ECE 491 Weekly Report MAY1607 Week 7 (10/04/2015-10/11/2015)

Advisor: Jaeyoun Kim Client: Honeywell, FM&T

Members (roles): Gregory Kuhn (Weekly Report), Noah Bergman (Team Leader)

Michael Kelly (Key Concept Holder), Garrett Hembry (Webmaster)

Project Title: Microscope Embedded Display for Assembly Work Instructions

Weekly Summary

This week our meeting was really a compilation two brief meetings: one with our project supervisor Bob Hearst, and one with our academic supervisor Jayeoun Kim. These two meeting will be discussed in greater detail below.

10/08/15 Group Meeting with Project Supervisor

Duration: 30 min **Members Present:** All

Purpose and Goals:

The purpose of this meeting was to finalize our project plans and to schedule a live meeting with our project supervisor.

Achievements: We were successful as we agreed to meet with Bob Hearst on Friday October 23 at around noon in order to further discuss our project plan. Furthermore he approved our purchase requirements so we will be able to start practicing with an actual microscope and heads up display very shortly.

10/09/15 Group Meeting with Academic Advisor

Duration: 30 min. **Members Present:** All

Purpose and Goals:

The purpose of this meeting was too further discuss the physics behind mirror and how they could be implemented in displaying the instructions from our heads up display in the eyepiece lenses of the projector.

Achievements: We were able to get instructions on how to project an image using mirrors. His advice was that we should us a mirror to bounce the image from the projector of a mirror and have it pass through a magnifying lens in order to increase the size of the image.

Pending issues

- 1. Acquire the materials (i.e. microscope, lenses) required to successfully display the instructions being displayed in the microscope, a
- Build a mechanism for displaying the instructions in the microscope lenses.

Plans for next week

We will be meeting on Tuesday afternoon in order to temporarily divide the project into two separate teams: one team will be involved with ordering the parts required to make a project display of our own, the other team will be using ModelSim to create a digital schematic of our projector circuit.

Individual Contributions (this week)

Gregory Kuhn- Researched technical aspects of microscopes, mirrors, and lenses.

Noah Bergman - Researched technical aspects of microscopes, mirrors, and lenses.

Matthew Kelly - Researched technical aspects of microscopes, mirrors, and lenses.

Garrett Hembry- Researched technical aspects of microscopes, mirrors, and lenses.

Total contributions for the project

Noah Bergman-14hrs Gregory Kuhn-14hrs Matthew Kelly-14hrs Garrett Hembry-14hrs