

Buzz lightboard Team-Meeting Minutes 1

Date: Tuesday, June 19, 2018

Time: 11:00 AM

Location: Client's office

In Attendance: DR. Swenson, Nathan Sherwood, Talal Aldoussari, Taylor Spence, Jake Jermyn.

- **Client Meeting Note – Brian Smentkowski:**

- There are two ways for reverse imaging, but brian will take care of that.
- Our primary goal as a team is to build and design the physical lightboard.
- To figure out an optimal size, we need to talk to the faculty and see what they would like.
- As of right now, Brian has no specific room in mind for the lightboard
 - o He is hoping to have designated spaces for it in different buildings across campus
- This is the prototype in which Brian is hoping can sell other faculty on using
 - o Wants to focus on portability to convince people
- Brian will give us a list of names of professors that have showed interest in the lightboard.
- There is no specific spec sheet that we need to follow, everything is at our discretion
- CETL will hold and maintain the lightboard after we're done with it.
- It is a good idea to make an "instruction sheet" of how to construct
- Note from Sweson: we will need a bill of material and drawings for the overall class, so that can be included in the instructional sheet.
- Keep the overall design simple

At this point, Brian's friend Greg joined in from another college to answer our questions.

- He said that his was easy to build
- Informed us of a feature that allows the user to shoot a powerpoint directly onto the lightboard to use as a reference
- The lightboard will most definitely cater to the online courses
- The room will need to be dark and finding perfect lighting is tricky.
- Erasing isn't perfect on the glass, and even though you're erasing, it will still show up on the glass a little bit
- They use an adjustable height table
- The LEDs that are connected to their lightboard are UV

Greg leaves, just Brian and us now

- The most excited that they are for the lightboard is the projecting feature.
- If you want to use the whole board, it is best to design the board with the camera's aspect ratio in mind
- Aspect ratios can be either 4:3 or 3:2
- We have a hard budget of \$2,000, but we should try to star around \$1,500, if possible.
- The lightboard does not need to be detachable from the frame
- Must be made to be safe for people to use.
- Reiterates that is **must** be portable.

Next meeting:

Date: Tuesday, June 26, 2018

Time: 11:00 AM

Location: EP 209

Buzz lightboard Team-Meeting Minutes 3

Date: Tuesday, July 3, 2018

Time: 11:00 AM

Location: EP 209

In Attendance: DR. Swenson, Talal Aldoussari, Taylor Spence, Jake Jermyn.

Summary of conclusion:

- Edited project schedule with DR. Swenson
- Split up the tasks and assign names next to each task
- Add comment next to the pictures on Wikipage
- Work better on the documents
- Get prepared for snapshot and organize the Wikipage

Next meeting:

Date: Tuesday, July 10, 2018

Time: 11:00 AM

Location: EP 209

Buzz lightboard Team-Meeting Minutes 4

Date: Tuesday, July 10, 2018

Time: 11:00 AM

Location: EP 209

In Attendance: DR. Swenson, Sarah Willis, Talal Aldoussari, Taylor Spence, Jake Jermyn.

Summary of conclusion:

- We need to lead the meeting and have enough topics to discuss
- We went over the budget
- We need to start ordering our materials
- We talked about our purchase materials and DR. Swenson agreed with the materials

Next meeting:

Date: Tuesday, July 17, 2018

Time: 11:00 AM

Location: EP 209

Buzz lightboard Team-Meeting Minutes 5

Date: Tuesday, July 17, 2018

Time: 11:00 AM

Location: EP 209

In Attendance: DR. Swenson, Sarah Willis, Talal Aldoussari, Taylor Spence, Jake Jermyn.

Summary of conclusion:

- Update the Design Validation Plan and estimate the test date

- Contact our client for the design review
- Start thinking of the caster wheels

Next meeting:

Date: Tuesday, July 24, 2018
Time: 11:00 AM
Location: EP 209

Buzz lightboard Team-Meeting Minutes 6

Date: Tuesday, July 24, 2018
Time: 11:00 AM
Location: EP 209
In Attendance: DR. Swenson, Taylor Spence, Jake Jermyn.

Summary of conclusion:

- Finish the prototype build, also need to do the machining to make everything work
- Storyboard is just blank board with power point slides tacked on to tell a story
- We should bring the prototype to the design review for a demonstration
 - Will allow most hands on way for people to see what this is about
- Start working on the actual design of frame
- Explore alternative frame possibilities
 - 8020 is not good looking enough

Next meeting:

Date: Tuesday, July 31, 2018
Time: 11:00 AM
Location: EP 209

Buzz lightboard Team-Meeting Minutes 7

Date: Tuesday, July 31, 2018

Time: 11:00 AM

Location: EP 209

In Attendance: DR. Swenson, Talal Aldoussari, Taylor Spence, Jake Jermyn.

Summary of conclusion:

- Test the two glasses from the top and the sides to observe the length of the light through the glasses
- Test the lightboard with a camera and film it, use best lenses to observe the clarity of the glasses
- Distribute the tasks between group members

Buzz lightboard Team-Meeting Minutes 9

Date: Thursday, August 23, 2018

Time: 3:30 PM

Location: Design Suit

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn.

Summary of conclusion:

- We will contact Nate and ask if we can get hold of his projector
- We meet Mondays & Thursdays (Wednesdays if needed)
- Jake is in charge of writing a storyboard for lightboard Video
- We updated the project schedule
- Find a room for prototype test

We will have our next meeting on Monday Aug 27. Taylor has a camera and will bring it for a projector test. If we have time, we will finish testing marker vibrance.

Buzz lightboard Team-Meeting Minutes 10

Date: Thursday, August 30, 2018

Time: 3:30 PM

Location: Design Suit

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn.

Summary of conclusion:

- We finished testing writing vibrance on 360 lighting arrangement
- We finished testing writing vibrance on top lighting
- We took videos and pictures of both tests
- We are postponing projector test until further notice

Next week plan:

- Gather and edit videos and pictures of tests
- Determine conclusion from prototype test
- Begin working on video
- Work on final model
- Develop final design idea

Buzz lightboard Team-Meeting Minutes 11

Date: Thursday, September 6, 2018

Time: 3:30 PM

Location: GJ lab

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn.

Summary of conclusion:

- Went over the videos and pictures of the prototype tests
- Started looking for final design frame
- Modeled final design in Solidworks
- Started looking for caster wheels

Next week plan:

- Contact client and lead instructor
- Finalize final design
- Buy LED's light
- Buy Silicon sealant

Buzz lightboard Team-Meeting Minutes 12

Date: Friday, September 14, 2018

Time: 2:30 PM

Location: GJ lab

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn, Nate Sherwood.

Summary of conclusion:

- Contacted client
- Created initial redesign on Solidwork
- Used Silicon sealant on the regular glass
- Reevaluated the budget
- Rescheduled design review

Next week plan:

- Continue working on final design
- Select time & date for design review.
- Identify final wheels and shelf
- Determine cost of frame options
- Perform force analysis on board
- Test lighting base of glass through holes
- Finalize solidwork model

Buzz lightboard Team-Meeting Minutes 13

Date: Thursday, September 20, 2018

Time: 2:30 PM

Location: GJ lab

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn, Nate Sherwood.

Summary of conclusion:

- Determined time and date for our presentation
- Looked for frames cost
- Applied force analysis
- Cut the holes in the machine shop
- Test light through holes

Next week plan:

- Create Power point slides for design review
- Get picture of final design, schedule, and budget
- Apply force calculation in TK-solver

Buzz lightboard Team-Meeting Minutes 14

Date: Thursday, September 27, 2018

Time: 3:30 PM

Location: GJ lab

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn, Nate Sherwood.

Summary of conclusion:

- Create Power point slides
- Get picture of final design, schedule, and budget
- Apply force calcs in TK

Next week plan:

- Do I-beam test
- Machine the legs if needed

Buzz lightboard Team-Meeting Minutes 15

Date: Thursday, October 11, 2018

Time: 3:30 PM

Location: Design suit

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn, Nate Sherwood.

Summary of conclusion:

- Tested the I-beam in GJ building
- Cut down the legs

Next week plan:

- Meet with DR. Swenson for purchase approval
- Show what we have done so far for the final shape

Buzz lightboard Team-Meeting Minutes 16

Date: Thursday, October 25, 2018

Time: 3:30 PM

Location: Design suit

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn, Nate Sherwood.

Summary of conclusion:

- Showed final shape to DR.Swenson
- Final purchase approved
- Create shelf model

Next week plan:

- Meet with DR. Swenson to show all the drawings of models

Buzz lightboard Team-Meeting Minutes 17

Date: Thursday, November 1, 2018

Time: 4:00 PM

Location: Catia Lab

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn, Nate Sherwood.

Summary of conclusion:

- Create drawings for the shelf
- We need to send the shelf model to the manufacture

Next week plan:

- Find a spot to build the board
- Get your logbooks ready
- The big sheet of glass arrives next Thursday

Buzz lightboard Team-Meeting Minutes 19

Date: Thursday, November 29, 2018

Time: 3:30 PM

Location: Design suit

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn, Nate Sherwood.

Summary of conclusion:

- The lightboard is built
- Done creating powerpoint slides

Next week plan:

- Disassemble the board and build it again
- Building process doc
- Design report and portfolio doc

Buzz lightboard Team-Meeting Minutes 20

Date: Friday, December 7, 2018

Time: 3:30 PM

Location: Design suit

In Attendance: Talal Aldoussari, Taylor Spence, Jake Jermyn, Nate Sherwood.

Summary of conclusion:

- Final construction
- Added the new LED
- Done creating building process, portfolio, and design report documents
- Updated DVP