

Kuda: World Editor

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Authoring Interactive 3D Content in Your Browser

<http://code.google.com/p/kuda>



Plymouth Hemi Cuda 70' by ~CentPL

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<http://centpl.deviantart.com/art/Plymouth-Hemi-Cuda-70-178292614?q=gallery%3Apolishartists%2F25292852&qo=4>

the Kuda World Editor

<http://stable.kuda.googlecode.com/hg/public/index.html>

adding behavior
through a GUI

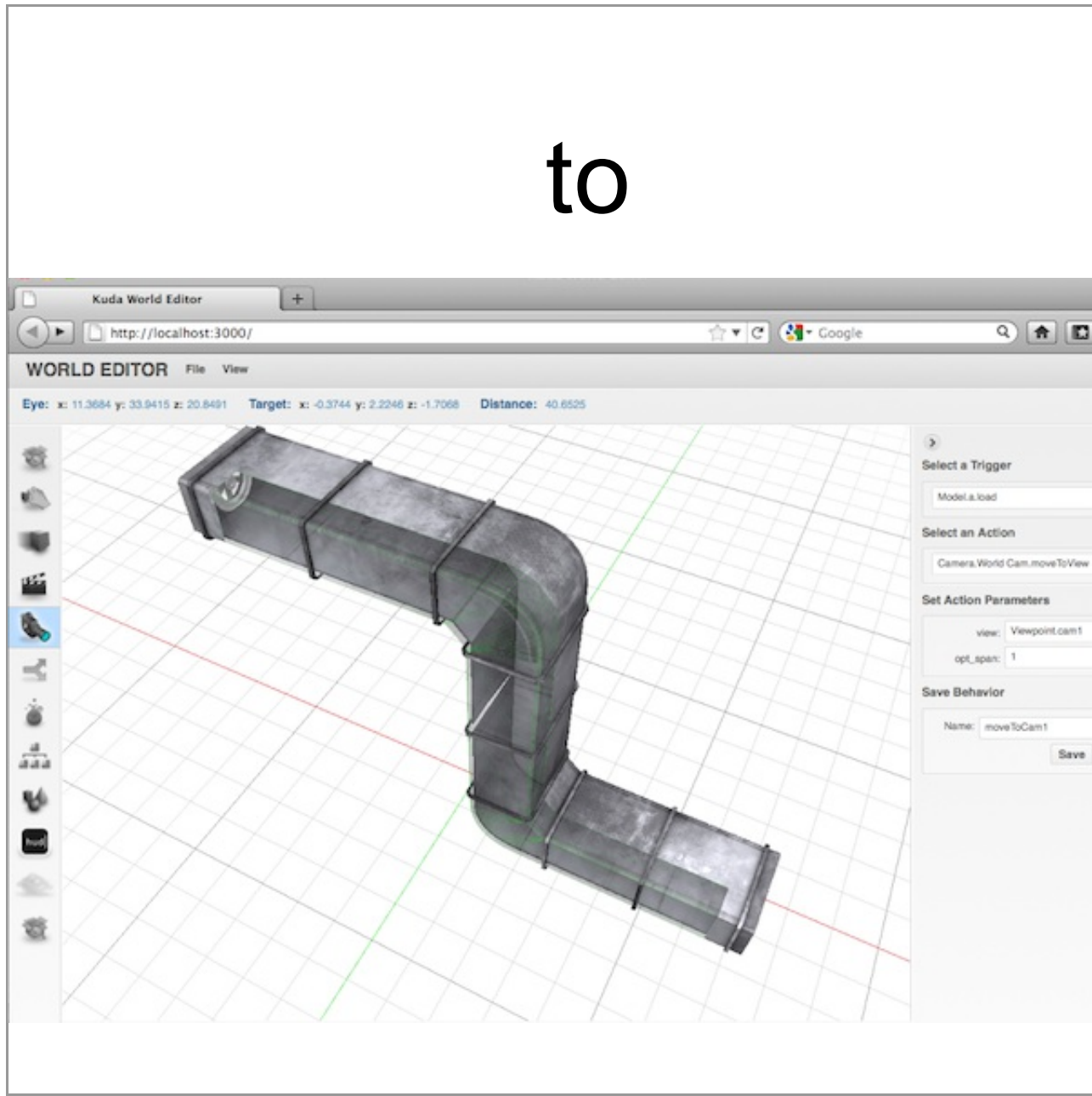
authoring interactivity
made much easier

triggers and actions

from JavaScript

```
door = new hext.house.Door(...
door.angle = -door.angle;
door.onPick(function(msg) {
    switch (msg.data.pickInfo)
        case 'SO_door':
        case 'door':
            door.swing();
        break;
    }
});
```

to



but first

3D behavior and interactivity

window

fan

door

camera

window

what would be the desired intuitive
interaction?

click and slides open

window

what would be the desired intuitive
interaction?

click and drag

fan

what would be the desired intuitive
interaction?

a rotation speed control

door

what would be the desired intuitive
interaction?

click and swings open

API makes sense
for a programmer

GUI makes sense
for a non
programmer

back to the World Editor

build a GUI tool to...

author behavior and interactivity

provide same level of control from
the editor as the API

by isolating a scripting behavior or
interaction and incorporating it into a
GUI tool(s)

**initial approach is a
form**

for a given behavior

example particle effects

not intuitive and you
need domain
knowledge

move to more intuitive
GUI tools

example

**translate, rotate, and
scale handles**

window example using Motion tool

does not work well

no intuitive way to reverse its action

however window
example using Manip
tool

works well

another example is
camera on a curve

dedicated tool for creating behavior and
interactivity

vs

behavior editing integrated into specific
tools

authoring a working system

the HVAC duct

Kuda

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