

ECE 491 Weekly Report MAY1607 Week 3 (9/07/2015-9/13/2015)

Advisor: Jaeyoun Kim

Client: Honeywell, FM&T

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

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

Project Title: Microscope Embedded Display For Assembly Work Instructions

Weekly Summary

The objective of this week was to gain a more detailed understanding of our project and too begin to understand the various components and techniques needed to successfully complete it. We also had meetings both with our Client and Advisor, who explained the project requirements in greater detail and helped us to illustrate some of the technical challenges of the project.

Meeting notes:

-This week we had two meetings one with our project contact via the telephone and one with our academic advisor.

-The two meetings will be discussed in greater detail below.

9/10/15 Group Meeting with Honeywell Contact

Duration: 30 min.

Members Present: All

Purpose and Goals: The goal of this meeting was establish first contact with our project associate and to gain a deeper understanding of what a display device for microscopes would look like.

Achievements: Our associate showed us what our microscope display should be able to do, as well sending as a list of possible microscopes to use and told we would be using a tablet to display the instructions on.

9/11/15 Group Meeting with Professor Kim

Duration: 30 min

Members Present: All

Purpose and Goals:

Discuss the physics behind electronic microscope imaging as well as the digital micro mirror device (DMD). Also discuss mechanisms for implementing such device.

Achievements:

-We gained a deeper understanding of how microscopes work as well as how to properly adjust it so that display the instructions at a correct size and to ensure that no light is lost as the instructions are transmitted from the computer.

Pending issues

1. Make a decision on purchasing a practice microscope and running a brief experiment to determine how well it can display light.

Plans for next week

Each team member will do more research to determine the physics behind electron microscopes and their properties. Furthermore we will determine a specific microscope to purchase as well more detailed spec's to use.

Individual Contributions (this week)

Gregory Kuhn-Continued Researching the technical aspects of the project.

Noah Bergman – Continued researching the technical aspects of the project

Matthew Kelly – Continued researching the technical aspects of the project

Garrett Hembry- Continued researching the technical aspects of the project

Total contributions for the project

Noah Bergman- 5hrs

Gregory Kuhn – 5hrs

Matthew Kelly – 5hrs

Garrett Hembry- 5-hrs