Community Site Proposal

I don't have time to make a LaTeX presentation, so this will have to suffice.

Charles

Summary

- We talked about having “badges” of a sort that students could earn. We also wanted to encourage students to partake in challenges. Although it might be possible to include this in a “gallery”, which is what the current site is, there is a much more ambitious and interactive approach that can be taken.

Summary

- What I propose is using the “cultural” part of this project to lead into a broader STEM topic. This will be done by using tools like the “tutorials” in the Cornrow Curves application to teach students concepts, and as they learn the concepts they unlock features that can be used in the “sandbox” mode, which would be similar to what we have

The best way to illustrate...

- Is with pictures. Therefore, I drew a number of pictures that show what I'm envisioning the final project look like. Getting from where we are to there will be long and difficult, and this is just a rough idea, but I feel that it gives a clear direction.

Image 1

- This first pictures shows the page the user is shown after they log in
- Assume the user clicks on “Iteration”, under the CC section

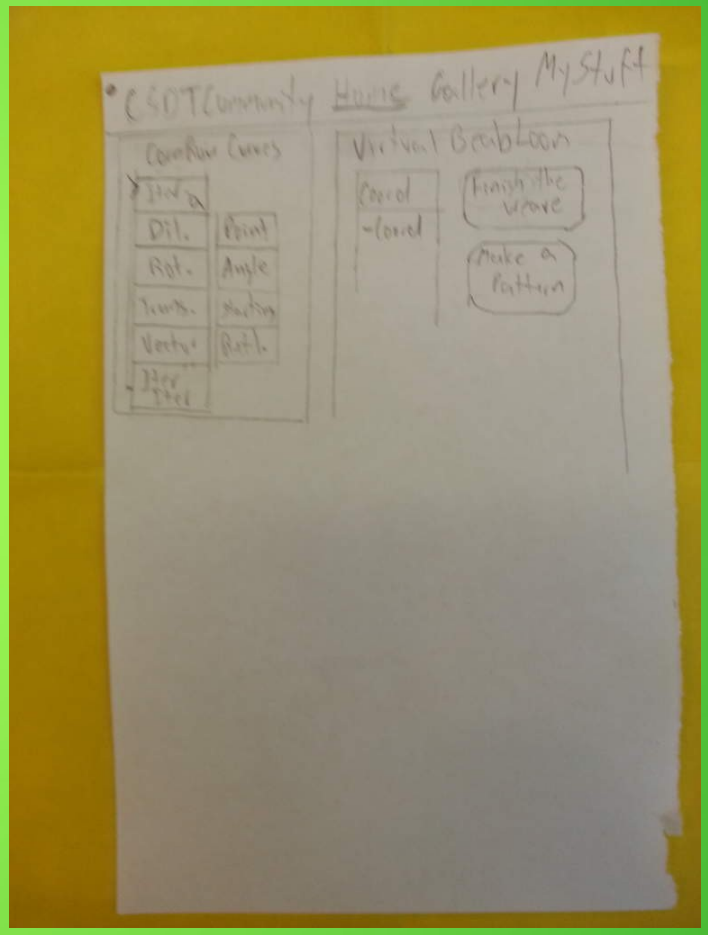


Image 2

- This image shows the “application” that user will use. This is basically the pCSDT, with several things hidden.
- After it's finished loading, they can read the description (cultural link), then a wizard will start

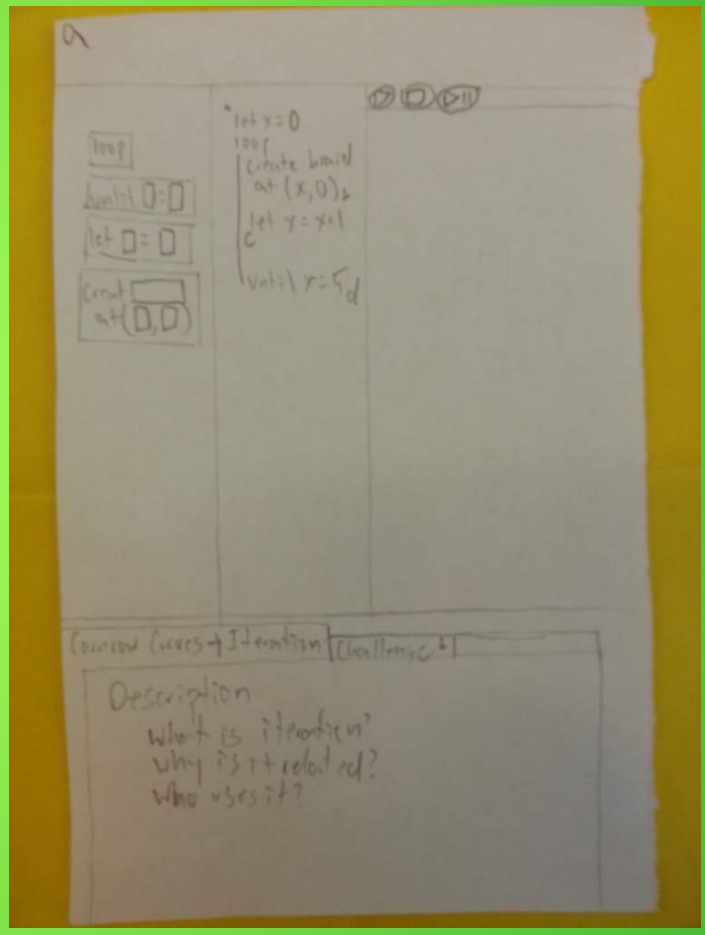
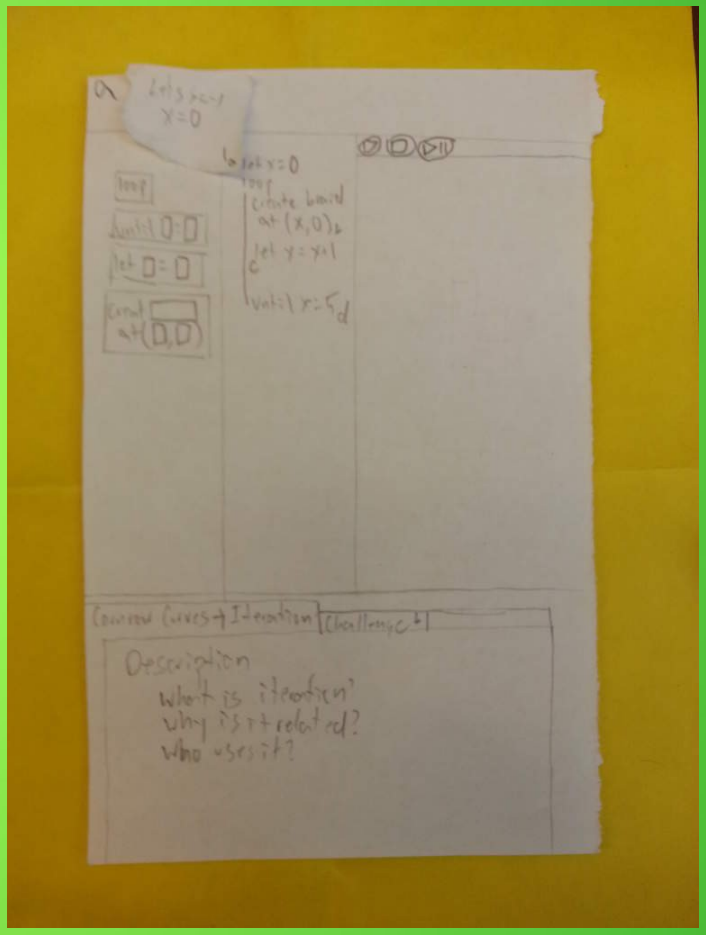


Image 3

- If you look carefully, you can see my version of a popup box near the top. This box describes one of the codelets to the student. The language may need to be change



- The student clicks the “next-step” button, which should be blinking

Image 4

- The code advances one step, and the wizard describes the next codelet
- User clicks blinking next-step button

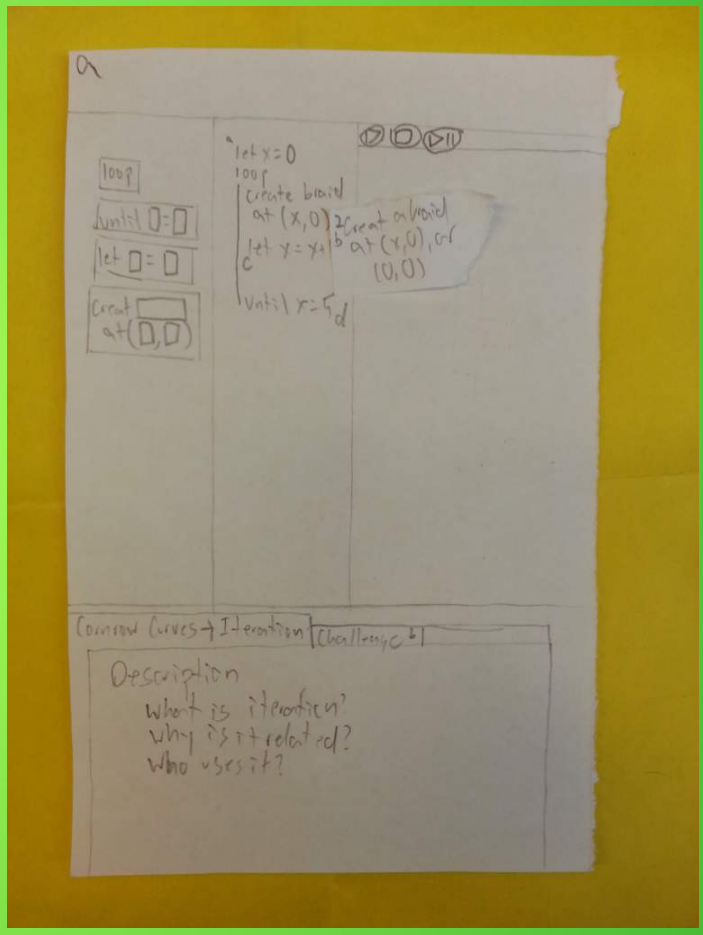


Image 5

- More description. It substitutes variables with what is actually going on.
- Next-step

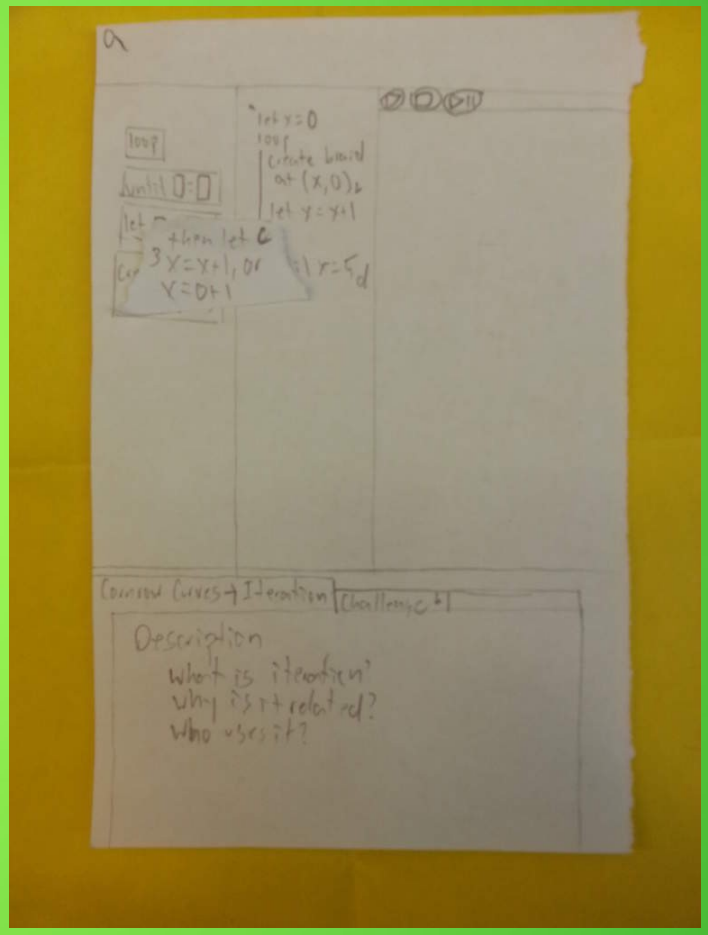


Image 6

- The “stage” area should be updating as this happens
- Next-step

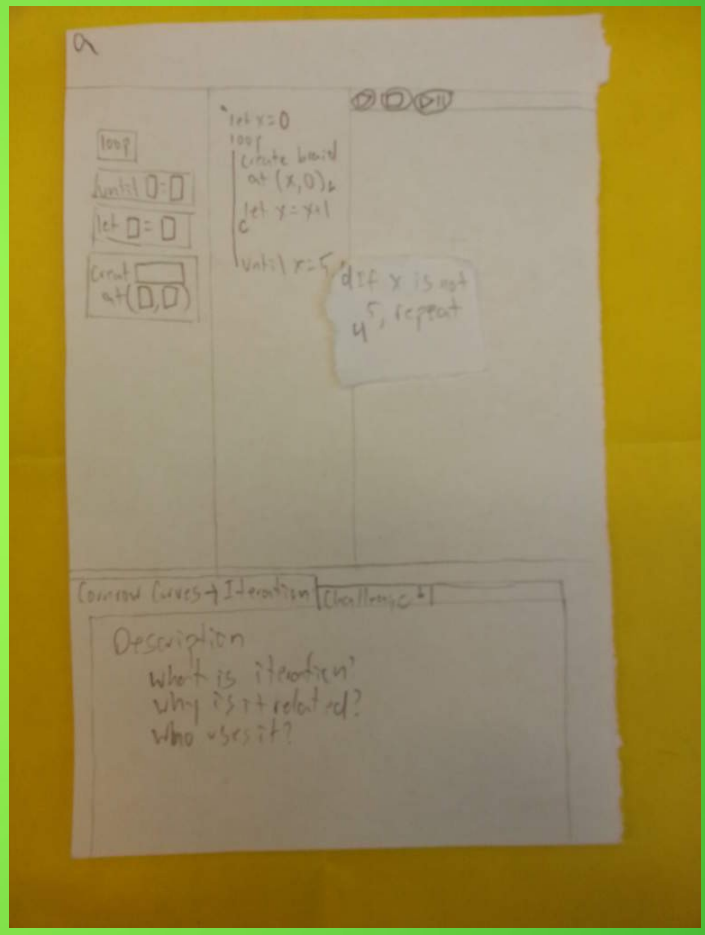


Image 7

- Note that this popup contains different information than the previous one
- Next-step

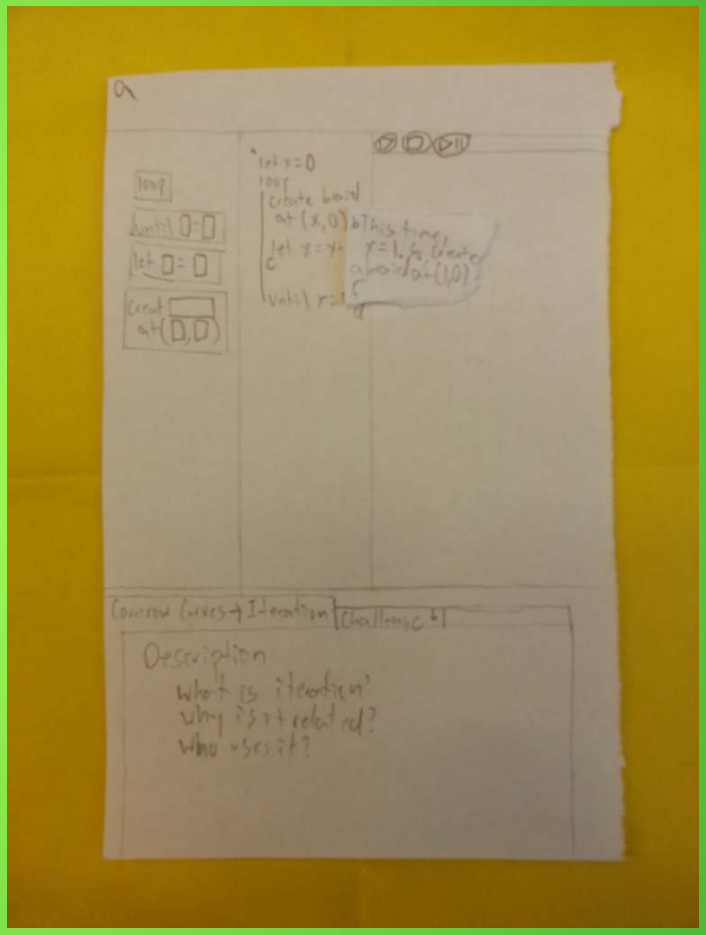


Image 8

- Blarg.
- Next-step

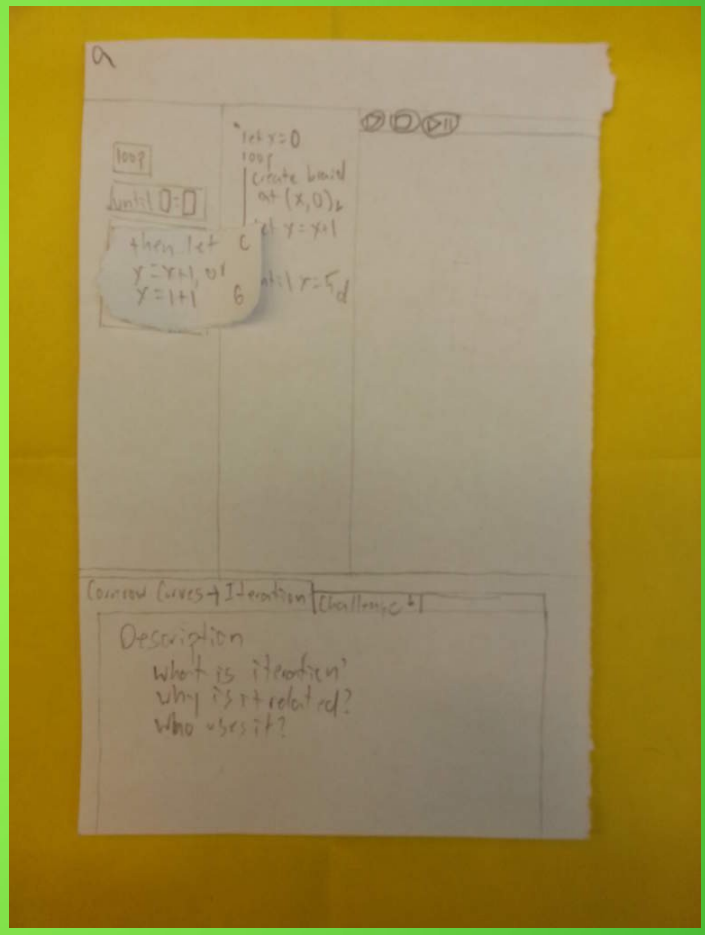


Image 9

- This will be the last slide showing this feature.

- Every level would begin with things like this. Technical words will be tied to the cultural description below

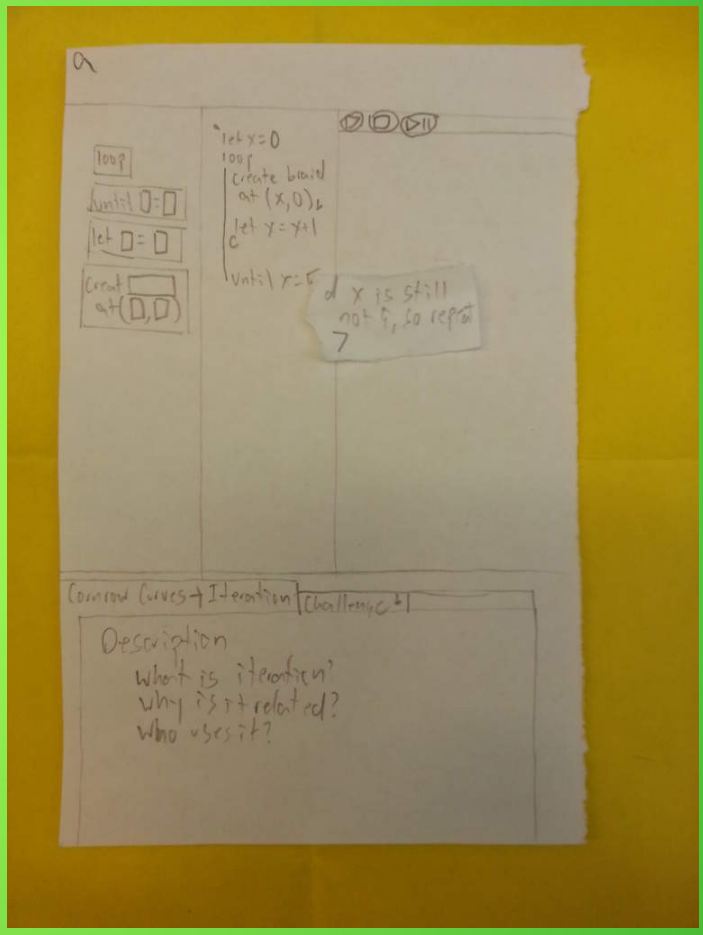
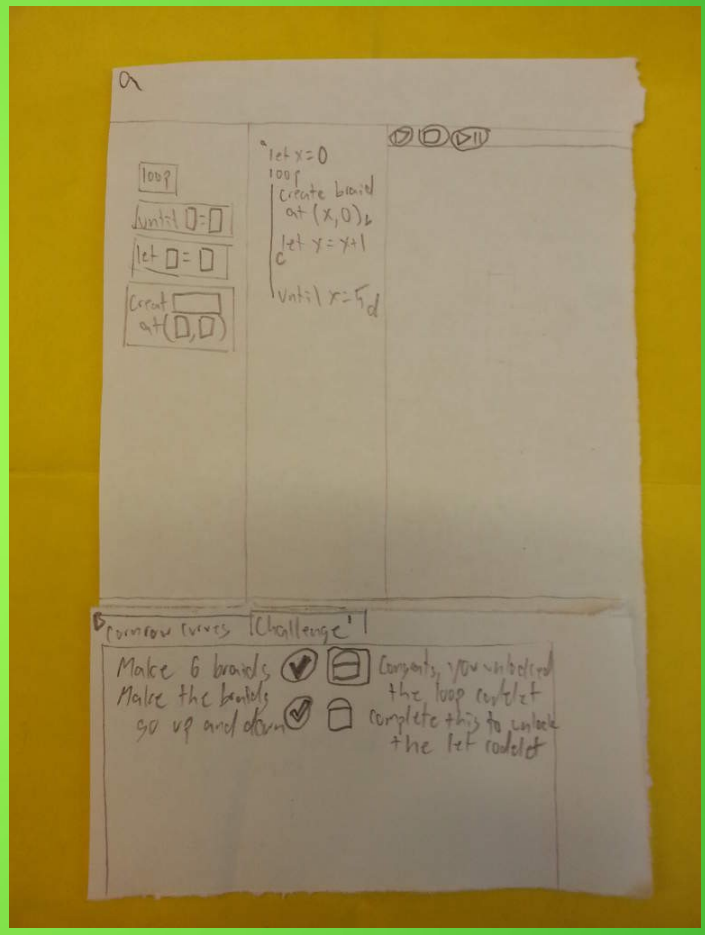


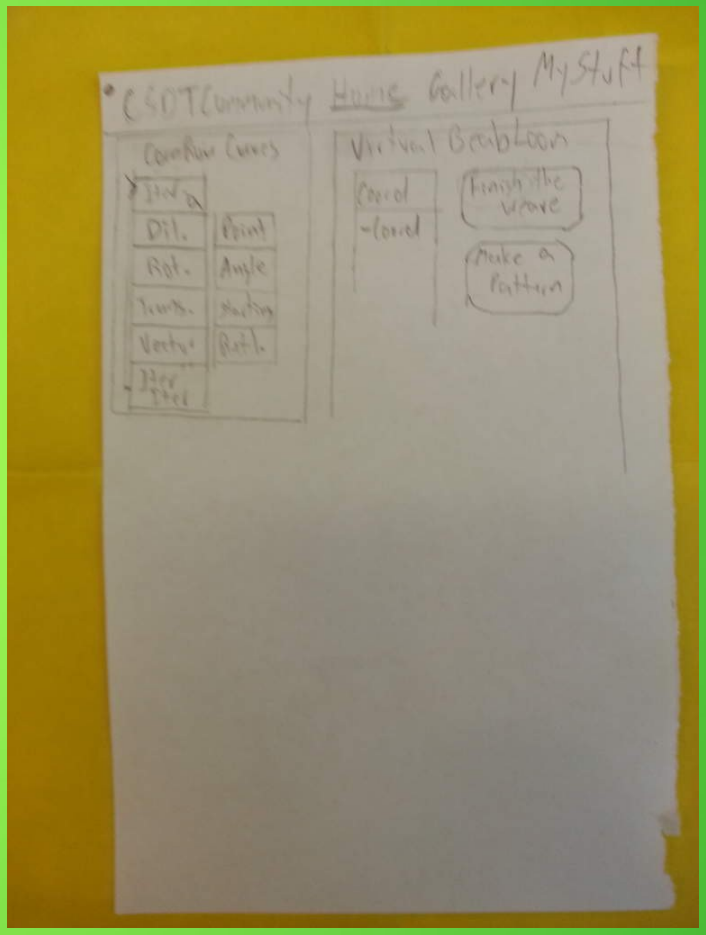
Image 10

- Look at the bottom box. There are objectives, which the student can try to complete
- Upon completion, the student unlocks a “codelet” which can be used in the sandbox



Back to the first picture

- The most important things here are the variety of levels, the gallery, and a button that I didn't have room for. There should be a sandbox feature (the missing button) which allows students to do whatever, then upload their creations to the gallery



Things that are not demonstrated

- Login
- All the levels
- Level creation
- Gallery
- Sandbox

Things, that IMO, are key differences between old software

- There is ONE tool. Everything else is just a configuration of that tool.
- The cultural learning is done in the levels, to involve the students in the software and encourage them to learn about things beyond STEM
- The goal is to teach STEM, cultural learning is just used a tool towards that end

How much would this be?

- A lot. More research needed.

Thoughts? Comments?
Scoldings?