Game_Object

sf::Vector2f position
int width
int height
sf::Sprite sprite

+ Game_Object(float
 x, float y, int w,
 int h)
+ virtual ~Game_Object
()=default
+ virtual void update()
+ virtual void render
(sf::RenderWindow &window,
 Camera &camera)
+ virtual sf::FloatRect
 get_rect() const
+ sf::Vector2f get_position
() const

Moving_Object

bool jumping
sf::Vector2f velocity
sf::Vector2f starting
_position
bool alive
sf::Clock animation
_timer
int animation_frame
Animation_State current
_animation_state
int animation_frame_rate

+ Moving_Object(float
 x, float y, int w, int h)
+ virtual void update
(float friction, float
 gravity)=0
+ sf::Vector2f get_velocity
() const
+ sf::FloatRect get_rect
() const override
+ sf::Vector2f get_starting
_position() const
+ virtual void stop_vertical()
+ virtual void stop_horizontal()
+ void update_position()
+ virtual void reset()
+ bool is_alive() const
+ void kill()
+ void push(float force)
+ void blow(float force)
+ virtual void change
_direction()
# virtual void update
_animation_state()
# virtual void update
_texture()

Player

+ Player(float x, float y)
+ void update(float friction,
 float gravity) override
+ void update_graphics
(Camera &camera)
+ int get_lives() const
+ std::string get_current
_power_up() const
+ void activate_random
_power_up()
+ void reset() override
+ void use_healthpack()
+ bool is_ghost() const
+ bool has_super_power
() const
and 6 more...