

L2TT2L Design Review Notes 12 July 2016

Reviewers:

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Some things reviewers might consider in their comments

- *What did you notice?* about presenting style, project, proof of concept prototype
- How did presenters show they were *serious, prepared & capable of doing a good job?*
- What *puzzled you or surprised you* about the project?
- What *questions* do you have for the group?
- What *suggestions* do you have for the project?
- Do you know of any *resources* (people, guides, etc.) that could help in their making journey

1.

SWOD

Mentors: Diego & Temour

Youth Teachers: Haseeb, Kyle, Keith, Tahjae

LED Array that displays the weather. It can display icons or text. It can also remind the user to take their umbrella, use sunscreen, stay hydrated, etc

- How does it know what the weather is like?
 - Get weather data from API - wifi
 - Internet of Things project
- Have you gotten the API to work?
 - Next step - get data to use
- Are you going to make your own matrix or purchase one?
 - What other aspects will be in your project besides coding?
 - Fabrication frame to hold matrix
- Like - common experience that brings everyone together
 - display from bus to weather matrix
- Look at comparable products that are on people's wall
 - Do people take time to think about the esthetic?
 - Is functionality or esthetic more important?
 - Desirable and functionable
- Presentation - Be more energetic, more fun
 - Pitch the product first before getting into the technical
 - What is your concept? Why should I care?

- Clear roles during presentation so info is not repetitive
- What sets this design apart from other products out there that people use to tell the weather?
 - Emphasize the inconvenience of stopping to actually check the weather
 - E.g. checking app, the news, the TV
- Explain how weather matrix will be on the wall
- Will the device turn ON/OFF easily?
- Make it aesthetically pleasing - more noticeable
- Show pictures - change depending on the weather
 - More interesting
- Good physical design take a lot of time
 - Don't minimize the details of making a case
 - Don't spend too much time on the technical aspect

2

GMH Industries

Mentor: Somtoo

Youth Teachers: Gabe, Hung, Manny

A toy car with a coding screen as a remote controller. The screen would require short 1-2 worded inputs in order to begin the function the car would do

- How will be able to open up this project to females?
 - Make it more accessible to a wider audience - versatile
 - Make the design really fun so they could put something into it
 - Nothing wrong with having a car - gender neutral
 - Make car that can be used to play with other accessories and toys
- Like - Simple description and gave demonstrations
- Iffy - The levels - RETHINK
 - What is the progression of the levels? What is the difference through them?
 - Beginners, Novice, Experienced, Pro - better terms (?)
 - Might be set up for failure
 - If kids can't do a level, they may be considered failures by others
 - Different levels to different tasks instead of advancing levels
 - How easy/hard it is to control the car
- Think about one interface, combining all the progressions
 - Add button, code, everything together rather than different pages for different levels
- Different games to play with the robot to level up their mastery
 - Points?
 - E.g. more points for typing in code than pressing a button
 - Achievements in games
 - Badges

- Will raise motivation
 - Gets harder as you play - adapts to how you're playing
- Easy - Pressing icons
- Medium - Commands from pull down menu
- Master - Type in commands yourself
- Consider making it so that it interacts with physical objects
 - Make something dance
 - Save this from falling
 - Move this object across the room
- Talk to kids and show them your ideas to get a better idea of what would interest them

3.

Capsule

Mentor: Thu

Youth Teachers: Judy, Dee Dee, Genesis

A storage/dispenser that holds a single type of pill. It alarms the user when it is time to take a pill, and will not shut off until the user turns the storage so a pill is dropped out.

- Particle photon - it could be portable
- 3D print the case
- Who would want to be notified that you took your pill/if you didn't?
 - Doctor, family member, etc
 - Keeps a log of when the pill is taken/not taken
- How many pills will it dispense?
 - At least 2 for now
- Is this a device that you can load at a beginning of the week that will set up time? Or will you have to set it up every time you take a pill?
- Have more pictures of the process would be more helpful of design
- Hard to control how to control how many pills comes out of dispenser
 - Automatic feeders - fish feeders?!
- Keeping pills all in one? How to get different channels to come down?
- What happens in the event of a power failure?
- Need code for people to actually use your device - setting time
- Have you spoken to people in healthcare/pharmacy?
- Is there a need for this product?
 - Solve out each problems - what type? How many times?
- Dog treat dispenser?
- For Doctors?
 - Alert patients to take their medicine
 - Alert doctors that patients have taken their medicine
- Make something that's not in the house - lights, noise abundant in home
 - Have a voice message - "You need to take your pill"
- Phone - communication - send notification to phone
- Insert to change for different pill sizes
- L.

- ively presentation, working prototype

4.

Trovas

Mentor: Tyla

Youth Teachers: Luisa, Pedro, Jordan

A device you can attach to a personal item (i.e a wallet) that allows you to find it if lost

- Use wifi to make it more portable
- Check out Tiles (?) app ? - similar product
 - Add something interesting to differentiate
 - Check out other projects for pros and cons
- Connect it to multiple people
- Use the fact that you can't make it as small as you want to your advantage - take step back and see what you can do with the size
- Accessibility to disabled people - don't limit yourself to a market statement
 - Good focus though

5.

Funny Bunnies

Mentor: Naeem

Youth Teachers: Betty, KB, Cypress

Laser Cut puzzle that when solved triggers an animated story to be displayed on screen.

- Makey-makey circuit may be a good way
- When you get to a certain point in a story, you unlock something on Scratch
 - Think about where you put copper tape so that its hard to complete randomly
- Do you have to put the puzzle piece in a certain sequence in order for the story to play in order? Or can you complete randomly for the story to still continue how you want it to?
 - Interaction with puzzle
 - Putting pieces together to unlock characters/objects
 - At the end, everything will come together to tell the story
- If two pieces doesn't fit, Scratch animates something saying that it doesn't fit
- Is there a limit to how many puzzle pieces there will be?
- Story telling aspect is very powerful
 - Different stories for each time they complete puzzle
 - Different sets of stories for different puzzles
 - Change roles of characters

6.

Winter Box

Mentor: Brad

Youth Teachers: Marc, Rian, Miles

An all year, all weather window box

- How is water going to get to this box? Rainwater?
 - Water from the bottom
- If there is a opening for the environment, how are you going to heat it?
- How are you going to generate enough heat to heat it?
- How is this different from other projects out there? What sets it apart?
 - Flourishing in the winter
- Think about versatility
 - Living in apartments
 - What if you can't hang things out the window?
- What kind of things will actually be in the box? Scale of plants and such
- Design itself is really complicated
 - The wicking ?
 - How are you going to regulate it all?
- You have all this technology, but you don't have the basics
 - Humidity sensor - no water pump?
- Purpose and audience aren't clear
 - Who? Why?
 - Can't be the jack of all trees
- Presentation didn't give the right amount of information/ misrepresentation of the info
 - Let's have further conversation
 - Try make a better pitch of what we're doing
 - Go back and work on questions
- Mentor too involved in the presentation of the youth
- Minimize the scope so that you have a project complete within the amount of time
 - Don't put too much that you don't end up completing anything

7.

Waterworks

Mentor: Susan

Youth Teachers: Satta, Gerard, Trinity, Jovanna

A musical water fountain that changes color when different Jumbo Piano keys are pressed.

- Are you going to make a real size (pump) or just a prototype?
- Will it be scaled to be in an actual park?
 - Make progression to that big vision, show us the general idea first
 - Step on something smaller first, reasonable to continue with fingers first

- Learn how to protect the electronics from the water? Sound speakers? Lights?
 - Do everything on a smaller scale first to LEARN
- Why use breakbeam (?) sensor when it's essentially a button
 - DDR mats - see how that works and implement it
 - You don't have someone triggering a certain weight to get it working
- What if you use the water as instruments to play with?
 - Playing with water if fun
 - Make a water piano
- Will the trajectory of the stream depend on the note you press?
- Pressure sensor vs Load sensor
- Don't be discouraged by things breaking
 - Solve it rather than trying to jump into something else