

MICHIGAN STATE  
UNIVERSITY

# Alpha Presentation

## Super Synoptics

### The Capstone Experience

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

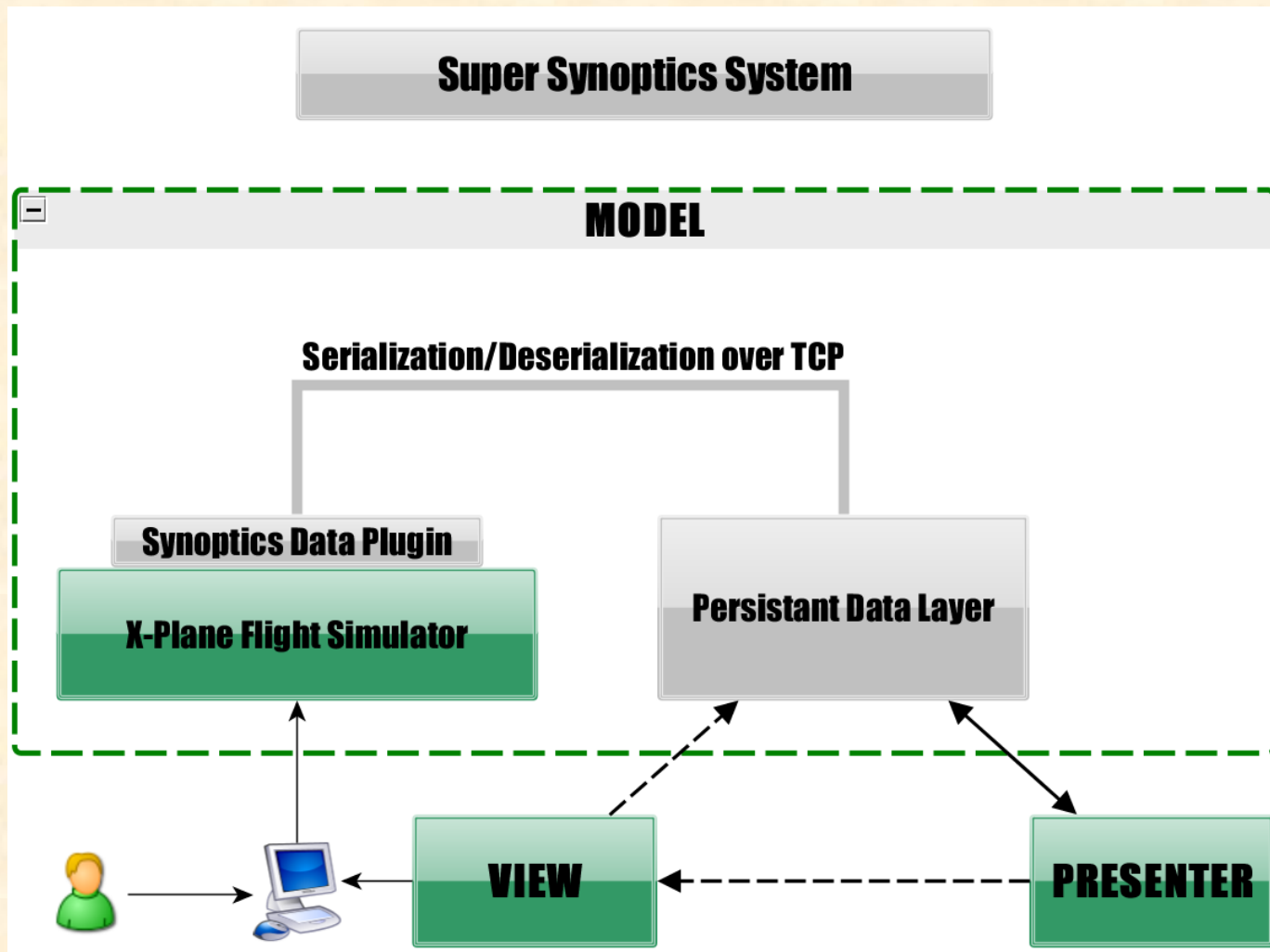
# Project Overview

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- Goal: make flight crew's decision making process easier
- Summarize flight deck instrumentation cleanly and intuitively
- Identify and suggest solutions to present and potential problems
- Be appropriately obtrusive as per the severity of the situation



# System Architecture



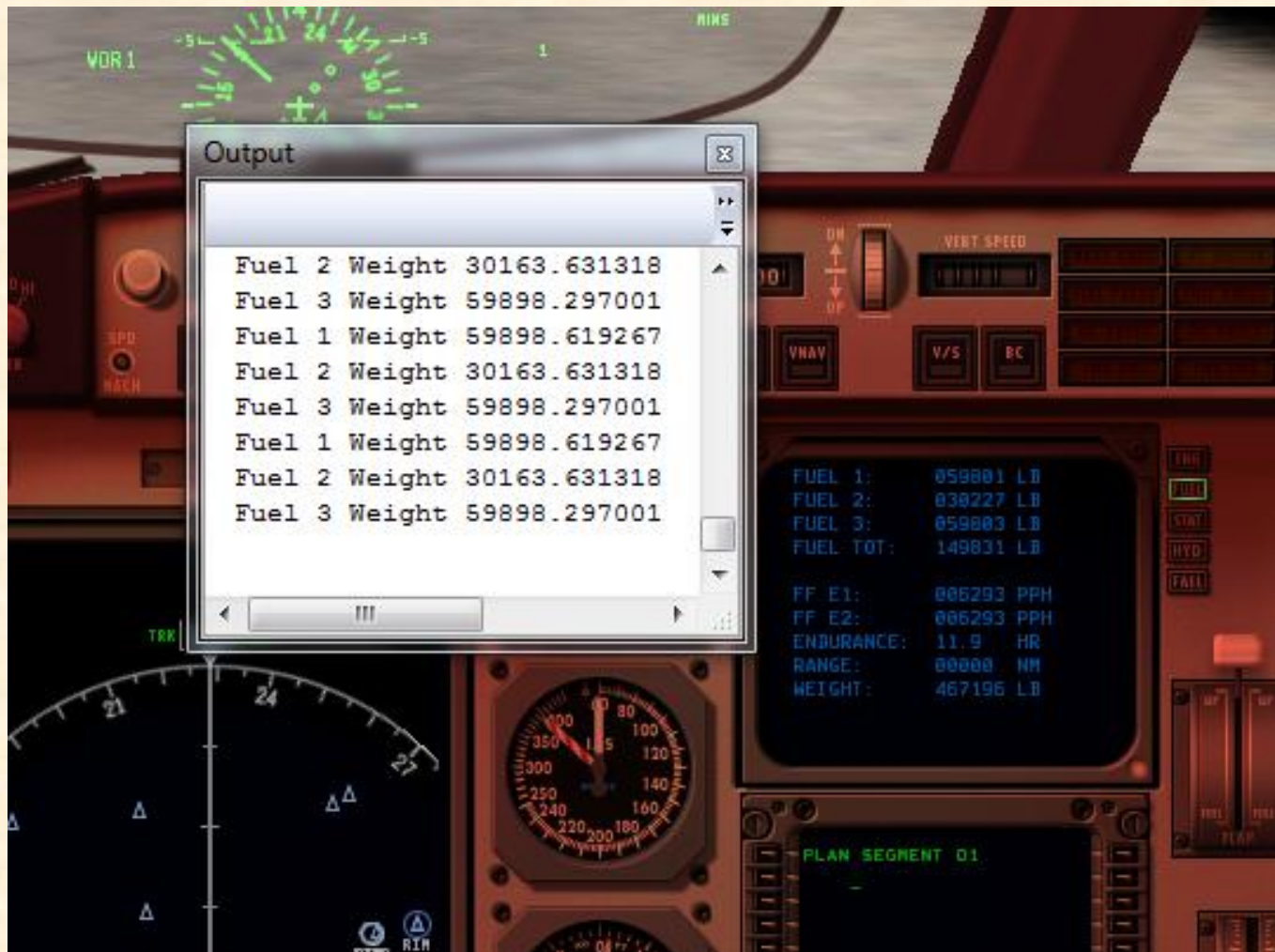
# Simple Synoptics



```
hello world!  
--FUEL TANK 1--  
temp: 7*f  
flow: 0.0gal / sec  
ID: 0  
fuel level: 0.00 / 0.00  
--FUEL TANK 2--  
temp: 35*f  
flow: 0.0gal / sec  
ID: 1  
fuel level: 8.0 / 30.0  
--FUEL TANK 3--  
temp: 8*f  
flow: 0.0gal / sec  
ID:2  
fuel level: 11.0 / 20.0
```



# Network Check



# What's left to do?

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- Complete Synoptics Pages
- Add X-Plane IOS scripting/macroing
- Refine GUI
- Research historic aviation situations and model them in Super Synoptics

