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**Node**

GitHub Repo: <https://github.com/ZapKanon/Node>

Gameplay Explanation Video: <https://www.youtube.com/watch?v=J9_H2Cg6IvQ>

**Game Description:**

Node is a “grid-based pipe connection active time battling” game prototype I’ve developed myself over the last few months. While a full version of the game would include an overworld for the player to walk through, the prototype currently focuses on the battle system. The player battles enemies by creating pathways through a grid system of blocks in the bottom half of the screen. An electric pulse runs from left to right at the very bottom of the screen, and energy from this pulse feeds into the player’s pathways, traveling along them. When energy reaches the top of the grid system, it lights up an action orb displaying the properties that the energy inherited from the path it traversed. The player attacks enemies by selecting actions and targeting enemies to deal damage. Different block types allow the player to perform different actions, from elemental attacks to healing.

Node takes place in a machine-filled, somewhat Tron-like world where the entire planet moves to the beat of this ever present pulse. The player is at least part machine, and they’re without allies in a hostile environment. This background leads me to imagine Node’s sound effects as a mix of industrial clanks and computer beeps along with electrical hums and sparks from the pulse.

**Audio Implementation:**

There are many opportunities for one-shot sound effects in Node’s battle system. These include the player’s inputs, like placing blocks and selecting actions, as well as events out of their control, from enemy attacks to pulse generation. I can create most of these sounds with a basic sample or two and modification in Reaper. I plan to use some synths in Reaper to obtain clear notes for some of the more digital effects. Some sounds can be tied to the player and enemy’s remaining health, using parameters in FMOD to make them sound more desperate or slower as their health decreases. Pitch randomization can help vary these sounds as well. Sounds for attacking can also change in pitch or length depending on the strength parameters of the attack.

For looped sounds, a humming during the period between selecting an action and choosing a target seems appropriate. This could also be made with a combination of synths and samples. I’ve also thought about a calm electric hum as pulses pass by, but that might occur almost constantly to the point that the sound could become grating.

Since pulses appear at a fixed rate, I think it would be interesting to create a battle theme that matches or is a multiple of the “BPM” of the pulse. This would add to the feeling that the pulse governs everything in the game’s world. I know that creating a music track takes quite a bit of time even for a one minute loop or something of that nature, but I have relevant experience from taking IGME-670 last semester and I’d like to try to create and implement some music if possible.