

Level Design Implementation

This past week we've implemented all the levels from our designs. Each set of building principles is set in a different environment, except for wider base levels which are split across two environments. Since wider base has more room for expansive design, it naturally has more levels. The symmetry principle is set in an earth-like environment while the wider base starts with an icy environment and ends with the earthy one. The last principle, closed gaps, is located in a fiery, volcano environment.

Visual Feedback Adjustments

As we mentioned last week, we've been working on making the in-theme metaphor for our game mechanics as clear as possible. Our first objective was to tackle the checkpoint system. In previous builds, it was not clear to players how the checkpoints worked in conjunction with the blocks and the UFO. To help clarify this, we now have the circular gems on the blocks light up when they intersect with a checkpoint.

To give the users the impression that the checkpoints are charging the UFO, we have implemented a darkened texture on the UFO that gives it the impression that it is powered off after the crash. When a user has built a structure that touches all the checkpoints, the UFO will begin to rotate, and its lights will blink in sequence. If their structure makes it through the charge sequence, the UFO is completely activated: the texture lightens back up and the lights are on, giving them a greater sense of accomplishment when they win.

As mentioned last week, we've been exploring ways to better visualize is the goal: the proper height at which the UFO should sit upon the structure. We've created a particle effect that mimics the shape of the UFO, and it pulses to show where the UFO should be placed.

Playtesting

On Thursday we went to the Children's Museum of Pittsburgh and tested with kids ages 4-8, and a 2-year-old younger sibling. We brought two laptops with external mice and two Android tablets so that we could see how the different platform and interface impacted the game, but our main focus was on clarity of mechanics.

- Age range and prior game experience were huge factors in terms of approach to the game. The game is probably not accessible for under 5 years old.
- Younger kids would place the tablet flat on the table and often used a two-handed approach, using the right hand to move blocks and the left hand to rotate them. This two-handed preference may impact the way we rotate in our mouse and keyboard interface as well.
- The touch interface of tablets, though intuitive, can be finicky. This has nothing to do with the game, but with the tablets themselves. We think we may be able to offset this somewhat by giving sound feedback when you are dragging a block against resistance and perhaps by visualizing the spring action that drags the block.
- Our new ice landscape, used as the background for certain levels, needs much better color contrast with the game assets so that they stand out better like they do on the earthy background.
- The new goal visualization was mostly successful, with far fewer instances of confusion about just where the UFO needs to be. At times users did not notice that it was there, because of the aforementioned contrast issue, so we'll be adjusting for that.
- Our improved visualization of checkpoints made a huge difference in how easily kids grasped that mechanic. Having the gems on the block light up when they absorb the "energy ball" of the checkpoint was much more intuitive to kids because of the shape- and color-matching aspect (blue energy circle matches blue gem circle). The energy could still perhaps stand to be smaller and denser to better match the gems. But we often saw kids line up the circles on the checkpoints without our having to say anything about them, a huge win.
- After much adjustment to the level designs based on our earlier playtest observations, level difficulty is finally just about right. When the mechanics were clear, we rarely saw a kid stuck on a level for a disproportionately long time.
- There are some specific levels we noted that could use more checkpoints than they currently have, or need the checkpoints placed so as to better suggest the final structure.

Calendar

November 28th

Soft Opening
-Faculty walkarounds to see near final build.

December 12th, 14th, 16th

Final Presentations

