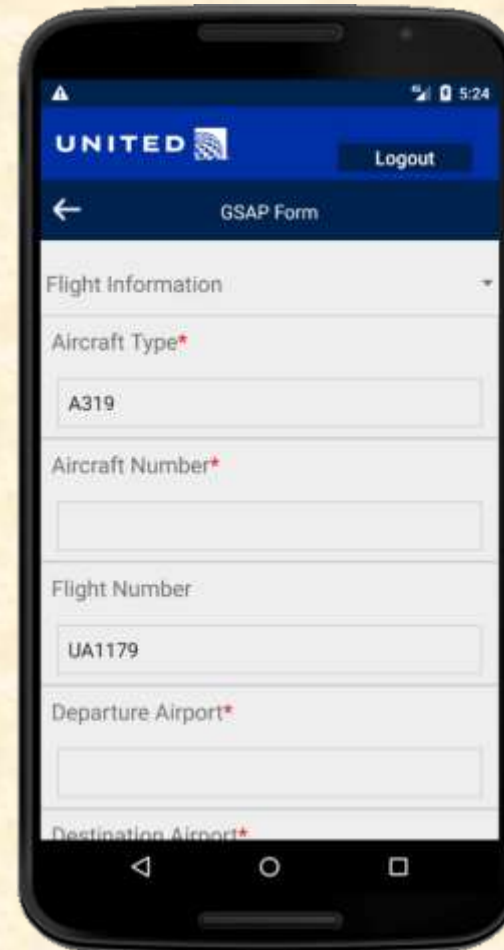
Flight Number
UA1179

Departure Airport*
ORD

Destination Airport*
IAH

Save and Continue

Save and Exit



A smartphone screen displaying the 'GSAP Form' with the United Airlines logo at the top. The form has a dark blue header with a back arrow and the title 'GSAP Form'. Below the header is a section titled 'Flight Information' with a dropdown arrow. The form contains four text input fields: 'Aircraft Type*' (filled with 'A319'), 'Aircraft Number*' (empty), 'Flight Number' (filled with 'UA1179'), and 'Departure Airport*' (empty). The 'Destination Airport*' field is partially visible at the bottom. At the top right of the screen is a 'Logout' button. The bottom of the screen shows a status bar with navigation icons.

UNITED Logout

GSAP Form

Flight Information

Aircraft Type*
A319

Aircraft Number*

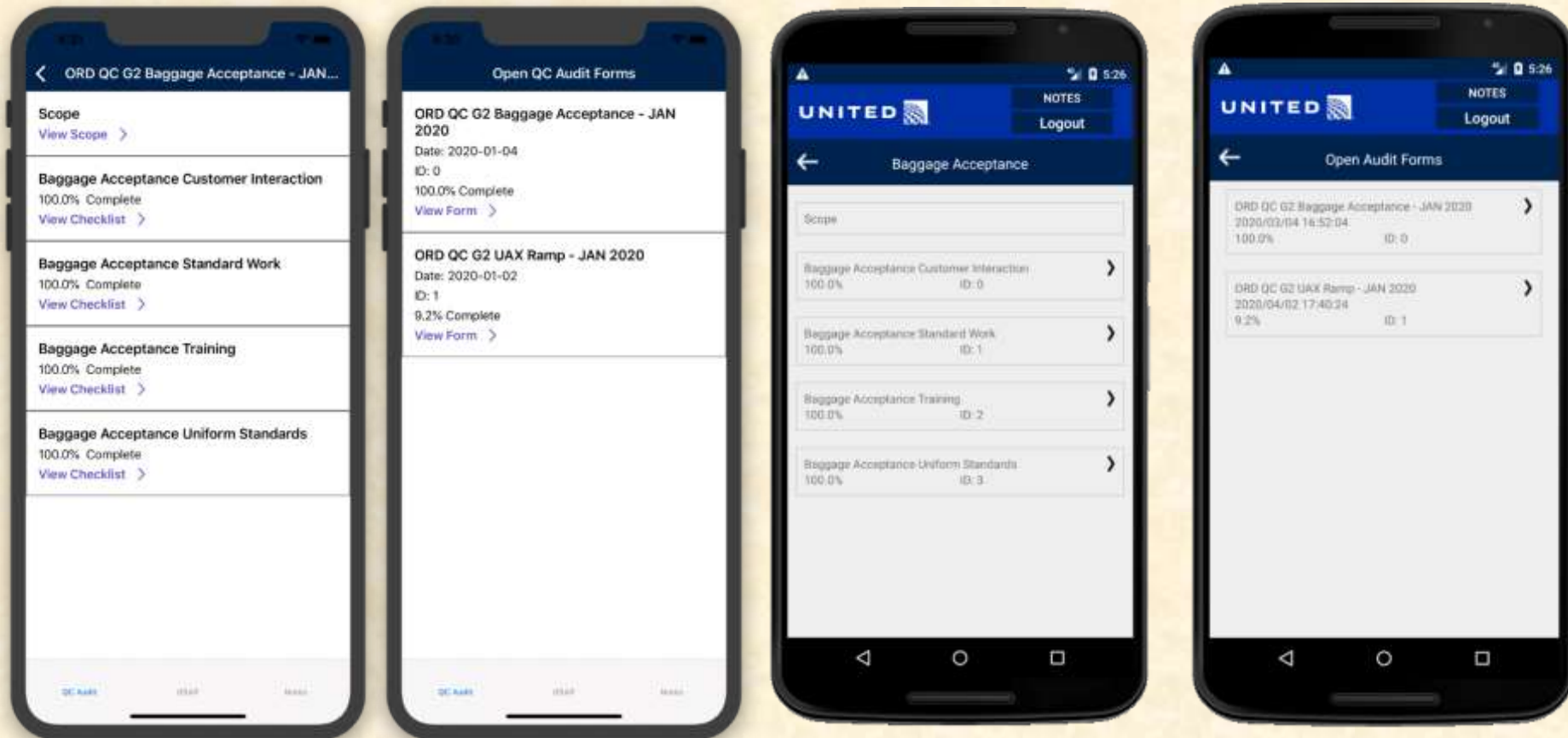
Flight Number
UA1179

Departure Airport*

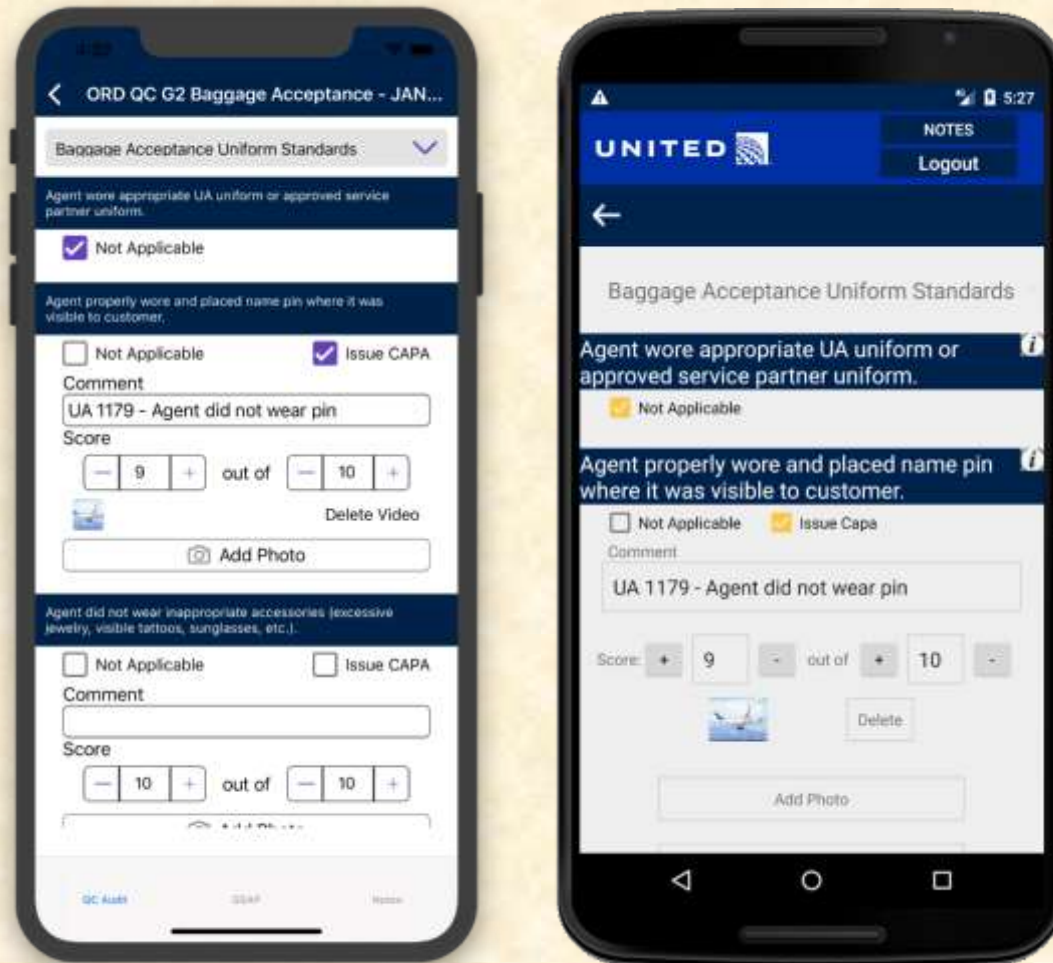
Destination Airport*



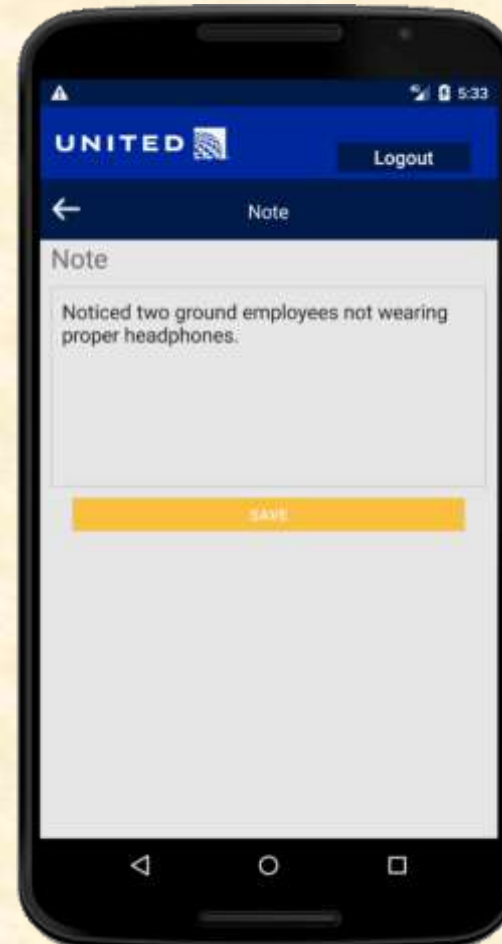
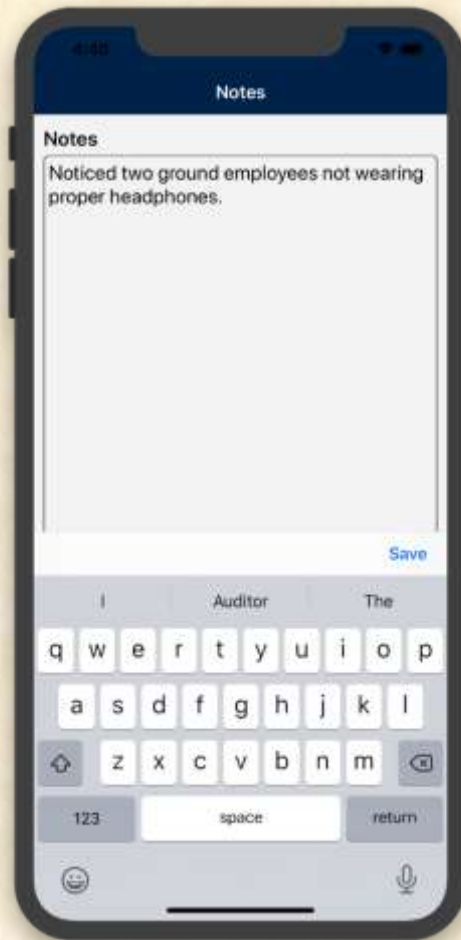
QC Audit Form And Checklist Selection



QC Audit Fields and Photo Upload



QC Auditor Notes



What's left to do?

- Updating the UI to fit United's standards
- Documentation
- Designing an app icon
- Bug fixes



Questions?

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