

For my final project, I wanted to blend two similar things that are themselves both useless and useful: pet rocks and Tamagotchis. I feel like pet rocks really get at the split between something that is both useless and useful. The whole point of a pet rock is that it is a “do nothing” pet, existing without a lot of the responsibilities that come with owning a pet. They are incapable of responding to stimuli, making them a poor choice in terms of companionship. Both pet rocks and Tamagotchis are essentially fake pets, except that one is inanimate and the other is virtual.

Tamagotchis were a popular handheld virtual toy in the 1990s and 2000s. However, any resurgence they may have had since then seems more driven by nostalgia than by entertainment value. It is a pet that exists solely so you can do simplified versions of those same tasks that might motivate parents to gift their kids a pet rock. The gameplay is largely centered around occasionally checking in on your Tamagotchi in order to boost various meters such as “hunger” and “thirst”. Although some versions incorporated minigames, most versions had this chore-based structure. Aside from the gameplay value, Tamagotchis are virtual. They lack a lot of the physicality that pet rocks bring to the table. Whereas a pet rock can be held and played with, a Tamagotchi is

The longevity of both pet rocks and Tamagotchis could indicate some sort of hidden usefulness. The parent who gives their kid either a pet rock or a Tamagotchi probably finds them useful in that both fulfill some of the function of a pet without most of the real maintenance. The young child who receives a Tamagotchi may learn some basic principles about taking responsibility for pets. The child who receives a pet rock may come to appreciate some of the comedic value of a pet incapable of responding to any chores. For example, attempts to feed a rock tend to require some patience. One value of the pet rock is that attempts to engage with it

foster creativity, compared to something like a teddy bear. They are more difficult for a child to imagine as animate.

When building my final project, I wanted to incorporate these considerations. I wanted my project to have some sense of humor to it, and I wanted it to add more interactivity to the pet rock and more physicality to the Tamagotchi. For the first consideration, instead of having buttons that would perform limited actions, I wanted the user to think creatively in order to come up with ways to interact with the digital pet rock. Additionally, I wanted there to be some entertaining output depending on user input as well. For that reason, despite only having three official ways to interact with the digital pet rock (“play”, “feed”, and “give water”), I was hoping to reward some out of the box thinking. While a lot of these alternate answer responses ended up on the cutting room floor, there is special output if you say that you would like to fight your pet rock. In order to add to the digital pet rock experience, I also added some amateur ASCII art which is both kind of nostalgic and comically bad.

As far as the actual logistics, the project includes some code, a breadboard with two rows of LEDs, and a rock. The code takes care of printing the digital pet rock ASCII representation, taking in user input, keeping track of the hunger and thirst levels of the rock, and scheduling those levels so that they both decrease by one point every 15 minutes. One of the rows of LEDs is red with 10 LEDs in total, and it represents the hunger level of the rock. The other row is blue and has 8 LEDs (I could only find 10 blue LEDs and 2 of them ended up being burnt out), and it represents the thirst level of the rock. When the rock is fed or given water, the hunger and/or thirst levels rise by 3 points. This change is immediately registered in the LEDs, which displays the current hunger and thirst levels for five seconds before moving on. Each LED is connected to its own GPIO pin in the Raspberry Pi.

Overall, I think that combining a pet rock with a Tamagotchi improves both concepts to the point where it becomes “the ultimate fake pet”. It would still be useless because of the concept of a fake pet, but more useful than either pet rocks or Tamagotchis on their own. I believe that being able to see the changes in the physical LEDs as you virtually feed the pet rock adds a sense of responsiveness to it that the original pet rock was lacking, and I think being able to get text feedback from the virtual pet rock (including ASCII art) helps to make the pet rock warmer and more likeable. In conclusion, I think this project is fun and a bit kitschy, and I enjoyed making it.