Tower Defense Class List

Player

Int life, money

earnMoney()

spendMoney()

loseLife() - reduces life, ends game if life is then 0

WaveGenerator

Contains array of the monsters to create, which monsters are in each wave

Int current\_wave - indicates which wave to load

Functions:

NextWave() - starts the next wave of monsters imediately

Pause() - stops current wave

Resume() - resumes current wave

Clear() - clears old monsters, projectiles, etc

PathFind

Seperate to Enemy; can theoretically be added to something else

2D array of points to be travelled to (maybe make objects in game so easier to place)

checkLocation() - checks if the next checkpoint has been reached

nextLocation() - moves to the next location

Enemy

Int hp, reward

Contains status

takeDamage()

applyStatus(string status)

move()

PathEnd

OnCollisionEnter2D() - checks for collision with monster, reduces health if so

Towers

changeRotation() - changes rotation based on enemy target

fireProjectile() - fires a projectile at an enemy

Projectiles

OnTriggerEnter2D() - checks for collision with enemy, self anihilates if so. Also self destructs after set amount of time

Should just work more as a visual effect rather than an arrow; actual damage applied by tower

UserInterface

Need to design this.

But, it’ll have a canvas, at least 2 text-type fields, some sort of state. Likely going to be time depenndant.