Both players can have multiple active power-ups and the power-ups could affect more than one player. The same logic applies to traffic cars.

For Besties In Harmony and Tangled Twist, the 0..2 multiplicity means 0 or 2, not 0, 1, or 2. This is because the power-up either affects both players or it affects no one.

In these classes bellow, we only added the attributes and methods that are not in the Parent Class.
The exceptions to this are the "affect_both_players", "affect_player", and "affect_traffic" methods. These are not used in every power-up. Thus, if a method from this trio is not written in the Child Class, it's because its not being used (only passed).

Power-ups::Sprite

Besties In Harmony
- + deactivate ()
- + affect_both_players ()

0..1

Gal Pal Rebirth
- + affect_both_players ()

0..1

Tangled Twist
- + deactivate ()
- + affect_both_players ()

0..1

PlayerCar
- - car_type : str
- - max_health : int
- - can_collide : boolean
- - can_crash : boolean
- - eliminated : boolean
- - can_move : boolean
- - controls_inverted : boolean
- + move_up ()
- + move_down ()
- + move_left ()
- + move_right ()
- + add_health ()
- + change_image ()
- + die ()
- + respawn ()
- + resize_car ()

0..2   0..1   0..2

In multiplayer, Sissy That Walk always affects both players.

Sissy That Walk
- + deactivate ()
- + affect_both_players ()
- + affect_player ()

0..2
0..1

Diva Defiance
- + deactivate ()
- + affect_player ()

0..1
0..1

Glamorous Growth
- + deactivate ()
- + affect_player ()

0..1
0..1

Power-ups
- - image : pygame.Surface
- - rect : pygame.Rect
- - mask : pygame.Mask
- - speed : int
- - duration : int
- - cooldown : int
- - max_duration : int
- - active : boolean
- - on_cooldown : boolean
- - can_move : boolean
- + move_down ()
- + add_speed ()
- + add_cooldown ()
- + add_duration ()
- + set_position ()
- + hide ()
- + collision ()
- + add_cooldown_prob ()
- + affect_both_players ()
- + affect_player ()
- + affect_traffic ()
- ▤ ABC
- ▤ Sprite

According to the selected player car, the attributes, such as speed, health, and power-ups' cooldown and duration change. Player health also changes according to the selected difficulty.

Car
- - image : pygame.Surface
- - rect : pygame.Rect
- - mask : pygame.Mask
- - speed : int
- - health : int
- + add_speed ()
- + change_image ()
- + set_position ()

There's an inner link between Car and Sprite.

Car::Sprite

TrafficCar
- - speed : int
- - health : int
- + move_up ()
- + move_down ()
- + change_car ()
- + resize_car ()

According to the difficulty, traffic cars change in direction, quantity and speed.

Frosty Frenzy
- + deactivate ()
- + affect_traffic ()

*
0..1

Toy Transforminator
- + deactivate ()
- + affect_traffic ()

*
0..1

Power-ups::ABC

1 / 1