```
{GameObject
|+ name
|+ ~GameObject()
+ addComponent()
+ getComponent()
+ removeComponent()
+ renderSprite()
+ update()
+ getPosition()
+ setPosition()
+ getRotation()
+ setRotation()
+ setConsumed()
+ getComponents()
          }
            #gameObject
     {Component
 ||+ Component()
 + ~Component()
 + getGameObject()
 + handleInput()
                            {b2RayCastCallback
 + update()
                                     ||}
 + renderSprite()
 + onCollisionStart()
 + onCollisionEnd()
          }
                          {Projectile
                     |# physics
                     # spriteComponent
                     # direction
                     # lifetime
                     # lifespan
                     # speed
                     # radius
                     # damage
                     # origin
                     |+ Projectile()
                     + init()
                     + update()
                     + getOrigin()
                     + setOrigin()
                     + getDirection()
                     + setDirection()
                     + ReportFixture()
                     + onCollisionStart()
                     + onCollisionEnd()
                            {Bullet
                          ||+ Bullet()
```