### GameManager.pde

Player player
Nexus nexus
Shop shop
ArrayList<Bullet> bullets
ArrayList<Enemy> spawnedEnemies
ArrayList<Gold> goldList
ArrayList<Turret> turrets
int wave
bool gameOver
int highscore
Cell[][] Grid
Cell hoverCell

void setup()
void draw()
void mouseCheck()
void keyPressed()
void keyReleased()
void mouseClicked()
void mousePressed()
void spawnEnemies()
void restartGame()

### Cell.pde

int x int y

Cell()
void build(Object)
bool buildable()
void outline()

## **Button.pde**

String name
String price
String damage
float x,y,w,h
color c

Button() bool pressed() void display()

# Shop.pde

ArrayList<Weapon>
weapons
ArrayList<Turret>
turrets
ArrayList<Trap>
traps
float x,y,w,h

Shop()
void buy()
bool afford(Object)
void display()
void pressed()

#### LList.pde

LLNode \_head int size

LList()
boolean
add(PImage)
PImage get(int)
PImage set(int,
PImage)
int size()

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#### Attributes.pde

#### protected vars

PVector dir int startingHP int currentHP bool isDead float HPDrawWidth

void takeDamage(int) void dead() void healthBar() void display()

#### Bullet.pde

PVector loc color c;

Bullet()

void move()
bool
collidesWithEnemy(Enemy)
void display()

# Gold.pde

**PVector** 

int amount color c;

Gold(PVector, int) void display()

#### Trap.pde

int damage int price

Trap()
void dealDamage()
bool
collidesWithEnemy(Enemy)

# Nexus.pde

Nexus()

#### Player.pde

float speed int money ArrayList<Weapon> weapons int currentWeapon color c

Player()
void move()
bool collidesWithObject(PVector)
void addWeapon(Weapon)
Weapon getCurrentWeapon()

### Enemy.pde

PVector target float speed int damage int goldAmount bool inRangeNexus bool inRangeTurret

Enemy()
void move()
void attackPlayer(Player)
void attackTurret(Turret)
void attackNexus(Nexus)
bool isTargetDead()
void resetTarget()

### Turret.pde

int damage double fireRate double range int price PVector target

Turret()
bool enemyInRange()
bool isTargetDead()
void findTarget(ArrayList<Enemy>)

## Weapon.pde

int damage int price double fireRate double range String name

Weapon(String, int, int, int, double)

# LLNode.pde

Plmage \_cargo LLNode \_nextNode

LLNode(Plmage, LLNode) Plmage setCargo(Plmage) LLNode setNext(LLNode)

#### Queue.pde

ArrayList<T> \_queue

Queue()
void enqueue(T x)
T peekFront()
T dequeue()
int size()
boolean isEmpty()

#### Stack.pde

ArrayList<T>\_stack

Stack()
void push()
T pop()
T get()
int size()