HW5 Design Document

**Game classes**

Player: can move up, down, left, right

Enemy:

* Ghost: chases the player and can move through wall(23 melee damage)
  + Moves very slowly, but deals high damage
* Hex: shoots bullets to 4 directions (12 range damage)
  + Stay at one place and shoot
* Penta: guards the ice cream near the bottom right of maze (33 melee damage)
  + Moves up from bottom of screen until hitting the first wall
  + Then moves to the right until hitting the right end of screen
  + Repeat the pattern
* Sphera: moves in a pattern and sprays to multiple directions (8 range damage)

Some of its bullet speed are faster than normal

\*Ranged enemies cannot deal melee damage, which means player can collide with their bodies without taking damage.

Food:

* Pizza: +300 points 2hp, eat all to complete level 1
* Apple: +500 points 5hp, eat all to complete level 2
* Milk : +800 points and 10hp
* Ice Cream: bonus food, +points that’s equal to 10 times of total HP, not required for completing any level (eat when HP is high to get higher score)
* Heal: +75% of current life

Maze:

* Built by 12 maze wall pieces
* Ghost can move through the maze

Game Description:

Goal: to complete all three levels, and get the highest score possible.

Player stats: starting HP – 100, starting points – 0

Walkthrough:

Level 1- collect 6 pizza

Enemy: Ghost, Penta

Extra Items: HP heal kit, ice cream x3

Level 2 (purple)- collect 6 apples

New enemy: Hex (ranged)

Level 3(orange)- collect 6 milk

New enemy: Sphera(ranged, movable)

Control: direction – WASD

Space – start

P – pause