Project Catalyst Documentation

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How we accomplished requirements one through eleven

1: Easy Controls

We decided to have the controls include just the left mouse button and the number keys one through four. This control scheme is simple and is detailed before each new game begins.

2: Easy to Learn and Approachable

Our game is very easy to learn once the player understands what the particles are supposed to do. From start to finish the game is just dropping particles and starting the reaction.

3: Short Bursts of Play:

We accomplished this by keeping the requirements to beat a round very simple, that being to turn all particles to a specific color. The simulation of the particle physics isn’t too fast nor too slow.

4: Sound

Background music was chosen to have a light hearted feel with some slight electronic tones, to give a sci-fi feeling. Every particle reaction makes a fast and varied pop or bubble sound, and winning or losing a round is signaled with a distinct sound of its own.

5: Good Onboarding

The first three levels show the primary “rock-paper-scissors” reactions between the three major colors. The first level starts with green particles on-screen, which are designed to react with and turn into red particles. The first level also defaults to letting the player drop a red particle, if they don’t change the setting with the number keys. This allows the player to see that the particles bounce and react only when touching, and that red “beats” green. The next level shows that green “beats” blue, and the next shows that blue “beats” red.

6: Good Usability

Our usability stems from our simplicity. Our game is usable because the controls are simple and understandable, and not much else needs to be done for the game to be played. No additional controls or parameters are needed from any player to experience the game.

7: High Score Board

Our high scoring system records the time it takes one to complete a certain round, then displays the top five fastest times after each round is complete. This system uses localStorage to record highscores, and overwrites the scores if a new highscore is scored.

8: Depth

Once level three is complete, the goal requires the player to drop at least two different particles. If the player drops them at inopportune times, the reaction could “battle” the different particles that are present, taking too much time to settle on one color before the timer runs out. If the timer runs out the player has to try again.

9: Genre

Our genre is a physics based chain reaction game.

10: Differ from Boomshine

Our game is very different from boomshine in that a more robust implementation of physics is applied. The theme is different as well, and carries a sci-fi tone to it. There is an explicit time to complete a level, rather than the time until a circle stops exploding. Particles can change size through reactions, but none explode and delete themselves.

11: This IS a complete portfolio piece, I would agree.

Sound Asset Documentation

Background Music:

<http://incompetech.com/music/royalty-free/index.html?isrc=USUAN1200079>

Win Sound:

<http://soundbible.com/1815-A-Tone.html>

Lose Sound:

<http://www.soundjay.com/failure-sound-effect.html>

Bubbling and Popping sound effects below

<https://www.freesound.org/people/tsidilin/sounds/254892/>

<https://www.freesound.org/people/FawfulGrox/sounds/103336/>

<https://www.freesound.org/people/Ekuhvielle/sounds/211007/>

<https://www.freesound.org/people/AlaskaRobotics/sounds/221091/>

<https://www.freesound.org/people/Glaneur%20de%20sons/sounds/104947/>

<https://www.freesound.org/people/CGEffex/sounds/89534/>