Learn X3D

Web3D Consortium Webinar Series

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Part 1: Building a Basic Scene

Using text editor and desktop browsers to:

1. create a simple X3D scene in VRML encoding
2. convert it to XML encoding
3. Publish it to a web page

Tools:
1. Text Editor: BBEdit on Mac OS
2. view3dscene
3. InstantPlayer
4. Python 3

References
X3D V3.3 Standard Documents
X3D Node Index
Classic VRML Encoding

Part 2 : Use OBJ asset in an X3D scene

Will convert an OBJ format model from the Smithsonian Open Access collection into X3D using open source software

Tools:
1. Meshlab

Assets:

Morse-Vail Telegraph Key from Smithsonian Open Access

Part 3 : Add interactivity and animation

Using [X3D Cookbook](#) examples on Glitch

Recommendation: There are many Glitch pages with X3D relevant material. Do search on keywords X3D X3DOM X-ITE.

Heads Up Display

LASER ASM

headsup-laser by

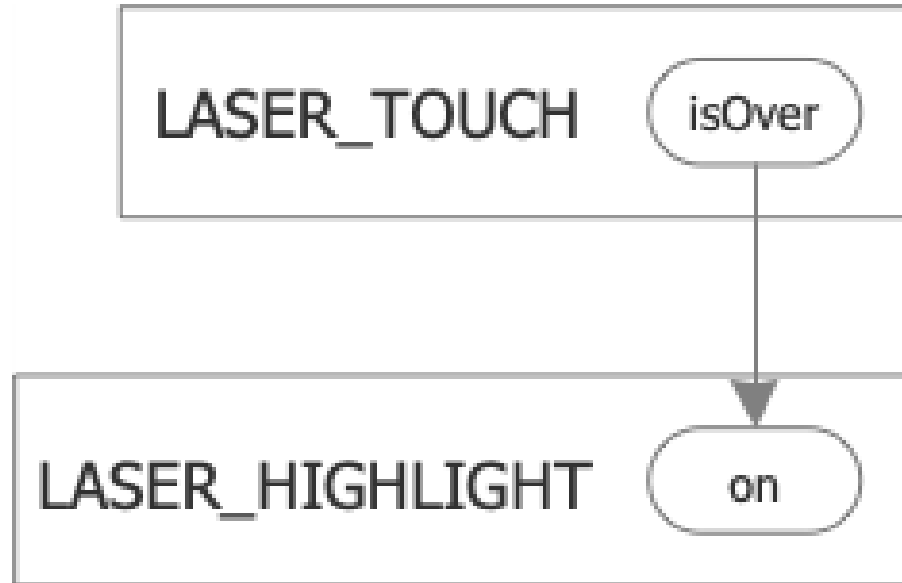Share | View Source
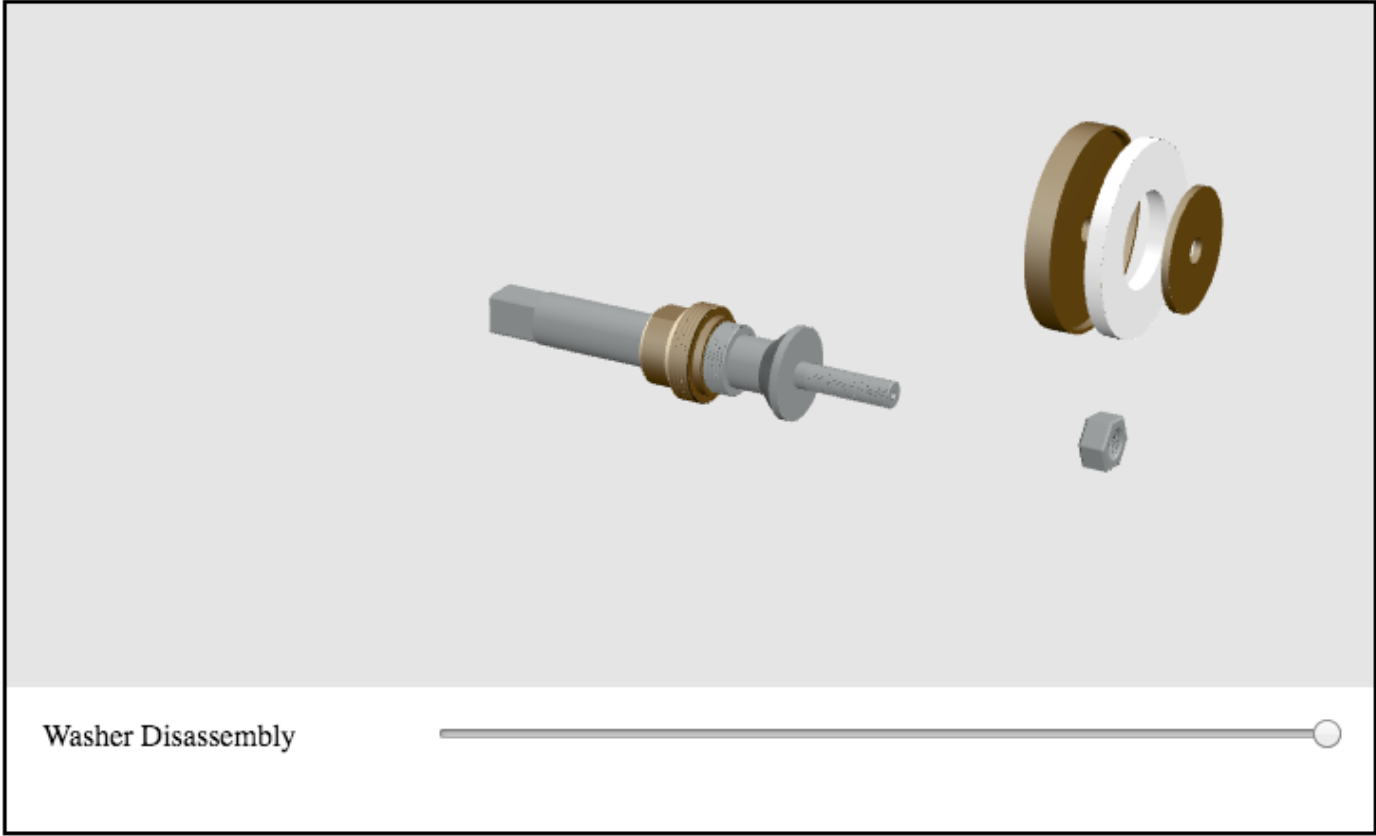
Edit Project

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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

Controlled Motion

Washer Disassembly

control-motion by

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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

float from HTML5

ASSEMBLY_FRACTION

WASHER_FRACTION

NUT_ROTATION_INTERPOLATOR

NUT_TRANSLATION_INTERPOLATOR

SFRotation

SFVec3f

NUT_TRANSFORM