Use case: Collision

Summary: This describes how a black hole collides with an other entity.

Priority: High

Extends: -

Includes: Swallow Entity, Collision

Participators: A black hole. The entity the black hole collided with.

Normal flow of events

There is no normal flow. The user case is built up of a couple of alternate flows depending on the colliding entity. Enemies cannot use powerups, so they are never under the effect of some powerup.

Flow 1.1 The black hole collides with the edge of the stage

	Actor	System
1.1.1		The black hole collides with the wall and thus bounces back. Handled by the physics engine

Flow 1.2 The black hole runs into an obstacle
Flow 1.2.1 The black hole is not the under effect of the "Eat obstacle" powerup

	Actor	System
1.2.1.1		The player collides with the obstcble. Handled by the physics engine. "bigger_collision" sound effect is played.

Flow 1.2.2 The black hole is under the effect of the "Eat obstacle" powerup

	Actor	System
1.2.2.1		The obstacle is eaten, as described in UC Swallow entity

Flow 1.3 The black hole runs into a planet
Flow 1.3.1 The planet is bigger than the black hole

	Actor	System
1.3.1.1		The black hole collides with the planet, handled by the physics engine. "bigger_collision" sound effect is played.

Flow 1.3.2 The planet is smaller than, or of the same size as the black hole.

	Actor	System
1.3.2.1		The planet is eaten, as defined in UC Swallow entity

Flow 1.4 The black hole runs into another black hole

	Actor	System

1.4.1		Per UC Swallow entity, the smaller black hole is swallowed. If they are of equal size and none is the player, then the eaten hole is randomly determined. If one is player controlled, then player always wins. If the swallowed black hole is player controlled then UC Player Swallowed is appliied.

Flow 2.4 The player runs into a powerup(not applicable for enemies)

	Actor	System
2.4.1		The player get some temporary status modifier applied, as described in UC swallow entity