Alpha Presentation
NextGen Aircraft Taxi Assistance

The Capstone Experience

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Project Overview

- Integration with NextGen Flight Deck project
- Lateral Map Display
  - Interface for selecting route
  - Expand display to include taxiways
- Primary Flight Display
  - Intuitive guidance queues
  - Warnings for nearby aircraft
System Architecture

X-Plane Process
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X-Plane Plugin

Flight/T terrain

X-Plane

Lateral Map Display

Flight/T terrain

X-Plane Plugin

Flight/T terrain

Primary Flight Display

Route Information

Cross Functionality

Airport Records

Service/Instrument

Flight/T terrain
Lateral Map Display – Route Selection
Primary Flight Display – Route Guidance
What’s left to do?

• Lateral Map Display
  ▪ Detailed zooming on airport map
  ▪ Labeling large quantities of taxiways

• Primary Flight Display
  ▪ Guidance queues along route
  ▪ Collision avoidance warnings
  ▪ Drawing runway features