

For my final project, I want to create a fun quiz that counts points from the user's answers, and uses those points to generate a looping animation, which can then be saved as png or gif.

This is inspired by the Pokemon Mystery Dungeon games, in which you play as a Pokemon. The games all start with a [personality quiz](#) that counts points for 16 personality types, and assigns you a Pokemon based on which personality trait you scored the most of (for example, if you scored 13 points for Timid but 15 points for Lonely, you are a Lonely type and therefore a Mudkip). The exact quiz from Pokemon Mystery Dungeon: Explorers of Time has been coded for desktop and mobile already, but I won't be using [this code](#) or [points system](#) as reference, since none of it is in Javascript anyway. It's just the inspiration!

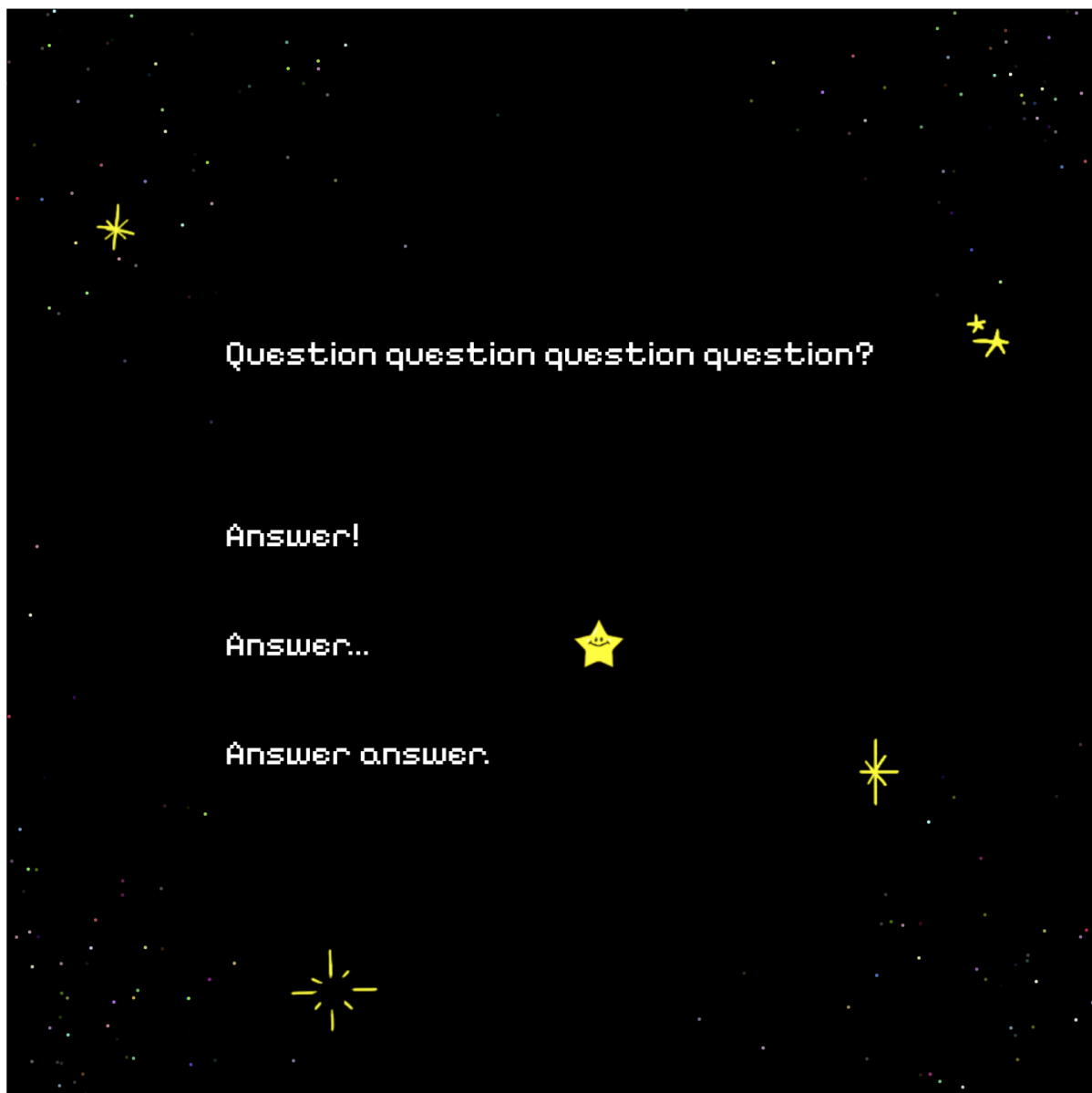
For the quiz itself, there should be 60 questions total. I'm thinking of making it so that each refresh, the user is presented with a random selection of 15 or 20 questions, so that the same person can take the quiz multiple times for new results. Each question will have 2 to 4 possible answers, and each answer can add 2-4 points for each personality trait. The personality traits I will be counting for are:

- Trusting / Careful (whether you view the world with optimism or always prepare for the worst)
- Instinctive / Thoughtful (whether you act fast or ponder decisions)
- Straightforward / Sophisticated (whether you prefer to be frank or to utilize social cues)
- Sensitive / Hardy (whether you are easily affected by emotions or thick-skinned)
- Ambitious / Content (whether you are more likely to strive for more or feel satisfaction with where you are)
- Earnest / Cool (whether you prefer to be an open book or to reserve certain sides of yourself for a special few)
- Playful / Efficient (whether you like to take a creative approach or to get things done the right way)

- Relaxed / Excitable (whether you tend to keep calm or garner energy fast)

I wanted there to be 8 pairs of opposing personality traits, but also for each one to be a compliment so that if anyone opens up the code (or if I decide to give the user the option to see a chart with results) that nobody will feel bad about themselves.

I want the quiz to be presented in "pages", as in only one question pops up at a time, and the game switches to the next question a few frames after the last one is answered.



This is a screencap from my prototype, in which the cursor is hidden and instead is represented by an icon of a smiling star. When the cursor moves, a little bit of star dust trails behind it. I want to make the answer turn yellow when the cursor hovers over it, and maybe have the star smile with teeth as well. But that might be a lot.

The final image that will be generated is a color gradient with noise and an extra layer of details. The goal is for the image to represent a sort of aura, so it is important to the aesthetic that there are soft color gradations.

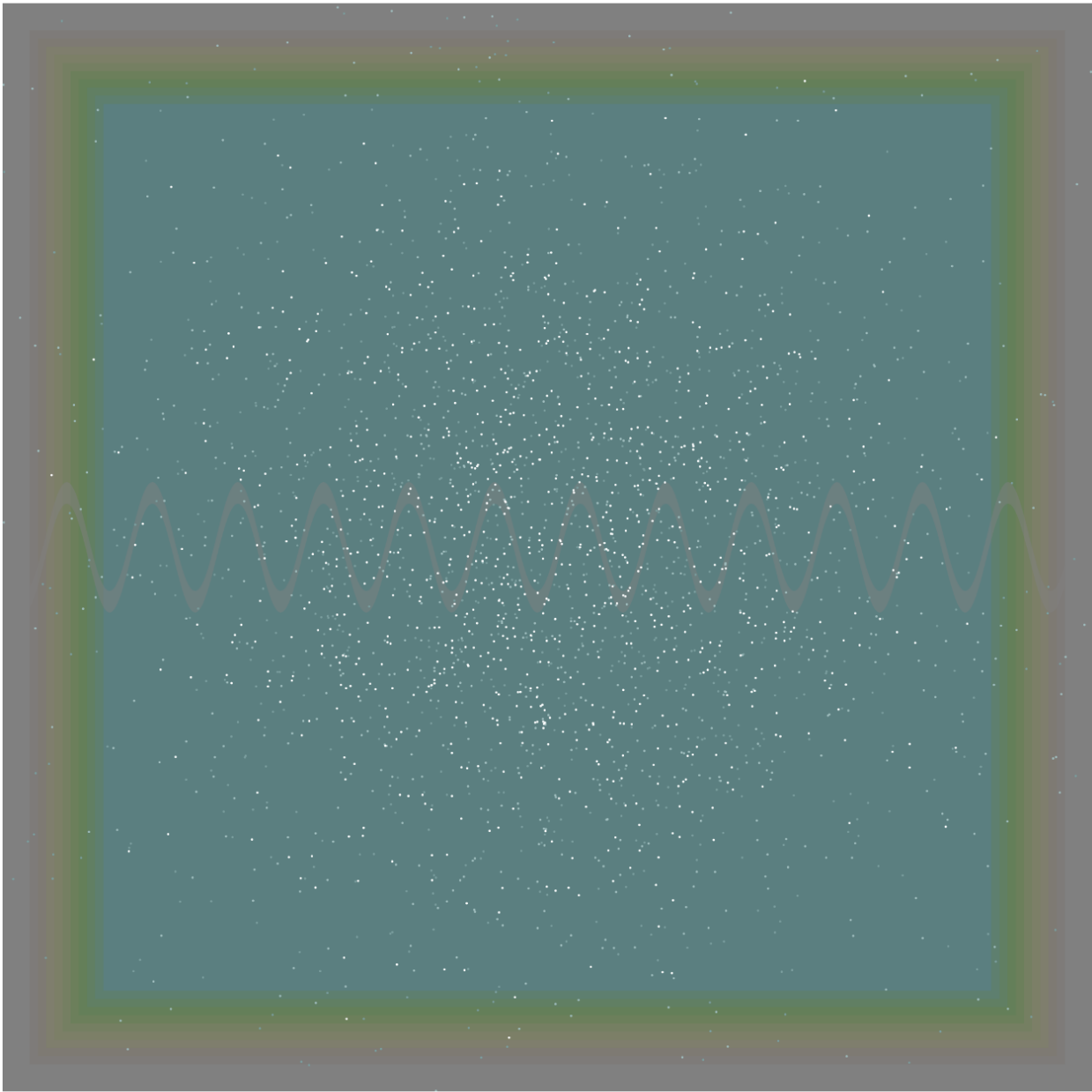
For my prototype, I've created a "default" image with each editable parameter set at its middle, to get an idea of what the "average" result will look like. This is:

- A mid-hue, mid-saturation, mid-brightness background;

- With a mid-speed, white digital noise occupying a circle in the center of the canvas that is at the middle of its size range;

- Another color framing the canvas, that blends into the background color;

- And a wave pattern in the center of the canvas, same color as frame, with the alpha set to 0.5 so it is nearly transparent.
(Sorry if anyone is colorblind...)



I have to associate each editable parameter to a personality trait and then set up a system that will make each trait's "points" link to the parameter's values. This will present a technical challenge in mapping the points to the values and another in linking the points and values together.

Trait	Parameter Start	Parameter End	Parameter Affected	Action	Points range	Parameter range
Trusting	0	100	Frame Saturation			0 - 100
Cautious	100	0	Frame Brightness			0 - 100
Instinctive	0	100	Noise Saturation			0 - 100
Thoughtful	10	100	Wave Size			10 - 100
Straightforward	0	100	Noise Brightness			0 - 100
Sophisticated	4	1	Noise Point Size			1 - 4
Sensitive	1	0.5	Wave Alpha			0.5 - 1
Hardy	360	0	Background Hue			0 - 360
Ambitious	0.05	0.25	Noise Circle Size			0.05 - 0.25
Content	0	100	Background Brightness			0 - 100
Earnest	0	100	Background Saturation			0 - 100
Cool	0	360	Frame Hue			0 - 360
Playful	50	200	Wave Height			50 - 200
Efficient	0	360	Noise Hue			0 - 360
Relaxed	0.08	0.02	Wave Width			0.02 - 0.08
Excitable	1000	6000	Noise Amount			1000 - 6000

When I write the actual questions, I will have to try to make sure that each trait gets the same amount of total points so that no results are unnecessarily hard to achieve.

All in all, this is where I'm at so far !!! Hope you enjoyed :P