CS 4900
Week 12 Writeup
Group 1: Merritt Hancock, Kenda Blair, Ryan Trull, Alan Bettis
<u>Details</u>

Changelog:
1) Added next level button to win screen.
    - Merritt 04/23/20
2) Mostly finished tool tips.
    - Merritt 04/23/20
3) Worked on/researched sound for the game.
    - Merritt 04/28/20
4) Adjusted volume of select sound.
    - Merritt 04/28/20
5) Changed name in tooltips from id to type.
    - Merritt 04/28/20
6) Enemy overlays now display again
    - Alan 04/26/20
7) Cursor is now confined to the level
    - Alan 04/26/20
8) Pathing no longer checks tiles outside level
    - Alan 04/26/20
9) Added Tween.js to move entities smoothly between tiles
    - Alan 04/27/20
10) Added enemy rotation; Fixed pathing waypoint bug
    - Alan 04/28/20
11) Finished enemy rotation
    - Alan 04/28/20
12) Made copy of slime model and edited it's skeleton to make a slime with pinpod abilities and
    - Kenda 04/21/20 7:30 PM - 8:30 PM
    - 04/22/20 1:15 PM - 2 PM
13) Edited weight painting and added animation for spike ability to slime
    - Kenda 4/25/20 2 PM - 4:15 PM
14) Edited uv map to better reflect the pinpod abilities.
    - Kenda 04/26/20 11 AM - 1 PM
15) Removed Level 3 from LevelManager and gave it its own file
    - Ryan 04/28/20
16) Added pinpods to level 3 and tweaked placements for playability
    - Ryan 04/28/20
17) Made the Pinbeast boss increase his AOE build-up by three turns every time one of its pinpods is absorbed
    - Ryan 04/28/20

18) Adjusted default pinpod masses for level 3
- Ryan 04/28/20
19) Added a new list of enemies to the Level class called 'respawnable' with the goal of using it to respawn enemies on the boss level
- Ryan 04/28/20

Decisions

- Use Tween.js for smooth movement

What we learned

- Synchronizing animations with movement is very difficult

Summary

Alan: I spent the vast majority of this week just fixing bugs. I implemented a bounding function to stop the cursor from leaving the board and throwing errors from non-existent tiles, and similar functionality can be used to stop the pathing algorithms from checking outside the board. I also finished implementing the rotation system for entities to smoothly rotate to face different directions, and I used Tween.js to make entities move smoothly between tiles. I attempted to get some animation functionality implemented, but it proved extremely difficult to synchronize the animations with movements of the entities, so that will be my primary focus next week, as that is one of the last features we need to implement.

Merritt: This week I focused mainly on tooltips and sound design. I began this week by working on level switching and creating a next level button on the win screen. It changes the level to the next level for every level but the boss level. For the boss level it redirects the player to the main menu. I also changed several aspects of the tooltips that include a changing photo when a tile is occupied by an entity and the name of the entity now displaying type instead of id. When approaching sound design, I began by creating a Sounds.js file that will handle all loading and playing of the sounds for the game. I then loaded the audio files in through the index.html file and accessed those in the Sounds.js file. A good portion of this week, which will continue next week, was taken up by trying to find sound effects I liked.

Kenda: Created another version of the slime character where it can use the pinpods spike ability. The uv map, rigging and animations reference the pinpod.

Ryan: I spent this week working on level organization, level tweaks, and continued development on the boss AI. The level is now populated with pinpods which are children of the pinbeast itself. When the player enters the level, the pinbeast will display (in the console) how many turns until it changes to its AOE state. Now, when a player absorbs one of the pinpod children, the turns

until attack will increase by 3 turns to delay the attack. Theoretically, when all four pinpods are absorbed, the boss will switch to a charge state which will rush the player before switching to a spawn state where it will create four new pinpods. Currently, the boss does charge, but when it switches to spawn state it doesn't generate models for the new pinpods.

Next Steps:

- Get animations working (yes, still... - _ -)
- Fix enter twice bug
- Find sound effects that are good and implement them.
- Make player/enemy abilities update within the tooltips.
- Find a way to respawn enemy models
- Fine-tuning aesthetic aspects