

Period 3

Game Object# (abstract)

Vector location
Vector Velocity
double angle
PShape model

Driver

void Setup()
void draw()
-boolean playerLose()

Player

- int shotCooldown
- int Score
- boolean dead
- VFX boosters
- int lives
+ boolean isDead()
+ Shot shoot()
+ void move()
+ void rotate(double angle)
+ boolean contact()

Asteroid

+ void move()
+ void spin()
+ void offScreenDestroy()
+ Collider getCollider()

VFX

- PImage fx
Vector location
- double angle

Collider

Vector focus1
Vector focus2
int distance
+ double distanceFrom()

Shot

VFX look
int width
int height
Vector shotVelocity
+ boolean contact()
+ void move()

Driver

Game Object[] objs
ArrayList<VFX> fxs
Queue to Spawn
BST colliders
LinkedList shots

+ void checkCollisions() - boolean remove Obj (Game Object o)
+ void updateColliders()
+ void spawnNewAsteroids()
+ void playRespawn()
+ void move()
+ void playerShoot()