Action Items Need Consensus:

Define Project Constraints

List of Hardware

List of Wanted Sensors

List of Wanted HUD Information

List of Shared P2P Information

Main Project Tasks

Physical Hardware Setup

Heads Up Display Unit

Computing Unit

Make and Model of Mask

Power Source

Communication Code (Independent of Other Code)

Networking Method (Central Access Point vs P2P)

Internet Connection(?)

Sensor Handling Code (Independent of Other Code)

Jitter Smoothing

Direction of Travel Calculation

GPS + Acc. Position Determination

Environment Light Intensity Sensor (Night vs Day HUD)

GUI Code (Independent of Other Code)

Handle Night vs Day HUD Color Pallet

SketchUp 3D Model for GUI Design Assistance (Before Coding)

Minimize Distraction, Maximize Information

Ski Goggle Interior Clearance Max: 2.3cm = 7/8 Inch

Augmented Reality Style Displays:

Proper see-through display, but more expensive if available at all.

<http://www.hongkiat.com/blog/augmented-reality-smart-glasses/>

<http://www.martinmagni.com/cyborg>

<http://optinvent.com/HUD-HMD-benchmark>

Recon Jet 900-00064 400x240 16:9 ?Hz API-Interface $499 (store.reconinstruments.com)

GlassUp Model? SKU? Rez? Ratio? ?Hz API-Interface $??? (by request [www.glassup.net/contact](http://www.glassup.net/contact))

Zeal Ze Live Googgle ZEL0112 Rez? Ratio? ?Hz API-Interface $599 (www.backcountry.com)

Virtual Reality Style Displays:

Cheaper and widely available, but may require modification for inside sunglasses or goggles.

<http://random-stuff-of-chris.blogspot.co.uk/2013/03/snowboard-hud-part-10-summary.html>

<http://hackaday.com/2012/12/24/pulling-the-lcd-screens-out-of-a-myvu-glasses-display/>

<https://www.raspberrypi.org/forums/viewtopic.php?f=64&t=30085>

OEM Vision-920 32432490638 1920x1080-input 854x480-disp 16:9 ?Hz HDMI/VGA-in $440 (AliExpress)

Mybud Mybud1 6322636684770 1920x1080-input 852x480-disp 16:9 60Hz HDMI-in Audio-out-3.5” 5VDC $246 (ebay buy-it-now)

MyVu MA-0701 (Crystal) B001A76VTQ 640x480-input/disp 30Hz 16:9 Composite 5VDC $210-300 (amazon)

unKOOLERTRON MA-SPYJ80 FPV Goggle 640x480-in/disp 16:9 120Hz Composite $100.99 (ebay buy-it-now)

MyVu MA-0483 858649004954 320x240-in/dips 4:3 30Hz Composite 5VDC $70 (ebay buy-it-now)

List of EE Tasks:

Sensor Models Selected

Sensor Algorithms Completed

HUD Display Selected

HUD Display in Masks Completed

Battery Solution Selected

Battery Circuit Setup Completed

List of CE Tasks:

Static Map Download

Static Map Render

Networking Query Methods

Networking Update Methods

First Batch of Sensor Models Due 9/25/2015

First Working Demo Due Before End of Fall Quarter