

CPRE 491 WEEKLY REPORT

MAY15-25

Week 7 Report

Advisor: Lee Harker

Client: Lee Harkin / Department of Electrical and Computer Engineering

Project Title: CyLocker Access System

Group Roles

Team Leader ->	Nathan Castek
Team WebMaster ->	Corey Coazzato
Team Communicator ->	Nathan Lafferty
Team Key Concept ->	Priyank Patel
Team Technical Leader ->	Mohammad Syazwan

Weekly Summary

Additional circuit schematics
Began testing varying components
Began work on design document
Retrieved XBee units from Lee

Weekly Accomplishments

Outlined "Priority" tasks to accomplish before end of semester
Outlined design document, and assigned relevant tasks
Began thought on ergonomic and HCI design of MCU
Began testing Arduino -> Servo controls

Meeting Minutes

Date: 10/15/2014

Duration: 60 minutes

Attendance: 100%

Summary:

Discussed previous week's accomplishments
Discussed Next week goals

Outlined project design document
Each component and each component interconnection will have their own sections
Abstract out to the "Block" level

Discussed ergonomics of Wall system
Need to find a way to mount it onto the lockers

Minutes:

https://docs.google.com/a/iastate.edu/document/d/18NRbya4dI5d1sgHBVxyD6Mi5LF_D1Rxb4Oy1czhlf80/edit

Progress Impediments

XBee's did not come with a bootloader, waiting on Lee
Corey does not have a breadboard -> Xbee adaptor

Individual Contributions

(Name) (this week, total)

Castek: 4, (31.4)

- Integration testing of ATMEGA, servo, lock (0.5)
- Hosted meeting (1)
- Researched how we could get more reliable testing with servo (0.5)
- Constructed priority list for the remainder of the semester (0.5)
- Reviewed how transistors can be used to save power (1.0)
- Talked to client about ordering LED (0.5)

Corey: 5, (33.5)

- Website created with weekly reports- 2 hours
- XBee software- 1 hour
- Team meeting - 1 hour
- Range testing of XBee communication- 1 hour

Lafferty: 8, (35)

- Design Document Initial Formatting (3)
- Reviewed Alternative Design Documents (1)
- Toyed with USB Card Reader (2)
- Weekly Report (1)
- Weekly Meeting (1)

Priyank: 5, (31)

- attended meeting - 1.0 hour
- researched on pspice software - 1.5 hour
- researched and designed circuit to power the atmega - 2.5 hours

Mohammad: 4, (32.5)

- attended meeting - 1.0 hour
- researched and designed regulatory circuit to power the atmega and xbee - 2 hours
- researched on how to do voltage/current simulation using software - 1 hour

Weekly Plans

Mohammad

- Test circuitry on breadboard

Priyank

- Test circuitry on breadboard

Castek

- Further research transistors
- Preform servo integration testing with Corey
- Finalize power and current consumption numbers and circuit design
- Prep for weekly meeting
- Learn what fellow team members found about their systems

Corey

- Finishing touches on website if not done already

- Xbee connected to processor testing

Lafferty

- Write script to get card reader input
- Design Document