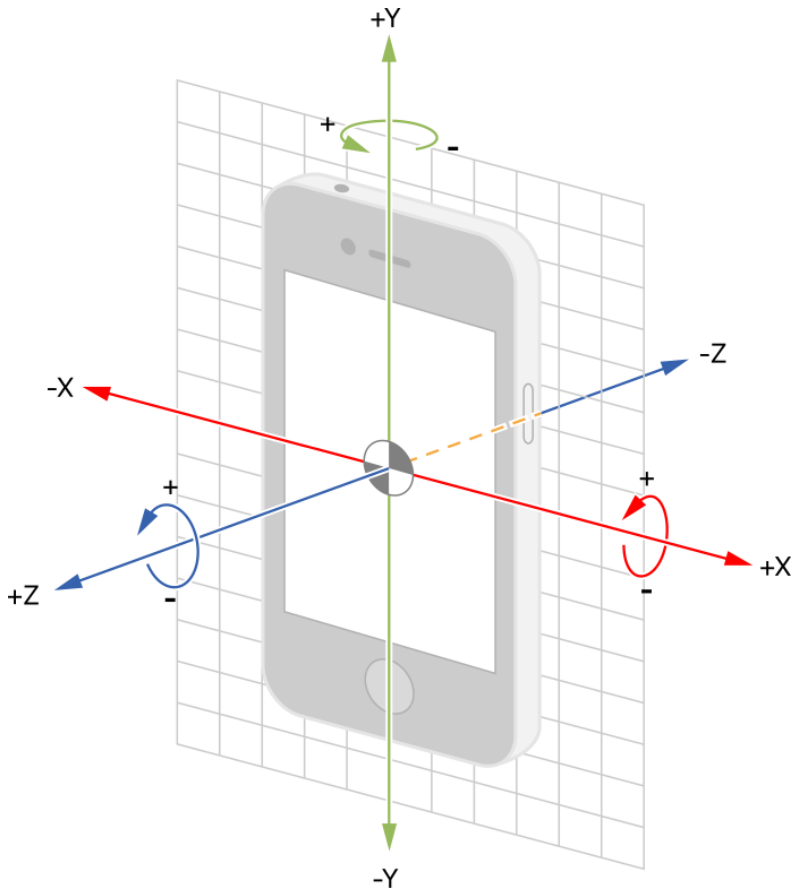
Viv – Creating Animations

In Viv you have 16 animations ready to bring your drawings to life, and you can create 4 more animations.

To create your animations in Viv, some concepts will help:

1. Axes

   Your drawing on paper will become reality in three dimensions. To move your drawing, we will use three axes (x, y, z), see what this represents in this figure:



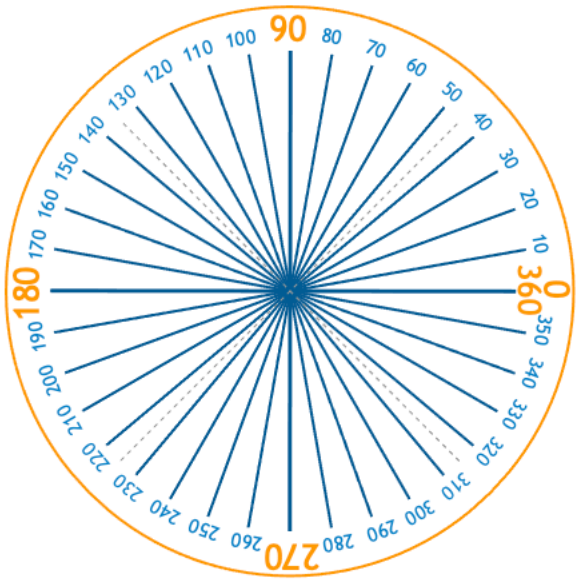
   So, you can move your drawing left or right (x-axis), up or down (y-axis) and forward or backward (z-axis). The movement will be specified in meters. As an example,

moving your drawing by 10 centimeters will be specified as follows:

- x:-0.10 (to the left)
- x:0.10 (right)
- y:-0.10 (down)
- y:0.10 (up)
- z:-0.10 (backwards)
- z:0.10 (forward)

2. Angles

In addition to moving your drawing on the three axes (x, y, z) you can rotate it on these axes. The rotation will be specified in degrees as shown in the figure:



So, x:180 means half a turn of the drawing on the x axis, z:-90 a quarter turn back on the z axis.

3. Actions

We will call each part of the animation an Action. And the available Actions are:

- Move
- Rotation
- FadeOut
- FadeIn
- Wait
- Scale
- FadeOpacity
- PlayAudio
- Repeat
- RepeatForever
- Sequence
- Parallel

For the first 7 actions we must specify a duration time (in seconds). So, duration:4 means that the action will last 4 seconds.
In the next item we will see all the commands for animations.

4. Commands

Action ___[01]___ = Move x:___[02]___ y:___[03]___ z:___[04]___ duration:___[05]___
Action _____ = Rotation x:___[06]___ y:___[07]___ z:___[08]___ duration:_____
Action _____ = FadeOut duration:_____
Action _____ = FadeIn duration:_____
Action _____ = Wait duration:_____
Action _____ = Scale to:___[09]___ duration:_____
Action _____ = FadeOpacity to:___[10]___duration:_____
Action _____ = PlayAudio number:___[11]___
Action _____ = Sequence actions:___[01]___,_____,...._____
Action _____ = Parallels actions:___[01]___,_____,...._____
Action _____ = Repeat action:___[01]___ count:___[12]___
Action _____ = RepeatForever action:___[01]___
Bubble ___[14]___ = Fill text:___[15]___|_____|_____|_____|_____
Motion ___[14]___ = Limits lf:___[16]___ rg:___[16]___ up:___[16]___ dn:___[16]___
TimingMode ___[01]___ = ___[13]___
Define ___[01]___ = ___[14]___

[01] Action Name, do not use spaces, equals, commas and colons
[02] Value in meters to move on the x axis
[03] Value in meters to move on the y axis
[04] Value in meters to move on the z axis
[05] Action duration time in seconds
[06] Angle, in degrees, for rotation on the x-axis
[07] Angle, in degrees, for rotation on the y-axis
[08] Angle, in degrees, for rotation on the z-axis
[09] Factor to scale the size of the drawing
[10] Opacity level (0-invisible to 1-visible)
[11] Number from 1 to 6 to determine the audio to play
[12] Number of times the action will be repeated
[13] Choose between Linear, EaseOut, EaseIn and EaseInOut
[14] Number 1 to 4 of the animation
[15] Text, up to 5 sentences (+/- 20 characters maximum) separated by |
[16] Limits in percentage of movement (left, right, up, down)

5. Where to set

On Viv press the button  and then the tab  .
Enter the commands for animation and to save press the button .

6. Examples

* Bubble speech *

Action le = Move x:0.1 duration:1
Action fi = Scale to:1.1 duration:1
Action fo = Scale to:1 duration:0.5
Action fs = Sequence actions:fi,fo
Action fa = Repeat action:fs count:3
Action sc = Scale to:1.5 duration:0.5
Action sq = Sequence actions:le,fa,sc
Define sq = 1
Bubble 1 = Fill text:They asked me if I was a drawing|I replied, I really was|But now I move, speak and sing|So I'm not just a drawing|Thanks to VIV

* Jump, fluffy and roll *

Action u1 = Move y:0.1 duration:0.6
Action d1 = Move y:-0.01 duration:0.2
Action u2 = Move y:0.01 duration:0.2
Action d2 = Move y:-0.1 duration:0.2
Action f1 = Scale to:1.1 duration:1
Action f2 = Scale to:1 duration:0.5
Action s1 = Sequence actions:f1,f2
Action t1 = Repeat s1 count:3
Action r1 = Rotation x:-90 duration:0.2
Action r2 = Rotation z:360 duration:2
Action m1 = Move x:0.2 duration:2
Action p1 = Parallel actions:r2,m1

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TimingMode d1 = EaseOut
TimingMode u2 = EaseIn
TimingMode d2 = EaseOut
Action s2 = Sequence actions:u1,d1,t1,u2,d2,r1,p1
Define s2 = 2

*   Rotate and move   *

Action rt1 = Rotation y:360 duration:1.6
Action mv1 = Move x:0.12 duration:1.6
Action pl1 = Parallel actions:rt1,mv1
Action rt2 = Rotation y:-360 duration:1.6
Action mv2 = Move x:-0.12 duration:1.6
Action pl2 = Parallel actions:rt2,mv2
Action sq1 = Sequence actions:pl1,pl2,pl2,pl1
Action rf1 = RepeatForever action:sq1
Define rf1 = 3

*   Jump and go   *

Action up = Move y:0.1 duration:2
Action dn = Move y:-0.1 duration:1.5
Action wait = Wait duration:1
Action seq = Sequence actions:up,dn,wait
Action mv = Move x:0.2 duration:4.5
Action mr = Move x:-0.2 duration:4.5
Action par1 = Parallel actions:seq,mv
Action par2 = Parallel actions:seq,mr
Action seq2 = Sequence actions:par1,par2
Action rf = RepeatForever action:par
Define rf = 4
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