

Witchgirl Spine

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セットアップ解説

Explanation the setup



目次 – Contents –

English explanation

P14 Naming rules

P15 The skeleton construction① Elements just below the root bone

P16 The skeleton construction② PATH_idle_hip / Effect_magic

P17 The skeleton construction③ IK_bones / hat

P18 The skeleton construction④ Bones just below hip bone / body1

P19 The skeleton construction⑤ body2 / neck

P20 The skeleton construction⑥ head

P21 The skeleton construction⑦ hairs

P22 The skeleton construction⑧ stick

P23 Animations

Naming rules

◆General :

L ... Left ※

R ... Right ※

C ... Center

mid ... middle

※From the character's point of view. It is opposite the direction on Screen.

◆Bone :

Controller_xxx

... This bone control the angle that the object after underbar.

Ex. Controller_body can change the body's angle with translate.

Controller_xxx_back

... This bone is set a Transform constraint to "Controller_xxx" bone, and it will move to opposite direction automatically when the "Controller_xxx" bone moved.

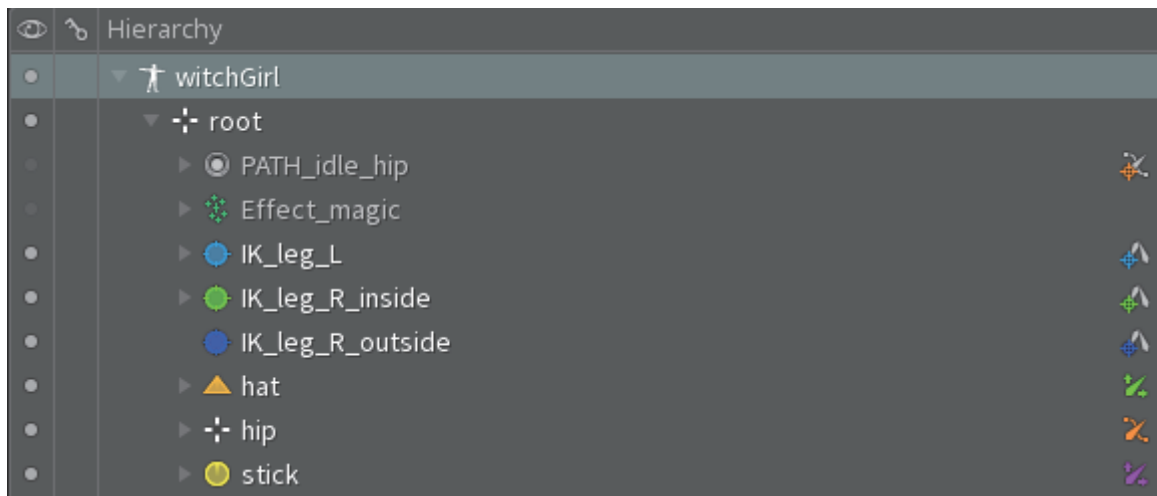
This bone is hidden in default, and there is no need to animate this bone.

◆Constraint :

TC ... Transform Constraint

The skeleton construction ①

◆ Elements just below the root bone



Slot – PATH_idle_hip (Default : hidden)

Hip bone follows this path on the idle animation.

Bone – Effect_magic (Default : hidden)

Magic effects bone.

Bone – IK_leg_L (Default : visible)

IK bone for left leg.

Bone – IK_leg_R_inside (Default : visible)

IK bone for right leg that directs inside.

Bone – IK_leg_R_outside (Default : visible)

IK bone for right leg that directs outside.

Bone – hat (Default : visible)

The hat bone ✕ This bone follows head bone with Transform Constraint.

Bone – hip (Default : visible)

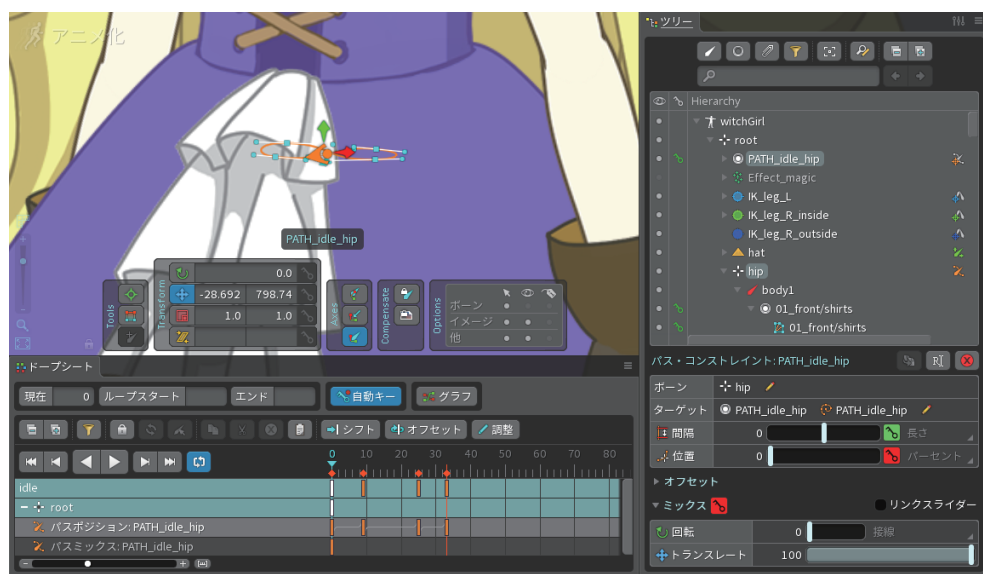
The character's hip bone.

Bone – stick (Default : visible)

The magical stick bone.

The skeleton construction ②

◆ Slot – PATH_idle_hip (Default : hidden)

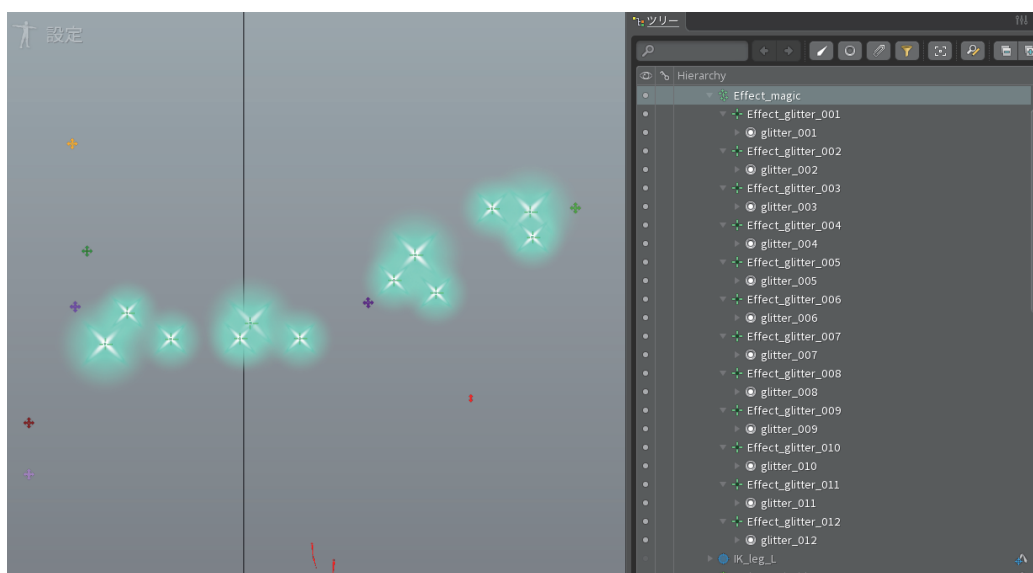


The path is a horizontal figure of 8 starting at the hip bone.

By moving the parameter of “position” in the path constraint of hip bone, you can move the bone in the shape of 8.

It makes the body swaying motion from side to side with sinking and floating.

◆ Slot – Effect_magic (Default : hidden)

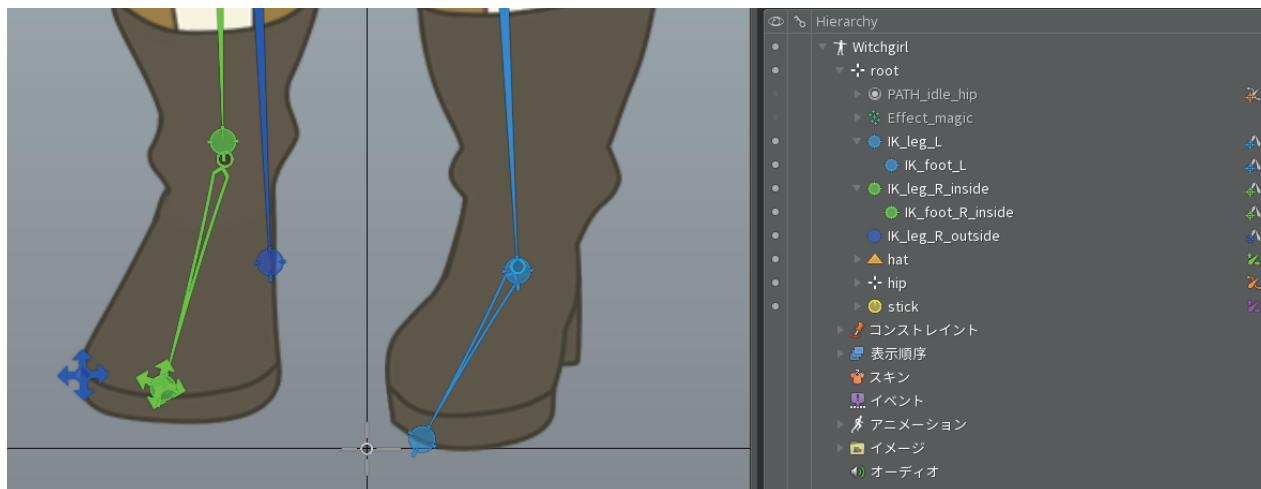


The bone includes simple glitters effect.

You can choose those bones below Effect_magic with pushing “6” on your keyboard.

The skeleton construction ③

◆ IK bones

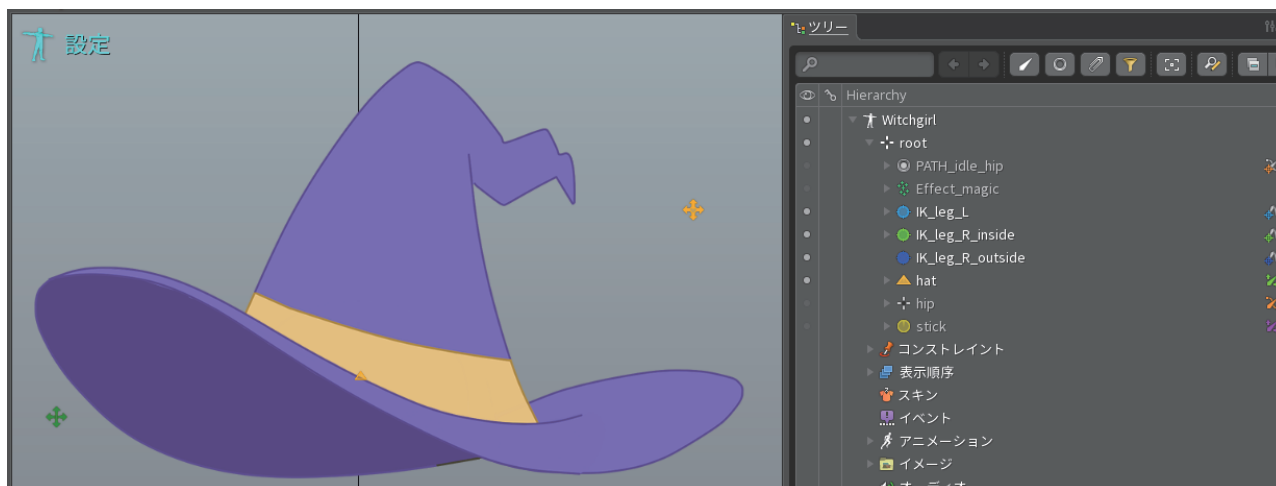


In this setup, IK is set for legs and foots only.

The right foot has two different poses, inside and outside, and each has a different IK bone.

Also, the foot bone has IK in the foot bone on the one shown by default, and it makes sure that the toes are not misaligned.

◆ Bone – hat

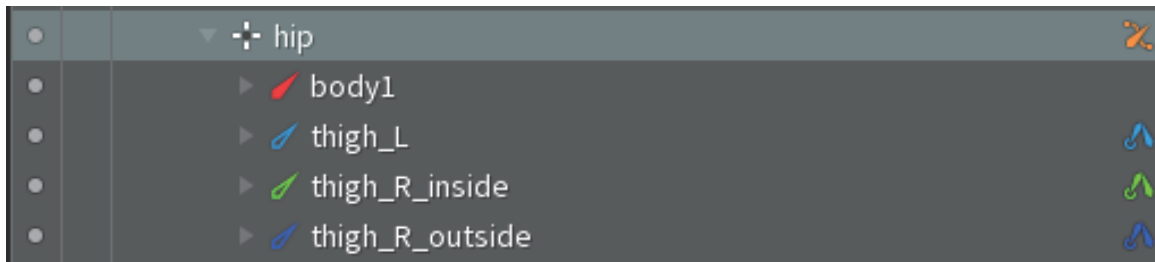


The hat bone is not parented to head, but follow the head bone with Transform Constraint.

※It has problem now... so the setup will be fixed.

The skeleton construction④

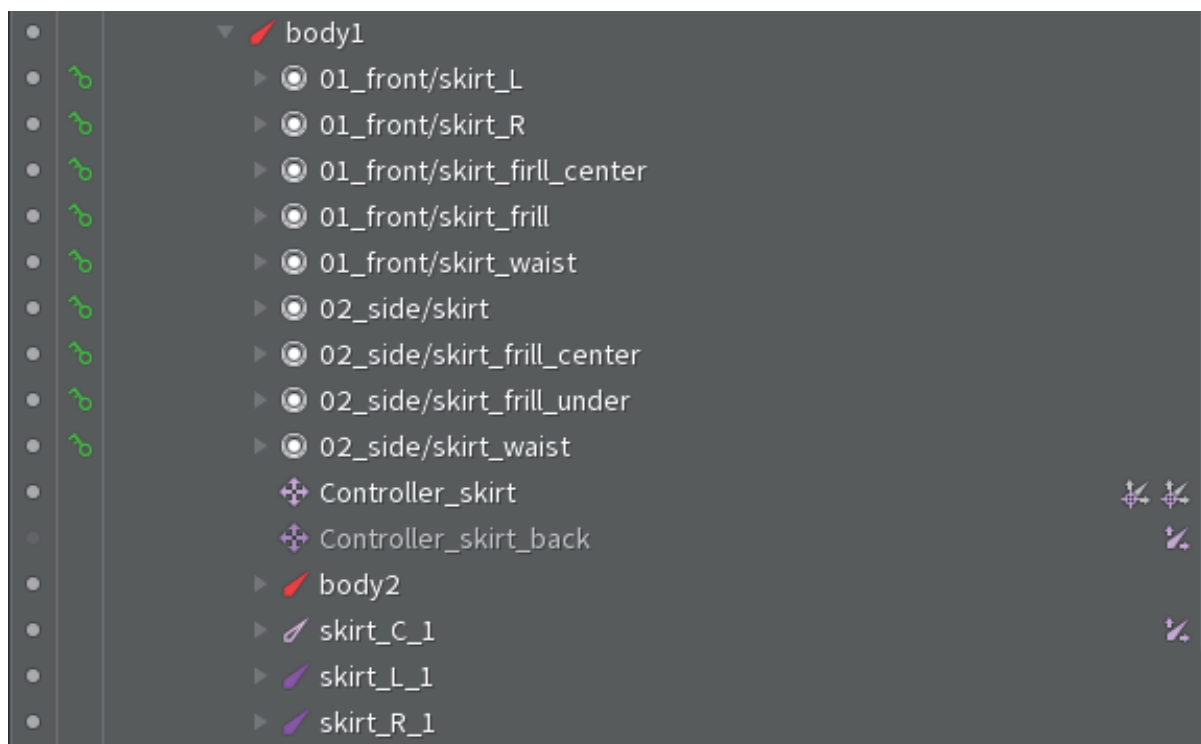
◆ Bones just below hip bone



There are 4 bones below the hip bone:

- body1 A parent bone the upper body.
- thigh_l A parent bone the left leg.
- thigh_R_inside A parent bone the right leg that direct inside.
- thigh_R_outside A parent bone the right leg that direct outside.

◆ Bone – body1



Bone “body1” includes the skirt. The skirt is separated to waist , cloth and frill.

You can change the skirt angle with “Controller_skirt” bone.

The skeleton construction⑤

◆ Bone – body2



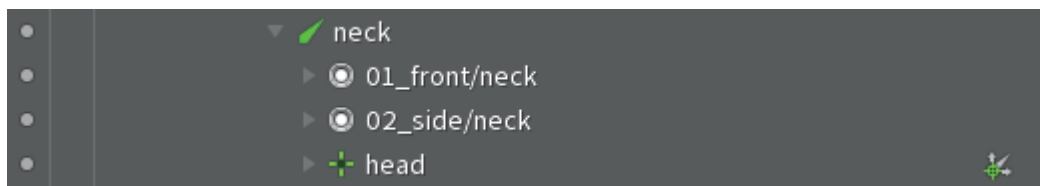
Bone “body2” includes the shirts, neck, and parent bones of arms.

You can change the upper body angle with “Controller_body” bone.

Also upperArmL/R will move when “Controller_body” moved.

upperArm_L moves to the same direction, upperArm_R moves to opposite direction.

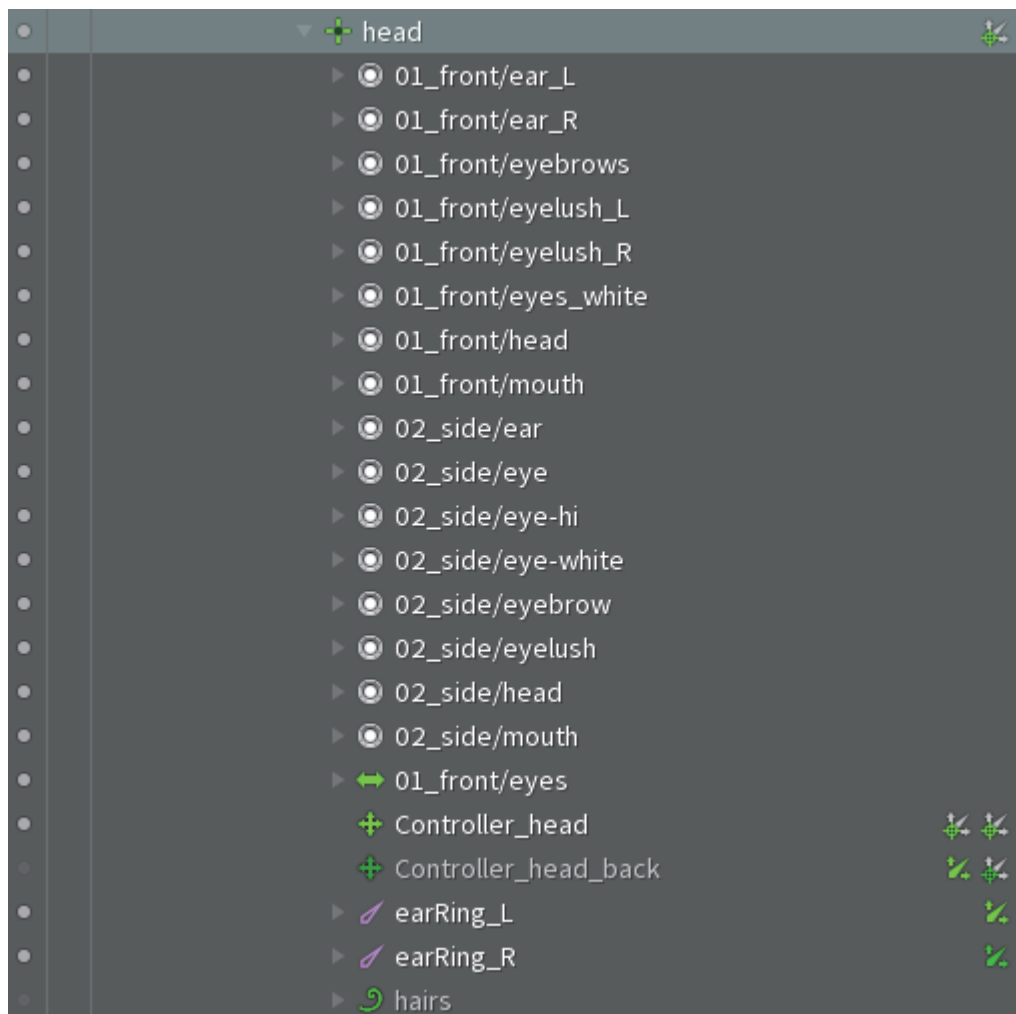
◆ Bone – neck



Bone “neck” includes neck and head.

The skeleton construction⑥

◆ Bone – head



Bone “head” includes face parts. For making easy to adjust the face angle with weights, it is separated many parts.

You can change the head angle with “Controller_head” .

Also you can move the eyes by moving “01_front/eyes” bone when the character’s front eyes are visible.

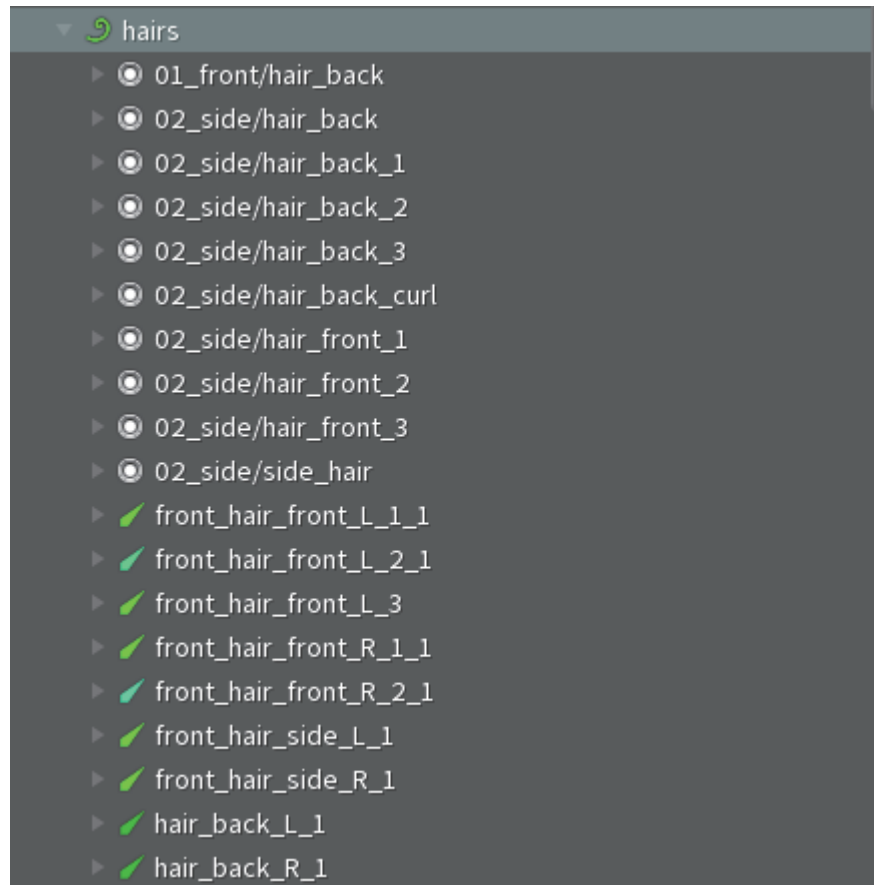
“earRing_L” is used for both of front and side direction.

“earRing_L” and “earRing_R” are set Transform Constraint to “Controller_head” .

earRing_L moves to the same direction, earRing_R moves to opposite direction.

The skeleton construction⑦

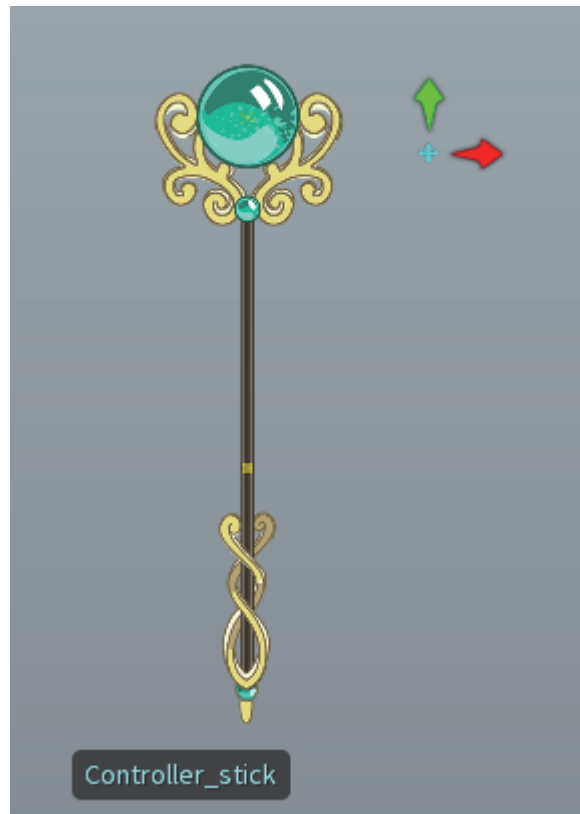
◆ Bone – hairs



Bone “hairs” is just made for compiling the hair bones, and hair slots.
You should move children bone of “hairs” for animating hairs.

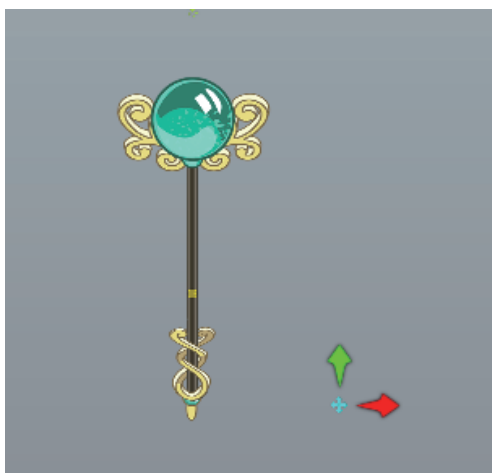
The skeleton construction⑧

◆ Bone – stick



This stick has Controller bone, and you can change angle with the bone.

However, it was just assumed for shrinking, so if you move it to upper, the stick will be weird shape.



Animation



There are 5 animation folders in this skeleton.

AnimationKit :

These animations are prepared for beginner animator.

There are 6 key poses of attack animation.

You can make the same animation as the SampleAnimation using those poses easily.

If you want to use it, you should duplicate it before editing.

BindPose :

There are animations for keeping “Bind Pose” .

If you don't know Bind pose, please check the following post:

<http://en.esotericsoftware.com/blog/Mesh-binding-tutorial>

The side pose and additional poses were bound after the default pose was set upped, so those Bind Pose animations are needed.

EffectAnimation :

This folder includes effect animation.

SampleAnimation :

You can see the sample animation.

The gif put the event page of Spinners MeetUp vol.2 is “idle-to-attack” .

TestAnimation :

There is test animation for checking the Controller bones is working or not.

You can know the translation limits※ of each Controller bones in the animation.

※ It is just for reference. You can edit this skeleton as you like, so you have not to be tied the rule.