BUBBLEGUM

Content table

1. Grammar

Bubblegum aims to simplify the process of creating complex animations through composition. What follows is a simple explanation of the rules Bubblegum enforces to ensure that the output produced makes sense. In a later section, we will explain in greater detail the different data types the language has to offer. Meanwhile, what is important is to know under which categories they may fall: Animation, Shape, Media and Layout.

¿What can I do with Bubblegum?

Bubblegum is defined with these rules:

a. Animations can nest Animations and Layouts multiple times, but they must always have either a Shape or Media in the final nest.
b. Animations can nest Animations and Layouts multiple times, but they must always have either a Shape or Media in the final nest.
c. Shapes cannot nest anything.
d. Media cannot nest anything.

2. Data subtypes

1. Animations
- *Opacity*: changes the opacity of nested elements.
- *Rotate*: rotates nested elements.
- *TranslateX*: moves nested elements in the x-axis.
- *TranslateY*: moves nested elements in the y-axis.
- *Recolor*: recolors nested elements.
- *Resize*: resizes nested elements.

2. Shapes
- *Triangle*
- *Rectangle*
- *Ellipse*

3. Media
- *Image*

4. Layout
- *Center*
- *Top*
- *Bottom*
- *Vertical*
- *Horizontal*
- *Left*
- *Right*
- *Stack*: stacks nested elements on top of each other.

3. Parameters

1. Animations

Animation	Parameters
Opacity	alternate, loop, duration, delay, alpha
Rotate	alternate, loop, duration, delay, angle

TranslateX / TranslateY	alternate, loop, duration, delay, end-value
Recolor	alternate, loop, duration, delay, end-color
Resize	alternate, loop, duration, delay, scale

2. Shape

Shape	Parameters
Triangle	fill-color, border-color, border-width, rotation, base, height
Rectangle	fill-color, border-color, border-width, rotation, height, width
Ellipse	fill-color, border-color, border-width, rotation, x-axis, y-axis

3. Media

Media	Parameters
Image	src

4. Layouts

Layouts receive no parameters.

5. Types for parameters

Type	Parameters
int	duration, delay, end-value, angle, border-width, rotation, height, width, x-axis, y-axis, base
float*	alpha, scale
string	end-color**, src
boolean (true|false)	alternate, loop

* For float types the number MUST have this format *"[+\|-]number.number"*
** Colors MUST be in hex format