# Week 5 check-ins

Wesley Murar

T03

Week 5

October 27th, 2014

## Tasks completed last week:

- Downloaded Eagle Cad and Gerbv
- Instigated and revised final requirements documentation.

#### Tasks to do next week:

- Familiarize myself with project management tools and practice creating schedules/Gantt charts
- Investigate GitHub, particularly pertaining to including files and links on Wiki.
- Assist in the researching process for final product enclosure.
  - Probably 3D printing (i.e. investigate EPL usage).

- Due Dates:
  - 10/29 Schematic
  - 11/10 Schedule
- Everyone should have Eagle either on their computer, or know how to access it in the lab (should be on all the computers) and be familiar with using it

Robert "Tyler" McNichols

T03

Week 5

October 27th, 2014

## Tasks completed last week:

- Added functionality of both knob and circular potentiometer to existing code and physical prototype
- Downloaded Eagle cad and familiarized myself with tools and components list
- Downloaded Gerbv program to later view cad files
- Pushed project proposal and requirements to the repository and added links in the wiki
- Provided input for the project requirements document and applied formatting changes

#### Tasks to do next week:

- Write final functions and modify the existing code to finish the program and use it with the completed prototype for a fully demonstrable project
- Provide correspondence, oversight, and assistance to group members creating the schematic
- Download Microsoft Project and ProjectLibre (open source project management software)
- Familiarize myself with project management tools and practice creating schedules/Gantt charts
- Research best method for building an enclosure for the final product
  - Probably 3D printing

- Schematic is due Wednesday the 29<sup>th</sup>
- Schedule is due November 10<sup>th</sup>, I suggest everyone download either Microsoft Project or an open source project management software and get used to the environment and tools it offers for scheduling
- Everyone should have Eagle either on their computer, or know how to access it in the lab (should be on all the computers) and be familiar with using it

Sarmad Butti

T03

Week 5

October 27th, 2014

## Tasks completed last week:

- Downloaded Eagle Cad and watched a tutorial on it
- Studied requirements specifications and created a list of requirements for our project.
- Practiced creating a file and pushing it to github using the command line window.

## Tasks to do next week:

• Familiarize myself further with Eaglecad and start working on creating the project schematic

## Things to keep in mind/general notes:

• The project schematic is due on 10/29

Project Check-in Edgard Musafiri T03 Week 5 October 27th, 2014

#### Last Week Tasks

\_\_\_\_\_

- Researched Arduino and arduino functionality
- Learned simple Arduino code writing to help out with the code
- Watched eaglecad introductory videos
- Tried downloading Eaglecad and Gerby program resulted in no success
- Viewed requirements and determine if they can be implemented

#### Next Week Tasks

-----

- Download Microsoft Project and ProjectLibre (open source project management software)
- Learn 3D printing method for enclosure build up
- Create schematic with eaglecad
- Help with Arduino function writing and debugging
- Learn project management tools
- Creating schedules and/or Gantt charts

## Things to keep in mind/general notes:

.....

- Preliminary schematic due on Wednesday October 29<sup>th</sup> 2014
- Schedule due November 10<sup>th</sup> 2014 made with open source project management software.
- Accessing Eagle in the lab and also using it on my computer after download.
- Download Microsoft Project.

#### Problems/Issues

-----

- Unable to download Eaglecad on my laptop
- Unable to download any Arduino software environment on my laptop
- Lost laptop administrative rights

# Week 6 check-ins

Wesley Murar

T03

Week 6

November 11th, 2014

#### Tasks completed last week:

- 2 Downloaded ProjectLibre and got familiar with the program
- 2 Created a schedule layout with Tyler, that will later be implemented into a Gantt chart
- 2 Helped decide enclosure, moving towards using existing cases rather than 3D prototyping.
- Installed GitHub onto computer to create raw data push and pull system

#### Tasks to do next week:

2 Create and finalize project schedule.

② Assist in the schematic revision process, and see if modifications can be made for the preliminary layout schematic.

#### Things to keep in mind/general notes:

② Due Dates:

- 11/05 Preliminary Layout
- 11/10 Schedule

② A lot of important due dates these next few make sure to check the schedule and see if the plan layed out is missing any key dates.

Robert "Tyler" McNichols

T03

Week 6

November 2nd, 2014

#### Tasks completed last week:

- Wrote code that allows matrix to keep the players choices illuminated throughout gameplay
- Start writing program that checks for a winning combination (should finish tonight)
- Wrote program that checks if a spot is taken and prevents user from selecting it if it is
- Researched enclosures to use for project, decided to modify existing case rather than draft and

#### 3D print our own

- Downloaded ProjectLibre and learned how to use it
- Helped Wes create a list of tasks and dates for the schedule
- Update wiki to include our documents embedded in links on the front page
- Renamed files in the repository

#### Tasks to do next week:

- Finish writing check-win function
- Check code formatting and edit for readability
- Bug test code—make sure all functionalities work in all cases
- Present finished code and prototype to group
- Create board layout
- Provide oversight and input on schedule

- Board Layout due November 5th
- Schedule is due November 10th, Wes and I are trying out ProjectLibre and it looks like it will work, unless anyone else remembers how to download Microsoft Project and would rather use that

Sarmad Butti

T03

Week 7

November 9, 2014

## Tasks completed last week:

- Found libraries for the actual components we are going to use
- Adjusted the schematic on eagle cad and fixed some issues

## Tasks to do next week:

- Learn block diagram modeling in level 0 and level 1 for the whole project and for the single components
- · Work on the modeling assignment for our project

## Things to keep in mind/general notes:

• The project modeling is due on 11/17

Project Check-in Edgard Musafiri To<sub>3</sub> Week <sub>5</sub> November 2nd, 2014

#### Last Week Tasks

-----

- Learned Microsoft Project
- Worked with ProjectLibre
- · Learned 3D printing method for enclosure build up
- · Learned schematics creation with eaglecad
- Learned with Arduino function writing and debugging
- · Learned other project management tools

#### Next Week Tasks

-----

- Enclosure build up schematic for 3D printing
- Download Microsoft Project and ProjectLibre
- · Correcting schematic with eaglecad
- Help with Arduino function writing and debugging
- · Creating schedules and/or Gantt charts

#### Things to keep in mind/general notes:

-----

- Project layout due on Wednesday November 05th 2014
- Schedule due November 10th 2014 created with open source project management software.

#### Problems/Issues

-----

Laptop still not fixed, only using school computer and remote access now.

# Week 7 check-ins

Wesley Murar

T03

Week 7

November 9th, 2014

#### Tasks completed last week:

- 2 Created first draft of Project Schedule
- Helped revise final draft layout
- ? Revised project schedule

## Tasks to do next week:

- ☑ Begin homework 6, evaluate the system using a zero and one block diagrams
- Start creating test plan
- Order Parts including enclosures that may be used

- ② Due Dates:
- 11/10: Project Schedule
- 2 Modeling/Design homework 6 looks lengthy, start early.
- November 11 No School

Robert "Tyler" McNichols T03 Week 7 November 9th, 2014

## Tasks completed last week:

- Finished writing check-win function
- Started bug testing code
- Created preliminary board layout
- Revised schematic to final state, implementing a USB to Serial programming mount and IC
- Revised board layout, created final draft
- Uploaded and ordered board from OSH Park
- Provided input on, and helped finalize, schedule

#### Tasks to do next week:

- Export BOM from eagle cad and create BOM for final ordering
- Fully debug code, ensure proper final working form
- Start system modeling/design
- Start creating test plan

## Things to keep in mind/general notes:

• Schedule is due November 10th

Sarmad Butti

T03

Week 7

November 9, 2014

# Tasks completed last week:

- Found libraries for the actual components we are going to use
- Adjusted the schematic on eagle cad and fixed some issues

## Tasks to do next week:

- Learn block diagram modeling in level 0 and level 1 for the whole project and for the single components
- · Work on the modeling assignment for our project

## Things to keep in mind/general notes:

• The project modeling is due on 11/17

Project Check-in Edgard Musafiri To3 Week 7 November 9th, 2014

#### Last Week Tasks

-----

- Worked with Microsoft Project
- · Learned making project schedule and Gantt charts
- Learned 3D printing file formats
- · Practice more schematics creation with eaglecad
- · Learned Arduino function writing

#### Next Week Tasks

-----

- Order parts
- · Learn methods for good test plan
- · Drawing level-o and level 1 block diagram
- Learn how to describe better project description

### Things to keep in mind/general notes:

-----

- System design and modeling due on Monday November 17th 2014
- Schedule due November 10th 2014 created with open source project management software.

#### Problems/Issues

.....

Only using school computers and little remote access.

# Week 8 check-ins

# **Project Check-in** Wesley Murar T03 Week 8 November 16th, 2014 Tasks completed last week: ☐ Received boards from OSH Park ☐ Created System level 0 block diagram ☐ Revised UML views for project ☐ Revised System level 1 block diagram Tasks to do next week: ☐ Develop and discuss test plan $\square$ Start testing board and components ☐ Begin Soldering parts to board ☐ Help Tyler in the adjustment of the enclosures ☐ Pay Tyler \$26 Things to keep in mind/general notes: ☐ Due Dates:

11/24 Test Plan

Robert "Tyler" McNichols T03 Week 8 November 16th, 2014

## Tasks completed last week:

- Export/create final BOM for project
- Ordered (and received) parts for project
- Received boards from OSH Park
- Helped Wes with system block diagrams
- Created 2 UML views for project
- Upload UML views and block diagrams to wiki

#### Tasks to do next week:

- Fully debug code and ensure final working order
- Start creating test plan
- Start testing board's traces
- Start soldering parts to boards
- Plan modifications to enclosure to fit completed board/system

- Test plan is due November 24th
- We need to plan a time to meet together and start soldering/testing our boards
  - I'll need payment for boards and parts order within the next couple of weeks

Sarmad Butti

T03

Week 8

November 16, 2014

## Tasks completed last week:

- Learned representing a project with block diagrams and model it with level 0 and level 1 diagrams
- Did the level 1 diagrams for the whole system and for the components

#### Tasks to do next week:

- Learn how to solder with the reflow oven
- Start mounting the components on the PCB boards
- Learn how to create a test plan for the project
- Work on creating a test plan and a test case study for the next assignment

## Things to keep in mind/general notes:

• The project test plan is due on 11/24

Project Check-in Edgard Musafiri To3 Week 8 November 16th, 2014

#### Last Week Tasks

-----

- Learn methods for good test plan
- Drawing level-o and level 1 block diagram
- · Learn how to describe better project description
- Learned 3D printing file formats
- Learned Arduino function writing

#### Next Week Tasks

-----

- Writing Arduino code
- Start making test plan
- Start testing boards
- Start Soldering

## Things to keep in mind/general notes:

-----

- Test plan due on Monday November 24th 2014
- · Reimbursing money for ordered parts
- · Team meeting for testing and soldering

#### Problems/Issues

-----

· Only using school computers and little remote access.

# Week 9 check-ins

Wesley Murar T03 Week 9

November 23, 2014

#### Tasks completed last week:

- ? Created test case templates
- ? Created test plan, and revised
- Investigated Soldering process
- Helped PCB board connections with Tyler

#### Tasks to do next week:

Begin assembling board(soldering) and testing for any flaws in the functionality.

- ② Keep in mind that we have a final presentation that includes making a board too. Make sure to be ready to get together and build at least one PCB board.
- 2 Tuesday, November 25th might be the day we begin soldering
- 2 November 27-28 Enjoy thanksgiving! Don't waste too much money.

Robert "Tyler" McNichols T03 Week 9 November 23rd, 2014

## Tasks completed last week:

- Create Gerber files to laser cut solder template
- Piece together enclosure and find suitable modifications
- Test board traces
- Met with EPL attendant to talk about SMT soldering
- Helped revise test plan
- Helped create test case templates

## Tasks to do next week:

- Fully debug code and ensure final working order
- Schedule a time to solder boards
- Solder components to boards

## Things to keep in mind/general notes:

• We need to meet and start soldering boards this week

Sarmad Butti

T03

Week 9

November 23, 2014

## Tasks completed last week:

• Wrote two test cases for a couple of the components in our project

## Tasks to do next week:

• Learn how to solder with the reflow oven

# Things to keep in mind/general notes:

• Find some time to meet with the group and help solder the board components

Project Check-in Edgard Musafiri To3 Week 9 November 23rd, 2014

## Last Week Tasks

-----

- · Learned methods for good test plan
- Learned 3D printing file formats
- Created test case templates
- · Created test plan
- Revised test plan

### Next Week Tasks

-----

- · Writing Arduino code
- · Learn soldering process
- · Start testing boards
- Start Soldering

## Things to keep in mind/general notes:

.....

- Thanksgiving week
- Begin soldering
- Preparing for the final presentation

### Problems/Issues

-----

Only using school computers and little remote access.

# Week 10 check-ins

Project Check-in
Wesley Murar
T03
Week 10
December 2nd, 2014
Tasks completed last week:
☐ Helped Tyler Solder parts onto a PCB board
☐ Tested the PCB connections (LED connections, Resistor values, etc).
Tasks to do next week:
☐ Get a fully working PCB board
☐ Begin constructing the project poster
☐ Divvy up presentation material.
☐ Understand all aspects of the project
° Go over Schematics, Layout, and all assignments turned in.
Things to keep in mind/general notes:
☐ Due Dates:
<ul> <li>Presentation: 12/12</li> </ul>
° Finals: 12/8
☐ Home stretch of the project, need to make sure everyone is working together to get this thing done

Project Check-in
Robert "Tyler" McNichols
T03
Week 10
December 1st, 2014
Tasks completed last week:
☐ Almost finish debugging code
☐ Use laser cutter to create solder stencil
$\hfill \square$ Place and bake (solder) surface mount components to board
☐ Solder thru-hole components to board
☐ Test components mounted on board
Tasks to do next week:
☐ Finish debugging code
☐ Program microcontroller on PCB
☐ Modify enclosure to fit PCB and components
☐ Work on project presentation
Things to keep in mind/general notes:
$\square$ Presentation on Thursday, 12/12 at 1:00
$\square$ Don't forget to sit in on two other presentations

Project Check-in Edgard Musafiri T03 Week 10 November 30th, 2014 Last Week Tasks
☐ Learned soldering process ☐ Started Soldering  Next Week Tasks
□ Test at least one of our game works accordingly □ Start working on the presentation □ Understand and reflect on what I learn on the project □ Make poster or PowerPoint
Things to keep in mind/general notes:
Problems/Issues  Only using school computers and remote access

# Week 11 check-ins

Project Check-in
Wesley Murar
T03
Week 11
December 8th, 2014
Tasks completed last week:
☐ Present Project
☐ Refine the projects enclosure, using fabric or any other material.
☐ Decide who is turning in the weekly reports.
Tasks to do next week:
$\square$ Relax and hopefully bask in the glory of being done with finals.
Things to keep in mind/general notes:
□ Due Dates:
☐ Due Dates:

Robert "Tyler" McNichols T03 Week 11 December 7th, 2014

## Tasks completed last week:

- Debug and complete finished code
- Drill holes in enclosure to fit LEDs/button
- Finished soldering board
- Program microcontroller with appropriate code

## Tasks to do next week:

- · Clean up any issues with the project
- Finish making presentation
- Present project
- Attend two other presentations

- Final is Wednesday 12:30-14:20
- We are scheduled to present Thursday at 1:00 in FAB 155
- Don't forget to attend two other presentations

Sarmad Butti

T03

Week 11

December 7, 2014

# Tasks completed last week:

The group meeting was at a time that was conflicting with my work schedule, so I couldn't meet with them to help with the soldering

## Tasks to do next week:

• Help prepare the presentation

Project Check-in Edgard Musafiri T03 Week 11 December 7th, 2014 Last Week Tasks
☐ Demonstrate class project
☐ Prepare presentation
☐ Revise presentation
Next Week Tasks
☐ Work on personal projects
Things to keep in mind/general notes:
□ Project Presentation on Thursday December 11th, 2014 at 1pm □ ECE 411 Final Exam on Wednesday December 10th, 2014 □ Attend two other presentation sessions
Problems/Issues
□ Only using school computers and remote access