**Status Report 4**

**Game Name:** PEETY THE BEEFY

**Developers:** Benny Lam & Thomas Nuhn (aka The GOD Squad)

List of programs. Clearly describe the problem that you are solving. Please put the date that you worked on it:

* Peety-the-Beefy / PTB 4.0(Main Game):
  + For this release we mainly focused on fixing up our code and making it more efficient for future developments in the game. We worked on splitting up the animation code into a class, so now we can create multiple sprites between multiple screens all with different parameters. We also made an instance of the tiled map so we can also create multiple tiled maps now for the other stages.
    - Peety the Beefy: <https://github.com/TheLegendHimself/Peety-The-Beefy> May 1st
* Contact Listener:
  + We made a basic contact listener scratch that prints lines every time the bodies come in contact with each other, along with the body’s string ID and which body has been hit (in format: sId + “: I’ve been hit!”). This will be useful when we have to make something happen when the bodies collide (whether it’s death or item drop etc.)

Major Challenges/setbacks( reference specific code please):

* Making the Box2D body not stick to the side of walls and platforms when we jump onto them (fixed by changing Fixturedef.setFriction(0.01f) )
  + (PTB 4.0 in Box2D.java)
    - <https://github.com/TheLegendHimself/Peety-The-Beefy>
* Making a string builder to properly ID each box2d body so that we can distinguish between different bodies and have different things happen when the player hits them (whether this will be separate death functions or just distinguishing which body will die when you hit it). We have a couple of ideas of how we are going to get past the barrier of having a max 10 ID’s (int goes up to 10 and then starts adding it onto the end [ex. sId10, sId111 (10 minus the 0 at the end then adding 1 to the end, getting “111”)]
  + Making it add characters to the end instead of int (up to 27 characters)
  + Deleting 2 numbers after it gets into double digits (up to 100 characters)
  + Resetting the string id each time adding on the int afterwards (infinite) (solution)
    - (Contact Listener in Main.java)
    - <https://github.com/TheLegendHimself/Peety-The-Beefy>
* Making sprites into separate classes and created multiple sprites took us a while because we were getting null pointer exceptions, but eventually we figured it out.
  + (PTB 4.0 in cookie cutters class SpriteAnimation.java)
    - <https://github.com/TheLegendHimself/Peety-The-Beefy>
* Need collision filtering for bullets in future release (bullets don’t collide with the player but hit the enemy and kills the enemy)
* Currently working on another shooting scratch with Box2D bodies. Before with ShapeRenderer, the projectiles can be moved by changing their position. With Box2D bodies, they only move by having a force applied to them, making the movement of the projectiles much different.
  + (b2Shooting scratch)
    - <https://github.com/TheLegendHimself/Peety-The-Beefy>

Source any web site/book that helped you with that concept:

* Conner Anderson tutorial with contact listener
  + <https://www.youtube.com/watch?v=ien40lFovG8&>
* Tutorial for deleting bodies (Bullets)
  + <https://www.youtube.com/watch?v=ACQaU2Vr1ao>

Describe the code and the lesson that you learned from it:

* Contact Listener: This scratch makes it so that we can distinguish and execute functions when 2 separate Box2D bodies collide.
* Animation Class: The animation class does the same thing that our old animation code does (splits up the sprite sheet into an Animation[] variable) except now we have the potential to create more of these for different entities. Right now we are creating separate variables for every sprite we create. In the future we would want to create these sprites into an array so that we can create many more than the 2 that we have right now.