Interactivity

Dwight Rodgers, Adobe + Ben Houston, Threekit
Interactivity

= 3D Model

Image used under license, stock.adobe.com
Interactivity

= 3D Model + Website
Interactivity

3D Model

Website

JavaScript
Have a nice day!
What if you’re targeting is a 3rd party page?

3D content aggregators
What if you’re not targeting a browser?

Mobile and HMD Virtual Worlds
What if you want your content to work everywhere?

Web Viewers

Mobile Viewers

HMD Viewers
Interactivity in the GLTF ecosystem

Content + Interactivity
for composing and 3rd party viewers
Interactivity in the GLTF ecosystem

Content + Interactivity
for composing and 3rd party viewers

- Safety
- Performance
- Control
- Time to market

Feedback
Wanted

Expressive power
Looking for feedback

No!

Yes!
What if we make it simple?

On Tap
Subject: Teapot

Move To
Subject: Teapot
Target: Teapot_target_null
Duration: 6 seconds
And performant by default
Err on the side of safety

- Allocation
- Iteration
- Data access
- Web access
Allow host to interact with content

**On Named Event**

**Event:** "Added to Cart"

**Rotate**

**Subject:** Teapot

**Degrees:** 360

**Duration:** 1 seconds
And give host control over content requests

On Tap
Subject: Teapot

Fire Named Event
Name: “Add to Cart”
Minimal flow control

**"Tap to Close"**

**On Tap**
- Subject: Teapot

**Enable Behavior**
- Next
- Parallel
- Behavior: "Tap to Open"

**Disable Behavior**
- Next
- Parallel
- Behavior: "Tap to Close"

**Scale To**
- Next
- Parallel
- Subject: Info_Panel
- Target: Info_Panel_minimized
- Duration: 0.5 seconds

**"Tap to Open"**

**On Tap**
- Subject: Teapot

**Enable Behavior**
- Next
- Parallel
- Behavior: "Tap to Close"

**Disable Behavior**
- Next
- Parallel
- Behavior: "Tap to Open"

**Scale To**
- Next
- Parallel
- Subject: Info_Panel
- Target: Info_Panel_maximized
- Duration: 0.5 seconds
And wire forward only
Small number of actions to keep it:

- Easy to implement
- Easy to secure
- Easy to optimize
- Easy to review
- Quick to Approve and Adopt
Extensible to further actions

Images used under license, stock.adobe.com
A side note: GLXF Incorporation by Reference

Images used under license, stock.adobe.com
Except for image, this work is licensed under a Creative Commons Attribution 4.0 International License
Demos Time

Daniel Plemmons, Adobe
Raanan Weber, Microsoft
Demos

Demo 1 goes here
• Demo 2 goes here
Feedback wanted!

Specs will soon be here:

https://github.com/KhronosGroup/glXF
Next: Ben Houston