

One of the main differences is the bullet class. In the design stage, we thought bullets their own separate class. But in the coding stage, we realized in made more sense for bullet to be a class of its own, with similar qualities with sphere.

Bouncing was a code heavy method that we didn't fully foreseen it's intricacies. We wished we could have incorporated the law of conservation of momentum in the bouncing method, so bouncing would have been more natural. We spent some time on it with the TAs, but with the time constraint in the last week of classes, we were unfortunately unable to do so.

We played for player to have a set amount of times they could be hit instead of having a running timer for how long we could get hit. This system would also be in tandem with temporary invincibility. Basically, after a player was hit, they'd have a set period in which they could not be hit again. Implementing this invincibility was challenging and time-consuming, and we found ourselves spending too much time on it, so we scrapped the idea. We also thought the ticking health system was much more interesting.

Other main additions that we hadn't planned: timer, inputting images

In all honesty, the only things we stuck with at the end of the game were the fact that player can shoot an endless stream of bullets, the spheres display their own health, and the player would not be able to jump. These decisions made our job made the interface of the game a bit more intuitive, since the player will know when spheres are about to die, and having an endless stream of bullets againsts waves of enemies always helps. The player being able to jump would cause the game to be easier, since dodging the spheres in two dimensions is definitely easier than being limited to one dimension.