SCML Candidate Specification Document

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If attribute requirements are met, the attribute will be present, or the default value (shown in the SCML column) should be assumed.
If the value is shown in parenthesis, this should not be considered a default value, but instead will contain additional info about the value, or an example value.

SCML	Attribute Requirements						Data Type	Possible Values	Description
<?xml version="1.0" encoding="UTF-8"?>									
<spriter_data									
scml_version=""							string		
generator="(Spriter)"							string		
generator_version="(1.0)"							string		
pixel_art_mode="false">							string	“true”,”false”	
<meta_data>									
<variable									
name=""									unique among all <tag>/<variable>'s within a <meta_data> entry
type="string"								”string”,”int”,or “float”	
value="0"*/>							type		Default value is 0 for type ”int”,or “float”, empty string (“”) for type “string”
<tag									
name=""/>							string		unique among all <tag>/<variable>'s within a <meta_data> entry
</meta_data>									
<folder									
id=""							int		unique to this <folder> within this .scml document
name="(root folder(relative to this SCML document))">							string		unique to this <folder> within this .scml document
<file									
type="image"							string	“image”, “sound_effect”, “atlas_image”, or “entity”(.scml file)	
id=""							int		integer unique to this image, within this folder
name=""							string		name unique to this file, within this folder
pivot_x="0.000000"	type=="image" or "atlas_image"						float		0.000000 would be the left edge, 1.000000 would be the right edge
pivot_y="0.000000"	type=="image" or "atlas_image"						float		0.000000 would be the bottom edge, 1.000000 would be the top edge
width="0"	type=="image" or "atlas_image"						int		
height="0"	type=="image" or "atlas_image"						int		
atlas_x="0"	type=="atlas_image"						int		
atlas_y="0"	type=="atlas_image"						int		
offset_x="0"	type=="atlas_image"						int		
offset_y="0"	type=="atlas_image"						int		
original_width="0"	type=="atlas_image"						int		
original_height="0"/>	type=="atlas_image"						int		
</folder>									
<atlas									
id=""							int		unique to this <atlas> within this .scml document
data_path=""							string		
image_path="">							string		
<folder									(virtual folder)
id=""							int		unique to this <folder> within this <atlas>
name="">							string		unique to this <folder> within this <atlas>
<image									
id=""							int		unique to this <image>, within this <folder>
full_path=""/>							string		unique to this <image>, within this <folder>
</folder>									
</atlas>									
<entity									
id=""							int		unique to this <entity>, within this scml file
name=””>							string		unique to this <entity>, within this scml file
<meta_data/>									
<animation									
id=""							int		unique to each <animation> within an <entity>
name=""							string		unique to each <animation> within an <entity>
length=""							int		total length of <animation>, in milliseconds
looping="true"							string	“true”,“false”, or “ping_pong”	
loop_to=”0”>							int		id of <key> to loop back to
<meta_data/>									
<mainline>									
<key									
id=""							int		unique to this <key> within <mainline>
time="0">							int	0 – <animation> length	time in whole milliseconds
<meta_data/>									
<hierarchy>									
<bone									
id=""							int		unique to this <bone>(or <bone_ref>) within this <key>
parent="none"							int		id of parent
x="0.000000"							float		
y="0.000000"							float		
angle="0.000000"							float(degrees)	0.000000 -- 359.999999	counter-clockwise
scale_x="1.000000"							float		ratio of original image width
scale_y="1.000000"							float		ratio of original image height
r="1.000000"							float	0.000000 -- 1.000000	red component of rgb color tint
g="1.000000"							float	0.000000 -- 1.000000	green component of rgb color tint
b="1.000000"							float	0.000000 -- 1.000000	blue component of rgb color tint
a="1.000000">							float	0.000000 -- 1.000000	alpha(opacity)
<meta_data/>									
</bone>									
<bone_ref									
id=""							int		unique to this <bone>(or <bone_ref>) within this <key>
parent="none"							int		id of parent
timeline=""							int		corresponds to the id of the <timeline> it references
key=""/>							int		corresponds to the id of the <key> within the <timeline>
</hierarchy>									
<object									
id=""							int		unique to this <object>(or <object_ref>) within this <key>
parent="none"							int		id of parent
object_type="sprite"	sprite	point	box	var	entity	sound	string	“point”,”box”,”sprite”,”sound”,”entity”,”variable”	
atlas="(no atlas)"	X						int		corresponds to the id of the <atlas> listed below
folder=""	X				X	X	int		corresponds to the id of the <folder> listed below
file=""	X				X	X	int		corresponds to the id of the <file> listed below
usage=”*”	X	X	X		X		string	“display”,”collision”,”both”, ”neither”	object_type==”sprite” or “entity - default is “display” object_type==”box” - default is “collision” object_type==”point” - default is “neither”
blend_mode=”alpha*”	X	X	X		X		string	“alpha”,”additive”,”subtractive”(incomplete list)	usage==”display” or “both”
name=""	*	X	X	X	X		string		*only if object_type==”sprite”, and usage==”collision” or “both”, then sprite will have a name
x="0.000000"	X	X	X		X		float(int in pixel_art_mode)		
y="0.000000"	X	X	X		X		float(int in pixel_art_mode)		increases north
pivot_x="*"	X		X				float(int in pixel_art_mode)		*(0.000000 if collision box, default pivot point if sprite)
pivot_y="*"	X		X				float(int in pixel_art_mode)		*(0.000000 if collision box, default pivot point if sprite)
angle="0.000000”	X		X		X		float	0.000000 -- 359.999999	increases counter-clockwise
w=""	X*		X		X		float		*only appears for sprites when in pixel art mode(as int)
h=""	X*		X		X		float		*only appears for sprites when in pixel art mode(as int)
scale_x="1.000000"	X				X		float		ratio of image width
scale_y="1.000000"	X				X		float		ratio of image height
r="1.000000"	X	X	X		X		float	0.000000 -- 1.000000	red component of rgb color tint
g="1.000000"	X	X	X		X		float	0.000000 -- 1.000000	green component of rgb color tint
b="1.000000"	X	X	X		X		float	0.000000 -- 1.000000	blue component of rgb color tint
a="1.000000"	X	X	X		X		float	0.000000 -- 1.000000	alpha(opacity)
variable_type="string"				X			string	“string”, “int”, “float”	
value=""				X			variable_type		
min="(no minimum)"				X			variable_type		only applies to int and float variable_types
max="(no maximum)"				X			variable_type		
animation=""					X		int		
t="0.000000 - 1.000000"					X		float		
z_index=""	X	X	X		X		int		order this sprite should be drawn, can also be inferred from order of appearance
volume="1"						X	float	0.000000 -- 1.000000	0.00000==silent, 1.000000==full volume
panning="0">						X	float	-1.000000 -- 1.000000	-1==full left, 0==center, 1==full right
<meta_data/>									
</object>									
<object_ref									
id=""							int		unique to this <object>(or <object_ref>) within this <key>
parent="none"							int		id of parent
timeline=""							int		corresponds to the id of the <timeline> it references
key=""							int		corresponds to the id of the <key> within the <timeline>
z_index=""/>							int		order this object should be drawn, can also be inferred from order of appearance
</key>									
</mainline>									
<timeline									
id=""							int		unique to this <timeline> within this <animation>
name=""	object_type==”box”,”point”,”variable”, “entity”, or “sprite”*						string		*if object_type==”sprite”, and usage==”collision” or “both”, then sprite will have a name
object_type="sprite"							string	“point”,”box”,”sprite”,”sound”,”entity”,”variable”	
variable_type="string">	variable						string	“string”, “int”, “float”	
usage=”*”	object_type==”box”,”point”,“entity”, or “sprite”						string	“display”,”collision”,”both”, ”neither”	object_type==”sprite” or “entity - default is “display” object_type==”box” - default is “collision” object_type==”point” - default is “neither”
<meta_data/>									
<key									
id=""							int		unique to this <key> within this <timeline>
time="0"							int	0 – <animation> length	time in whole milliseconds
curve_type="linear"							string	“instant”, “linear”, “quadratic”, “cubic”	
c1=""	for curve_types quadratic and cubic						float	0.000000 - 1.000000	
c2=""	for curve_type cubic						float	0.000000 - 1.000000	
spin="1”>	for curve_types quadratic,linear,& cubic						int	-1,1	1==counter-clockwise,-1==clockwise
<meta_data>									
<variable*									*(tweenable)
name=""							string		unique among all <variable>/<tag>'s within this <meta_data> entry
type="string"							string	”string”,”int”,or “float”	
value="0"*							type		*default value is 0 for type ”int”,or “float”, empty string (“”) for type “string”
curve_type="linear"	attribute type == ”int” or “float”						string	“instant”, “linear”, “quadratic”, “cubic”	
c1=""	for curve_types quadratic and cubic						float	0.000000 - 1.000000	
c2="" />	for curve_type cubic						float	0.000000 - 1.000000	
</meta_data>									
<bone									(either <bone> or <object>, but not both)
x="0.000000"							float		
y="0.000000"							float		increases north
angle="0.000000"							float	0.000000 -- 359.999999	increases counter-clockwise
scale_x="1.000000(ratio)"							float		ratio of original image width
scale_y="1.000000(ratio)"							float		ratio of original image height
r="1.000000"							float	0.000000 -- 1.000000	red component of rgb color tint
g="1.000000"							float	0.000000 -- 1.000000	green component of rgb color tint
b="1.000000"							float	0.000000 -- 1.000000	blue component of rgb color tint
a="1.000000">							float	0.000000 -- 1.000000	alpha(opacity)
<meta_data/>*									*tweenable
</bone>									
<object	sprite	point	box	var	entity	sound			(either <bone> or <object>, but not both)
atlas="(no atlas)"	X						int		corresponds to the id of the <atlas> listed below
folder=""	X				X	X	int		corresponds to the id of the <folder> listed below
file=""	X				X	X	int		corresponds to the id of the <file> listed below
name=""		X	X	X	X		string		
x="0.000000"	X	X	X		X		float		relative to character
y="0.000000"	X	X	X		X		float		relative to character, increases north
pivot_x="*"	X		X				float		*(0.000000 if type==“box”, default pivot point if type==“sprite”)
pivot_y="*"	X		X				float		*(0.000000 if type==“box”, default pivot point if type==“sprite”)
angle="0.000000"	X		X		X		float	0.000000 -- 359.999999	counter-clockwise
w=""	X*		X		X		float		*only appears for sprites when in pixel art mode(as int)
h=""	X*		X		X		float		*only appears for sprites when in pixel art mode(as int)
scale_x="1.000000"	X				X		float		ratio of image width
scale_y="1.000000"	X				X		float		ratio of image height
r="1.000000"	X	X	X		X		float	0.000000 -- 1.000000	red component of rgb color tint
g="1.000000"	X	X	X		X		float	0.000000 -- 1.000000	green component of rgb color tint
b="1.000000"	X	X	X		X		float	0.000000 -- 1.000000	blue component of rgb color tint
a="1.000000"	X	X	X		X		float	0.000000 -- 1.000000	alpha(opacity)
blend_mode=”alpha*”	X	X	X		X		string	“alpha”,”additive”,”subtractive”(incomplete list)	usage==”display” or “both”
value=""				X			'variable_type'	min – max	the value of the variable if type==”variable”
min="(no minimum)"				X			'variable_type'		
max="(no maximum)"				X			'variable_type'		
animation=""					X		string		
t="0.0 - 1.0">					X		float		
volume="1"						X	float	0.000000 -- 1.000000	0.00000==silent, 1.000000==full volume
panning="0">						X	float	-1.000000 -- 1.000000	-1==full left, 0==center, 1==full right
<meta_data/>*									*tweenable
</object>									
</key>									
</timeline>									
</animation>									
</entity>									
<character_map									
id=""							int		unique to this <character_map> within this .scml document
name="">							string		unique to this <character_map> within this .scml document
<map									
atlas="(no atlas)"							int		
folder="(all files regardless of folder)"							int		if no <file> specified, all <file>s in <folder>(by id)
file="(all files in folder)"							int		if no <folder> specified, all <file>s in any <folder>(by id)
target_atlas="(atlas)"	atlas attribute must be present						int		
target_folder=""	folder attribute must be present						int		
target_file=""/>	file attribute must be present						int		
</character_map>									
<document_info									
author="author not specified"							string		
copyright="copyright info not specified"							string		
license="no license specified"							string		
version="version not specified"							string		
last_modified="date and time not included"							string	YYYY-MM-DD:HH:MM:SS	
notes="no additional notes"/>							string		
</spriter_data>									