

MICHIGAN STATE
UNIVERSITY

Alpha Presentation

Mobile Avionics Weather

[The Capstone Experience](#)

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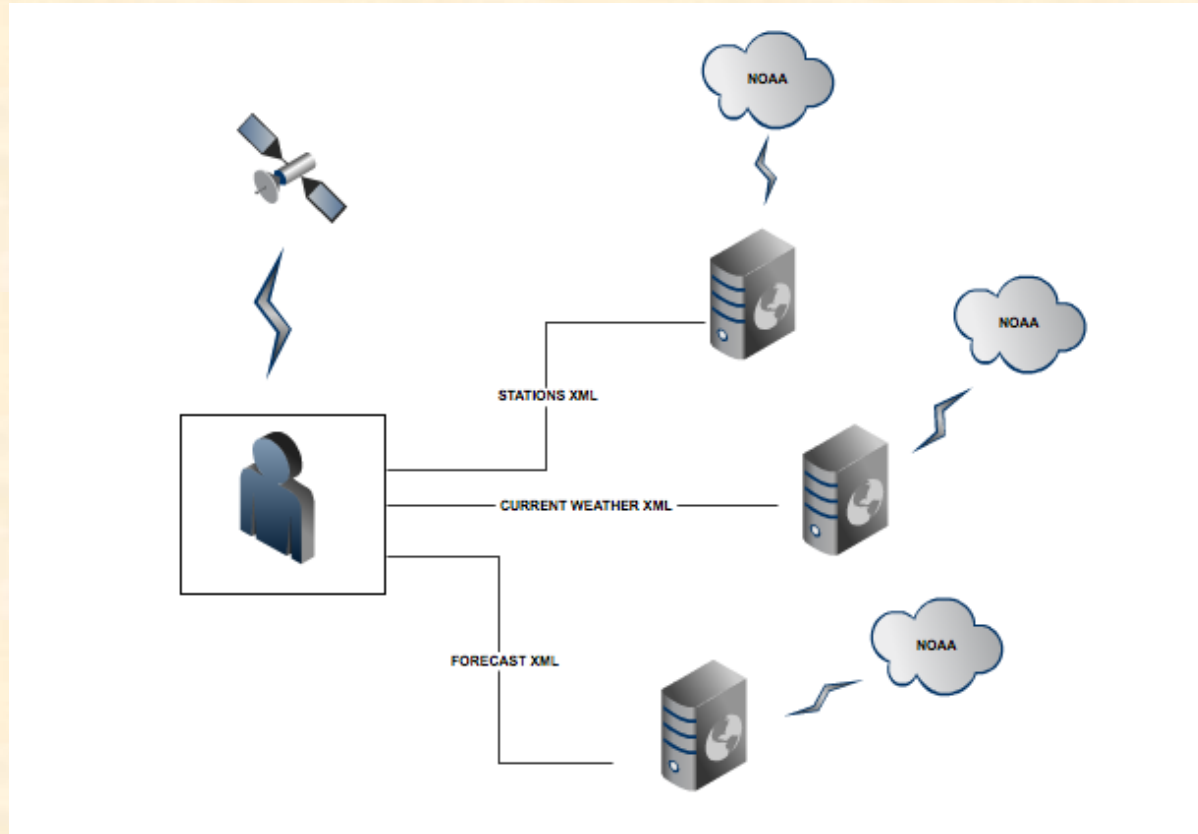
*From Students...
...to Professionals*

Project Overview

- Tablet based application for iOS
- Retrieve and display weather data in a format useful for aviation industry.
 - Pilots, and other aviation staff
- Easy to use and intuitive UI (user interface).
- Use of *FAA flight charts instead of Google Maps
 - *Federal Aviation Administration



System Architecture



*National Oceanic and Atmospheric Administration



Main View

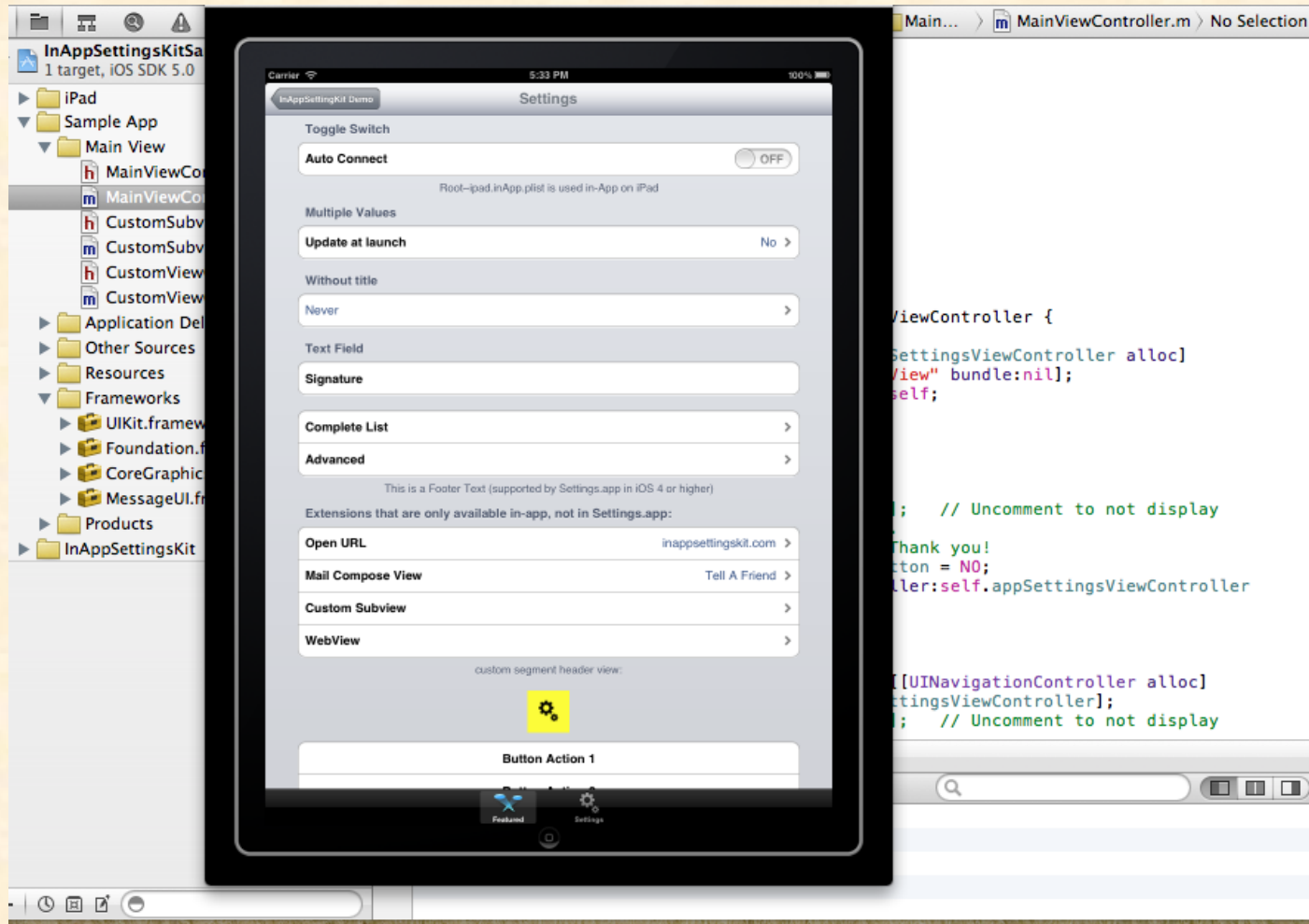
The screenshot shows the Xcode IDE with a file named `ViewController.m` open. The code includes comments for a simulation and a call to a weather service. Below the code, an iPad simulator is running the application, displaying a map of the Lansing area. A text box on the map shows the following weather data:

CTC LANSING APP WITHIN
20 NM ON 133.475 226.4

pressure_inches : 30.07
relative_humidity : 45
pressure_mb : 1019.2
wind_gust : 0.0
temperature : 41.0 F (5.0 C)
windchill : 37 F (3 C)
wind : West at 5.8 MPH (5 KT)
dewpoint : 21.0 F (-6.1 C)



Settings Screen



What's left to do?

- Tiling of maps
- Georeferencing of maps
- Radar data
- More complete looking UI
- Preferences page
- Settings integration

