Date:	
Attendees:	
Customer Updates (Any):	
Team Members Weekly Updates:	
Nathan:	
Austin:	
Zach:	
Tyler:	
Advisor:	
Collaborative Discussion:	
Individual Team Goal Setting:	
Nathan:	
Austin:	
Zach:	
Tyler:	

Date: 9/17/2015

Attendees: Nathan, Austin, Zach, Dan, Bruce

# **Customer Updates (Any):**

Need to contact client to set up a meeting with him.

### **Team Members Weekly Updates:**

Nathan: Austin and I have done some brainstorming on the ME functionality of this machine. We will not move forward on prototyping until we have completed our client interview.

Austin: Same as Nathan.

Zach: none

**Tyler: absent** 

Advisor: none

#### **Collaborative Discussion:**

Do we like this agenda template?

Table until next meeting.

Finish questions for customer.

Please add any information. The file is located on the Shared Drive.

Determine when we are going to contact customer.

Zach will follow up with customer about when he would like to meet. He will email us when he knows when we can set up our client interview.

Talk about purchasing the wheel prototype.

Table until next meeting.

Discuss Team Contract.

Table next meeting.

Individual Team Goal Setting:

Nathan:

Determine when and where we are going to meet for team meetings.

Austin:

Go to purchasing lecture 9/24/2015.

Zach:

Contact Client

Tyler:

Absent.

Date: Oct. 1st 2015.

Transcribed by: Austin Olsby

Attendees: Zach, Tyler, Austin, Dan, Bruce

### **Customer Updates (Any):**

We got the OK to move ahead with the spaghetti string idea and also use a motor if we were unable to make it man powered.

#### **Team Members Weekly Updates:**

Nathan: Did not attend

Austin: Updated on the progress of the mechanical system and what it will look like.

Zach: Updated on the status of the computer science side of the project: what things we will be needing and concerns.

Tyler: Researched prices and found persistence of vision kit that best suits the team's needs.

Advisor: Things to be aware of for snapshot: Why we have the hardware we do, flowcharts, visualization of what we are building, and why we are building it.

#### **Collaborative Discussion:**

Do we like this agenda template? Yes

Discuss Team Contract. Team is okay with and has signed the team contract

Talk about purchasing the wheel prototype. Tyler bought a kit to work on visualizing and prototyping. We are looking into purchases a weed whacker for the structural prototype. We want to make the base out of a dolly. We have found strings of LED's are on the market.

Setting Milestones (Monthly/Semester) and Goal Statement. Upcoming goals are being prepared for snapshot. We would like to have one wheel complete by this semester.

Team binder. Tyler has gotten a team binder.

Action Register – Are we ok with this system? (Nate will bring last week's printed agenda to each meeting). Yes

# **Individual Team Goal Setting:**

Nathan: Constructing a solid model and animation of the first prototype.

Austin: Same as above.

**Zach: Create a diagram of how the programming works** 

Tyler: Assemble the persistence of vision kit.

Date: 10/08/2015

Transcribed by: Nathan McLeod

Attendees: Nathan, Austin, Zach, Tyler, Dan.

#### **Customer Updates (Any):**

Bob has electrical supplied ready for us to use.

#### **Team Members Weekly Updates:**

**Nathan:** New place for meetings, Senior Design Suite. We plan on doing a prototype using a weed eater during the coming weekend.

Austin: Created a rough solid works model of our finished product.

**Zach:** Determined that we will be able to use Arduino for controlling the LED's on the final product. The wheel spoke can be made with LED strips that Zach found online. These strips have 3X densities.

**Tyler:** Spent the week creating an LED spin wheel prototype using a bike wheel.

**Advisor:** Informed us that we will need to use a DC motor on the final product.

#### **Collaborative Discussion:**

Snapshot expectations: We will showcase Tyler's bike prototype during snapshot.

We will meet on Monday 10/12/2015 to create a poster, and practice for snapshot.

Prototype due dates: (make schedule excel) Tabled until 10/15/2015

# **Individual Team Goal Setting:**

**Nathan:** Austin + Nathan will work on the weed eater prototype over the weekend.

Austin: See above

Zach: Will continue research on LED controller capabilities.  Tyler: Same as Zach.  The team will meet on Monday 10/12/2015 for snapshot preparation.	
The team will meet on Monday 10/12/2015 for snapshot preparation.	

Date: 10/15/2015

Attendees: Nathan, Austin, Tyler, Dan,

Zach not present!!!!!!!

### **Customer Updates (Any):**

Bob visited us at Snapshot, he is willing to give us hardware starting next week.

#### **Team Members Weekly Updates:**

**Nathan:** Weed Eater testing. Too quick of acceleration. So we bought a cordless drill for prototype testing. Worked a lot better. We might need a "spine" for the LED wires. TBD

Austin: Same as Nathan

Zach: Absent

**Tyler:** Created basic circuit design for the LED's Arduino switch. Also created a more detailed design for our next prototype. Has a BOM for his next LED prototype.

**Advisor:** Snapshot seemed very well. We got good reviews about our booth. People liked having hardware.

#### **Collaborative Discussion:**

#### How did snapshot go?

**Austin:** Went great. Generated s lot of interest. I liked Dr. (someone) advised to put a weight on the cord to help with stability.

**Tyler:** Went well. We did a good job presenting. Easy to comprehend. Good feedback. A lot of instructors gave sound advice.

Nathan: It all went well. People seemed very interested to see the final product.

Setting our schedule for the semester.

All Team member shave a full parts list for Assembly Prototype

What to buy for next prototypes. We will determine all BOM at next week's meeting.

# **Individual Team Goal Setting:**

Nathan: BOM for proto 1 determined for next week

Austin: Same

Zach: Same

Tyler: Same

Date: 10/21/2015

Attendees: Nathan, Austin, Zach, Dan

# **Customer Updates (Any):**

#### None

#### **Team Members Weekly Updates:**

Nathan: Built prototype for motor assembly. Created BOM for mechanical components

Austin: same as Nathan

Zach: LED Strips are compatable

**Tyler:** Created CS BOM

**Advisor: Nothing** 

#### **Collaborative Discussion:**

BOM presentation: Mechanical totals to \$200.31

CS totals to \$138.33

Grand total is \$338.64

Approval of the semester agenda: All approved

Wiki Page Discussion: EVERYONE NEEDS TO ATTEND WIKI PAGE REVIEW ON THE 27<sup>TH</sup>.

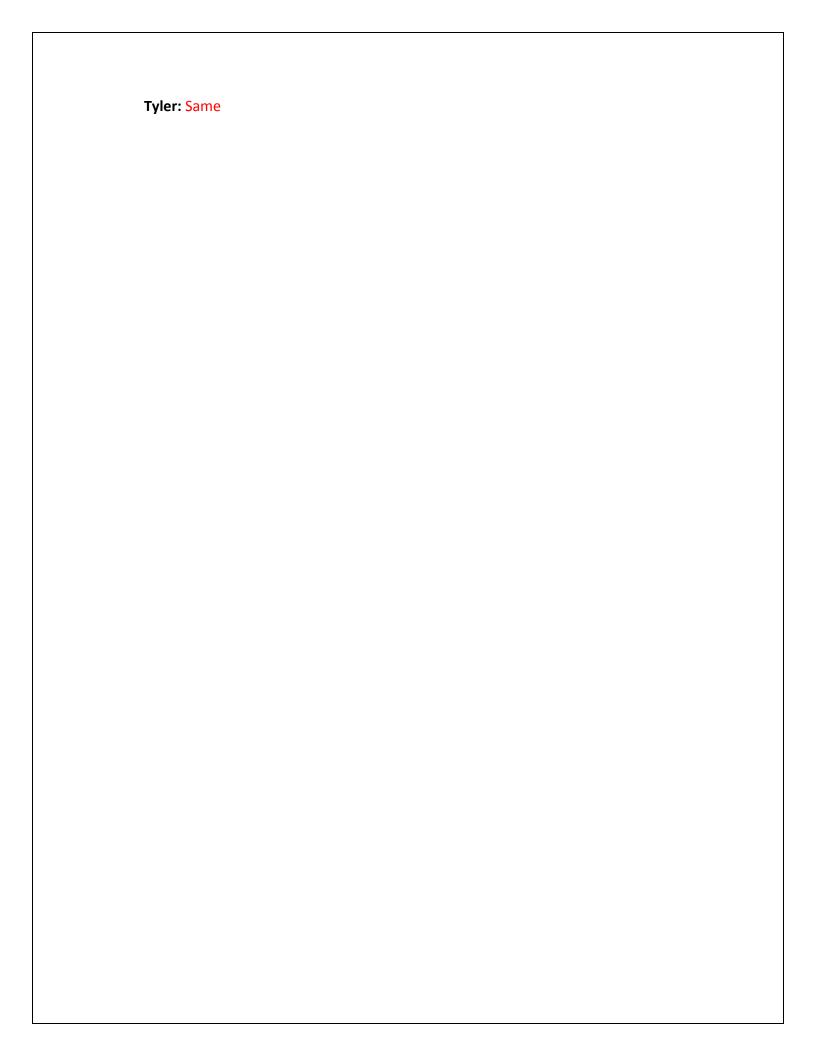
Design Review Scheduling (Time and Place): Determine time and place after wiki page discussion

# **Individual Team Goal Setting:**

Nathan: Austin and Nathan have all parts purchased for Mech.

Austin: same

Zach: Have LED's purchased.



Date: 11/05/2015

Attendees: Zach, Tyler, Nathan, Austin

### **Customer Updates (Any):**

He says hi.

#### **Team Members Weekly Updates:**

Nathan: ½ built prototype. We like our new design concept

Austin: Nathan is pretty neat

Zach: Wikipage went really well. Made sure that we will not have a catastrophic meltdown with the part ordering. However, people supersede the judgement of Zach. We will get some duplicates.

Tyler: I was very sick. Now, I am not very sick. Finishing up circuit design. Wants to work on programming starting now.

Advisor: Note here.

#### **Collaborative Discussion:**

#### What do we need to do:

Everyone provide a brief page of what has been done so far this year (from logbook). We need to update for next meeting.

Idaho Pitch, Next Thursday the 12th. In the sub Ballroom. We need to figure out our pitch. Nathan will take on organizing the pitch.

# **Individual Team Goal Setting:**

Nathan: Austin: Determine Pitch. Work on paragraph for wiki page Zach: Wiki page progress description. Create a step by step plan for the to do's for programming and circuit designing with Tyler. Tyler: Wiki page progress description.

**Date:** 10/29/2015

**Transcribed By: Austin Olsby** 

**Attendees: Austin and Zach** 

### **Customer Updates (Any):**

N/A

### **Team Members Weekly Updates:**

**Nathan: Not Present** 

**Austin:** Ordering parts was not able to happen. Deadlines are being moved back a week to compensate for not having parts.

**Zach:** Linear Voltage Regulators have been obtained from Dr. Rinker. To reduce the amperage required, the leds can be broken into smaller strips.

**Tyler: Not Present** 

**Advisor: Not Present** 

#### **Collaborative Discussion:**

**Parts List** 

**Scheduling and Calendar Updates** 

Moved due date back a week

Wiki-Page

Zach is going to be working on getting the wiki-page started.

#### **Elevator Pitch Competition**

Austin is going to sign the team up for the elevator pitch competition.

**Design Review** 

We are going to wait until we have everyone together to schedule a time for the design review.

# **Individual Team Goal Setting:**

Nathan: N/A

Austin: Sign the team up for the elevator pitch competition and work on purchasing

parts.

Zach: E-mail Sue to order parts needed and build Wiki-page

Tyler: N/A

**Date:** 11/19/2015

Attendees: Nathan, Austin, Zach.

### **Customer Updates (Any):**

Bob Rinker thinks that our design review was successful.

### **Team Members Weekly Updates:**

Nathan: Completed the design review. We are still waiting on parts to come in to continue our building. Austin and I competed in the pitch competitions. We were awarded the 2 most valuable runner up consolation prize.

Austin: Balanced the budget this week. Still waiting for parts.

Zach:

Tyler:

Advisor:

#### **Collaborative Discussion:**

How did design review go?

It went well. Bob Rinker was interested in the progress of the project. The discussions were very involved, and we gained a good perspective on the anticipation of the client.

Don't forget to email teammate review sheets to advisor by 11/20/2015.

# **Individual Team Goal Setting:**

Nathan: Waiting on parts

Austin:	Waiting on parts
Zach:	Absent
Tyler:	Absent
.,	

Date: 12/03/2015

Attendees: Tyler, Nathan, Austin, Dan, Zack.

**Customer Updates (Any): none** 

### **Team Members Weekly Updates:**

Nathan: We have assembled a make-shift ME prototype.

Austin: Attended lecture, did the ME prototyping as well.

Zach: Soldering on the project.

Tyler: Made a small (awesome) LED proto.

Advisor: Turn in logbooks before the end of the semester.

#### **Collaborative Discussion:**

Snapshot tomorrow. Get a proto working?

# **Individual Team Goal Setting:**

Nathan: Build proto for snapshot

Austin: Same

Zach: Same

Tyler: Same

**Date:** 1/21/2016

**Attendees:** Nathan, Austin, Tyler, Zack

# **Customer Updates (Any):**

New Semester.

### **Team Members Weekly Updates:**

Nathan: No updates through the break

Austin: No updates from over the break

Zach: No updates

Tyler: No updates

Advisor: Absent

#### **Collaborative Discussion:**

Complete Calendar. Scheduled brief out until expo.

# **Individual Team Goal Setting:**

Nathan: as stated in calendar.

Austin: as stated in calendar.

Zach: as stated in calendar.

Tyler: as stated in calendar.

Date: 1/28/2016

Attendees: Nathan, Dan, Tyler, Zach

# **Customer Updates (Any):**

What did Rinker say about our design review?

### **Team Members Weekly Updates:**

Nathan: We have PWM and necessary wiring ordered. I completed some deconstruction of the drill motor, and found that

Austin: absent

Zach: Working with Tyler on the IDAHO code

Tyler: Same as Zach

Advisor: Awaits the design review on the 11<sup>th</sup> of February.

#### **Collaborative Discussion:**

Plan on spending a good amount of time working on assembly during next meeting (Feb 4<sup>th</sup>)

# **Individual Team Goal Setting:**

Nathan: Assemble the pulse width modulator with the motor this week.

Austin: Same as Nathan

Zach: Finish up any updates on the wiki page

Tyler: Finish up the remaining portions of the code in order to prepare for

testing.

Date: 02/18/2016

Attendees: Nathan, Austin, Tyler, Zach, Dan the Man.

# **Customer Updates (Any):**

From Design Review: "Test the lights out in the Kibbie Dome"

"See if we can sync the machines to the goofy glasses"

### **Team Members Weekly Updates:**

Nathan: Design Review went well. We tested out the machine in the Kibbie.

Austin: We tested out the machine in the Kibbie.

Zach: We tested out the machine in the Kibbie.

Tyler: Might be dead. Nope, not dead. Working with polar images.

Advisor: None.

#### **Collaborative Discussion:**

Goal Setting: Snapshot, Team Citizenship, Portfolio, Wiki all due March 8th.

Snap Shot Expectations: Video of machine. Poster board.

# **Individual Team Goal Setting:**

Nathan: ME's- All Documentation. + Spinning Attachment

Austin: Same as Nathan.

Zach: Polar images. Done.

Tyler: Same as Zach.

Date: 03/24/2016
Attendees: Nathan McLeod, Austin Olsby, Tyler W. Zach
Customer Updates (Any):
Rinker gave the ME team permission to buy more drills.
ME team ordered 3 new motors.
Bob wants to see the machine working in the Kibbie Dome.
Team Members Weekly Updates:
Nathan: Austin and I built magnet support for the hall sensor.
Austin: Same as Nathan
Zach: Working on the prototype.
Tyler: Working on the user friendly way to use program. This is for lamen.
Advisor: NA
Collaborative Discussion:
We need a working prototype TODAY.
We need to show Bob this next week.
Individual Team Goal Setting:
Nathan:
Austin:
Zach:
Tyler:

Date: 02/25/2016

Attendees: Nathan, Austin, Zach, Tyler.

# **Customer Updates (Any):**

#### None

### **Team Members Weekly Updates:**

Nathan: Went Shopping

Austin: Went shopping

Zach: Got hall sensors from Bob.

Tyler: Working on Polar conversion in Code.

Advisor: Absent

#### **Collaborative Discussion:**

Separate.

# **Individual Team Goal Setting:**

Nathan: Work Day

Austin: ...

Zach: ...

Tyler: ...

Date: 04/07/20016

**Attendees: Austin and Zach** 

### **Customer Updates (Any):**

We talked with Bob Rinker and he discussed with us why the motor controller was not working.

#### **Team Members Weekly Updates:**

Nathan: Not in Attendance. (Note: Nate, Austin, and Zach met of Tuesday and Wednesday)

Austin: Nate and I spoke with Bob Rinker and Herb Hess. We speculate the controllers were cheap and poorly manufactured. We are going to try a different controller from a more reliable source and better documentation. We have placed an order for the controllers and they are all 60 day refundable in case they do not work.

Zach: Zach fixed the bug with the larger prototype. The Hall Sensor now works when we use the complete wheel. The Image is a bit blocky, so he is working on interpolating between LEDs to create a clearer image.

Tyler: Not in Attendance (Back problems and is in Tri Cities) Email update: He is working on the graphics for the letters to be displayed.

Advisor: Not in Attendance

#### **Collaborative Discussion:**

# Things that need to be completed:

- We need to prove that we have a reliable control system that can last at least two minutes
- We need to create a visible image on the full wheel.

- We need to create documentation and safety instructions for running the machine.

### **Individual Team Goal Setting:**

Nathan: Same as Austin

Austin: Nate and I are prioritizing the control system over the documentation. Once that is finished and we have a proven final model, we can work on documentation including: how to run the machine, safety features, and the build process.

Zach: Zach is working getting the code to create clear images on the larger spinning rotary. He has a model that is working fairly well at the moment. He got the code to work with two spokes.

Tyler: Tyler is working on a user interface that is easy to use by anyone.