

# Friendly Forces Finder 'SEE YOUR TEAM'

EnPRO 350 Midterm Presentation Illinois Institute of Technology

### Introduction to Paintball

#### Speedball

- Fast Paced
- Small Fields

#### Scenario Based

- Team Work
- Larger Fields
- Longer Games



#### **Problem**

- Fratricide (shooting your own friends)
- Cumbersome handheld devices
- Insufficient communication

#### Need

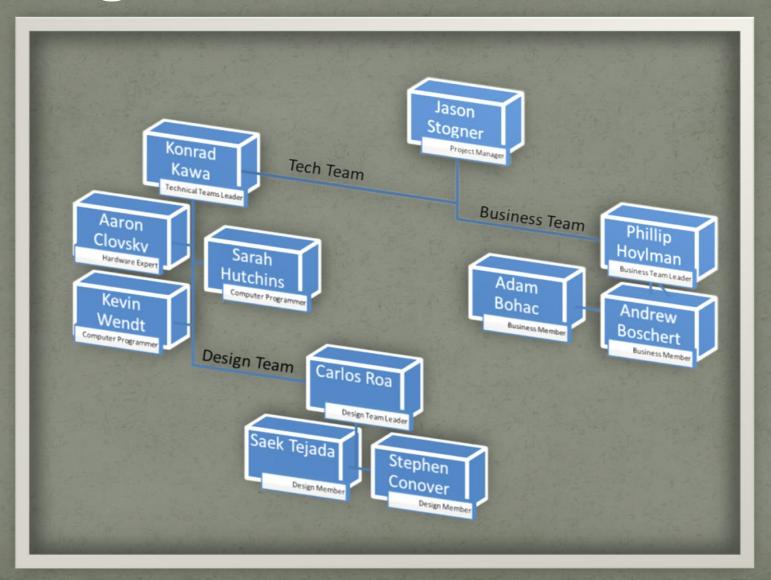
- IFF (Identify Friend from Foe)
- Hands-Free device
- Streamlined data and communication

## Solution

- Smart Specs 3<sup>F</sup>
  - Heads-Up display
  - Real-Time communication
  - Teammate identification



## **Organization of the Team**



# Technology

GPS

Wireless 802.15.4

Compass

Accelerometer

FPGA

LCD Display w/driver

> Network Manager

Co-Processor

RAM

#### **Hurdles We Have Overcome**

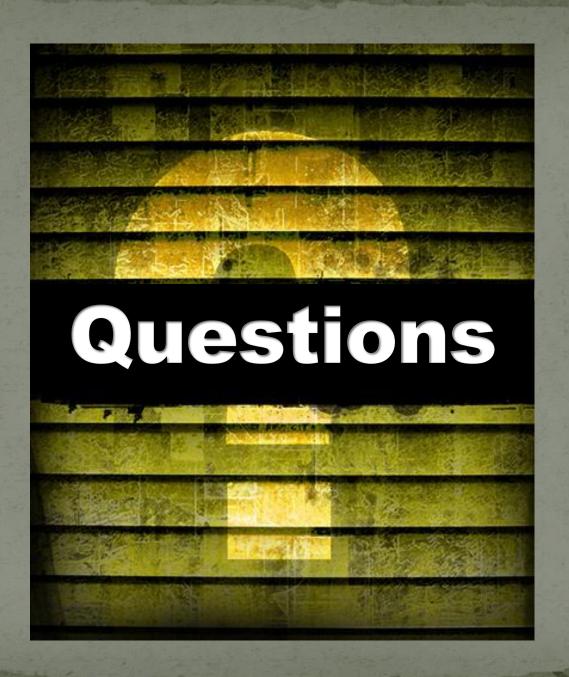
- Technical team
  - Development Timeline
  - Technology Constraints
- Design team
  - Learning CAD
  - Design Development
- Business
  - Reaching Contacts
  - Coordinating Out of Class Meetings

### **Hurdles to Overcome**

- Technical team
  - Assembly of Prototype
  - Debugging
- Design team
  - Size Constraints of 3D Printer
  - Mask Tolerance
- Business
  - Finish Business Plan
  - Market Entry Strategy

# Summary

• In conclusion....



Presenters:

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