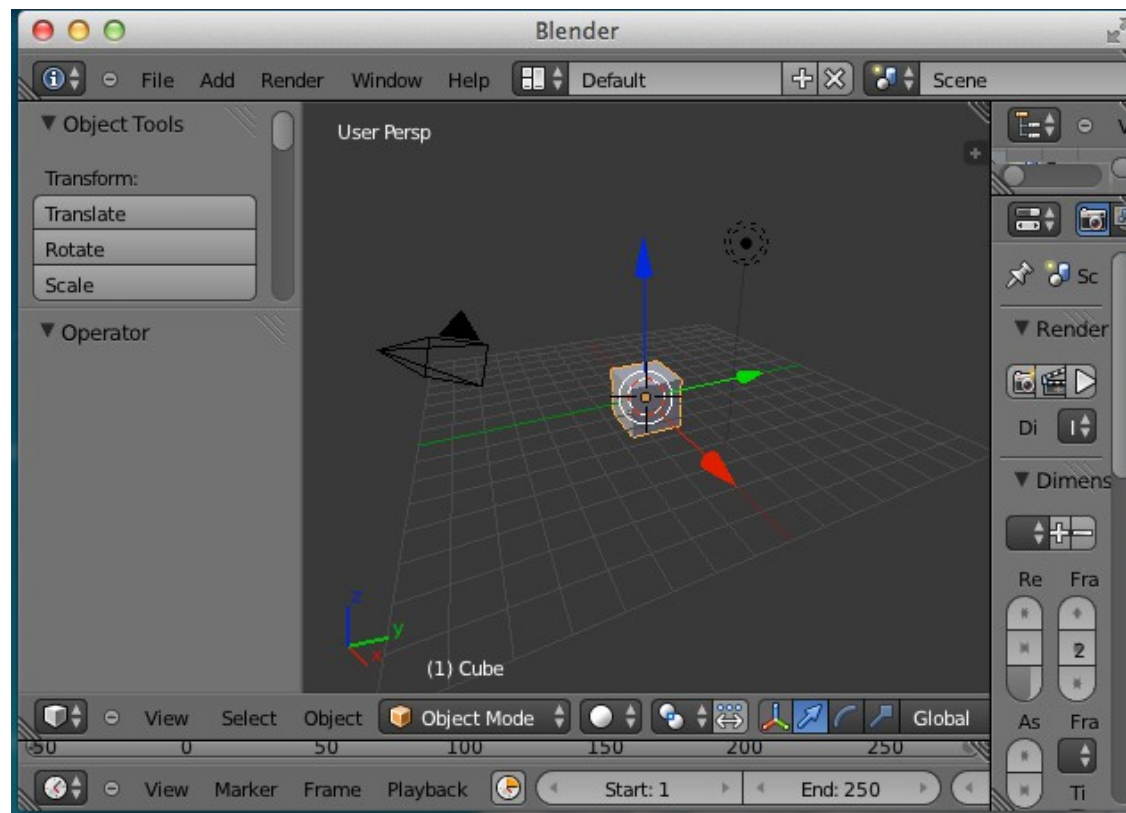# UW GAME DEV CLUB

http://www.blender.org/download/

UW GAME DEV CLUB

Pros :
-Free and open source
-Very popular in the indie industry
-Tiny, bloat-free download
-Able to handle the same workload as ``professional'' modeling software

Cons :
-Not widely used in professional industry (most use Maya/Autodesk)
-The interface is unique (think emacs/vim)
-The windowing system is REALLY unique
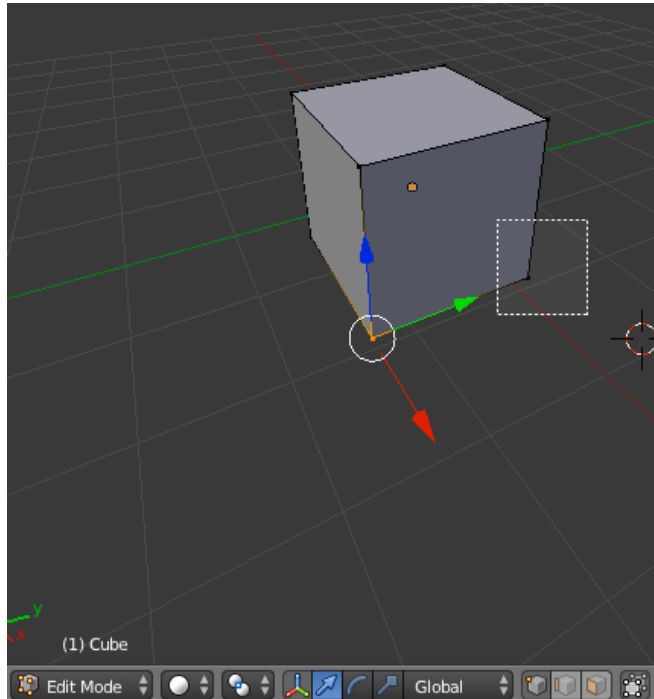
UW GAME DEV CLUB
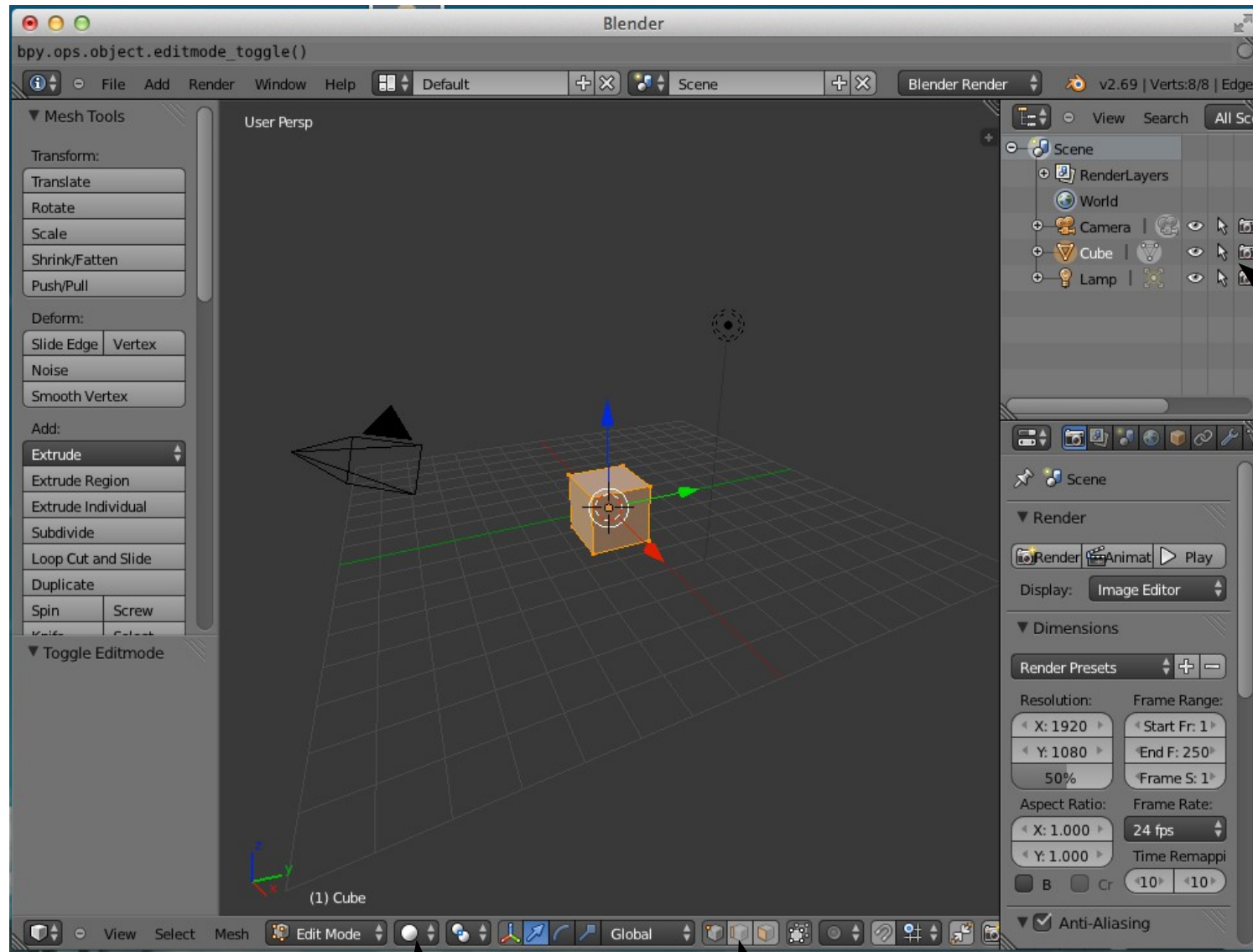
Stuff we
care about

Scene Objects
(Remove everything but the
cube for our workflow)

Mode
(You'll generally want to be in
edit mode)

Render Mode
(Solid, Wireframe, Textured)

Selection Mode
(Select vertices, edges or
faces)

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(1) Cube

Edit Mode | Global

Basic Navigation

Rotate -
**Middle mouse click + drag
Numpad arrow keys**
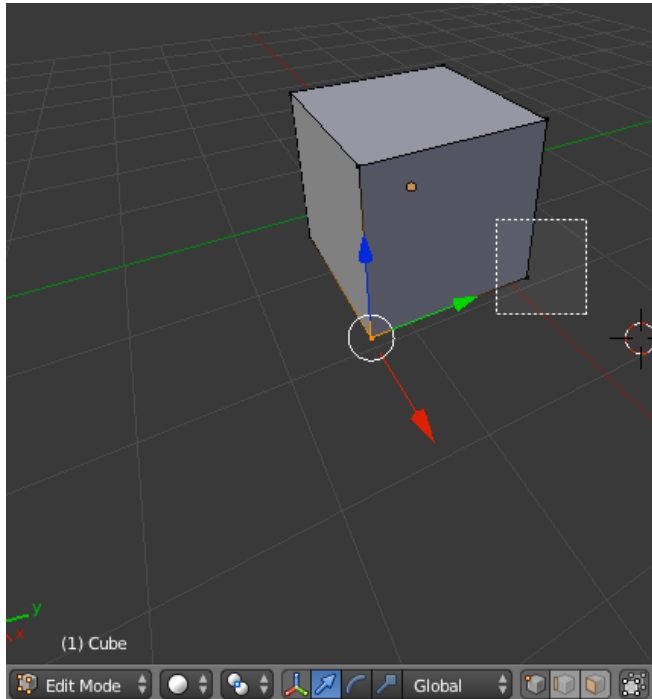
Zoom -
**Ctrl + Scroll wheel
Numpad +/-**

Pan -
**Shift + middle click + drag
Ctrl + Numpad arrow keys**

http://www.dummies.com/how-to/content/blender-for-dummies-cheat-sheet.html

Configure it your way :

http://wiki.blender.org/index.php/Doc:2.4/Manual/Interface/Keyboard_and_Mouse

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(1) Cube

Edit Mode | Global

You'll need to be in edit mode with an object
selected (in the scene) to do this.

Editing Commands

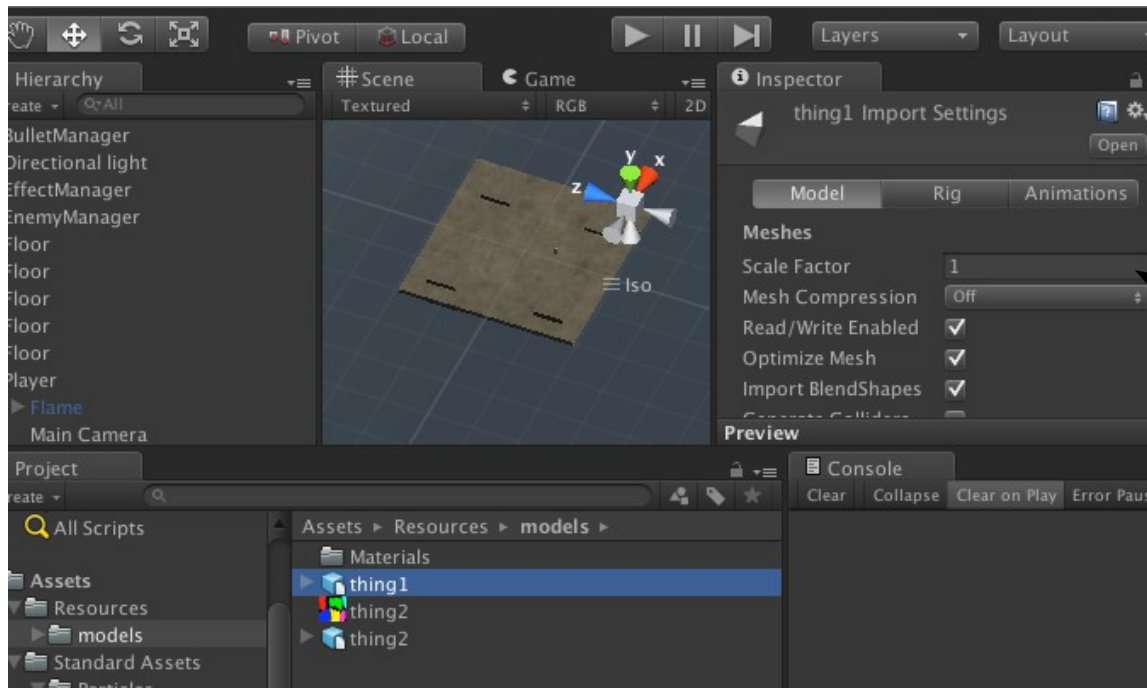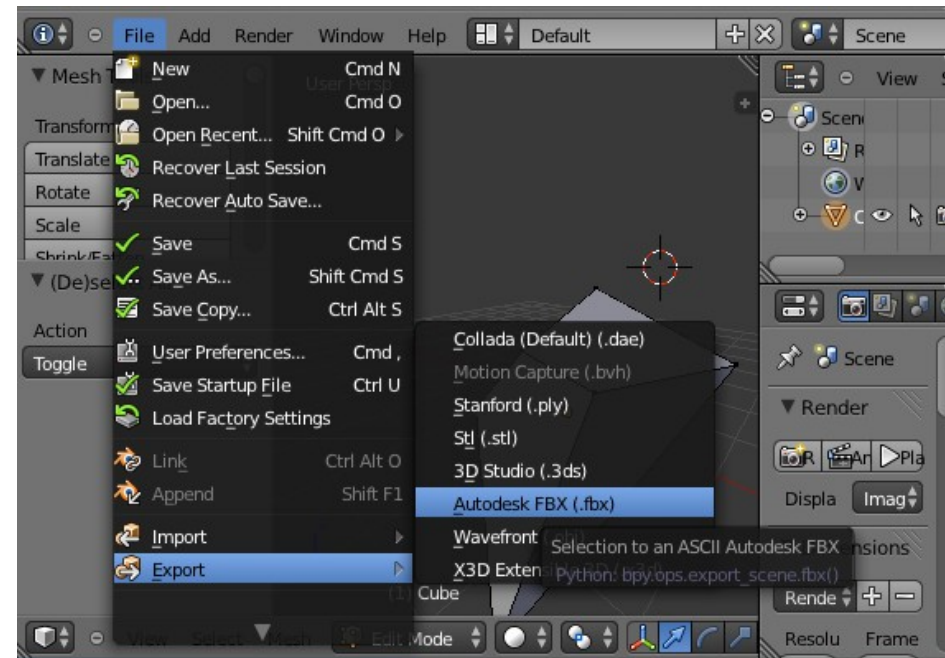**B –** hold and drag to select

A – Select/Unselect all

G – Translate
  Followed by **(X, Y or Z)** to lock on axis

(note differences in vertice/edge/surface, and solid/wireframe modes)

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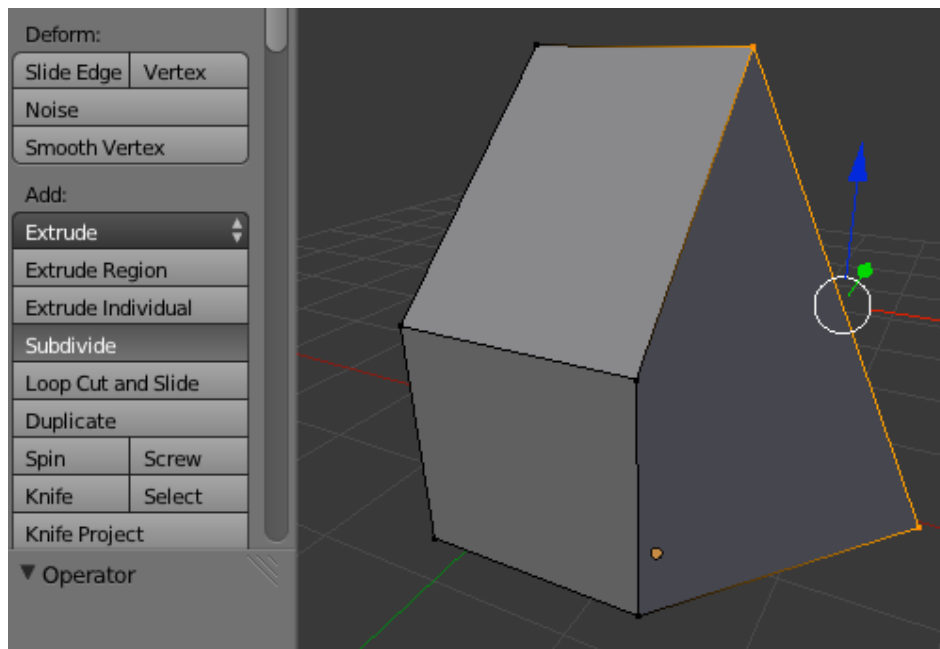Export for use in a game engine
(Unity in this case)

.fbx files work well in Unity
(though others are probably fine
too)

Unity can just load these
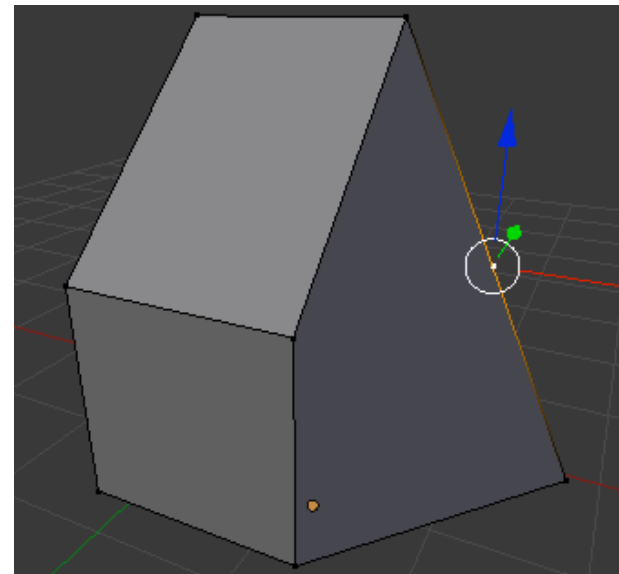automatically.

You may want to change the
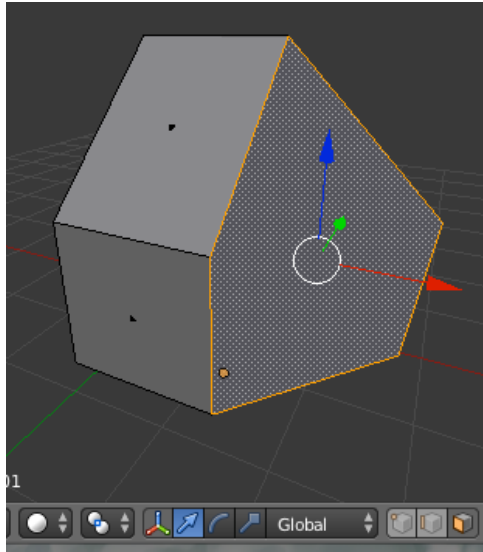scale factor

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Have two vertices (points) selected, **subdivide**.

Will make a new vertice on halfway between the two on the edge (line)

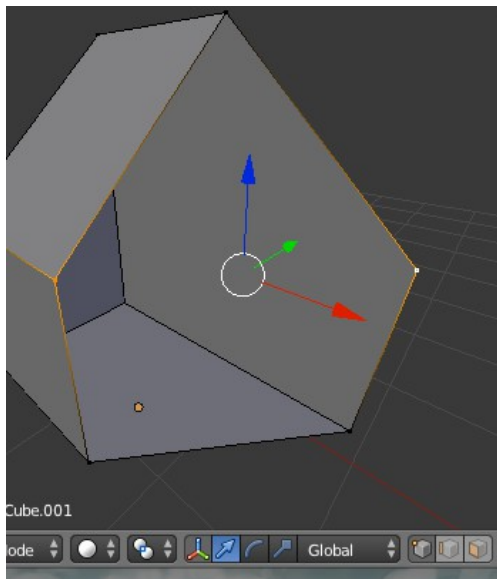Technically splits the single edge into two edges as well.

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This face (surface) is no longer a simple tri/quad. Let's simplify it.

Go into faces selection mode.
Right click on the surface
Delete to delete (finally a shortcut that makes sense...)
Select faces (to delete the face)
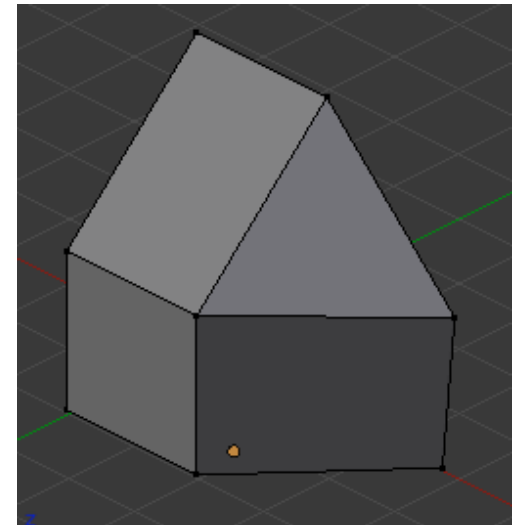

Our surface has a hole in it.
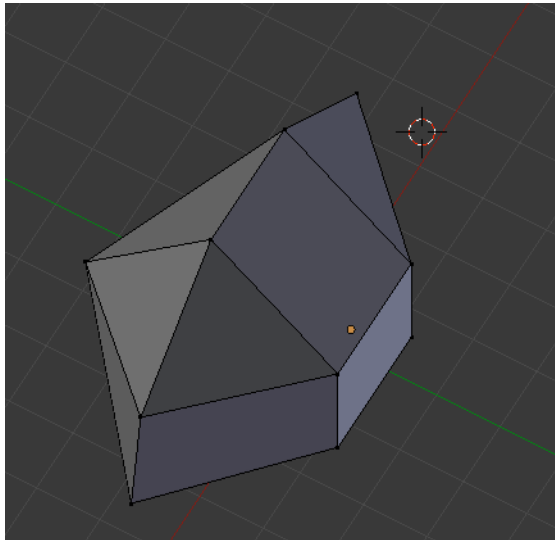(Back in vertices selection mode),
select two vertices, then press
F to fill in the edge between the two.

Select three vertices, then press
F to fill in the face.
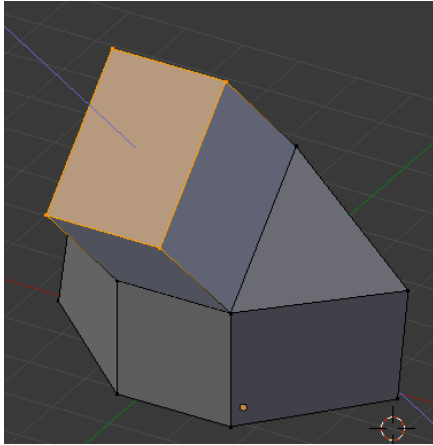
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Repeat for the other side, and maybe do a little work for the back too.

You ought to be able to make this kind of stuff now.

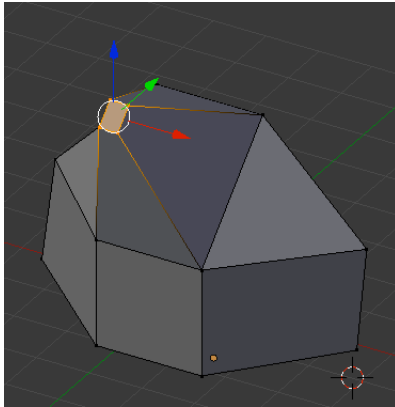**Nice !!**

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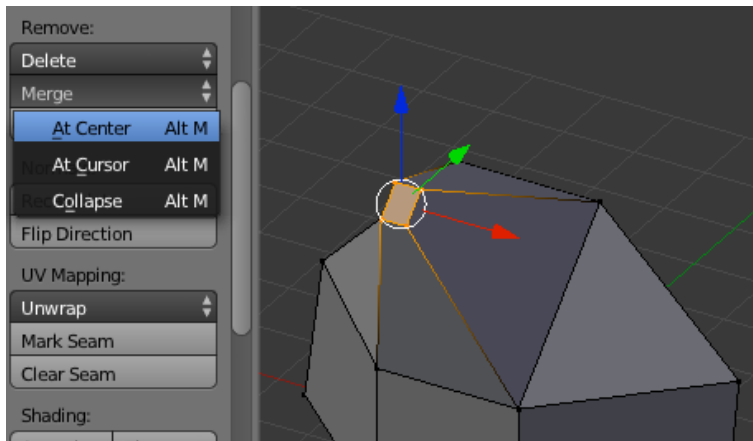
Tool that may be useful -
E – extrude.
(Say we want to give our face a horn)

Select the vertices of a face (in vertice mode) and press **E**. Pull it out !
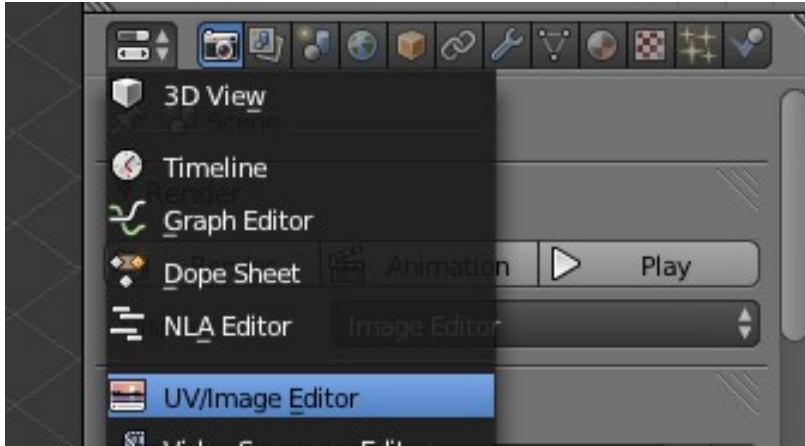

Afterwards, press
S – scale.

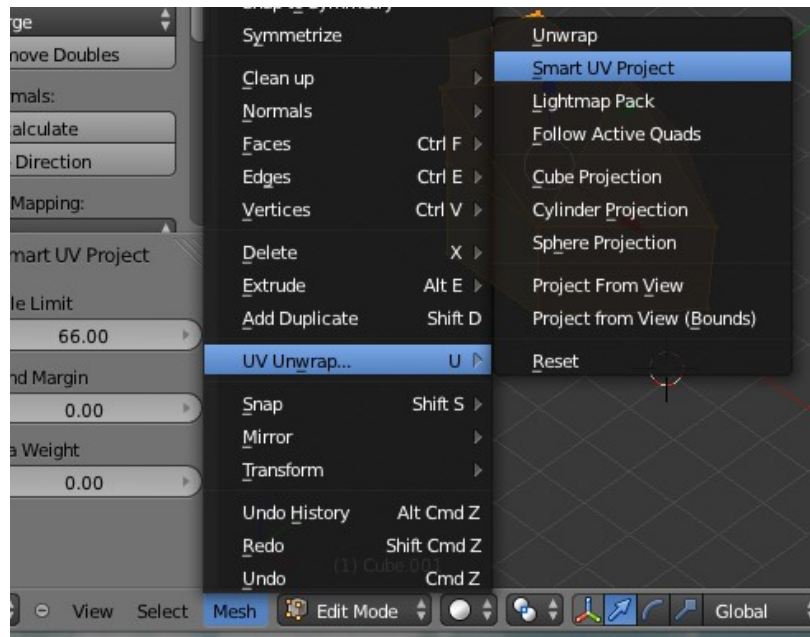If you want the edges of the ``horn'' to Join at the center, do merge->at center

(will be at the average of the selected points)

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UV Mapping – Advanced ! (And pretty hairy)

Switch one of your windows to the UV/Image editor (welcome to blender's windowing system...)
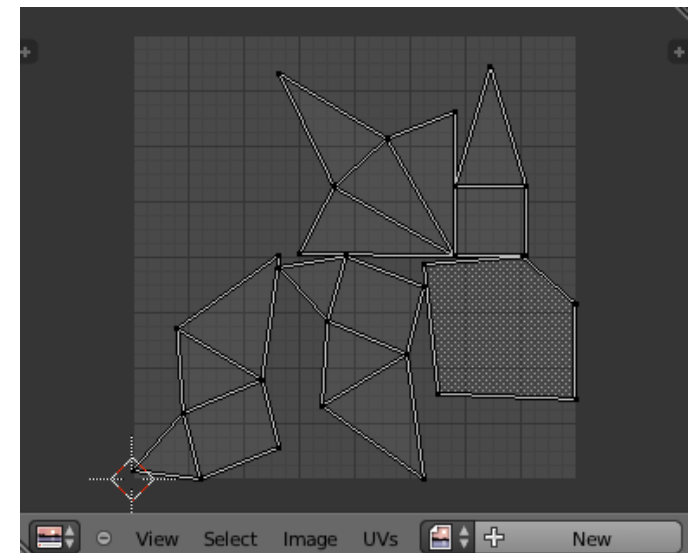

Select your whole mesh
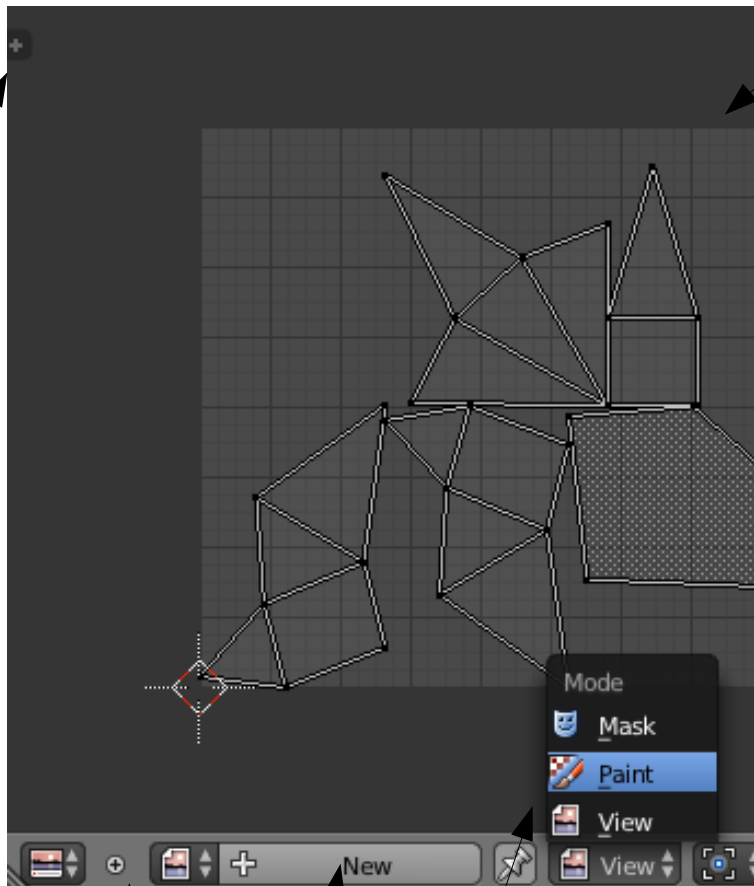(**A**)
Then press Smart UV Project, then ok)

This is your UV map, you'll be painting on this.
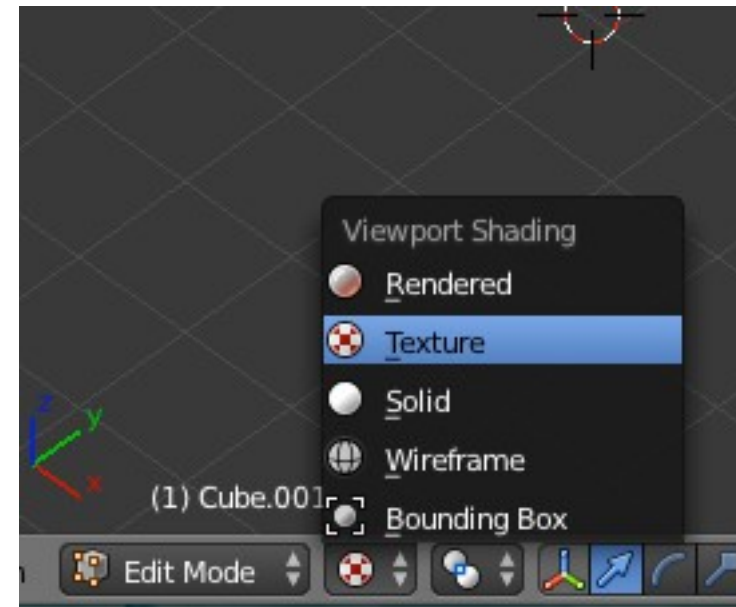
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This window has the same controls as the 3d window for zooming/selection/transformation

Click this tab to bring up the color picker

Mode
- Mask
- Paint
- View

New

View

You may need to click this

Go to paint mode

Click this afterwards

Viewport Shading
- Rendered
- Texture
- Solid
- Wireframe
- Bounding Box

(1) Cube.001

Edit Mode

Go to texture view mode to see your lovely creation
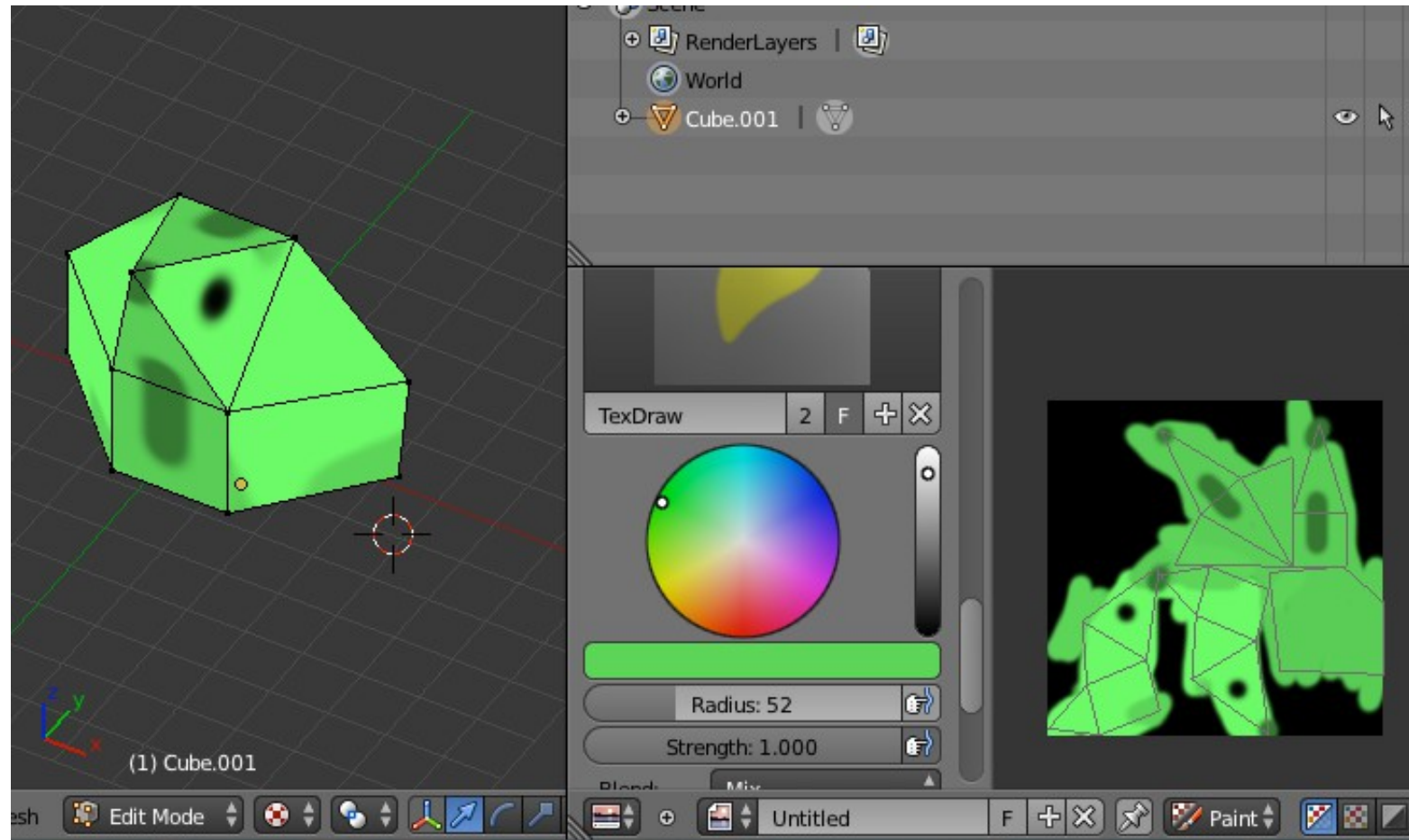
Hire me, Pixar !!!

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thing2.png.meta
thing3.fbx
thing3.png

Score: 0
Enemies: 1

Assets ▸ Resources ▸ **models** ▸
📁 Materials
🔷 thing1
🔶 thing2
🔷 thing2
🟢 thing3
🔷 thing3
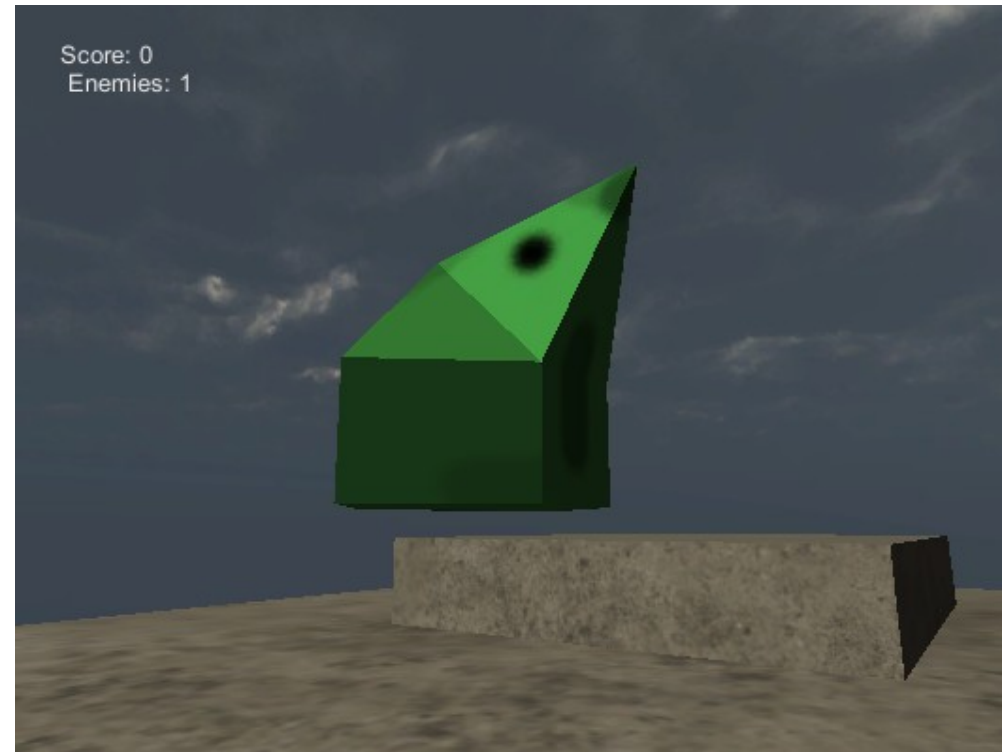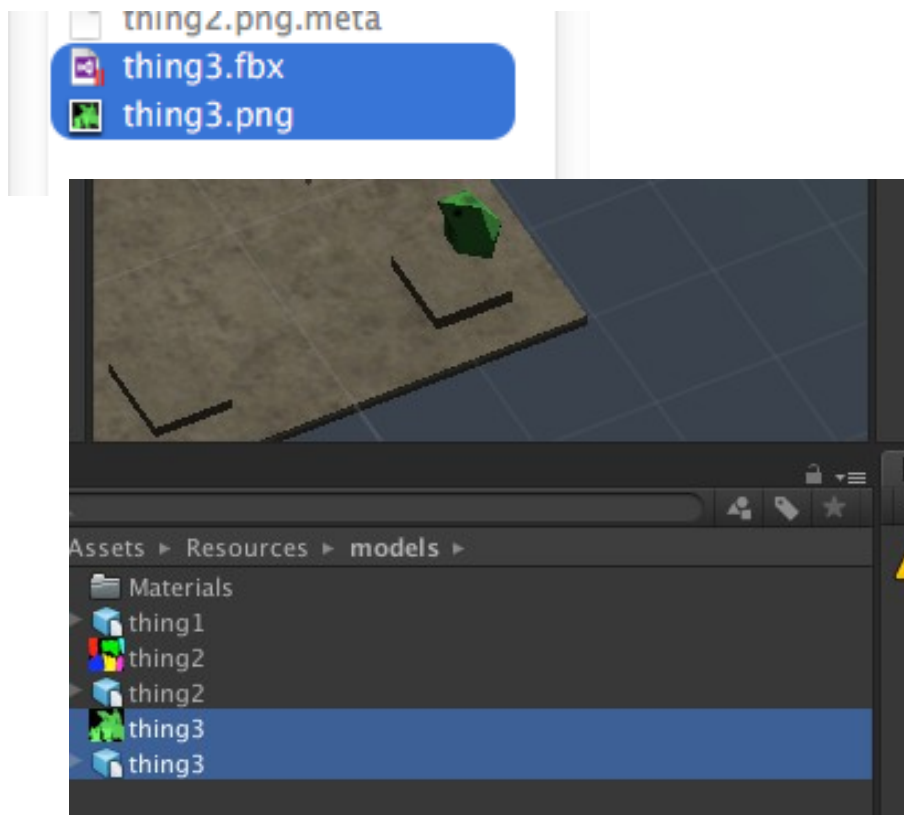
Export it as a fbx, and the UV map image as a png and it should work fine with Unity. (You may need to link to the image in the material (in Materials folder))

Resources :

Tutorial everyone (including me) used to learn blender :

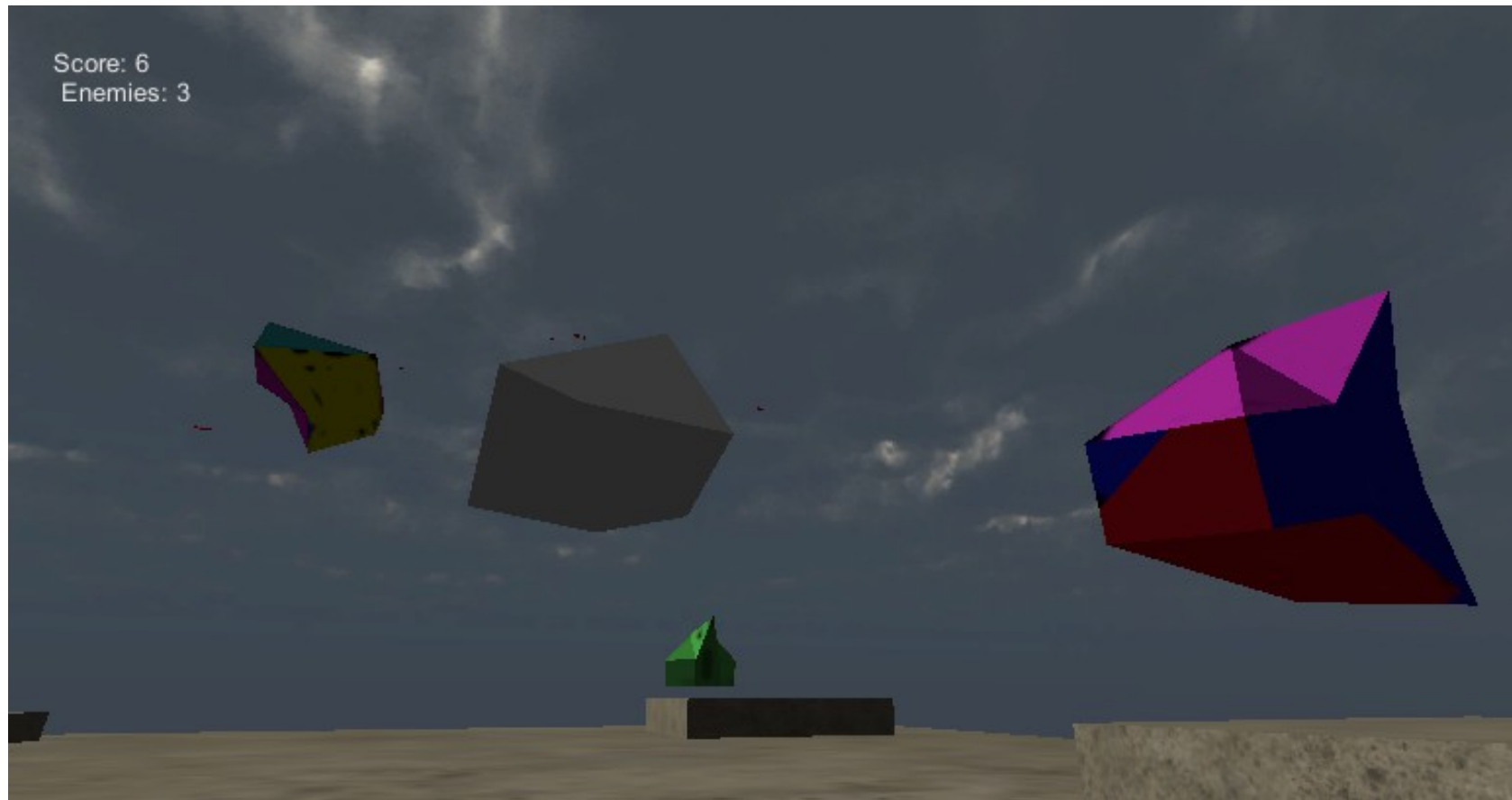http://cgi.tutsplus.com/tutorials/modeling-uvmapping-and-texturing-a-low-poly-t-rex-in-blender-part-1--cg-12763

Tutorial on rigging/weight painting (for animation) :

http://cgi.tutsplus.com/tutorials/building-a-basic-low-poly-character-rig-in-blender--cg-16955

Alternate beginner's tutorial :

http://cgi.tutsplus.com/tutorials/creating-a-low-poly-ninja-game-character-using-blender-part-2--cg-16133

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Activity :

Take 15 minutes to make the shittiest model possible,
then post it online (on the FB group).

Let's put them all in the game !