The ability to add comments to a CV2 graph is crucial for organization and teaching. Currently, the CV1 text gadget is the best solution, but even this is expensive enough to change a creator's building plans. In addition, it means text that's only useful for creators is hanging around the room and must be hidden from players. Let's provide something more lightweight and useful for this specific purpose.

Goals

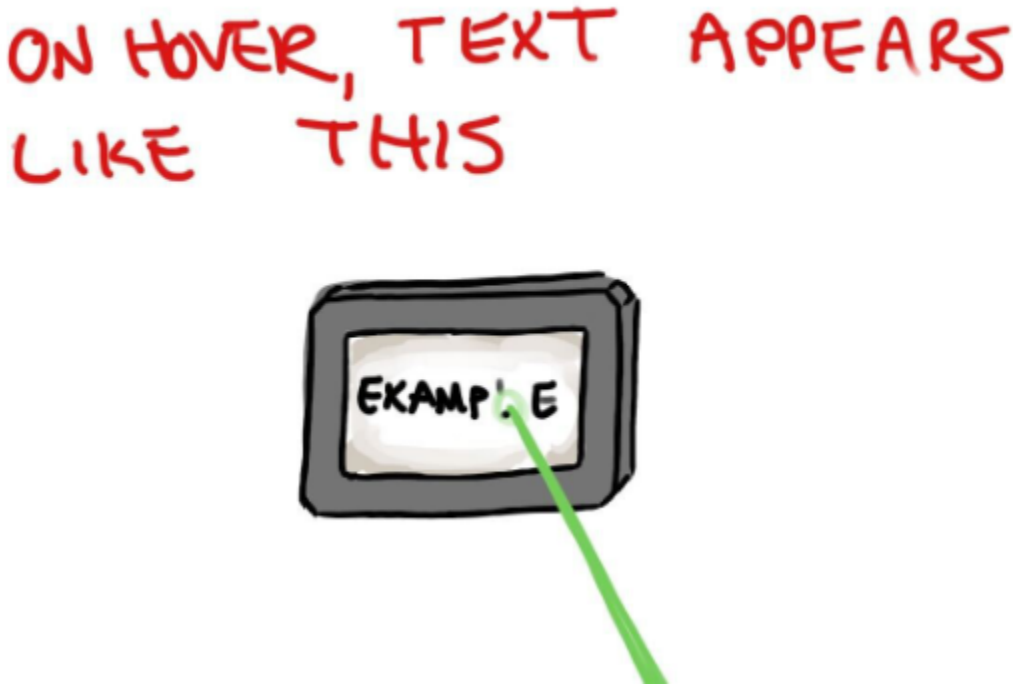
1. Provide creators with a useful tool to label and explain their circuit graphs
2. Expense is not a deterrent to use (i.e. ink cost)
3. Does not affect the play experience (i.e. is tied to gadget visibility)
4. Does not cause any room save/load issues, especially related to the data cost of strings

How it works

The Comment Chip can be created from the palette like any other chip.

- Because it's a chip, it has no ink cost (unless the room creator has chosen to make all gadgets visible) but it does count against the chip limit.
- This chip has no ports or functions and cannot be changed dynamically in any way
- The name defaults to "i" to match the palette UI, but can be changed. The name is always visible (unless it LODs out)
- Because the bulk of it glows white, the comment chip should stand out in a normal circuit graph.
    - It should glow only when the multi-line comment field in the config menu has been populated with text. (like connected vs unconnected ports)
- The gray enamel material can be recolored with the Recolor tool like that of all other chips.

When a creator laser pointers the comment chip, either with their finger (it should activate the pointer like buttons do) or with their maker pen, the comment text appears above it, only for them. The content is identical for every member of the room, but the activation to display it is local only.



Using the configure tool, creators can:

- Change the name displayed on the front
    - This has a strict character limit (~25ish?) and stretches the chip horizontally like names usually do
    - Defaults to “i” for info
- Set the comment that displays when the chip is activated
    - This also probably has a character limit, because of string storage limits. It’s less strict but still significant, like twitter-length. Let’s call it 256.
    - It is not important that text display instantaneously when the chip is activated. I’d trade a little load time for a longer comment any day.
- Change the color of the comment that displays when the chip is activated
- Set the text as “always on”
    - This may have a perf impact for the creators, or impose an ink cost, but let’s try to avoid the latter

Questions:

Are there any art needs?
Yes, this implies a new chip mesh, but I can handle it without requests to the art team. It's also possible that we can reuse the event definition mesh.

How is this text formatted?
For MVP, I think we don't format it at all and let you use enter to insert line breaks, so you can format it yourself.

Does text billboard?
So far in this doc, the plan is no - the text is aligned with the chip. But we could make this an option if it's worth doing.

Is it two-sided?
The plan here is to have it be readable only from the "front" like most chips, but this is largely linked to whether or not text is billboarded. (I don't care if it *renders* two-sided, i.e. you can see backwards text if it's viewed from the back. Not worth extra work to support either answer.)

Should the text have a background?
I'd like to keep it as lightweight as possible, and I'm worried that adding a background adds a draw call and some background-resizing needs. Hopefully text color serves the need of making it stand out against its surroundings. But we can look into this if we find that color isn't sufficient.