

## 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-obstacle” 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 to be time limited.

	Actor	System
1	The player moves into the powerup	
2		The powerup is removed and the player is affected by the powerup. 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 player moves faster 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 player moves slower for a short time.

#### 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.
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**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. Instead of moving the player in the opposite direction of the touch, it is moved towards the touch.

**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.