+potentialCollisions: vector<PotentialCollision*> **PotentialCollision** +addCollider(obb:*OBBCollider): void +one: *PhysicsObject \Leftrightarrow +clearPotentialCollisions(): void +two: *PhysicsObject +fillPotentialCollisions(): void **CollisionsGenerator** +potentialCollisions: *vector<PotentialCollision*> +collisionsPoints: vector<CollisionPoint*> +CollisionsGenerator(in potentialCollisions: *vector<PotentialCollision*>) +fillCollisions(): void +clearCollisions(): void **GJKEPACollisionPointGenerator** -objA: *PhysicsObject -objB: *PhysicsObject -simplex: Simplex -searchDir: vec3 +GJKEPACollisionPointGenerator(in objA:*PhysicsObject, in objB:*PhysicsObject) -support(in dir:vec3): MinkowskiDiffPt -doSimplex(): bool +testIntersection(): bool +createCollisionPoint(inout contact: *CollisionPoint): bool **Simplex** +numVertices: unsigned int +a: MinkowskiDiffPt +b: MinkowskiDiffPt +c: MinkowskiDiffPt +d: MinkowskiDiffPt +clear(): void +set(in a:MinkowskiDiffPt,in b:MinkowskiDiffPt, in c:MinkowskiDiffPt,in d:MinkowskiDiffPt): void +set(in a:MinkowskiDiffPt,in b:MinkowskiDiffPt, in c:MinkowskiDiffPt): void +set(in a:MinkowskiDiffPt,in b:MinkowskiDiffPt): void +set(in a:MinkowskiDiffPt): void +pushVertex(v:MinkowskiDiffPt): void **Triangle** +numVertices: unsigned int +a: MinkowskiDiffPt +b: MinkowskiDiffPt +c: MinkowskiDiffPt +vecABC: vec3 **MinkowskiDiffPt** Edge +numVertices: unsigned int +v: vec3 +a: MinkowskiDiffPt +supA: vec3 +b: MinkowskiDiffPt +supB: vec3

PotentialCollisionDetector

-obbVector: vector<OBBCollider*>