ECE 491Weekly Report **MAY1607 Week 11 (11/02/2015-11/09/2015)**

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 weekly meeting was a compilation of two separate meeting's. I will discuss them in more detail below.

11/06/15 Group Meeting With Jaeyoun Kim

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

Purpose and Goals:

The objective of this meeting was to finalize the details on the system we were constructing. We have already purchased most of the materials the only thing next to complete was ordering a part that would hold the lenses properly.

Achievements: We were successfully able to purchase the device necessary to hold the magnifier lenses attached to the microscope, the device is called. It also important that the lens stand is adjustable, therefore we can change the magnifying lenses angle and displacement in order to achieve the desired image magnification dimensions,

11/09/15 Group Meeting in Physics Laboratory

Duration: 120 min **Members Present:** All

Purpose and Goals:

The objective of this meeting is to design a mechanism for displaying the image from the projector in the eyepiece of a microscope. I will discuss the detail of how we managed to accomplish this in the achievements section of the report.

Achievements: We were successfully able to transmit an image from the projector and it appeared at a desired magnification in the lenses of the microscope itself. We did this by using a beam splitter and put it equidistant from the projector and the eyepiece lenses, a distance of 6cm. The eyepiece lenses we used to magnify the image was bi-concave lenses.

Pending issues

1) Begin to simulate the project projector using ModelSim software.
2) Purchase the parts that will be used to hold the lenses in place.

Plans for next week

Having successfully designed and tested the mechanism for the next step is to begin to design the projector to actually display an image. We will first do this using computer software known as ModelSim.

Individual Contributions (this week)

Gregory Kuhn-Researched parts to hold lenses in place.
Designed and experimented the mechanism to display a
projector image in the eyepiece lenses.
Noah Bergman – Researched parts to hold lenses in place.
Designed and experimented the mechanism to display a
projector image in the eyepiece lenses.
Garrett Hembry- Researched parts to hold lenses in place.
Designed and experimented the mechanism to display a
projector image in the eyepiece lenses.

Michael Kelly- Researched parts to hold lenses in place. Designed and experimented the mechanism to display a projector image in the eyepiece lenses.

Total contributions for the project

Noah Bergman-25hrs
Gregory Kuhn–25hrs
Michael Kelly–25hrs
Garrett Hembry-25hrs