Olenka Yuen Pippin Barr | CART253b Project 2 proposal November 9, 2021

My final project aims to bring awareness to individuals who are pressured by time and tend to overwork themselves in the end. In most cases, this "time" or rather "deadline" is a self-deception and a psychological stress.

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My approach to this idea is to present an anthology of quickly-paced mini-games to represent different situations in life in which one would feel stressed. Since this project turned out to be more personal and my understanding of the self is often complex, I decided to make my overall project look abstract with shapes and colours (as with the case for most of my other exercises in the course). I would envision overall bold vibrant colours with high contrast. The bold colours puts emphasis on the stress and the plain background narrows the focus to the specific goal of the current mini-game. This is similar to how I often overlook my surroundings and only focus on the main task. At the same time, each game should show a progress bar that fills according to the current task and a delusional 10-second timer that will give a bad ending if you don't finish the task on time. The timer refers to how I would often limit the time I have for certain tasks in my personal life. If time runs out, I will often punish myself for not doing something on time and would be convinced to be a failure. To reflect this in the project, a message of, "YOU DIDN'T MAKE IT. Try harder next time.", will be shown on the game over screen.

After the round of mini-games, the player would reach a point where the screen would turn black with ambulance sirens and rain sounds in the background, followed by a heart rate monitor. This moment demonstrates the phase where the player has overworked themselves and ends up in the hospital. (Hence, a blackout.) So whether the player succeeds in the game or not, they will end up in a bad situation either way. The difference is that one is a dead end and the other is progressive to the story. After the blackout scene with a brief monologue or dialogue, the player enters another state of the game where they find themselves stacking up blocks until they reach the finish line. This is a demonstration of my journey to recovery, free from a fast paced society (no timer), free from comparing and judging my success (no progress bar). All I have to do is reenergize myself to good health and not worry about other external factors in the process. Finally, the game ends with the quote by William Churchill, "Success is not final, failure is not fatal". Forgive yourself and respect your body.

Mini games and their Challenges

I always want to experience something new with code, so there will definitely be many bumps along the road.

- 1. The first game will be a simulation of completing tasks in a daily life. The player has to drag and drop objects that match the generated pair of shapes into the desired area. While this game involves an array of objects, which can be organized with classes, the states for the whole project can also be organized by using classes as well. One technical challenge that may come from this is getting used to linking states and arrays into classes. Regarding arrays, this game involves the randomizing of two shapes and two colours which might require new exploration of arrays (or maybe not). For example, I imagine that I will use arrays to draw a maximum of four objects to select while also generating two random objects that I need to match from the four options. Another challenge that I might come across is that the two generated objects should not be the same. In that case, I could code an if statement to tell the code to check whether if the second object is the same as the previous one. If the object is the same then generate another object.
- 2. The second game will be a simulation of managing stress levels. The player must make the tip of the meter touch the circular target by moving the mouse left or right. I had already encountered a challenge here while making the prototype. Pippin had helped me to randomize and constrain the target within the meter by using the arc and angle functions from the p5 library.
- 3. The final game I have in mind for the project is a simulation of how one would recover from the hospital. The act of collecting objects and the growing player represent how one would take in nutrients and reenergize themselves. To prolong the time in finishing this game, I want to create an illusion of movement in the final game by moving the background downwards every time the player increases in height. I could approach this idea by drawing a grid or a few lines in the background that moves down every point to indicate progress in the field (or some simpler indication if a grid is too difficult). I could also place the finish line way past the window height.

After some thought for the final game, I still think it had a similar pace compared to the previous games. This one still had a sense of urgency to do an action, in this case, catching falling balls. Therefore, it didn't necessarily slow down the pace. I could perhaps make a drawing simulation where the player is prompted to draw a memory or draw their current emotion (or maybe something simpler like a favorite animal). To emphasize the calming mood, I can also insert calming music as well. A challenge here might be that I would figure out how to make the mouse draw a new line for each click and change colors of the brush stroke. I would probably calculate the distance of the mouse and the colors and change the color of the stroke when they overlap.

Moreover, I want to explore sounds in the background and for player feedback. The challenge I see here is part of player feedback, where I would code the increasing pitch of sound as the progress bar fills up in each game. This could be done by increasing the frequency of the sound files. Lastly, speeding up the transitions between states (at random times) to create tension would be interesting as well. In this case, I would

probably introduce a timer variable and add a random() to it. Finally, if time allows, I would like to experiment with more mini games.

In the submitted prototype, I have decided to experiment with the mechanics in the first and final games mentioned above and transitioning between the two using states and functions.

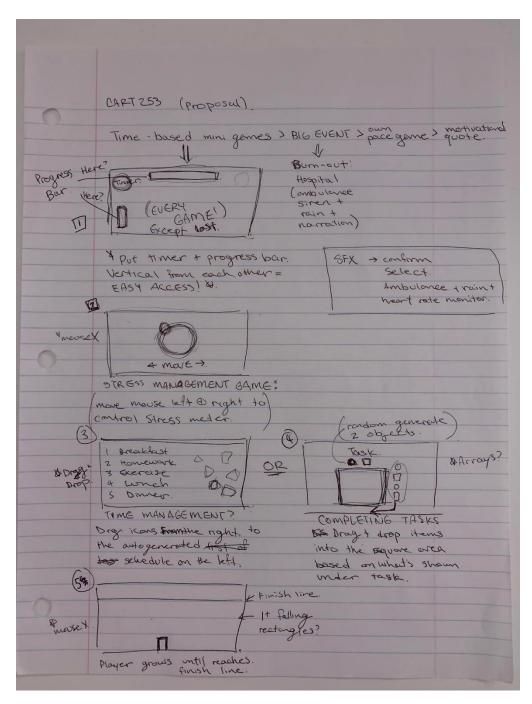


Figure. 1 Sketches of mini-games.

- 1. The first box is the layout for all the mini games shown in the project. There is a timer on the top left and a progress bar at the bottom left.
- 2. The second box shows a simulation of managing stress. The meter is centered on the screen with the instructions indicated at the bottom.
- 3. The third box is a drag and drop type of task game. On the right there is a randomly placed icons where you need to drag and drop them in the order indicated on the left.
- 4. The fourth box is another interpretation of the task simulation, except this one feels more doable. The idea is similar; under the word "task", the game should randomly generate 2 (different) objects. There would be a row of objects to choose from beside the "active area" in which you have to drag and drop the required objects into.
- 5. The final box is my initial vision of the final game. The player is at the bottom of the screen while the finish line is at the top. The user collects the falling objects and increases in height to reach the finish line.

Code references:

Pippins's help with displacing a target on an arch.

https://editor.p5js.org/pippinbarr/sketches/ljWb1XRTF

Inspiration for a drag and drop game https://editor.p5js.org/pippinbarr/sketches/IPfsT9qw4

Pippin's Typewriter effect https://github.com/pippinbarr/cart253-2020/blob/master/examples/text/typewriter-effect/js/Typewriter.js

Other references:

Quote https://www.brainyquote.com/quotes/winston churchill 124653