Elma Python Library

Release

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Contents

1 elma package **1**
- 1.1 Submodules . . . 1
- 1.2 elma.constants module . . . 1
- 1.3 elma.models module . . . 1
- 1.4 elma.packing module . . . 5
- 1.5 elma.utils module . . . 6
- 1.6 Module contents . . . 6

Python Module Index **7**

CHAPTER 1

elma package

1.1 Submodules

1.2 elma.constants module

1.3 elma.models module

class elma.models.**Event**
Bases: object

Abstract base representation of a single replay event.

time
float

The time at which the event occurs, given in 625/273ths of a second.

class elma.models.**Frame**
Bases: object

Represent a single replay frame. .. attribute:: position

Point

The position of the kuski in this frame in level coordinates.

left_wheel_position
Point

The position of the bike's left wheel in this frame relative to the position of the kuski.

right_wheel_position
Point

The position of the bike's right wheel in this frame relative to the position of the kuski.

head_position
point

The position of the kuski's head in this frame relative to the position of the kuski.

rotation
int

The rotation of the kuski in 10000ths of a radian.

left_wheel_rotation
int

The rotation of the bike's left wheel in 249/2/pi-ths of a radian.

right_wheel_rotation
int

The rotation of the bike's right wheel in 249/2/pi-ths of a radian.

is_gasing
boolean

Whether or not the bike is gasing in this frame.

is_turned_right
boolean

Whether or not the bike is turned right in this frame.

spring_sound_effect_volume
int

The spring sound effect volume for this frame.

class elma.models.**GroundTouchAEvent**
Bases: elma.models.Event

Represent a single replay ground touch A event.

class elma.models.**GroundTouchBEvent**
Bases: elma.models.Event

Represent a single replay ground touch B event.

class elma.models.**LeftVoltEvent**
Bases: elma.models.Event

Represent a single replay left volt event.

class elma.models.**Level**
Bases: object

Represent an Elastomania level.

polygons
list

A list of Polygons in the level.

objects
list

A list of Objects in the level.

pictures
list

A list of Pictures in the level.

level_id
int

A unique unsigned 32bit integer level identifier.

name
string

The name of level, which should be no longer than 50 characters long.

lgr
string

The name of the LGR used for this level, which should be no longer than 10 characters long.

ground_texture
string

The name of the ground texture used for this level, which should be no longer than 10 characters long.

sky_texture
string

The name of the sky texture used for this level, which should be no longer than 10 characters long.

class elma.models.**Obj**(*point*, *type*, *gravity=0*, *animation_number=1*)
Bases: object

Represent an Elastomania level object, which can be one of: flower, food, killer, start.

point
Point

The 2D Point that represents the position of the object. type (int): The type of the object, which should be one of: Obj.FLOWER, Obj.FOOD, Obj.Killer, Obj.START.

gravity
int

The gravity of the object, if the object is a food object. It should be one of: Obj.GRAVITY_NORMAL, Obj.GRAVITY_UP, Obj.GRAVITY_DOWN, Obj.GRAVITY_LEFT, Obj,GRAVITY_RIGHT.

animation_number
int

The animation number of the object.

FLOWER = 1

FOOD = 2

GRAVITY_DOWN = 2

GRAVITY_LEFT = 3

GRAVITY_NORMAL = 0

GRAVITY_RIGHT = 4

GRAVITY_UP = 1

KILLER = 3

START = 4

class elma.models.**ObjectTouchEvent**
Bases: elma.models.Event

Represent a single replay object touch event.

class elma.models.**Picture**(*point*, *picture_name=''*, *texture_name=''*, *mask_name=''*, *distance=500*, *clipping=0*)

Bases: object

Represents an Elastomania level picture.

point
Point

The 2D Point that represents the position of the object.

picture_name
string

The name of the picture resource to use, without .PCX, e.g. 'BARREL'.

picture_name
string

The name of the texture resource to use, without .PCX, e.g. 'STONE1'.

mask_name
string

The name of the texture resource to use, without .PCX, e.g. 'MASKHOR'.

distance
int

The z-ordering distance of the picture. Should be in the range 1-999.

clipping
int

The clipping of the picture. Should be one of: Picture.CLIPPING_U, Picture.CLIPPING_G, Picture.CLIPPING_S.

CLIPPING_G = 1

CLIPPING_S = 2

CLIPPING_U = 0

class elma.models.**Point**(*x*, *y*)

Bases: object

Represent a single 2D point.

x
float

The x-coordinate of the point.

y
float

The y-coordinate of the point.

class elma.models.**Polygon**(*points*, *grass=False*)

Bases: object

Represents an Elastomania level polygon.

points
list

A list of Points defining the polygon contour.

grass
boolean

A boolean deciding wether or the polygon is a grass polygon.

class elma.models.**Replay**
Bases: object

Represent an Elastomania replay.

is_multi
boolean

Whether or not the replay is a multiplayer replay.

is_flagtag
boolean

Whether or not the replay is a flagtag replay.

level_id
int

The unique identifier of the level this replay is from.

level_name
string

The name of the level this replay is from.

frames
list

The frames of this replay.

events
list

The events of this replay.

get_exact_duration_in_seconds()
Calculates the exact replay duration in seconds.

class elma.models.**RightVoltEvent**
Bases: elma.models.Event

Represent a single replay right volt event.

class elma.models.**TurnEvent**
Bases: elma.models.Event

Represent a single replay turn event.

1.4 elma.packing module

elma.packing.**pack_level**(*item*)
Pack a level-related item to its binary representation readable by Elastomania.

elma.packing.**pack_replay**(*item*)
Pack a replay-related item to its binary representation readable by Elastomania.

elma.packing.**unpack_level**(*data*)
Unpack a level-related item from its binary representation readable by Elastomania.

elma.packing.**unpack_replay**(*data*)
Unpack a replay-related item from its binary representation readable by Elastomania.

1.5 elma.utils module

elma.utils.**null_padded**(*string*, *length*)
Force a string to a given length by right-padding it with zero-bytes, clipping the initial string if neccessary.

1.6 Module contents

e

elma, 6
elma.constants, 1
elma.models, 1
elma.packing, 5
elma.utils, 6

A

animation_number (elma.models.Obj attribute), 3

C

clipping (elma.models.Picture attribute), 4
CLIPPING_G (elma.models.Picture attribute), 4
CLIPPING_S (elma.models.Picture attribute), 4
CLIPPING_U (elma.models.Picture attribute), 4

D

distance (elma.models.Picture attribute), 4

E

elma (module), 6
elma.constants (module), 1
elma.models (module), 1
elma.packing (module), 5
elma.utils (module), 6
Event (class in elma.models), 1
events (elma.models.Replay attribute), 5

F

FLOWER (elma.models.Obj attribute), 3
FOOD (elma.models.Obj attribute), 3
Frame (class in elma.models), 1
frames (elma.models.Replay attribute), 5

G

get_exact_duration_in_seconds() (elma.models.Replay method), 5
grass (elma.models.Polygon attribute), 4
gravity (elma.models.Obj attribute), 3
GRAVITY_DOWN (elma.models.Obj attribute), 3
GRAVITY_LEFT (elma.models.Obj attribute), 3
GRAVITY_NORMAL (elma.models.Obj attribute), 3
GRAVITY_RIGHT (elma.models.Obj attribute), 3
GRAVITY_UP (elma.models.Obj attribute), 3
ground_texture (elma.models.Level attribute), 3
GroundTouchAEvent (class in elma.models), 2
GroundTouchBEvent (class in elma.models), 2

H

head_position (elma.models.Frame attribute), 1

I

is_flagtag (elma.models.Replay attribute), 5
is_gasing (elma.models.Frame attribute), 2
is_multi (elma.models.Replay attribute), 5
is_turned_right (elma.models.Frame attribute), 2

K

KILLER (elma.models.Obj attribute), 3

L

left_wheel_position (elma.models.Frame attribute), 1
left_wheel_rotation (elma.models.Frame attribute), 1
LeftVoltEvent (class in elma.models), 2
Level (class in elma.models), 2
level_id (elma.models.Level attribute), 2
level_id (elma.models.Replay attribute), 5
level_name (elma.models.Replay attribute), 5
lgr (elma.models.Level attribute), 3

M

mask_name (elma.models.Picture attribute), 4

N

name (elma.models.Level attribute), 2
null_padded() (in module elma.utils), 6

O

Obj (class in elma.models), 3
objects (elma.models.Level attribute), 2
ObjectTouchEvent (class in elma.models), 3

P

pack_level() (in module elma.packing), 5
pack_replay() (in module elma.packing), 5
Picture (class in elma.models), 3
picture_name (elma.models.Picture attribute), 4

pictures (elma.models.Level attribute), 2
Point (class in elma.models), 4
point (elma.models.Obj attribute), 3
point (elma.models.Picture attribute), 4
points (elma.models.Polygon attribute), 4
Polygon (class in elma.models), 4
polygons (elma.models.Level attribute), 2

R

Replay (class in elma.models), 5
right_wheel_position (elma.models.Frame attribute), 1
right_wheel_rotation (elma.models.Frame attribute), 2
RightVoltEvent (class in elma.models), 5
rotation (elma.models.Frame attribute), 1

S

sky_texture (elma.models.Level attribute), 3
spring_sound_effect_volume (elma.models.Frame attribute), 2
START (elma.models.Obj attribute), 3

T

time (elma.models.Event attribute), 1
TurnEvent (class in elma.models), 5

U

unpack_level() (in module elma.packing), 5
unpack_replay() (in module elma.packing), 5

X

x (elma.models.Point attribute), 4

Y

y (elma.models.Point attribute), 4