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DevLUp FSU



GBM #5



October 10th, 2024



Welcome!

Next Few Weeks

Date	Week #	GBM Title	Secondary Event	Presenter
29 Aug	1	(No Meeting)	Involvement Fair	
5 Sep	2	Intro to Club and New Club Project		Club
12 Sep	3	Intro to Game Design		Chris
19 Sep	4	Intro to 3D Game Dev in Godot		Dion
26 Sep	5	(No Meeting)	Hurricane	
3 Oct	6	Intro to 3D Modelling in Blender		Jake, Parker, Emma
10 Oct	6	Blender Animations		Ares
17 Oct	7	Blender Materials		Parker, Jake
24 Oct	9	Pixel Art		Ares, Emma
31 Oct	10	Tile Maps	Game Jam!	Jake, Ares
7 Nov	11	Writing for Games		Emma, Chris
14 Nov	12	UI Design		Emma, Jake
21 Nov	13	3D Math		Dion
28 Nov	14	Thanksgiving Break		
5 Dec	15	Goodbye Chris Social		Chris
12 Dec	16	Finals		

DevLUp War Games - Game Jam

COUNTDOWN TO GAME JAM: 21 DAYS

- DevLUp-wide Game Jam
 - FSU, UF, FIT, FAU, and more
- November 1st — 3rd
 - 48 hours
 - Starts Friday afternoon/evening
 - Ends Sunday afternoon/evening
- We will likely have access to the Innovation Hub (still needs to be reserved)



#👁👁showoff **recap**

Intro to 3D Animation

PLAN OF THE DAY

- ★ Keyframes :D
- ★ Bones :)
- ★ Weight painting :o
- ★ Physics??? Procedural animations?????? :O???

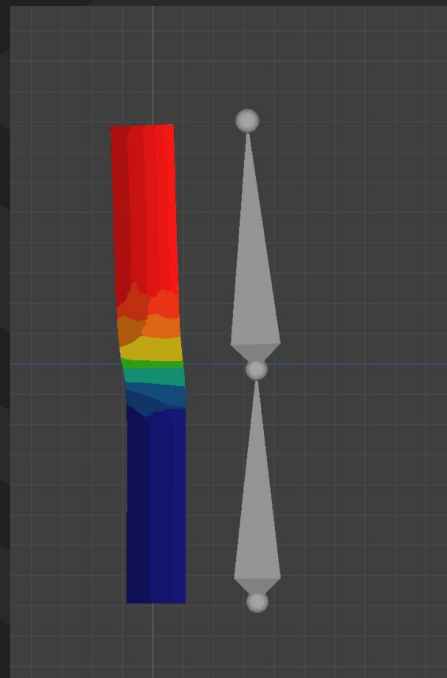


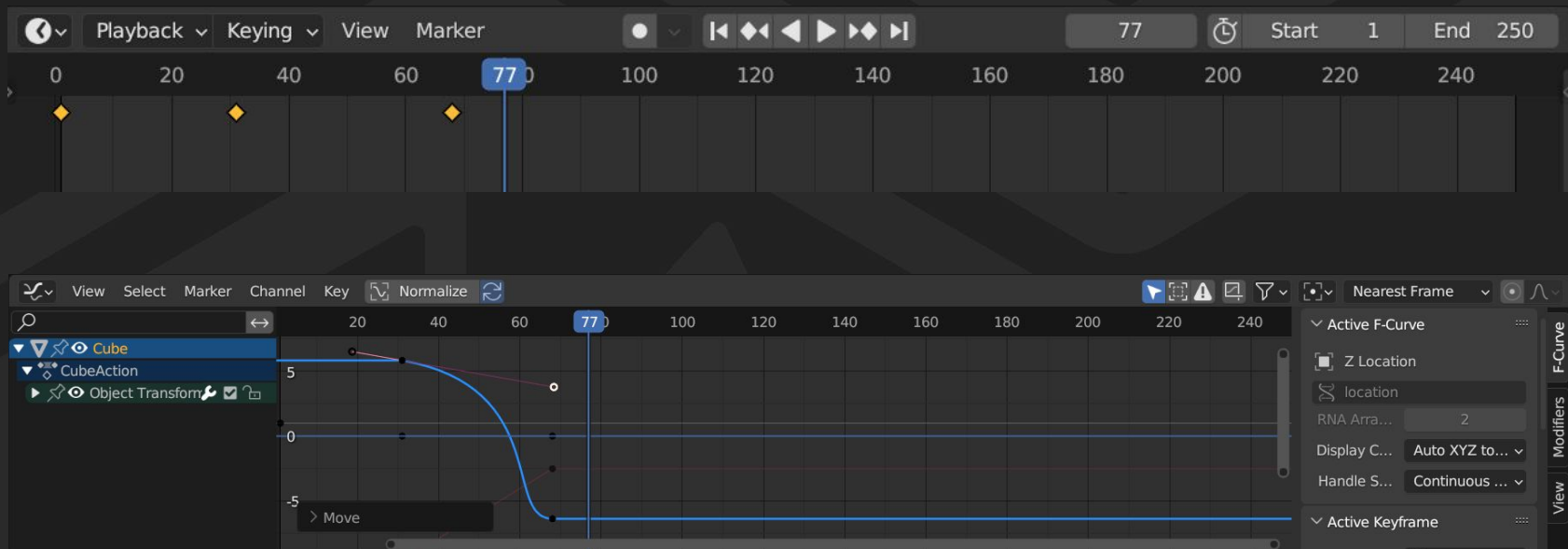
Fig. O: *what the actual*

Keyframes

Keyframe Animation

Add Keyframe: i

- You can animate basically any property for any asset in the scene



Keyframe Animation

Here, we're taking Suzanne
The Monkey for a little ride
with two "location" keyframes



Add Keyframe: i

Timeline interface showing a single keyframe at frame 1.

Timeline controls: Playback, Keying, View, Marker. Playback controls: Play, Stop, Previous, Next, First, Last.

Timeline markers: 1, 20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240, 250.

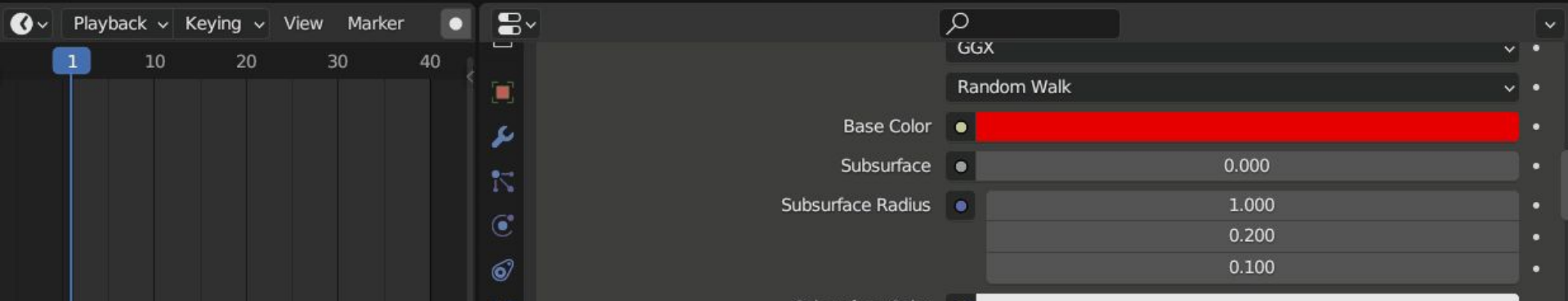
Keyframe data table:

Frame	Start	End
1	1	250

Keyframe Animation

Remember, you can keyframe nearly every property: here, we're animating Suzanne's eye color. Be careful with those Suzanne!

Add Keyframe When Hovering Over A Property: i



The image shows the Blender 2.80 interface. The top part features a 3D viewport with a low-poly purple Suzanne model. Two red circles highlight the eyes, and a red crosshair is positioned over the right eye. The bottom part of the interface includes a timeline with a keyframe at frame 1, a Properties panel on the right showing material settings for 'GGX' and 'Random Walk', and a left sidebar with various tool icons.

Timeline: 1 10 20 30 40

Properties Panel:

- GGX
- Random Walk
- Base Color: [Red]
- Subsurface: 0.000
- Subsurface Radius: 1.000, 0.200, 0.100

The background features a complex, abstract pattern of dark gray geometric shapes, including nested rectangles and lines, creating a sense of depth and structure.

Bones

BONES

Armatures

- An armature is a group of bones (often attached to each other) that can be posed
- Think of them like a literal wooden armature

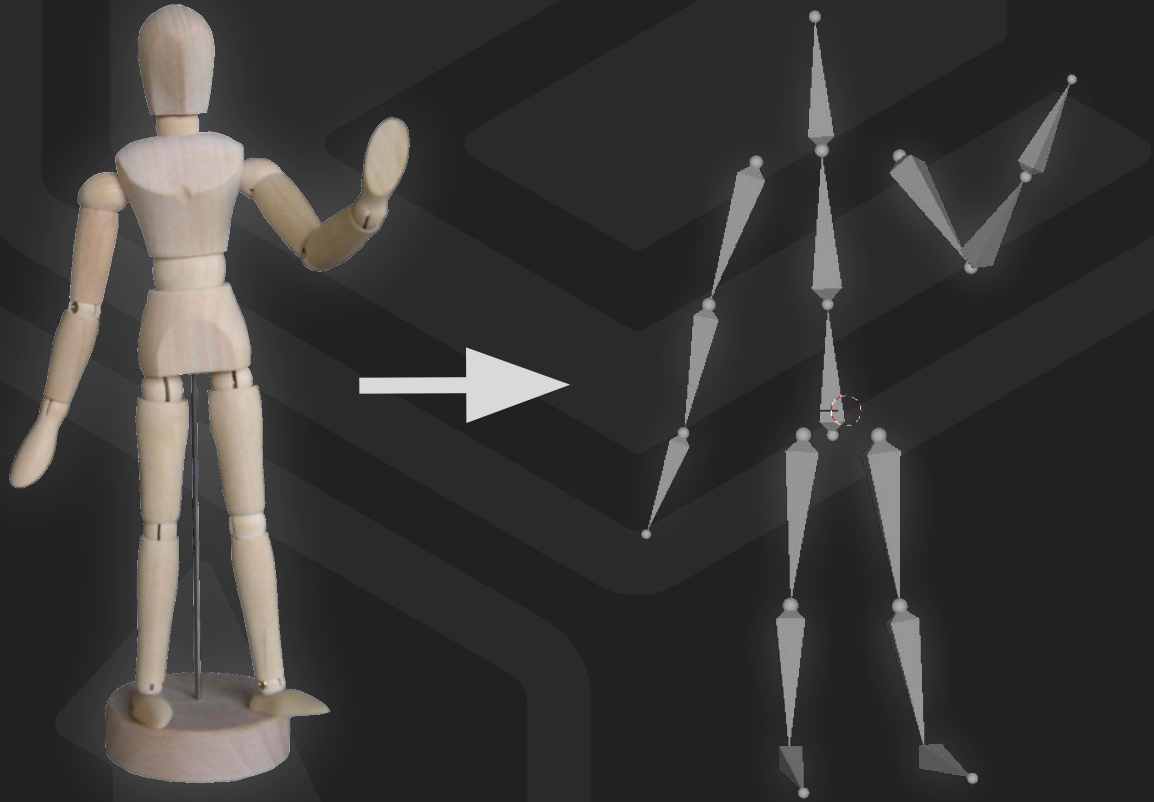


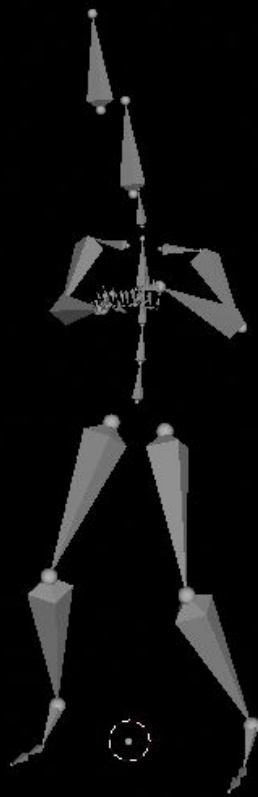
Fig. 2: *I really need to get one of these things...
Y'know, just to talk to. 🥹🥹🥹*

Keyframe Animation

Here's some keyframe animation playing on a armature:



(Alec made this for last year and I think it's beautiful)



Weights

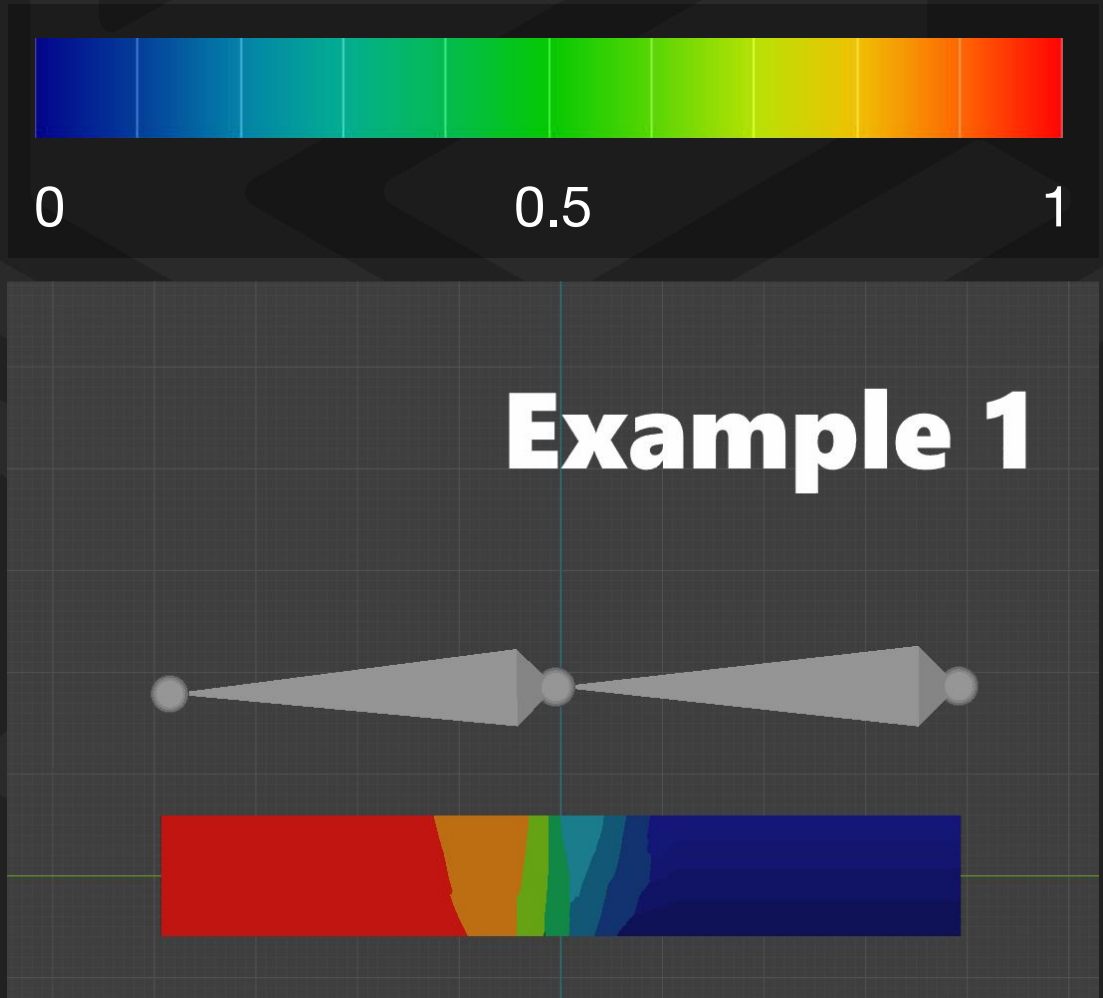
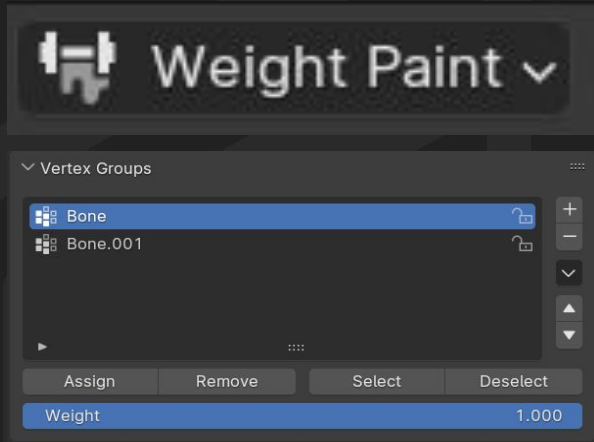
Weights:

How do parts of a mesh
get affected by a bone
being animated?



Weight Painting:

With weight painting, you can assign the weights (the degree a bone affects) a vertex on the mesh:



**HOW DOES ANY
OF THIS WORK?**

Keyboard Shortcuts you forgot:

Move: G Rotate: R Scale: S Keyframe: I

Add objects: Shift + A

Change Mode: Tab

Selection and Cursor: Shift + S

Loop Cut: Ctrl + R

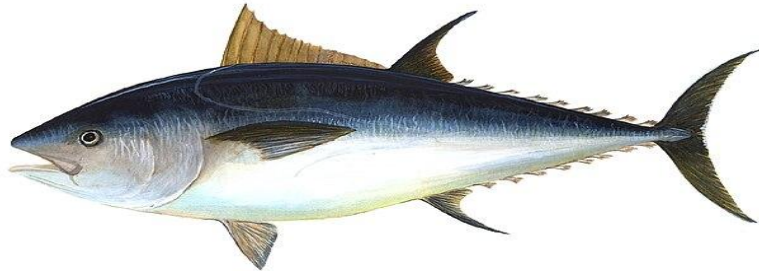
Duplicate: Shift + D

Repeat Last Action: Shift + R



Try opening a cheat sheet when you work.

Jakes Marine Creatures!!!! We WILL(Y) make them swim!



Additional Resources:

[Tech Artist who makes really great shader tutorials:](#)



Ben Cloward

@BenCloward 51.1K subscribers 206 videos

This channel focuses on shader creation and other game development tip... >

[Blender Guru:](#)



Blender Guru ✓

@blenderguru 2.68M subscribers 264 videos

Subscribe for tutorials on learning Blender (open source 3d software). >

polyigon.com and 1 more link

[Blender Reddit](#)



r/blender

[Artstation \(many artists post great breakdowns\)](#)



ARTSTATION

Exit Survey:



Fig. 1: *Homer dislikes exit surveys.*

