Building Dynamic Interactive X3D Scenes
A Cookbook

x3dom
Instant 3D the HTML way!

X3dom.org

glitch.com

XITE
Controlled Motion

https://glitch.com/~control-motion

Welcome to Glitch
Techniques demonstrated in controlled motion

- Defining coordinated animation motion in an X3D scene
- Interaction with an X3D scene through HTML 5 user interface controls
Event flow for showing controlled motion

1. float from HTML5
2. \texttt{ASSEMBLY\_FRACTION}
3. \texttt{WASHER\_FRACTION}
4. \texttt{NUT\_ROTATION\_INTERPOLATOR}
5. \texttt{NUT\_TRANSFORMATION\_INTERPOLATOR}
6. \texttt{SFRotation}
7. \texttt{SFVec3f}
8. \texttt{NUT\_TRANSFORM}
Annotation with visibility  

https://glitch.com/~annotate-visibility
Techniques demonstrated in Annotation with visibility

• Attaching text and image visual annotations to an X3D scene.
• Dynamic control of the annotations as the user interacts with the scene, to preserve visual clarity.
Event Flow for showing/hiding an object in the scene
Heads Up Display

https://glitch.com/~headsup-laser
Techniques demonstrated in Heads Up Display

- Attach a visual element that moves with the point of view – a Heads Up Display
- Interacting and controlling the scene with a pointing device -- mouse
Event Flow for turning on a light
Goals of the Cookbook approach

• Help creators use X3D to make compelling dynamic interactive 3D scenes with the X3D standard
• Identify common or useful patterns which authoring tools can offer.