

MICHIGAN STATE

UNIVERSITY

Alpha Presentation

Virtual Reality Aircraft Walkaround

The Capstone Experience
Team United Airlines Safety

Caitlin Brown
Jiachen Lin
Ellie Locatis
Jacob Turcano
Cheney Wang

Department of Computer Science and Engineering
Michigan State University
Spring 2020



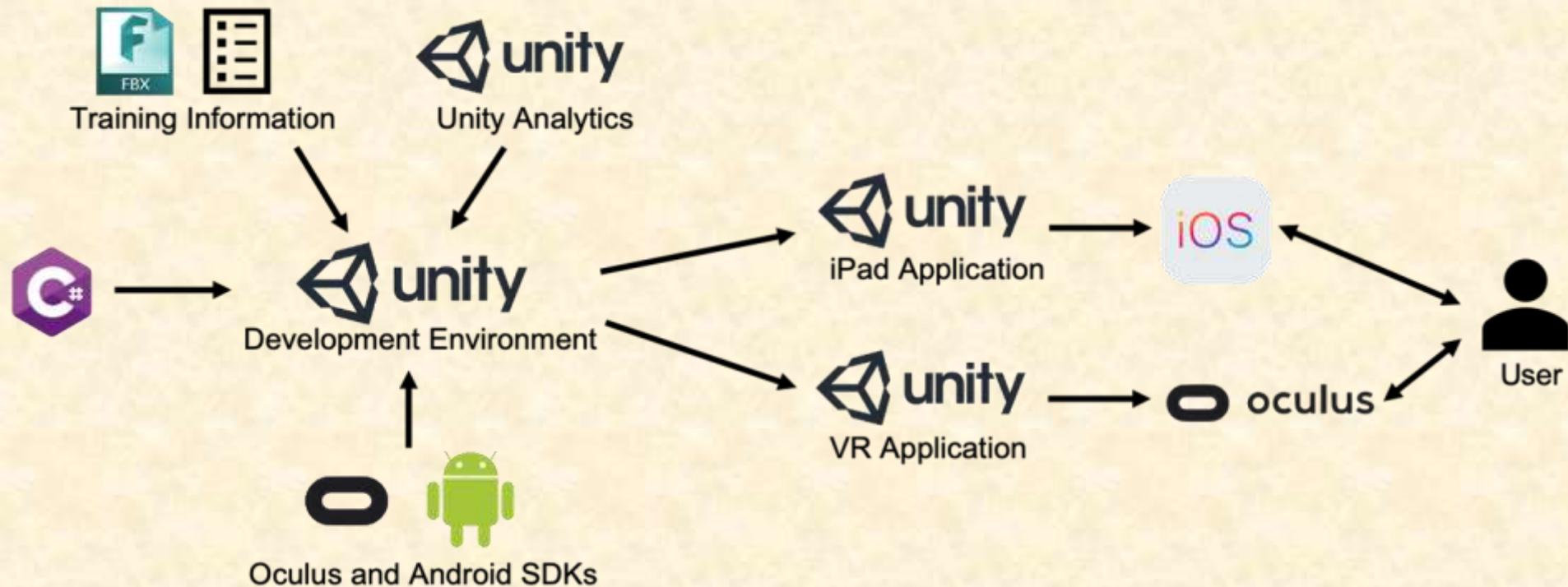
*From Students...
...to Professionals*

Project Overview

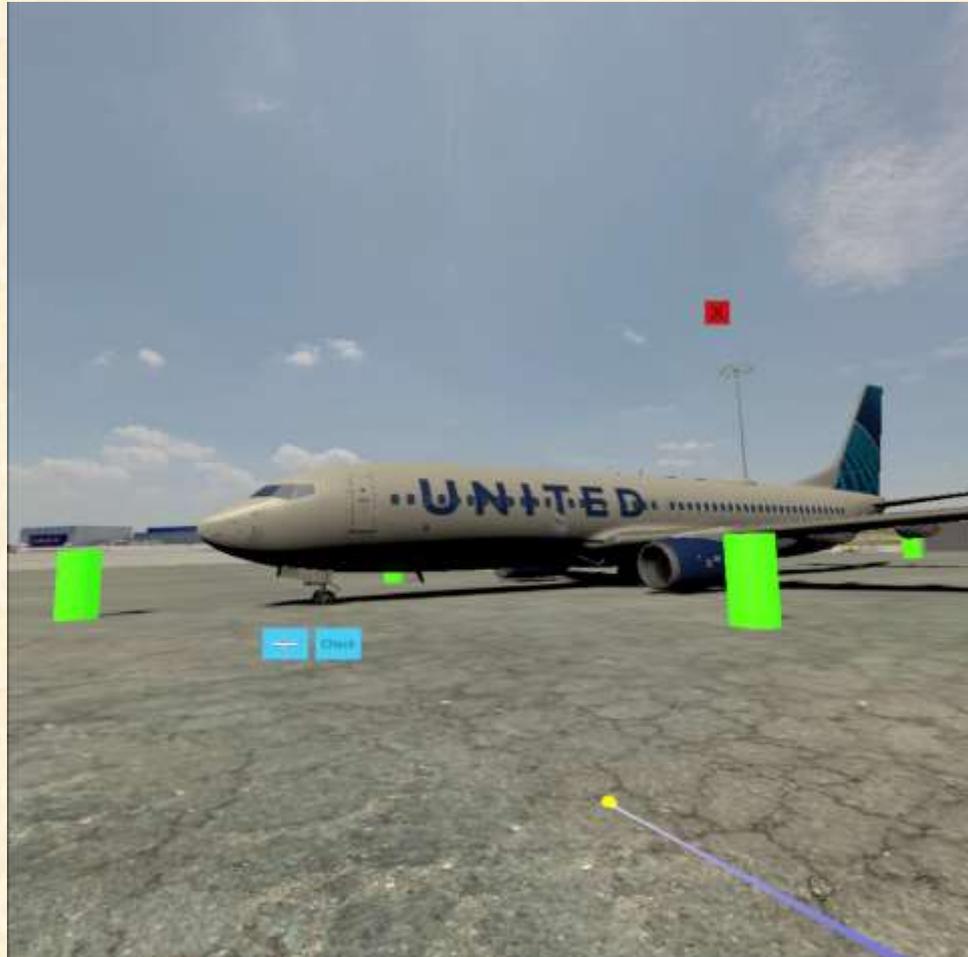
- Train technicians to spot aircraft defects
- Training mode teaches what to look for in various locations on the airplane
- Testing mode grades ability to accurately spot defects on the airplane
- Available on Oculus Quest and iPad



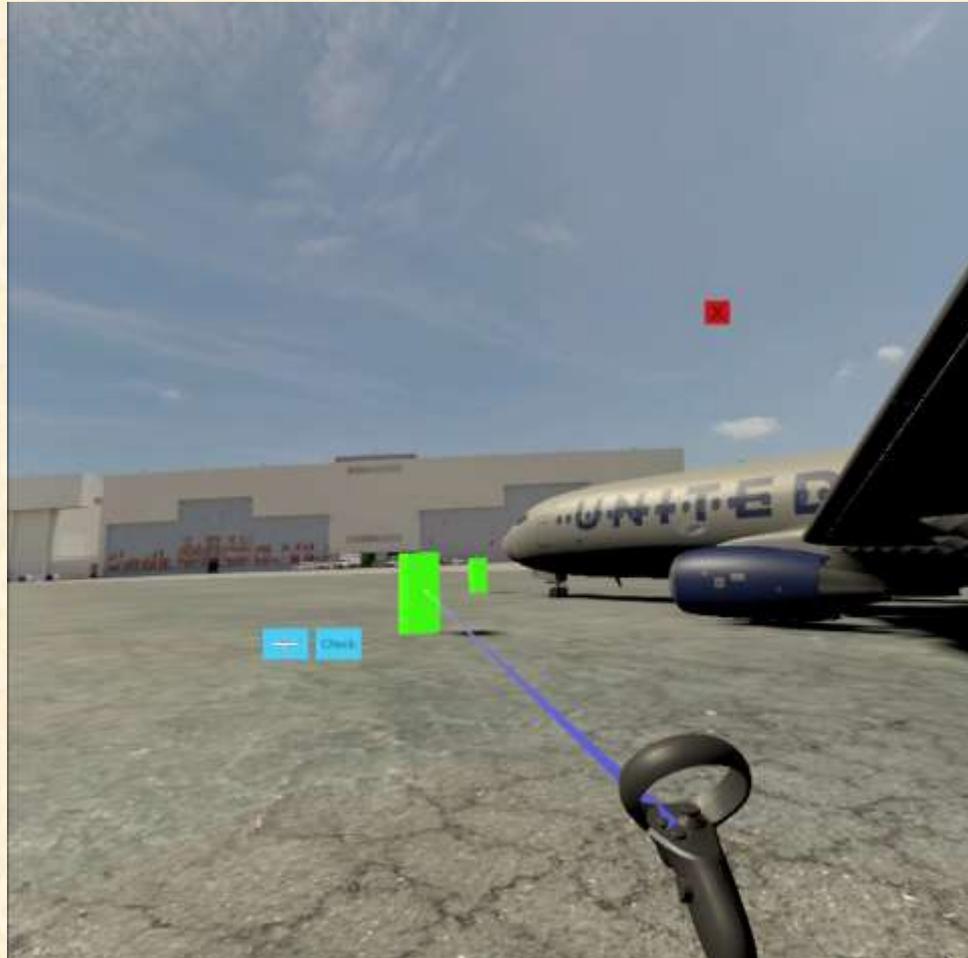
System Architecture



View of Boeing 737 Model in VR



Teleportation in VR



Defect Marking on iPad



Navigation Menu on iPad



What's left to do?

- Expand library of aircraft and defects
- Scoring system
- Defect marking and detecting system
- Add audio and text popups to training mode
- User data tracking
- Navigation tutorial



Questions?

?

?

?

?

?

?

?

?

?

