

# CPRE 491 WEEKLY REPORT

**MAY15-25**

## Week 2 Report

**Advisor:** Lee Harker

**Client:** Lee Harkin / Department of Electrical and Computer Engineering

**Project Title:** CyLocker Access System

### Group Roles

<b>Team Leader -&gt;</b>	Castek
<b>Team WebMaster -&gt;</b>	Corey
<b>Team Communicator -&gt;</b>	Lafferty
<b>Team Key Concept -&gt;</b>	Priyank
<b>Team Technical Leader -&gt;</b>	Mohammad

### Weekly Summary

Met with Lee and gang on Wednesday at 7. Assigned weekly goals to be accomplished before next meeting.

Discussed senior-design work-plan (from now until May), approved timetables proposed. Basically, have POC done before Winter Break, finalize testing/design before End of March, use march till may to prep for documentation and presentation.

Looking to spend ~4-8 hours per week on this class individually, for each of us.

### Weekly Accomplishments

Castek setup formal group-time (without Lee) at 7 pm on Wednesdays, at Coover 3011

Lafferty completed folder structure, and revised the weekly report to include the Rubric

Emailed professors for clarification

Corey setup github account, and began researching setting up the webspace

### Meeting Minutes

**Duration:** 80 minutes

**Attendance:** 100%

#### Summary:

Met with Lee, discussed shortcomings of prior projects, defined project timetable, assigned "specializations", assigned weekly tasks, discussed future meeting dates, discussed with Lee equipment usage and financial usage (we have ~\$250 budget, excluding what has already been purchased)

<https://docs.google.com/document/d/1wxmvPr8UVVC0bYjHEsS-s2A86rUI-DoJ-SHYw1UV8Vc/edit?usp=sharing>

Meeting Minutes are recorded in google doc format. Rather than copying and pasting them, they will be viewable by anyone with the link above.

## Progress Impediments

Access to the senior design room, locker, and lab. Will coordinate with Lee to obtain access.

Access to CyFiles webspace for our webpage. This should be covered in class.

## Individual Contributions

(Name) (this week, total)

**Castek:** 5.4, (6.4)

- Created meeting agenda (0.7)
- Reserved conference room for weekly meetings (0.5)
- Hosted meeting (1.2)
- Researched locking unit mechanism (3)

**Corey:** 5.5, (6.5)

- Research on Arduino Uno - 2.0 hours  
Possible security issue solution
- Researched how to use raspberry pis - 3.0 hours
- Created Github Repo - .5 hours

**Lafferty:** 5, (6)

- Attended Meeting (1.2)
- Research Xbee Units (3)
  - Found Several tips on how to link and manage them
  - Discovered very simple I/O device for us to link them with Pis
- Built weekly report (0.8)

**Priyank:** 4, (5)

- Research on different types of batteries (4 hrs)
  - D, C, AA, AAA, 9 Volt, 6 Volt lantern
  - Capacity (mAh)
  - Typical drain (mA)

**Mohammad:** 6, (7)

- conducted research on XBee design, power consumption - 3.0 hours
- learnt on PCB software and design - 3.0 hours

## Weekly Plans

### Mohammad

PCB + Xb  
research  
Learn simple fabrication / design techniques

### Priyank

Do research on batteries  
Compare/contrast battery benefits  
cost/power duration/operating time

### Nathan

research locking unit

**Corey**

Learn how to use raspberry pis  
research arduino

**Lafferty**

Pi, Xb rf transmitter/receiver interface  
usb/drivers