iOS Controller for Lasers and Optics

Overview
Raytheon created a high-tech sensor array that is able to acquire and track objects for the purposes of defense. However, in order for it to be used, it needs a multitude of computers in order to be properly set-up and controlled. Our group was tasked with creating an iOS application that would allow a user in the field to communicate with a deployed tracking system without having to use its many control computers. By using a local network, the soldier can view information from the tracking system at any time, wherever it may be needed.

Objectives
The objective for our team for this semester was to create an iOS (iPhone) application and have it communicate with a Raytheon tracking system over a local network.

Approach
- Communicated with Raytheon on a weekly basis to establish objectives and goals
- Designed a general user interface in the initial weeks, agreed upon its usage with Raytheon
- Received a network specification from Raytheon, based entire network procedure off of that
- Constantly tested product as it was coded
- Broke project down into 4 main panels, each was coded sequentially by the team
- Final prototype was integrated with Raytheon tech (meaning it worked with their physical hardware) in less than 4 hours

Outcomes
Finally, list the outcomes for this project making sure to clearly convey their implications for the sponsoring company:
- The sponsor has a proof-of-concept for a marketable application that uses their sensor technology
- Our application could one day be used as a product for law enforcement / soldiers to keep them out of danger