Use case: Powerup

Summary: This is how the player picks up a powerup on the map.

Priority: High

Extends: -

Includes:

Participators: The player. The powerup.

Normal flow of events

The player swallows the powerup(if under effect of "eat-obstable" powerup), enemy black hole, or planet. All powerups act only for a short period of time, or are instantaneous. Which powerups are instantaneous is indicated, the rest are assumed be to time limited.

	Actor	System
1	The player moves into the powerup	
2		The powerup is removed and the player is affected by the powerup. "powerup" sound effect is played. See the alternative flows.

Alternative Flow

Flow 2.1 The powerup is the eat obstacle powerup

	Actor	System
1		The player is now for a short period of time also able to eat obstacles.

Flow 2.2 The powerup is the speed_increase powerup

	Actor	System
1		The players current speed is doubled for a short period of time.

Flow 2.3 The powerup is the shield powerup

	Actor	System
1		The player is given a shield which temporarily protects it from bigger enemy black holes.

Flow 2.4 The powerup is the speed_decrease powerup

	Actor	System
1		The players current speed is halved for a short period of time.(so if you have both speed_decrease and speed_increase applied, then their effects will cancel each other out)

Flow 2.5 The powerup is the teleport powerup

	Actor	System
1		The player is instantaneously teleported to an unoccupied, random, place on the map. To find out whether some random place is unoccupied, the physics engine is simply queried.

Flow 2.6 The powerup is the double score powerup

	Actor	System
1		The player receives double score when scoring for a short period of time

Flow 2.7 The powerup is the extra life powerup

	Actor	System
1		Player gets an extra life

Flow 2.8 The powerup is the mirrored movement powerup

	Actor	System
1		The movement of the player is reversed for a short period of time.

Flow 2.9 The powerup is the random powerup powerup

	Actor	System
1		A random powerup is applied to the player.

Flow 2.10 The powerup is the scoreup powerup

	Actor	System
1		Player gets a score increase.

Flow 2.10 The powerup is the black background powerup

	Actor	System
1		The player is colored black for a short period of time(same color as the background color of the game)

Also, when the player picks up a powerup, it will be colored in a certain color. Different powerups color the player differently. The current color of the player is determined by the most recently picked up powerup. When all powerups have worn out, the player-color is changed to the default color, white.