Asteroids

Requirements/Rules:  
- Player controls rotation and forward direction, player starts with 3 lives and gains an extra life for each 10k points  
- All objects wrap around the edge of the screen  
- A few large asteroids spawn at the beginning of each level  
- Larger asteroids break into smaller asteroids that move more quickly  
- After score has hit 40k saucers also spawn that fire projectiles at the player  
- Player lives decrease to 0 game over  
- Large asteroids 30 points, Small asteroids 100 points

Classes:  
Game Object:: Collision Object  
Position, parenting information, wrap around functions, Draw functions

Sprite Object:: Game Object  
Position, image, and texture data

Collision Object  
Sphere, Plane, AABB, Ray collision maths

Player:: Game Object  
Lives, Speed, Rotation, Fire Bullet function, collision with other objects

Bullet:: Game Object  
Collision detection against larger and small asteroid

Large Asteroid:: Game Object  
Destroy large asteroid, replace with two smaller asteroids with similar trajectory upon destruction add to game score

Small Asteroid:: Game Object  
Destroy small asteroid, add to game score

Saucer:: Game Object  
Destroy Saucer, fires bullet at player, moves in a direction