

UModeler Manual

This document contains many gif-formatted images so it is recommended that you'll read the online document.

Online Document URL

<https://docs.google.com/document/d/1We1SKcGhpbmDRwmXj6BG8AKJtTSIzm-qY7wVpn7q28/edit?usp=sharing>

Introduce	4
Key Features	4
Basic vs Pro	4
Where to download UModeler	5
Interface	6
Setting up shortcuts	6
Search Edit Box	7
Settings	9
Display	9
Gizmo	9
Snap	10
Basic Workflow	11
Tools	16
Move	16
Vertex/Edge/Polygon	16
3D Cursor	18
Pivot	19
Snap	20
Selection	21
All/None - 1 (All Elements)	21
All/None - 2 (Deselect All)	21
Island	22
Loop - 1 (Edge)	22
Loop - 2 (Polygon)	23
Ring - 1 (Edge)	24
Ring - 2 (Polygon)	24
Invert	25
Increase	25
Draw	27
Line	27
Arc	27

Rectangle	28
Disk	29
Side Stair	30
Parallel	31
Primitive Shapes	33
Box	33
Room	34
Stair	35
Cylinder	37
Cone	38
Sphere	39
Capsule	40
Manipulation	42
Bridge - Fill	42
Bridge	42
Push/Pull - 1 (Single Push Pull)	43
Push/Pull - 2 (Multiple Push Pull)	45
Extrude Edge	46
Inset - 1 (Single Inset)	47
Inset - 2 (Multiple Inset)	49
Boolean	50
Shear	50
Mirror	51
Loop Slice	52
Interface	53
Properties	53
Clip	53
Follow	54
Bevel	55
Clone	56
Tweak	58
Eraser - 1 (One by one)	58
Eraser - 2 (Vertex)	58
Eraser - 3 (Edge)	59
Eraser - 4 (Polygon)	59
Copy	60
Invert Face	61
Detach	61
Combine - 1 (Combines several vertices)	62
Combine - 2 (Combines polygons)	63
Combine - 3 (Combines game objects with UModeler Component)	64
Remove Doubles	64

Collapse	65
Flatten	66
Surface	68
Material	68
UV	69
Color	70
Smoothing Group	72
Others	75
Pivot to Center	75
Freeze X Form	75
Collider	76
Export to Obj	77
Backface	77

Introduce

UModeler is a modeling tool on Unity3D which makes it easier to create various geometric models from prototype levels to complex static meshes in Unity3D. Those geometric figures made with **UModeler** can also be used for rendering, collision, navigation mesh, trigger zone etc. This will help you a lot in creating great game worlds.

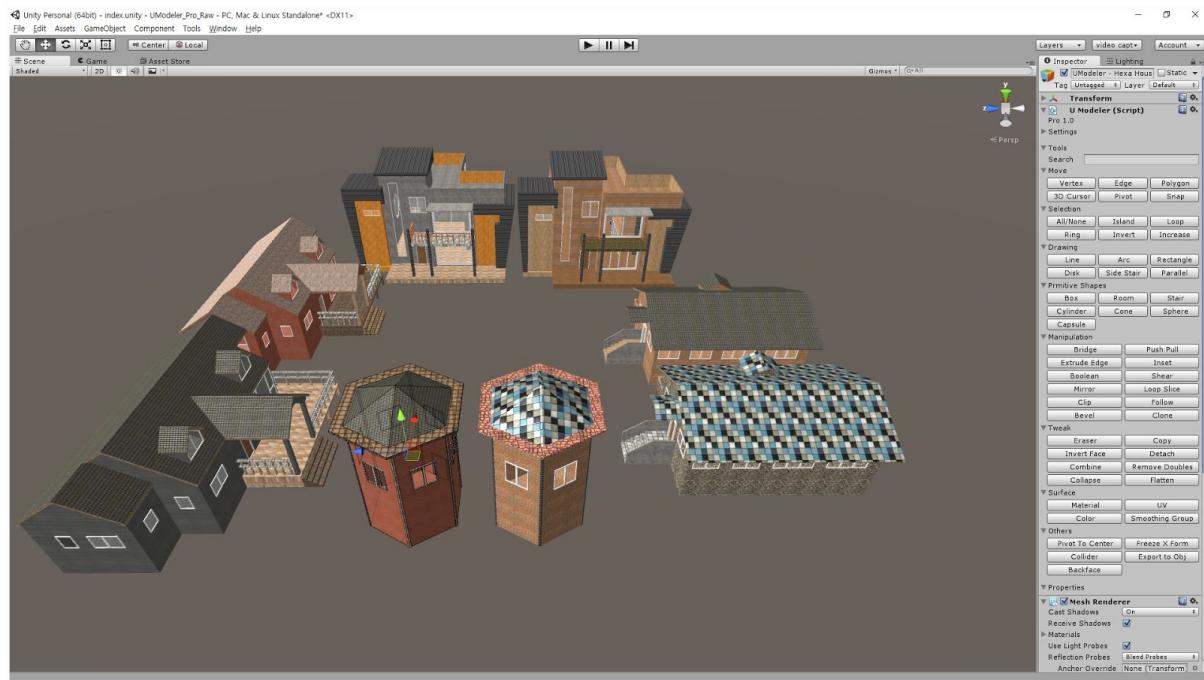
Key Features

For beginners

Any polygons can be drawn easily and you can turn them into 3D shapes in intuitive ways.

For Experts

If you want to create complicated shapes like buildings, vehicles, props, etc, you can do it with the advanced tools like push pull, inset, boolean, bevel, shear, loop slice, mirror, follow tool, etc.



Basic vs Pro

UModeler Basic

The basic version includes the core features enough to create simple meshes and levels.

UModeler Pro

The Pro version has lots of advanced tools such as bevel, boolean, mirror, cut, loop slice, follow, and much more. With Pro version, you can make complicated shapes for real assets without leaving Unity.

If you want to know the difference more between Basic and Pro, see [Basic and Pro Comparison](#)

Where to download UModeler

You can download **UModeler Pro/Basic** in Unity Asset Store.

UModeler Pro URL (Coming soon) - <http://u3d.as/Hz4>

UModeler Basic URL - <http://u3d.as/Hz5>

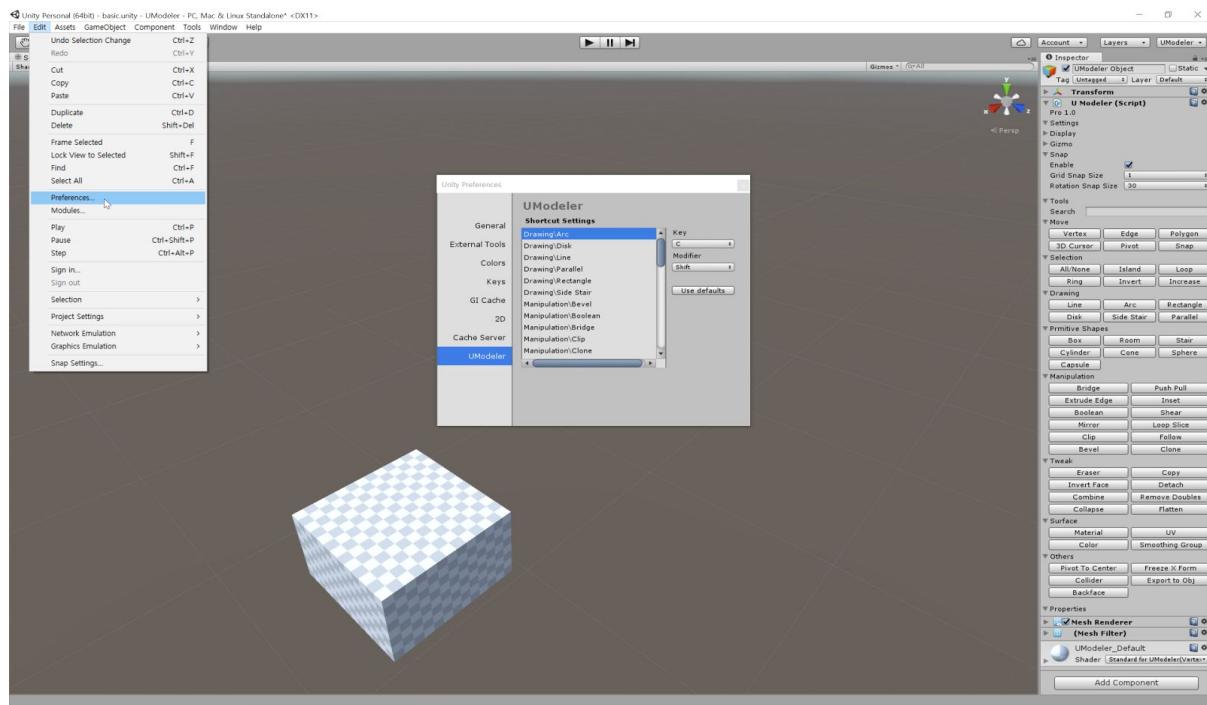
[UModeler Website](#)

Interface

SPACE	Confirms the current function.
ESC	Cancels the current function or Exit the current tool.
ENTER	Enables Search Edit Box
CTRL + Z	Undo
CTRL + Y	Redo
W	Translation Gizmo
E	Rotation Gizmo
R	Scale Gizmo
LMB(Left Mouse Button)	Selects one.
LMB Drag	Selects or moves several elements.
SHIFT + LMB or LMB drag	Special action depending on the current tool
CTRL + LMB or LMB drag	Special action depending on the current tool

Setting up shortcuts

[Editor] - [Preference] - [UModeler.Pro]



Search Edit Box

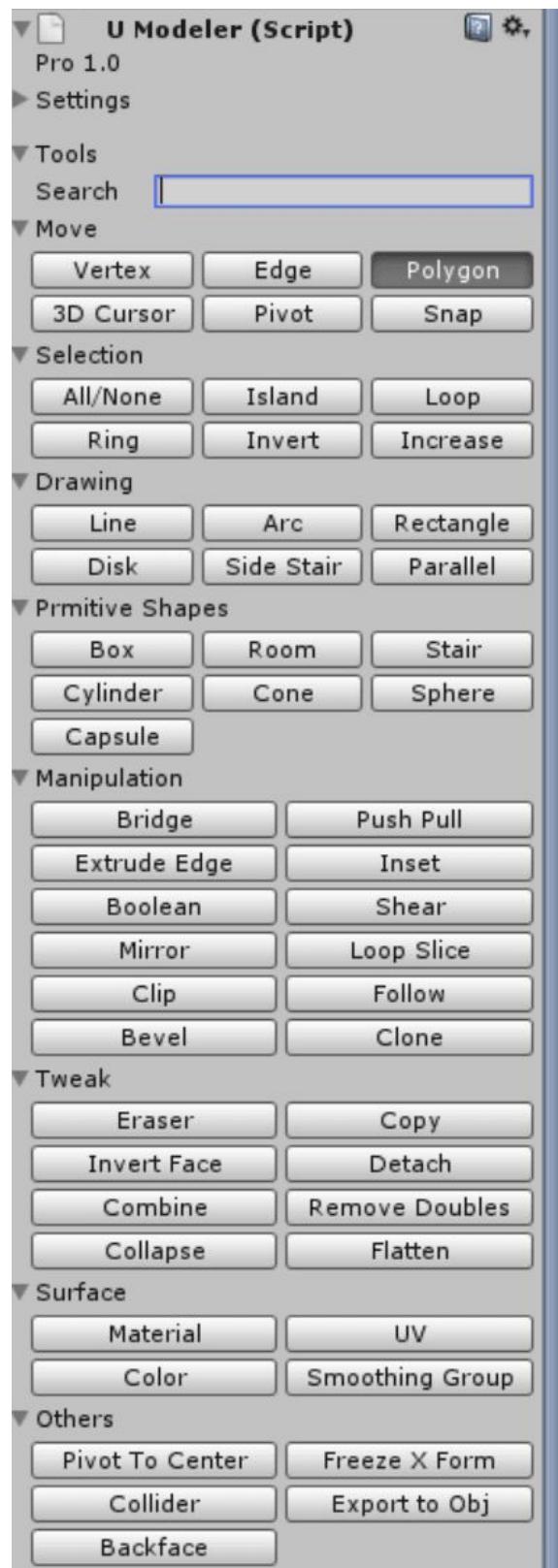
You can find a tool which you want quickly using Search Edit Box as below.



There are two way to activate the edit box. One of them is to click on the edit box and the other one is to press ENTER on the scene view or the inspector window.

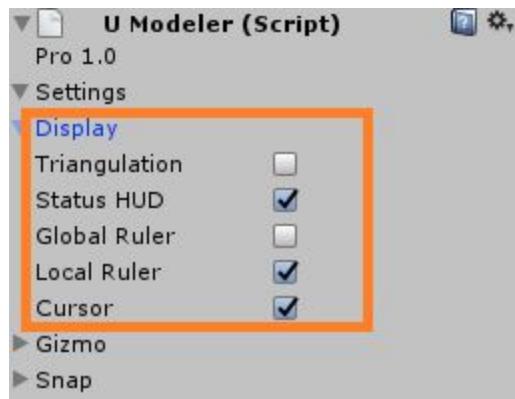
When you type characters on the search edit box, tools containing the characters will be displayed.

Please check out how it works via the following image, which is moving.



Settings

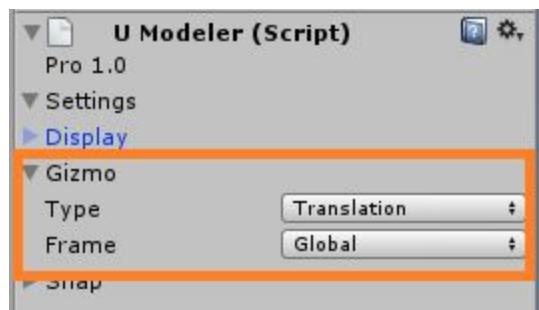
Display



This is to set which helper elements are drawn on the scene view.

Triangulation	Displays triangles divided by the triangulation algorithm. This is same as triangles used for rendering.
Status HUD	The window with useful information like selected vertex/edge/polygon count, total polygon/triangle count etc will be displayed on the left-top of the scene view.
Global Ruler	A ruler showing width,height and depth sizes of the game object will be displayed.
Local Ruler	A ruler displayed by the current tool will be displayed.
Cursor	Displays the 3D cursor.

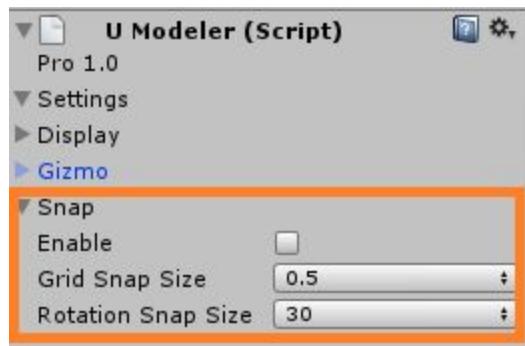
Gizmo



You can set the gizmo type and frame.

Type	One of Translation , Rotation and Scale gizmos can be selected. You can also do this by pressing E, R or T on keyboard.
Frame	Local will keep the Gizmo's rotation relative to the selected elements Global will clamp the Gizmo to world space orientation.

Snap

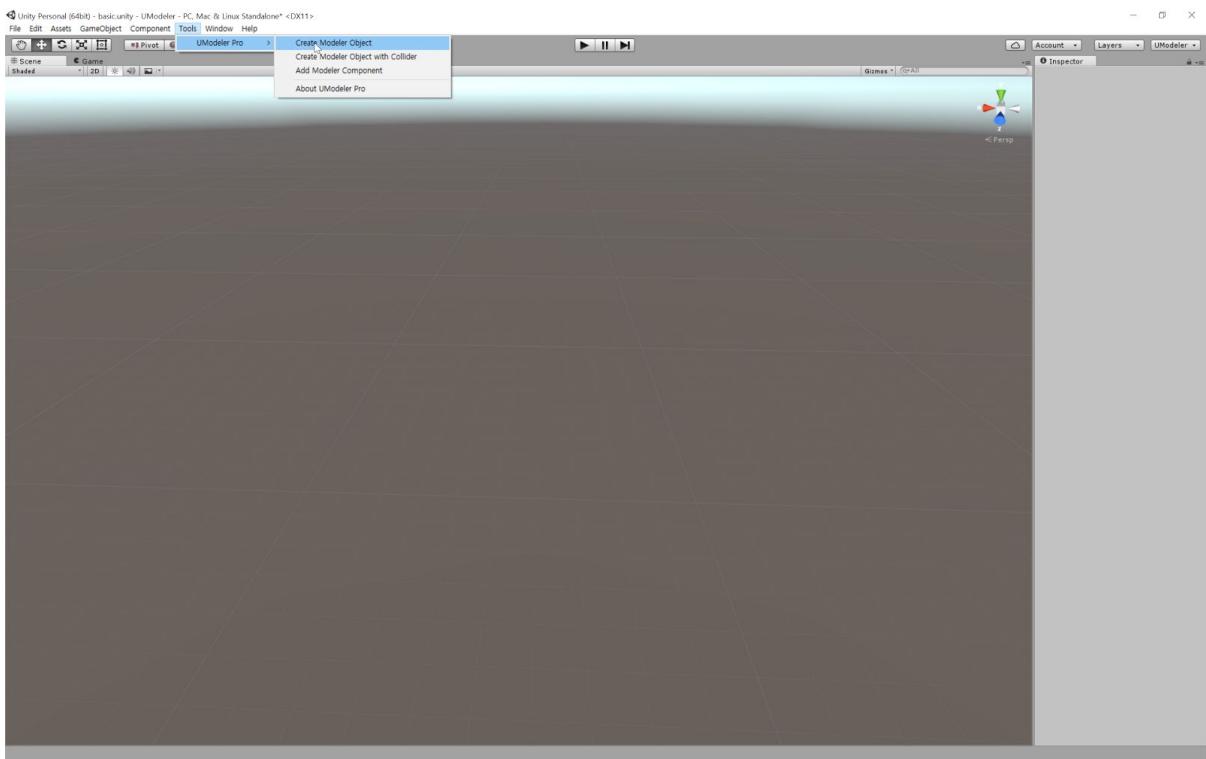


You can change settings related to Snap here.

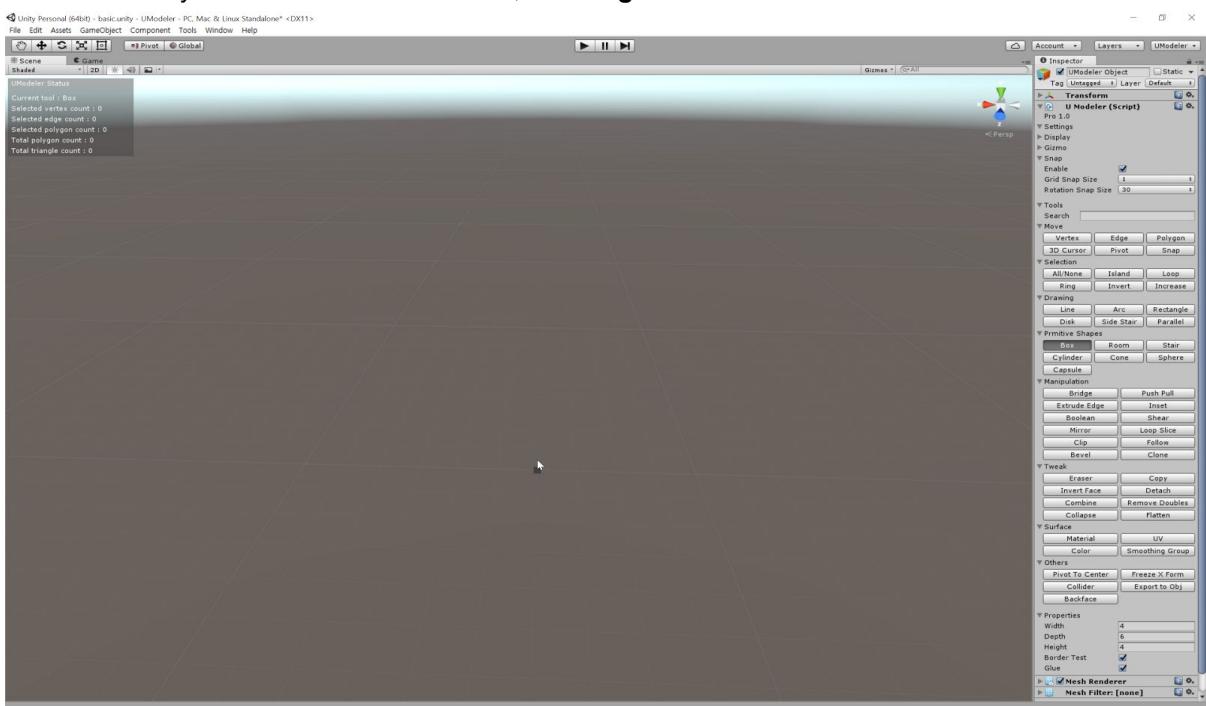
Enable	Grid and Rotation snap will be enabled.
Grid Snap Size	Sets the grid snap size
Rotation Snap Size	Sets the rotation snap size

Basic Workflow

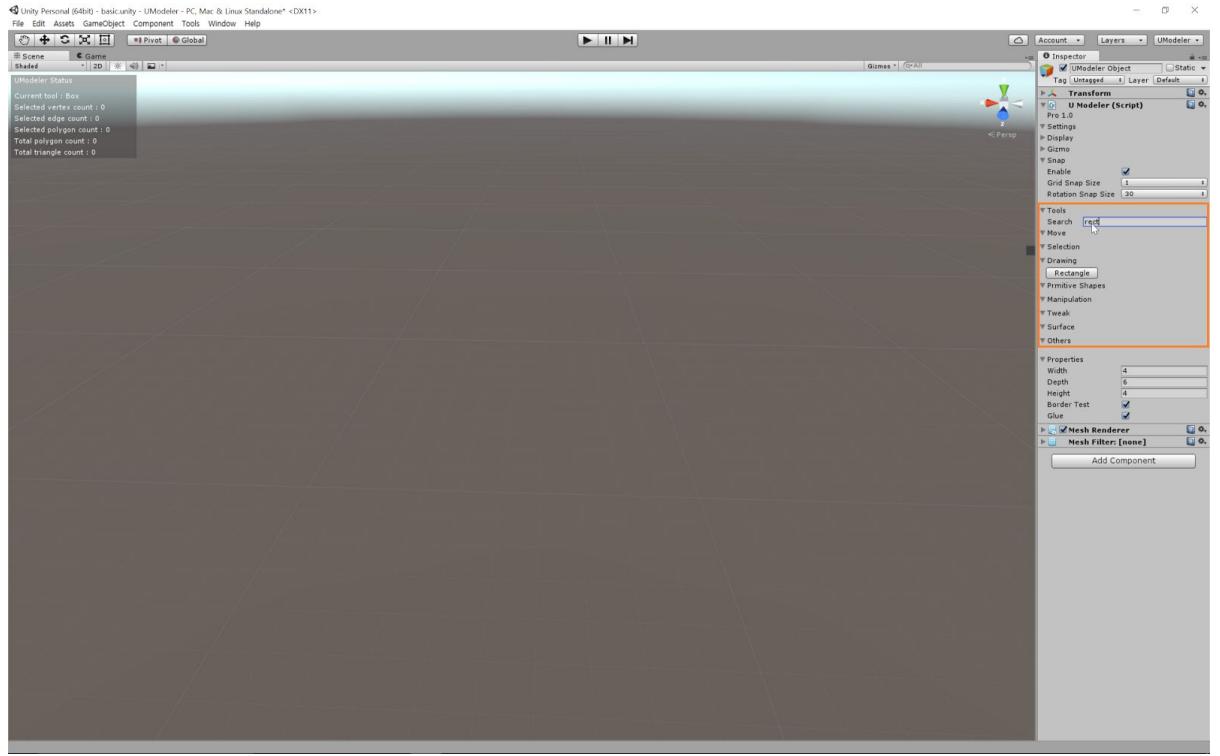
1. Select [Tool] - [UModeler Pro] - [Create Modeler Object].



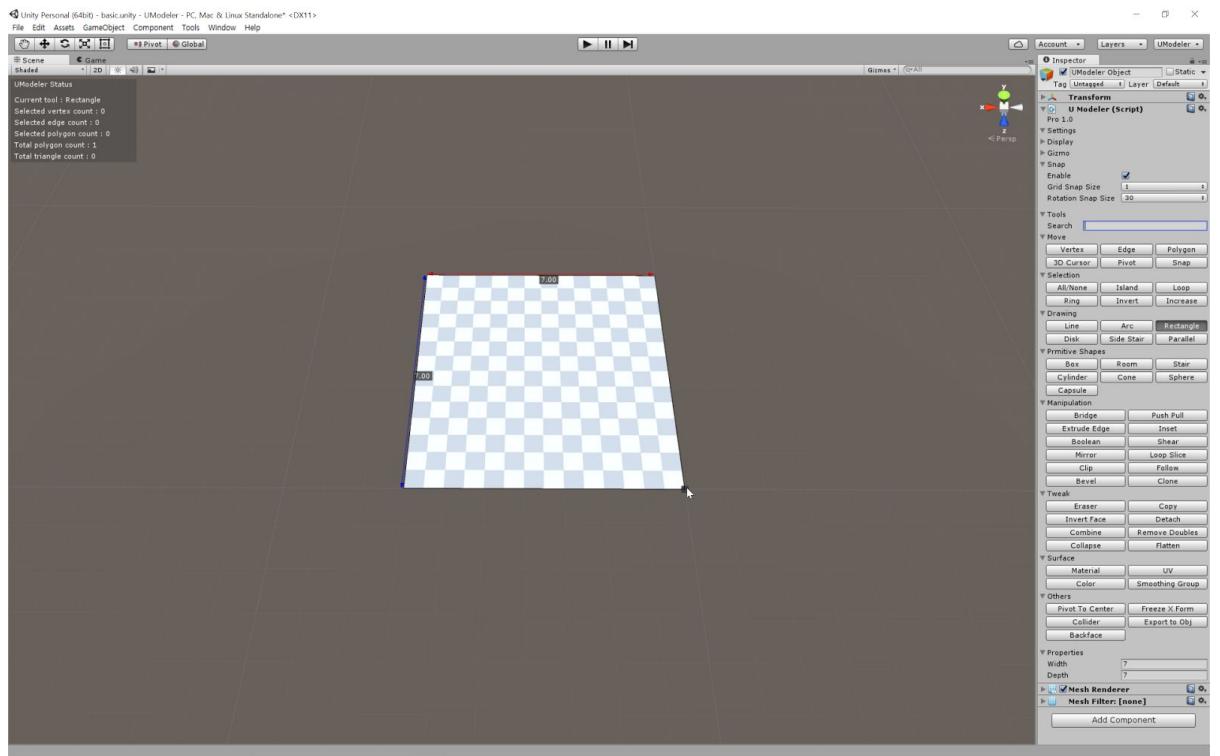
2. UModeler component will be displayed in the inspector. **Box tool** will be selected as UModeler is Pro version by default. If it is Basic version, **Rectangle tool** will be enabled.



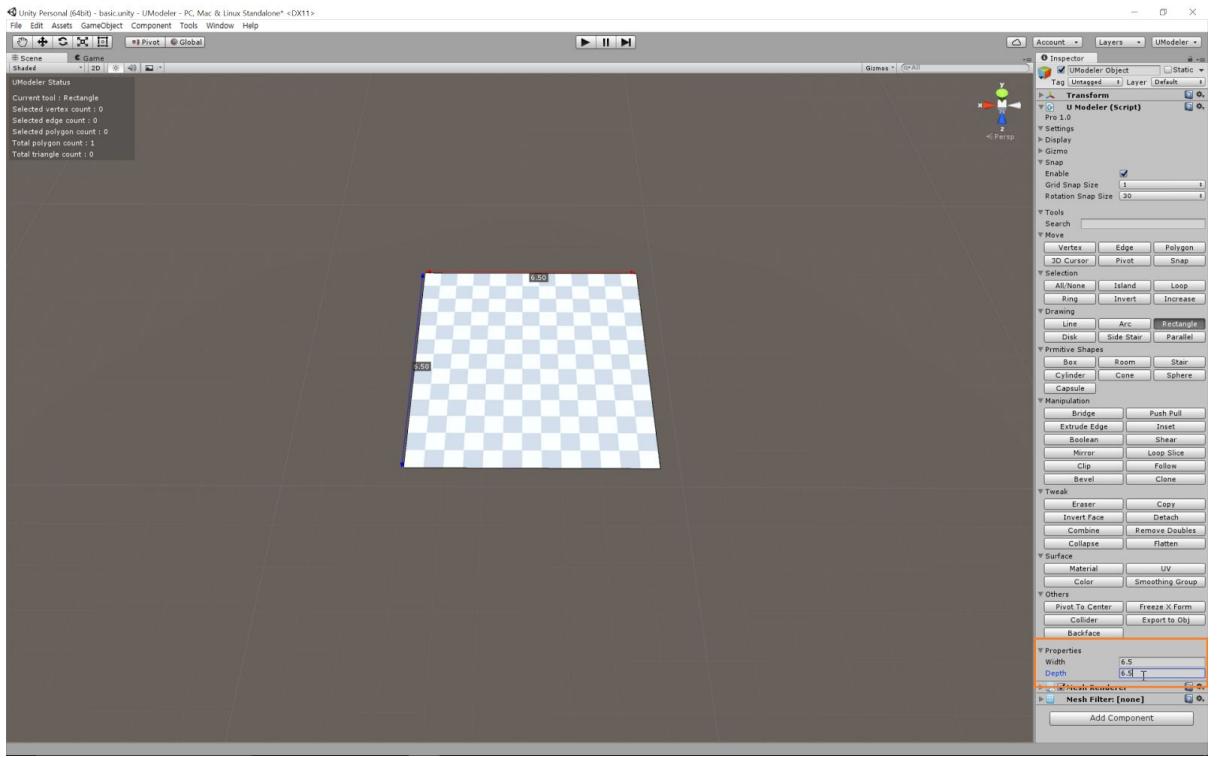
3. Select **Rectangle tool**. If you feel hard to find **Rectangle tool** in the inspector, Enter “Rect” in Search editor box. Then only rectangle button will be shown as below. At this point press **ENTER** key to enable **Rectangle tool**.



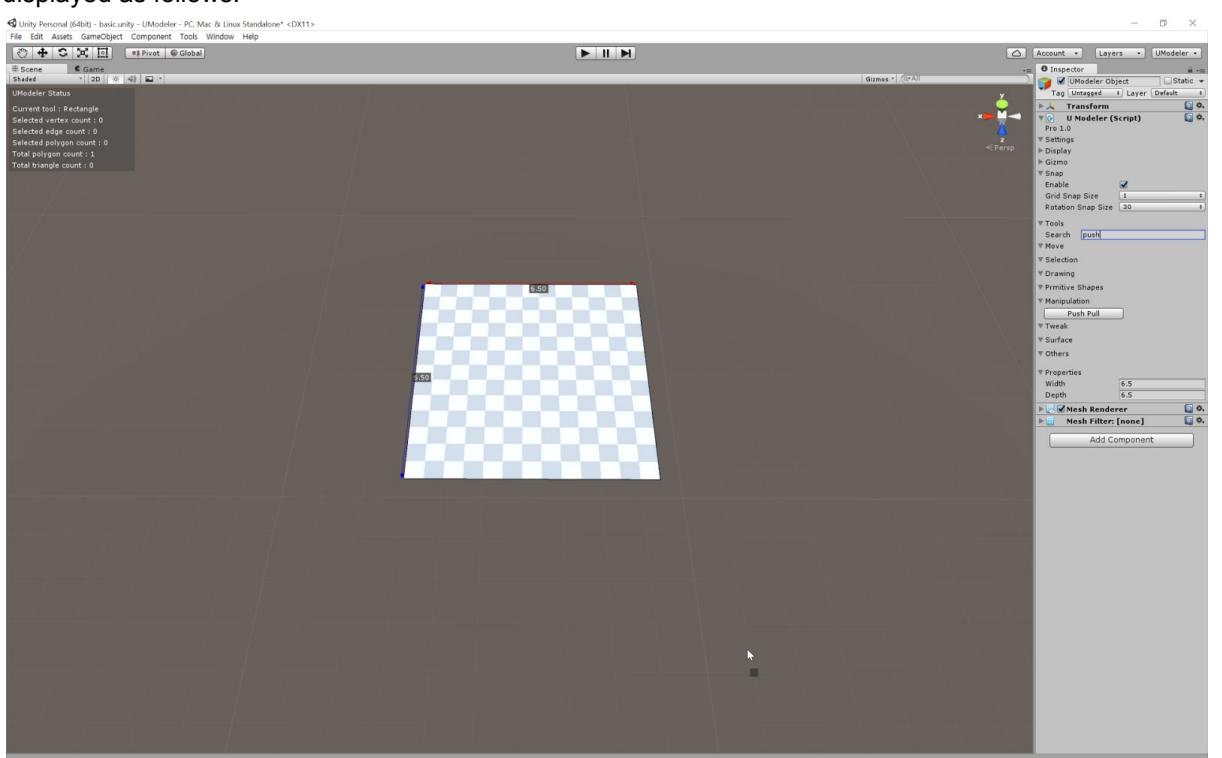
4. Start to drag a mouse anywhere in the world to draw a rectangle. Stop dragging when the size of the rectangle becomes what you want.



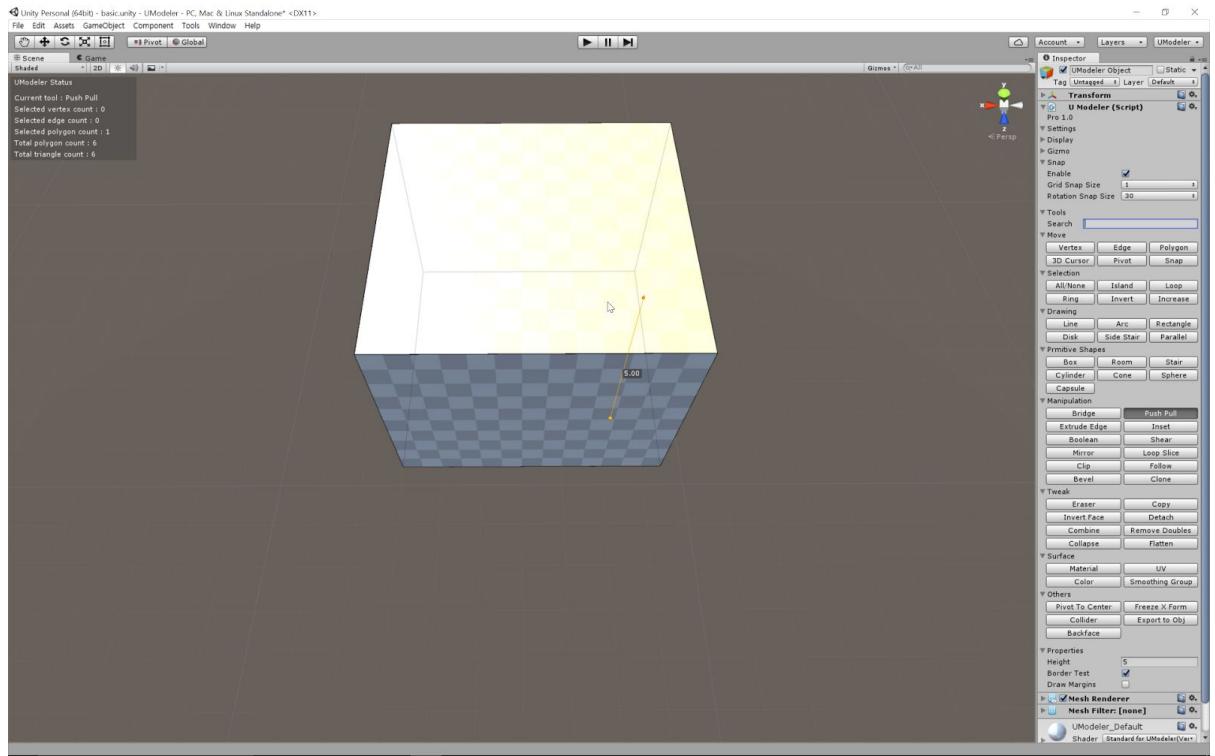
5. If you need the exact size, edit **Width** and **Height** properties under **Properties** in the inspector. The unit used in UModeler is meter.



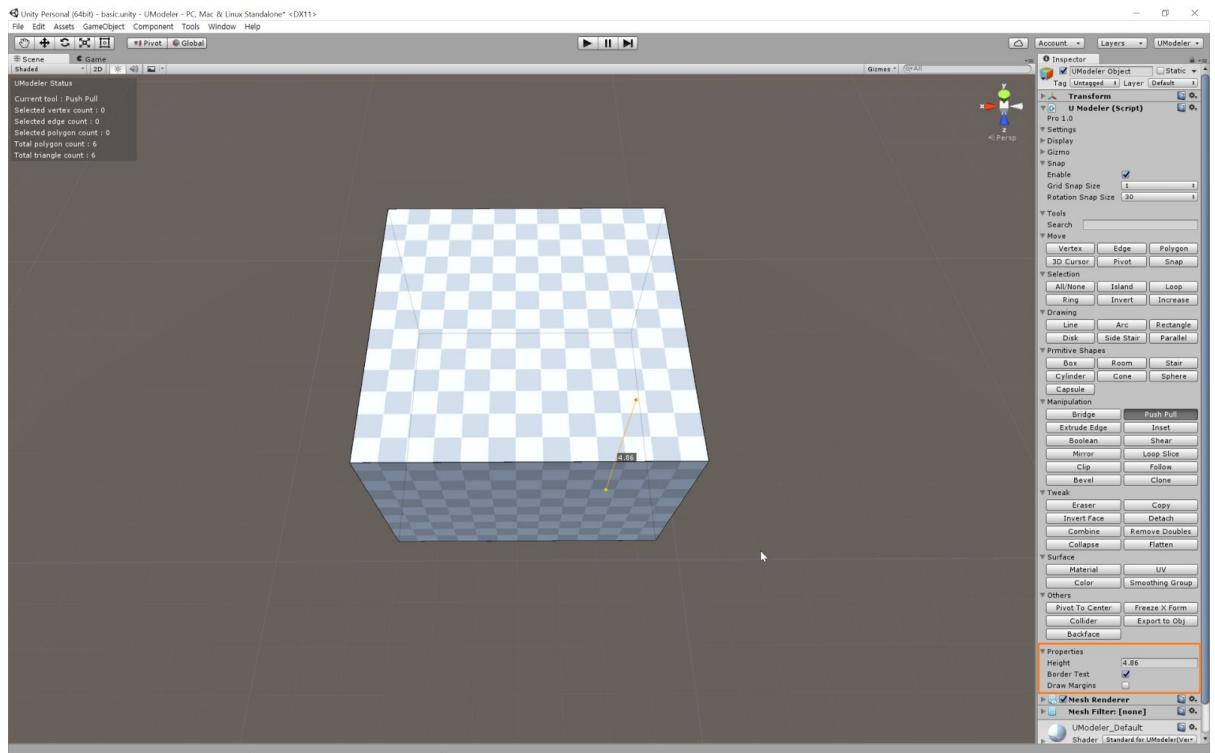
6. If you would like to register the rectangle drawn according to the upper steps, press **SPACE**. If you want to cancel the rectangle, Press **ESC**.
7. Now go to **Push Pull tool** under **Manipulation** in the inspector. If it is difficult for you to find it, Press Enter to enable Search edit box and enter “Push” there. Then only **Push Pull tool** will be displayed as follows.



- Put the mouse cursor to the rectangle drawn in the former steps and drag it up.

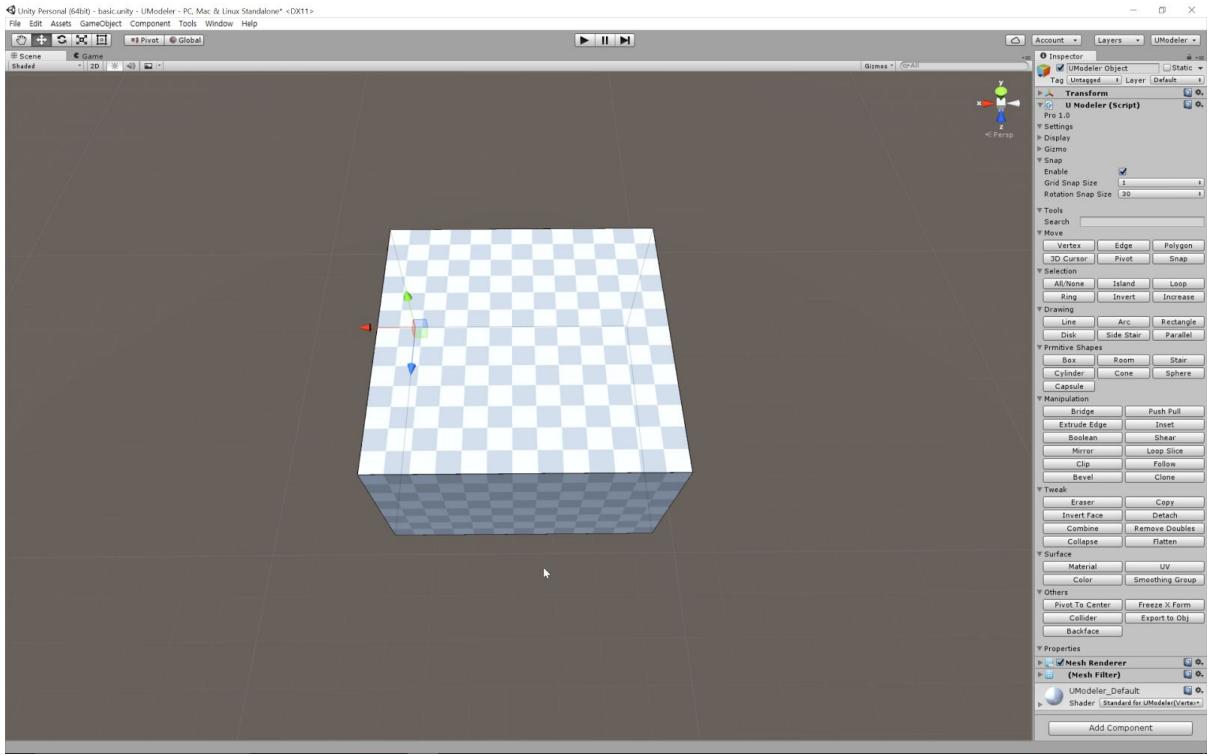


- When the rectangle goes up to where you want, stop dragging. If you need an exact height, fill out the height editor box with the size you want in the inspector as below.

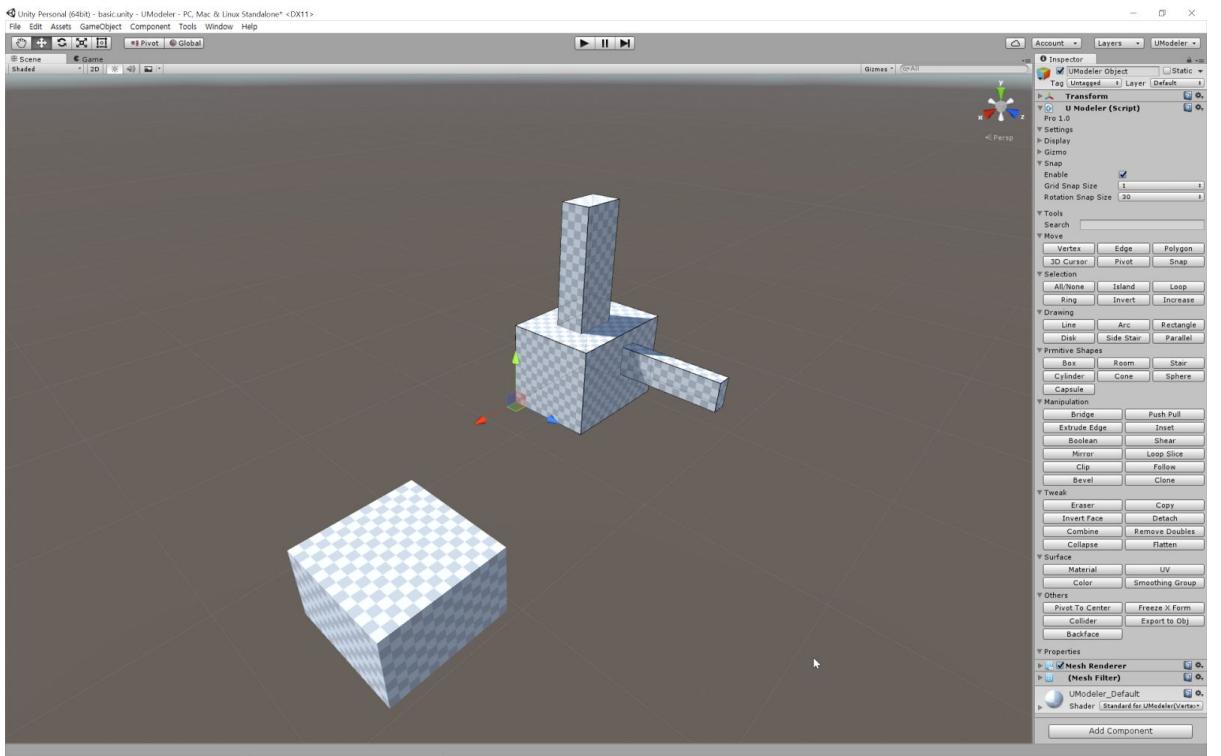


- If you want to confirm what you did, Press **SPACE**. Or Press **ESC** to cancel it.

11. Press **ESC** twice in a row on the Scene view to select the other game object.



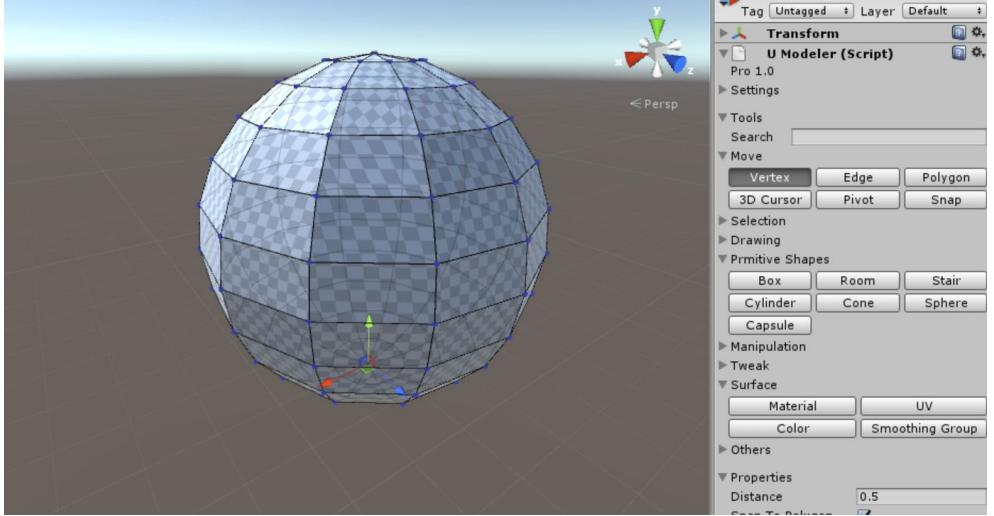
12. Now you can select the other game object. When the new selected game object has a UModeler component, black edges around the selected object will be drawn as below.



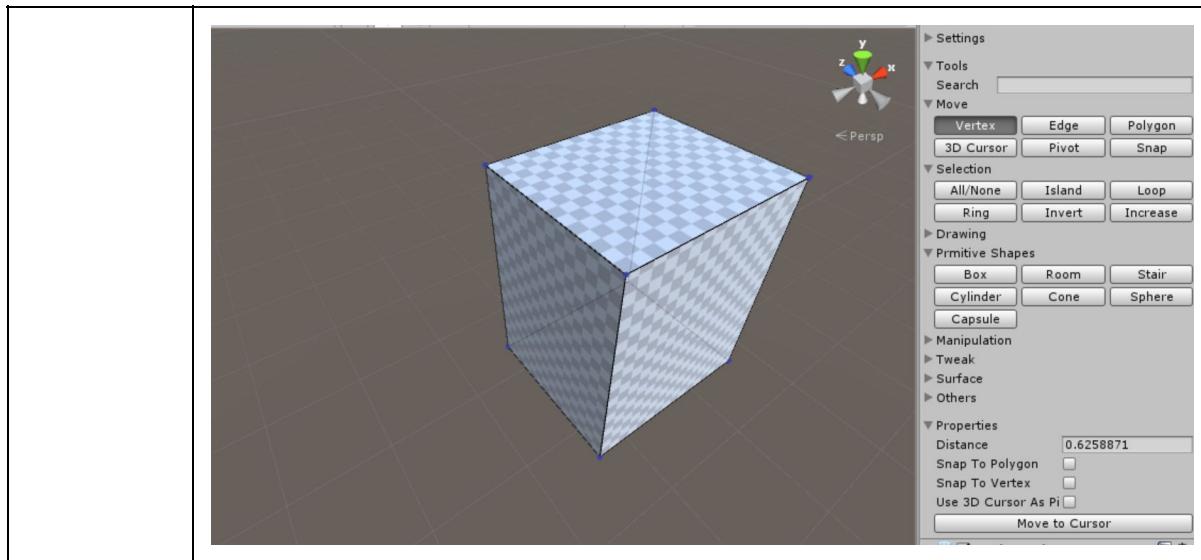
Tools

Move

Vertex/Edge/Polygon

Mode	Edit
Required Ver	Pro1.0, Basic1.0
Desc	Vertex, Edge and Polygon are called Element.
Steps	<ol style="list-style-type: none">1. Select Vertex, Edge or Polygon tool2. Select Vertices/Edges/Polygons by clicking LMB on an element or dragging the mouse.3. Manipulate Gizmo or Drag the mouse just after pressing LMB on an element.4. If necessary, adjust Distance property only when the elements are translated.
Demo.1	Translation 

Demo.2	Rotation and Scale	<p>The screenshot shows a 3D cylinder in a Unity scene. The Transform panel on the right indicates the object is a 'U Modeler (Script)' component. The Move tab is selected, showing options for Vertex, Edge, Polygon, 3D Cursor, Pivot, and Snap.</p>
Demo.3	Moves Elements separately (SHIFT + LMB Drag)	<p>The screenshot shows a 3D sphere in a Unity scene. The Transform panel on the right indicates the object is a 'U Modeler (Script)' component. The Move tab is selected, showing options for Vertex, Edge, Polygon, 3D Cursor, Pivot, and Snap. The Properties section shows 'Distance' set to 0.2626373 and 'Snap To Polygon' checked.</p>
Demo.4	Snap To Polygon property	<p>The screenshot shows a 3D mesh in a Unity scene. The Transform panel on the right indicates the object is a 'U Modeler (Script)' component. The Move tab is selected, showing options for Vertex, Edge, Polygon, 3D Cursor, Pivot, and Snap. The Properties section shows 'Distance' set to 0.3544083 and 'Snap To Polygon' unchecked.</p>
Demo.5	Snap to Vertex property	



Interface

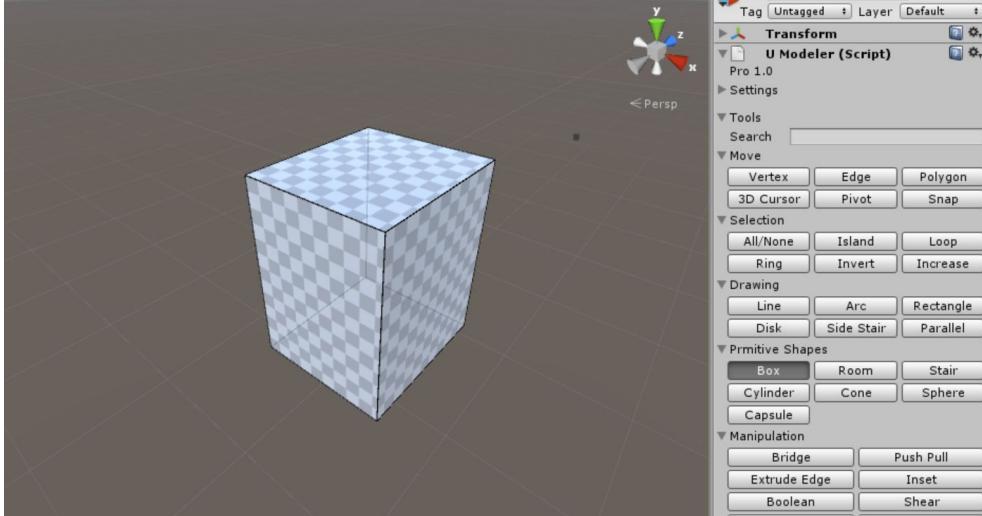
LMB	Selects Vertex/Edge/Polygon
CTRL + LMB	Selects Vertex/Edge/Polygon one after another.
LMB Drag	<ol style="list-style-type: none"> Selects multiple Vertices/Edges/Polygons in a rectangle. Moves Vertex/Edge/Polygon
SHIFT + LMB Drag	Polygons sharing the selected vertices/edges or the selected polygons moved separately.
ESC	Goes to object selection mode.
W	Translation Gizmo
E	Rotation Gizmo
R	Scale Gizmo

Properties

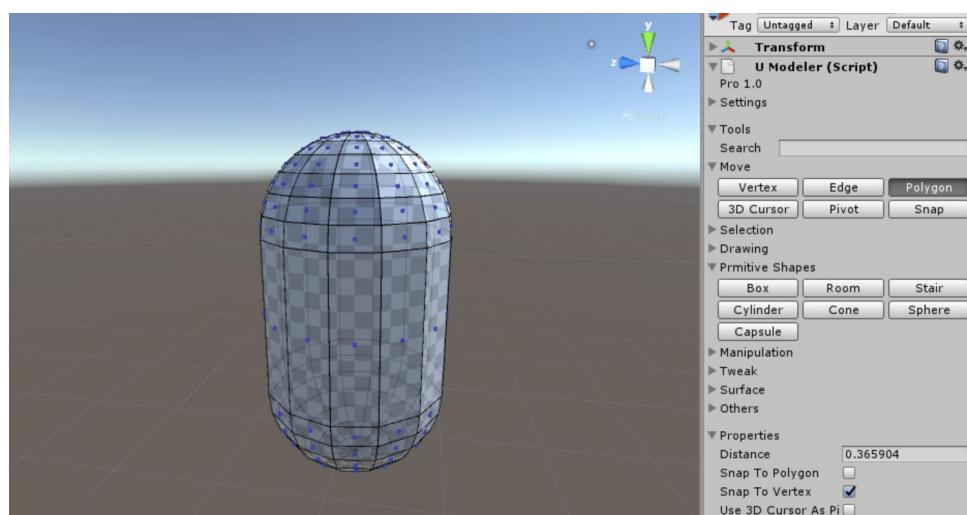
Distance	How distant the selected elements move. This is only available as translation gizmo is enabled.
Snap To Polygon	An edge is snapped to a close polygon within a specific distance. This is only available as the edge is being translated.
Snap To Vertex	A vertex is snapped to the other close vertex within a specific distance. This is only available as the vertex is being translated.
Use 3D Cursor As Pivot	Rotates the selected elements around the 3D cursor.
Move to Cursor	Moves the current selected elements to the 3D cursor position.

3D Cursor

Mode	Edit
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Required Ver	Pro1.0
Desc	<p>Positions the 3D cursor.</p> <p>The 3D cursor are used as a pivot when you rotate or scale vertices, edges or polygons.</p>
Steps	<ol style="list-style-type: none"> 1. Select 3D Cursor tool 2. Put the 3D Cursor by clicking on a vertex or moving a translation gizmo.
Demo	

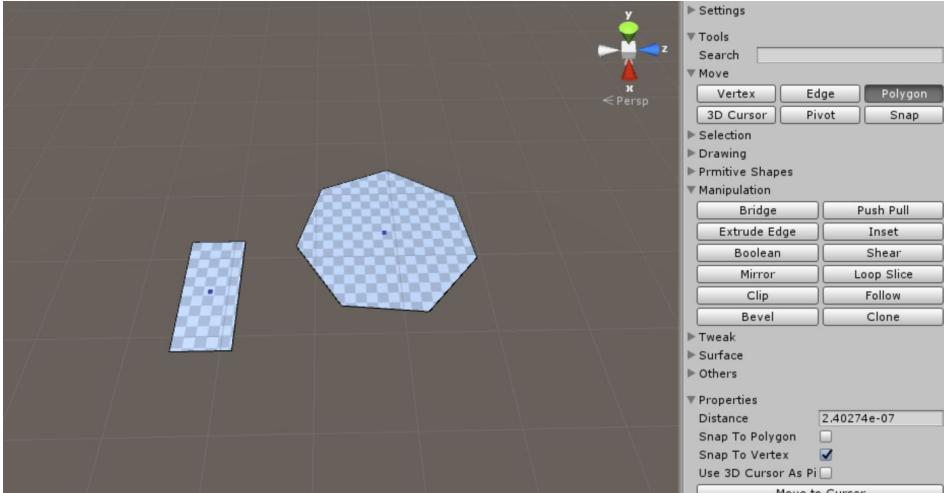
Pivot

Mode	Edit
Required Ver	Pro1.0
Desc	Sets a pivot position.
Steps	<ol style="list-style-type: none"> 1. Select Pivot tool. 2. Select a blue point or move the translation gizmo.
Demo	

Properties

Candidate Set	Bound Box - Position set coming from the bound box. Polygons - Position set coming from the vertices from the polygons.
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Snap

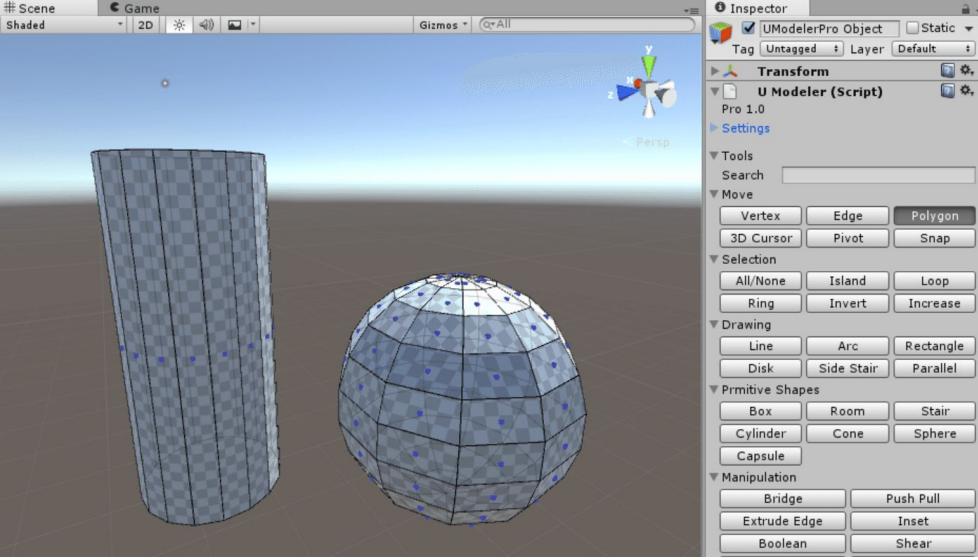
Mode	Edit
Required Ver	Pro1.0
Desc	Moves a polygon to the specific position. This tool can be used to set a profile polygon for Follow tool .
Steps	<ol style="list-style-type: none"> 1. Select Snap tool. 2. Select a polygon. 3. Set a pivot by choosing a blue point. 4. Set a up-direction by selecting another blue point. 5. Click on a vertex to move the polygon to the vertex.
Demo	 <p>The screenshot shows a 3D view with two blue checkered polygons. One polygon is selected and is being moved by a 3D cursor. The right polygon serves as a pivot point. To the right is a large sidebar with several sections:</p> <ul style="list-style-type: none"> Tools: Settings, Tools, Search, Move, Selection, Drawing, Primitive Shapes, Manipulation, Tweak, Surface, Others. Move: Vertex, Edge, Polygon, 3D Cursor, Pivot, Snap (selected). Selection: Bridge, Push Pull, Extrude Edge, Inset, Boolean, Shear, Mirror, Loop Slice, Clip, Follow, Bevel, Clone. Properties: Distance (2.40274e-07), Snap To Polygon (unchecked), Snap To Vertex (checked), Use 3D Cursor As Pi (unchecked).

Properties

Flip	Flips the polygon horizontally.
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Selection

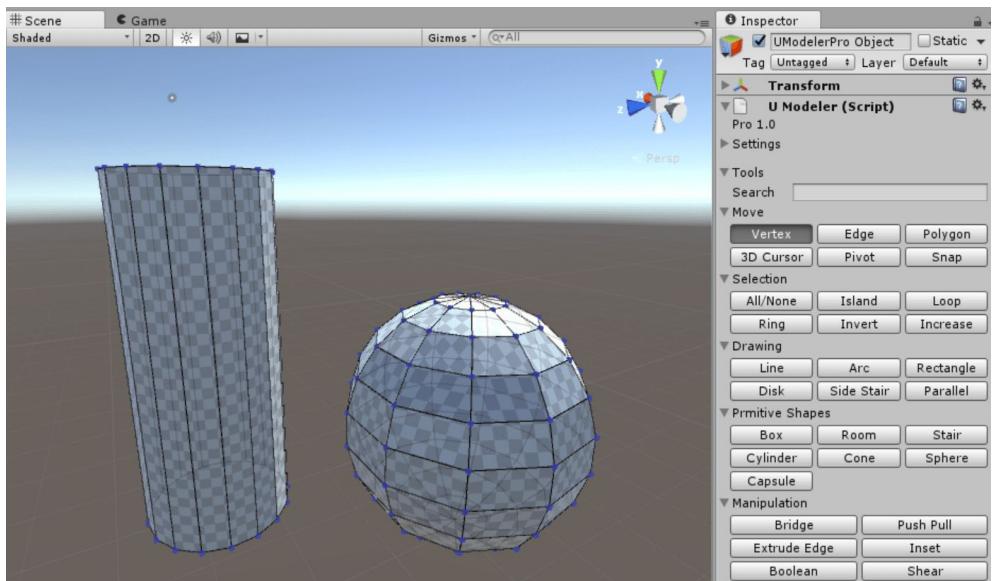
All/None - 1 (All Elements)

Mode	Immediate
Required Ver	Pro1.0
Condition.1	No elements are selected and Vertex tool is on.
Desc.1	All vertices will be selected.
Condition.2	No elements are selected and Edge tool is on.
Desc.2	All edges will be selected.
Condition.3	No elements are selected and Polygon tool is on.
Desc.3	All polygons will be selected.
Steps	<ol style="list-style-type: none"> Select one of Vertex tool, Edge tool and Polygon tool. Select All/None tool with no selections.
Demo	

All/None - 2 (Deselect All)

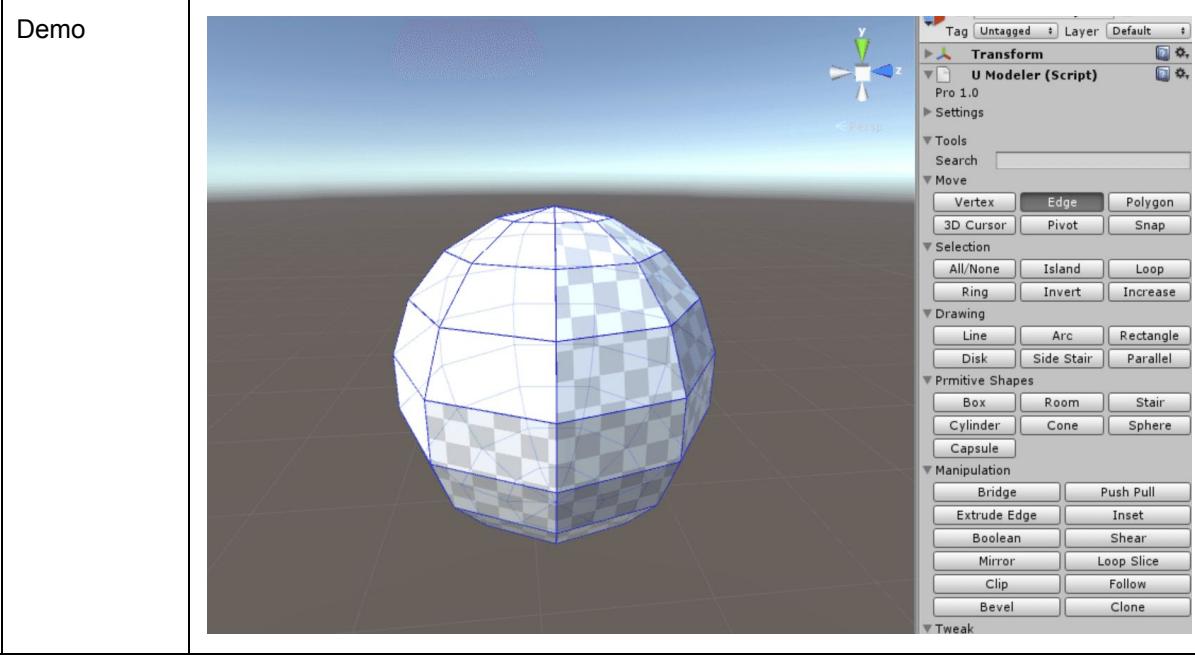
Mode	Immediate
Required Ver	Pro1.0
Condition	Any elements are selected.
Desc	All selected elements will be deselected.
Steps	<ol style="list-style-type: none"> Select All/None tool with any elements selected.

Island

Mode	Immediate
Required Ver	Pro1.0
Condition	More than one vertex, edge or polygon is selected.
Desc	The parts including the selected elements will be selected.
Steps	<ol style="list-style-type: none"> 1. Select Island tool with any elements selected.
Demo	

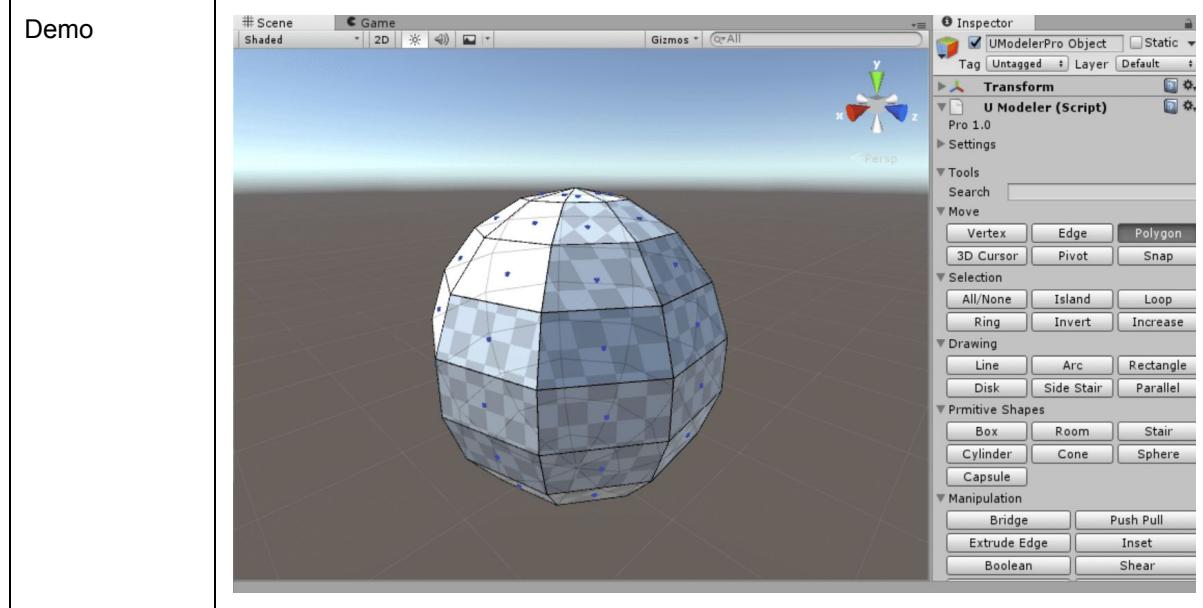
Loop - 1 (Edge)

Mode	Immediate
Required Ver	Pro1.0
Condition	An edge is selected.
Desc	Selects a loop of edges that are connected in a line end to end.
Steps	<ol style="list-style-type: none"> 1. Selects an edge with Edge tool 2. Selects Loop tool



Loop - 2 (Polygon)

Mode	Immediate
Required Ver	Pro1.0
Condition	Two serial polygons should be selected.
Desc	Selects a loop of polygons that are connected in a line end to end.
Steps	<ol style="list-style-type: none"> 1. Selects two serial polygons with Polygon tool. 2. Selects Loop tool.

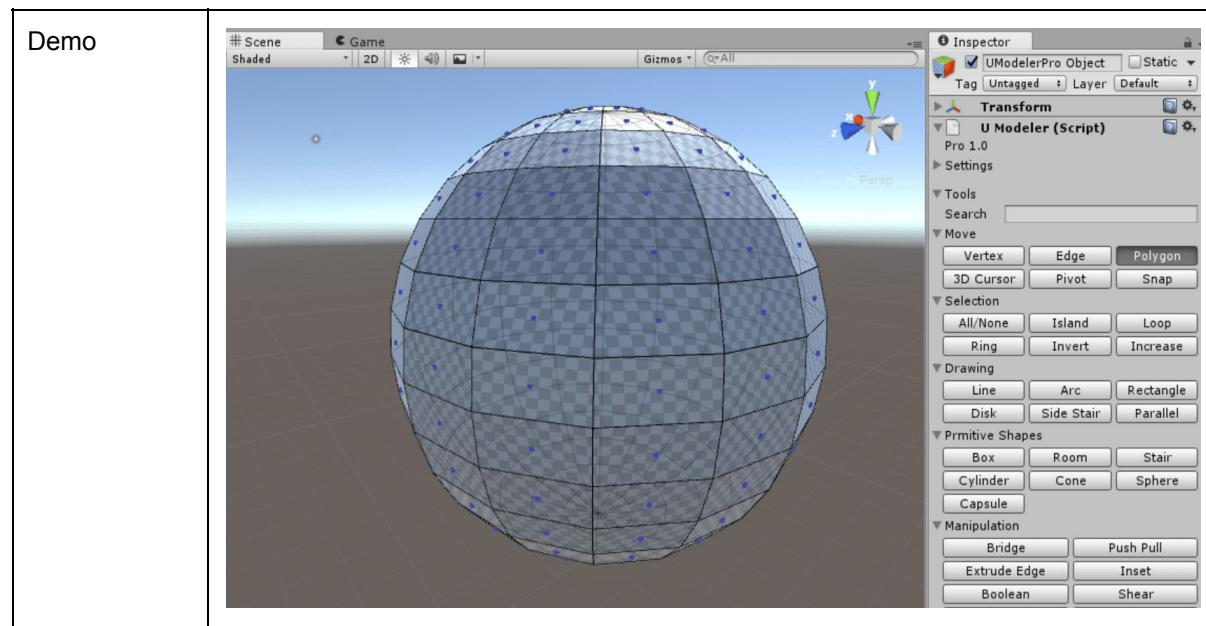


Ring - 1 (Edge)

Mode	Immediate
Required Ver	Pro1.0
Condition	An edge should be selected.
Desc	Selects a sequence of edges that are not connected, but on opposite sides to each other continuing along a face loop
Steps	<ol style="list-style-type: none"> 1. Selects an edge using Edge tool. 2. Selects Ring tool.
Demo	

Ring - 2 (Polygon)

Mode	Immediate
Required Ver	Pro1.0
Condition	Two serial polygons should be selected.
Desc	This tool lets you select several polygons across a mesh without having to select each polygon individually.
Steps	<ol style="list-style-type: none"> 1. Selects two serial polygons with Polygon tool 2. Selects Ring tool

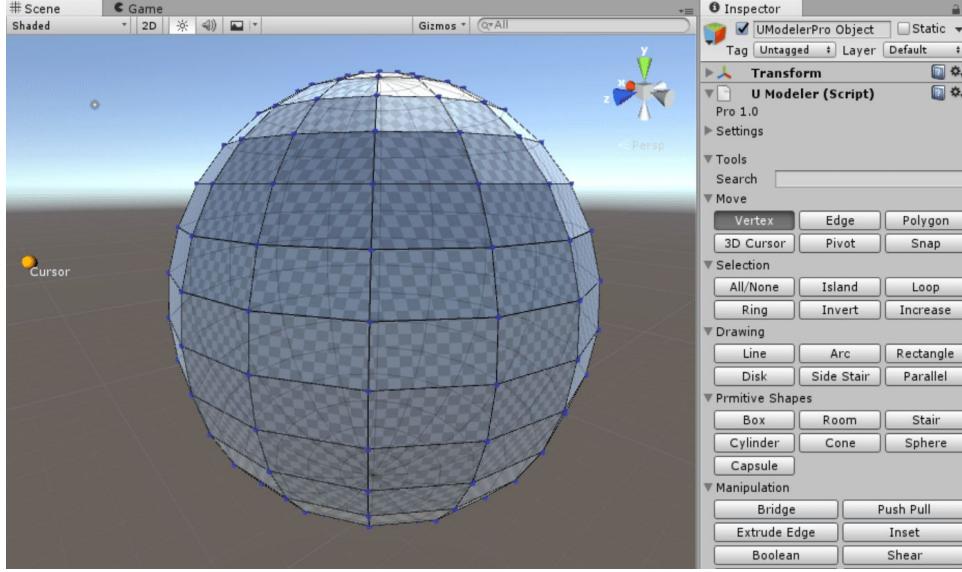


Invert

Mode	Immediate
Required Ver	Pro1.0
Condition	Some vertices/edges/polygons should be selected.
Desc	The selection will be inverted. It means the selected ones will get deselected and the deselected ones will get selected.
Steps	<ol style="list-style-type: none"> Select a vertex(vertices) or an edge(s) or a polygon(s). Select Invert tool.
Demo	

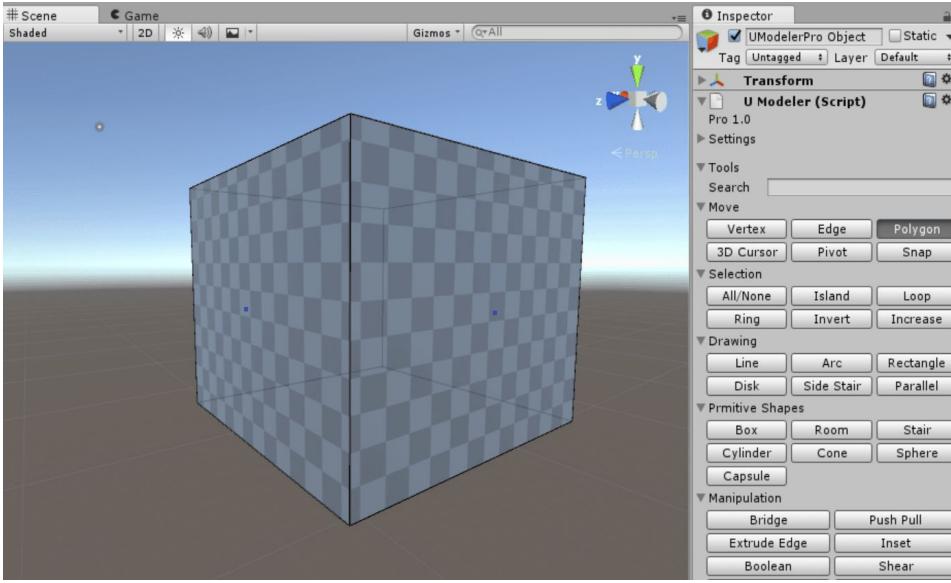
Increase

Mode	Immediate
------	-----------

Required Ver	Pro1.0
Condition	Some vertices/edges/polygons should be selected.
Desc	Expands the current selection outwards in all directions from the current selected elements.
Steps	<ol style="list-style-type: none"> 1. Select a vertex(vertices) or an edge(s) or a polygon(s). 2. Select Invert tool
Demo	

Draw

Line

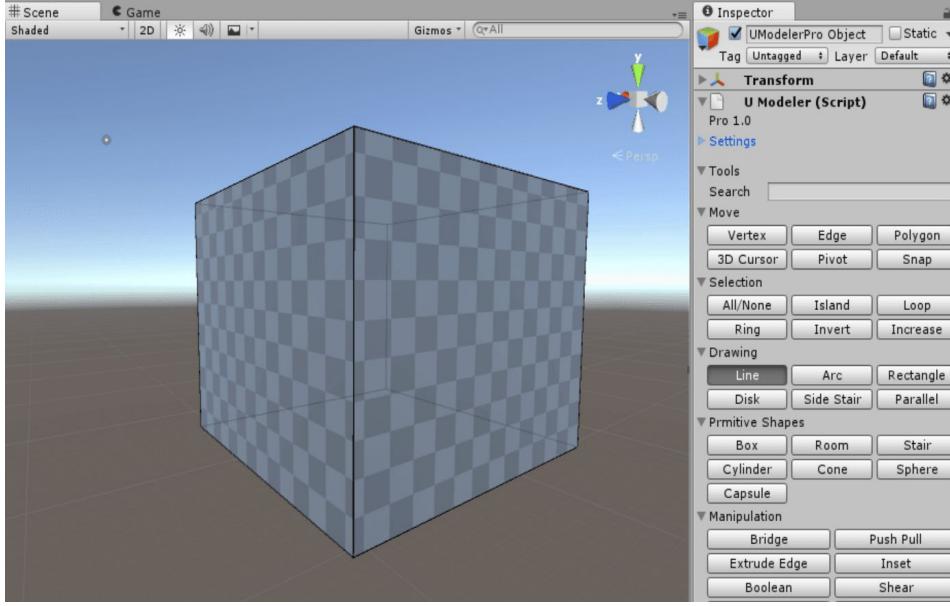
Mode	Edit
Required Ver	Pro1.0, Basic1.0
Desc	You can draw edges on a surface or on a floor in a row. The mouse cursor will be snapped to a vertex, a center of edge, a center of polygon etc when the cursor gets close enough to them.
Steps	<ol style="list-style-type: none">1. Select Line tool under Drawing2. Click LMB on where you want to start to draw.3. Click LMB to place another point to draw an edge.4. You can draw successive edges by putting points until pressing SPACE.5. If you want to go back to the previous point, Press ESC.
Demo	

Interface

LMB	Places a point
SPACE	Confirms the drawn edges.
ESC	Cancels the previous point.

Arc

Mode	Edit
Required Ver	Pro1.0
Desc	An arc can be drawn by setting three points on a plane.

Steps	<ol style="list-style-type: none"> 1. Select Arc tool 2. Click on where you want to start to draw an arc 3. Drag the mouse to set the second point. 4. Release LMB and move the mouse cursor to set the third point of the arc. 5. If necessary, adjust Segment property in Properties. 6. Press SPACE to complete drawing the arc or if you want to cancel the arc, press ESC.
Demo	

Interface

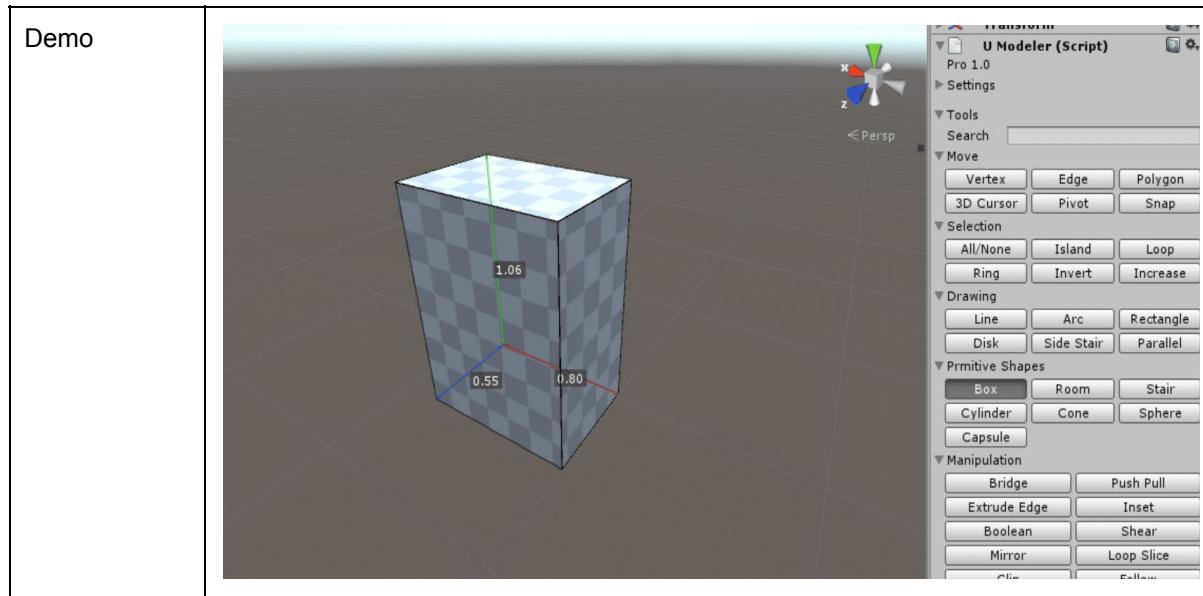
LMB drag	Sets the first and second points.
SPACE	Completes drawing an arc.
ESC	Cancels drawing an arc.

Properties

Segments	How many edges an arc will have.
----------	----------------------------------

Rectangle

Mode	Edit
Required Ver	Pro1.0, Basic1.0
Desc	A rectangle is drawn by dragging the mouse to set two corners.
Steps	<ol style="list-style-type: none"> 1. Go to Rectangle tool under Primitive Shapes. 2. Drag a mouse to set two corner points on any plane. 3. Release LMB. 4. If necessary, adjust Width, Height properties. 5. Press SPACE to confirm the rectangle. If you want to cancel the rectangle, Press ESC.



Interface

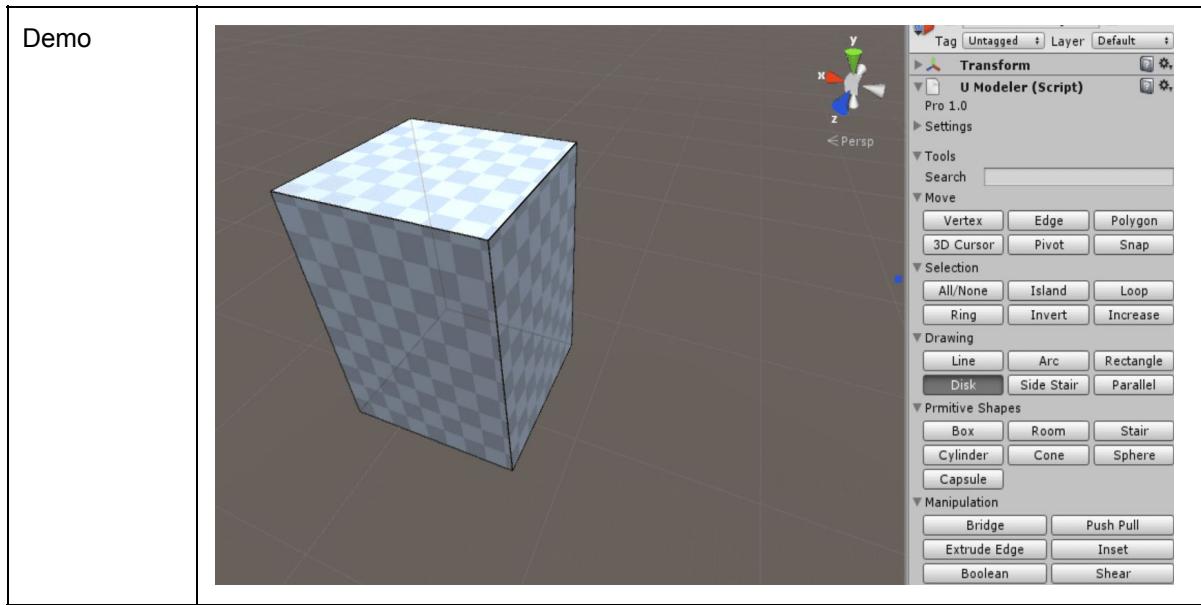
LMB Drag	Draws a rectangle.
SPACE	Confirms the rectangle.
ESC	Cancels the rectangle.

Properties

Width	The width of the rectangle.
Height	The height of the rectangle.

Disk

Mode	Edit
Required Ver	Pro1.0
Desc	You can draw a disk by setting a center and a radius.
Steps	<ol style="list-style-type: none"> Select Disk tool Drag the mouse to draw a disk by setting a center and a radius of a disk. You can type more precise radius and the number of segment in Radius and Segment fields in Properties. Press SPACE to complete or Press ESC to cancel.



Interface

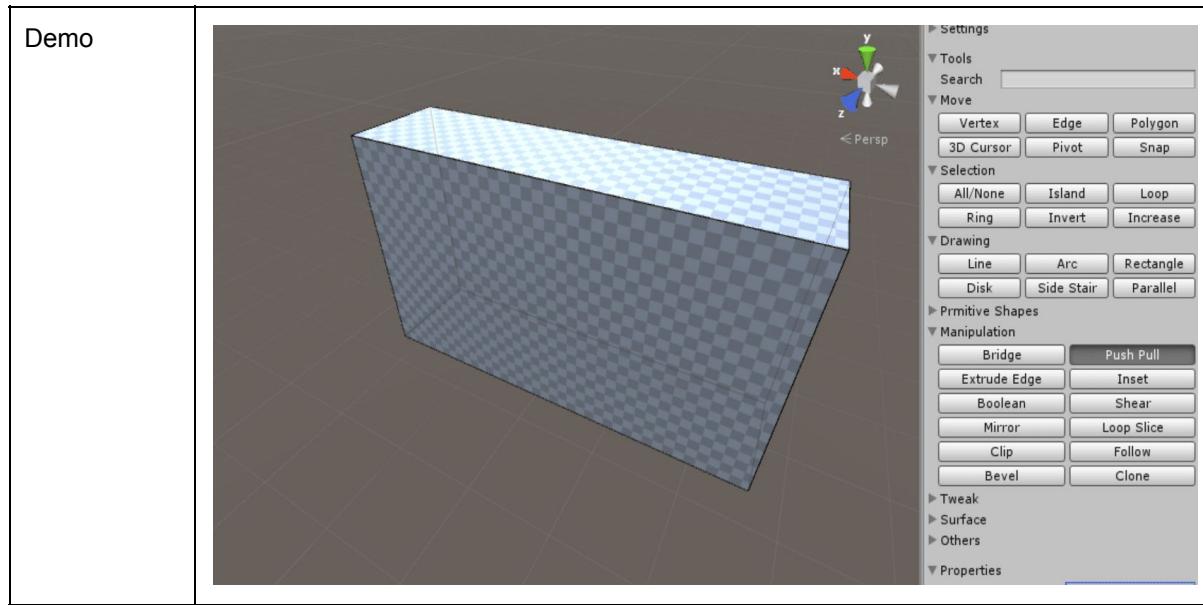
LMB Drag	Draws a disk
SPACE	Completes drawing a disk
ESC	Cancels drawing a disk

Properties

Segment	The number of edges/segments
Radius	Radius of a disk
Angle Snap	When you drag the mouse with this property on, the disk's direction will snap to every 90 degree.

Side Stair

Mode	Edit
Required Ver	Pro1.0
Desc	You can draw a stair profile on a plane with this tool.
Steps	<ol style="list-style-type: none"> 1. Select Side Stair tool 2. Drag the mouse like you did in Rectangle tool to draw a profile of the stair. 3. Release LMB. 4. If necessary, adjust Rise in Properties. If the stair is upside down, toggle Flip property. 5. Press SPACE



Interface

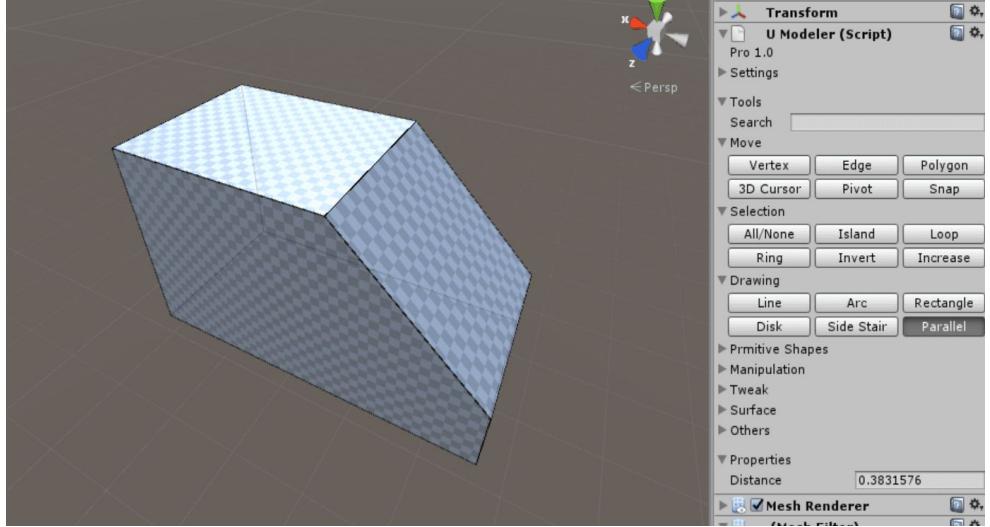
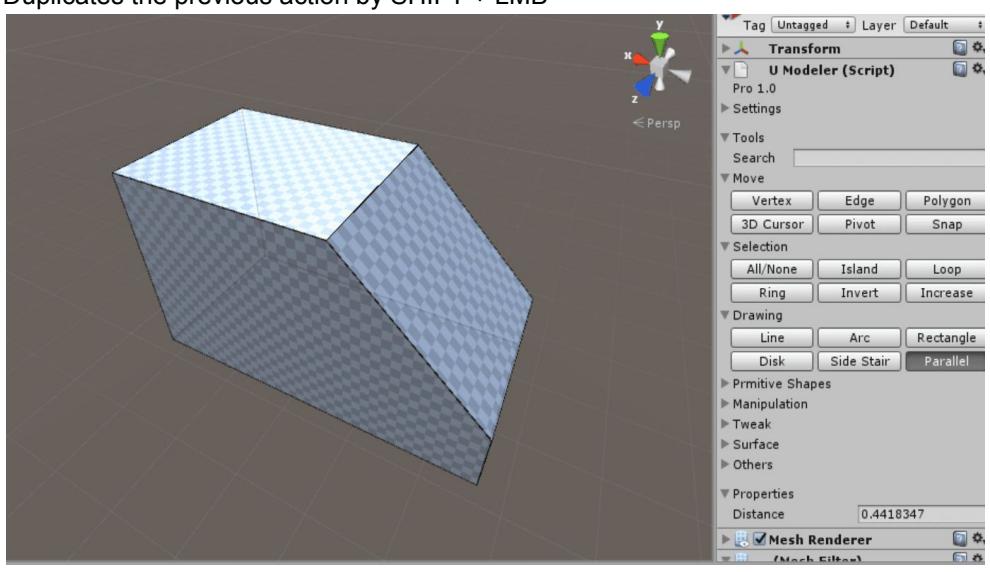
LMB Drag	Draws a stair profile
SPACE	Confirmation
ESC	Cancellation

Properties

Rise	Distance between two treads.
Flip	Flips the drawn stair profile.

Parallel

Mode	Edit
Required Ver	Pro1.0
Desc	The closest edge of the polygon where the mouse cursor points gets copied and the copied edge will be moved parallel to the original edge following the mouse.
Steps	<ol style="list-style-type: none"> 1. Select Parallel tool 2. Move the mouse cursor to any point nearby the edge you want to copy and move. 3. Start to drag the mouse holding LMB in a normal direction of the original edge. 4. Release LMB where you want to put the copied edge. 5. Type Distance property if you want the precise distance. 6. Press SPACE to confirm what you did or Press ESC to cancel it.

Demo.1	
Demo.2	Duplicates the previous action by SHIFT + LMB 

Interface

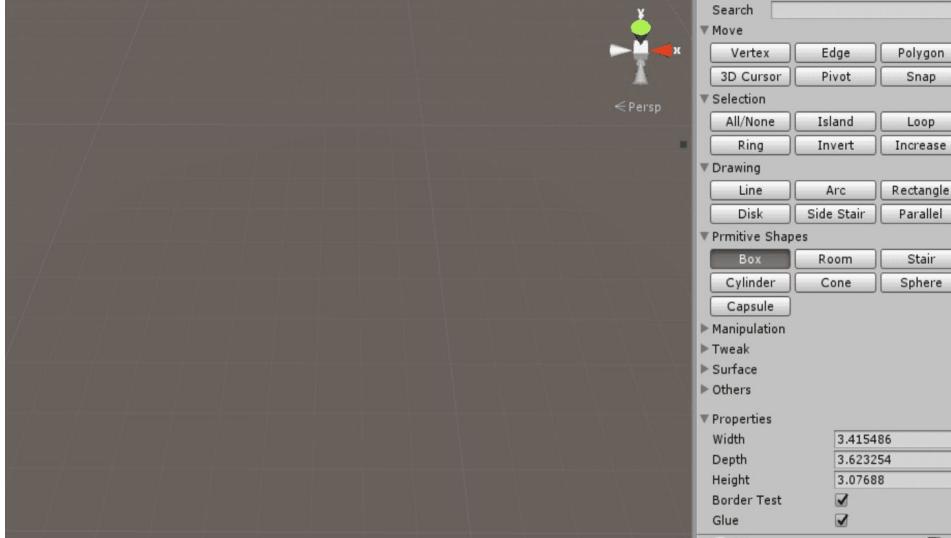
LMB Drag	Copies and moves the edge in a parallel direction.
SHIFT + LMB	Duplicates the previous Parallel action.
SPACE	Confirmation
ESC	Cancellation

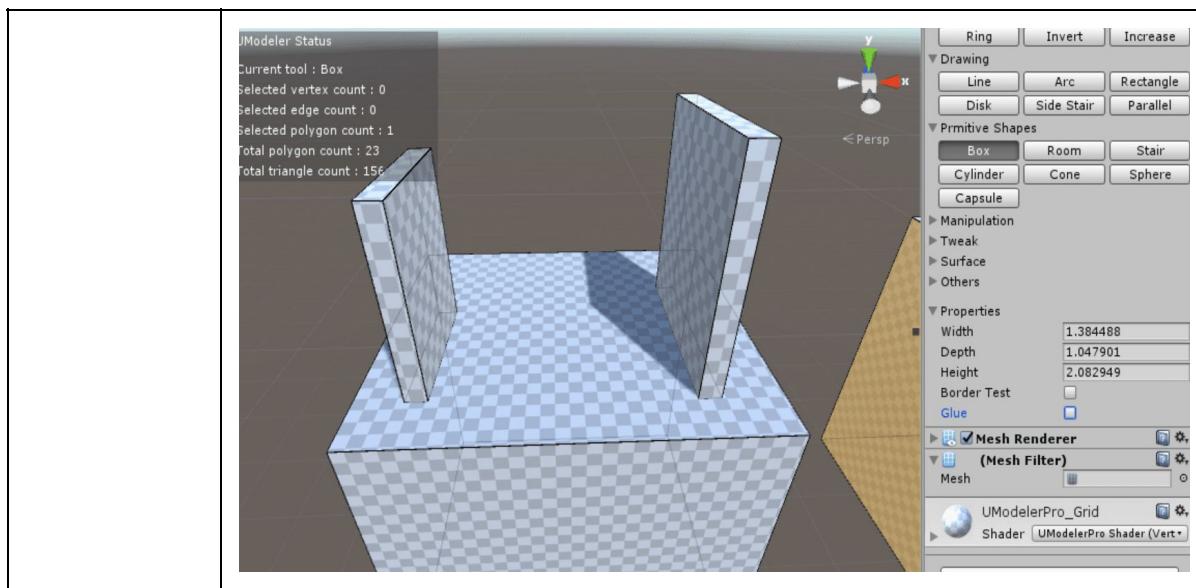
Properties

Distance	Distance from the original edge.
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Primitive Shapes

Box

Mode	Edit
Required Ver	Pro1.0
Desc	You can create a box with this tool on a plane.
Steps	<ol style="list-style-type: none"> 1. Select Box tool 2. Draw a rectangle on a plane where you want like you draw it by dragging the mouse. 3. Release LMB and move the mouse up or in a normal direction of the plane where you started. 4. Click LMB when you need to finish creating a box. 5. If necessary, type the precise size in Width, Depth and Height fields in Properties. 6. Press SPACE to complete or Press ESC to cancel.
Demo.1	 <p>The screenshot shows a 3D modeling interface with a perspective view window. In the top right corner of the window, there is a 3D cursor icon. To the right of the view window is a toolbar with various icons for selection and modification. Below the toolbar is a large vertical menu with several sections: Move, Selection, Drawing, Primitive Shapes, Manipulation, Tweak, Surface, and Others. Under the Primitive Shapes section, the 'Box' button is highlighted. At the bottom right of the interface is a properties panel. The properties panel has sections for Width (3.415486), Depth (3.623254), Height (3.07688), Border Test (checked), and Glue (checked).</p>
Demo.2	Border Test and Glue Properties



Interface

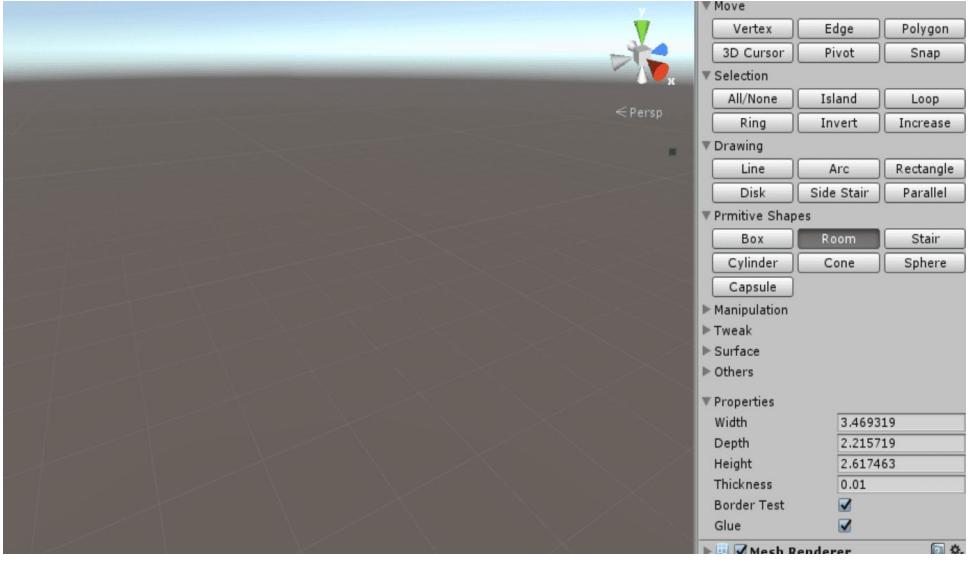
LMB Drag	Starts and draws a bottom rectangle of a box.
SPACE	Completes creating a box.
ESC	Cancels creating a box

Properties

Width	Width of a box
Depth	Depth of a box
Heigh	Height of a box
Border Test	If this is enabled, the ray cast will run and it checks if the created box is beyond the other polygons.
Glue	The box with this property enabled will be glued to the polygon where it started to be created. It means that the hidden part of the floor polygon by the created box is removed.

Room

Mode	Edit
Required Ver	Pro1.0
Desc	This is nearly same as the box tool except creating a flipped inner box.
Steps	<ol style="list-style-type: none"> Select Room tool Draw a rectangle on a plane where you want like you draw it using Rectangle tool by dragging the mouse. Release LMB and move the mouse up or in a normal direction of the plane where you started. Click LMB when you need to finish creating a room

	<p>5. If necessary, type the precise size in Width, Depth, Height or Thickness fields in Properties.</p> <p>6. Press SPACE to complete or Press ESC to cancel.</p>
Demo	

Interface

LMB Drag	Starts and draws a bottom rectangle of a room.
SPACE	Completes creating a room.
ESC	Cancels creating a room.

Properties

Width	Width of a room
Depth	Depth of a room
Heigh	Height of a room
Thickness	The distance between outer box and inner flipped box.
Border Test	If this is enabled, the ray cast will run and it checks if the created room is beyond the other polygons.
Glue	The room with this property enabled will be glued to the polygon where it started to be created. It means that the hidden part of the floor polygon by the created room is removed.

Stair

Mode	Edit
Required Ver	Pro1.0
Desc	Creates stairs as you creates a box.

	The stair created with this tool has a uniform rise no matter how high the stair is.
Steps	<ol style="list-style-type: none"> 1. Select Stair tool 2. Draw a rectangle on a plane where you want like you draw it by dragging the mouse. 3. Release LMB and move the mouse up or in a normal direction of the plane where you started. 4. Click LMB when you need to finish creating a stair. 5. If necessary, type the precise sizes in Width, Depth, Height and Rise fields in Properties or turn on or off Wide Steps or Reverse to change the stair's direction 6. Press SPACE to complete or Press ESC to cancel.
Demo	

Interface

LMB Drag	Starts and draws a bottom rectangle of a stair
SPACE	Completes creating a stair
ESC	Cancels creating a stair

Properties

Width	The entire width of a stair
Depth	The entire depth of a stair
Height	The entire height of a stair.
Rise	Distance between two treads.
Wide Step	Rotates the stair by 90 degrees.
Reverse	Reverses the front and back.
Border Test	If this is enabled, the ray cast will run and it checks if the created stair is beyond the other polygons.

Glue	The stair with this property enabled will be glued to the polygon where it started to be created. It means that the hidden part of the floor polygon by the created stair is removed.
------	---

Cylinder

Mode	Edit
Required Ver	Pro1.0
Desc	Creates a cylinder
Steps	<ol style="list-style-type: none"> Select Cylinder tool Drag the mouse to draw a disk on a plane. Release LMB and move the mouse cursor in a normal direction of the plane to raise up a cylinder. Click LMB to stop. Type the count of edges in Segment field, radius in Radius field and height in Height field if necessary. Press SPACE to complete or Press ESC to cancel.
Demo	

Interface

LMB Drag	Draws a disk.
SPACE	Completes creating a cylinder
ESC	Cancels creating a cylinder.

Properties

Segment	The count of side faces
Radius	A radius of a cylinder
Height	A height of a cylinder

Angle Snap	When you drag the mouse with this property on, the disk's direction will snap to every 90 degree.
Border Test	If this is enabled, the ray cast will run and it checks if the created cylinder is beyond the other polygons.
Glue	The cylinder with this property enabled will be glued to the polygon where it started to be created. It means that the hidden part of the floor polygon by the created cylinder is removed.

Cone

Mode	Edit
Required Ver	Pro1.0
Desc	Creates a cone
Steps	<ol style="list-style-type: none"> 1. Select Cone tool 2. Drag the mouse to draw a disk on a plane. 3. Release LMB and move the mouse cursor in a normal direction of the plane to raise up a cone. 4. Click LMB to stop. 5. Type the count of edges in Segment field, radius in Radius field and height in Height field if necessary. 6. Press SPACE to complete or Press ESC to cancel.
Demo	

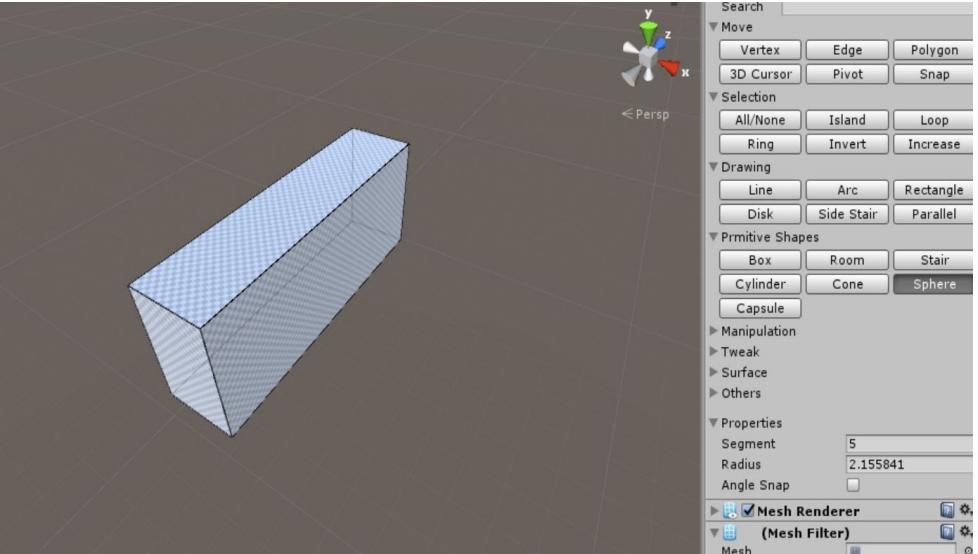
Interface

LMB Drag	Draws a disk.
SPACE	Completes creating a cone
ESC	Cancels creating a cone.

Properties

Segment	The count of side faces
Radius	A radius of a cone
Height	A height of a cone
Angle Snap	When you drag the mouse with this property on, the disk's direction will snap to every 90 degree.
Border Test	If this is enabled, the ray cast will run and it checks if the created cone is beyond the other polygons.
Glue	The cone with this property enabled will be glued to the polygon where it started to be created. It means that the hidden part of the floor polygon by the created cone is removed.

Sphere

Mode	Edit
Required Ver	Pro1.0
Desc	Creates a sphere.
Steps	<ol style="list-style-type: none"> Enter Sphere tool Drag the mouse holding LMB from a point of any planes to define a radius. The sphere will be created from the center of the bottom. You can type more precise values of Segment and Radius if necessary. Press SPACE to complete or Press ESC to cancel.
Demo	

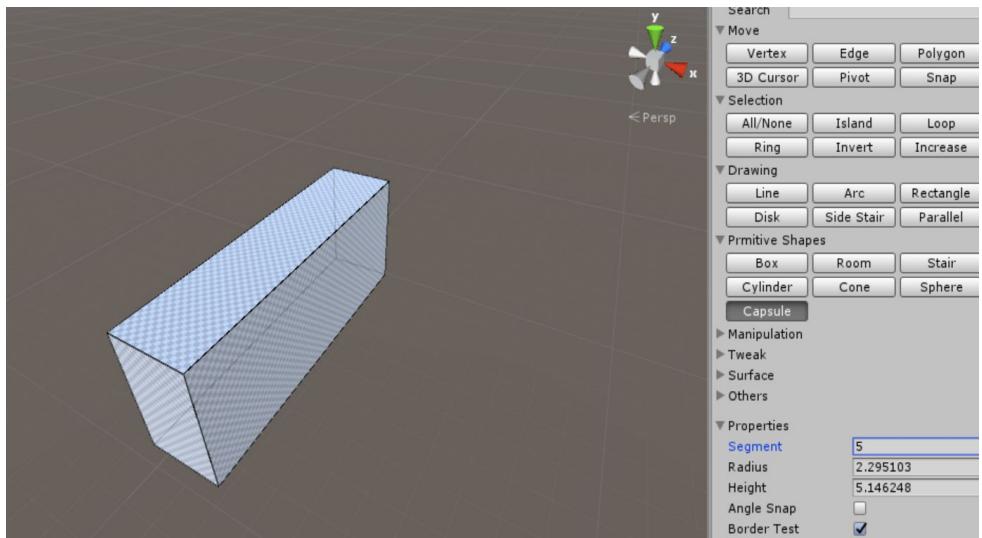
Interface

LMB Drag	Creates a sphere
SPACE	Completes
ESC	Cancels

Properties

Segment	How much the sphere will be divided
Radius	A radius of the sphere
Angle Snap	When you drag the mouse with this property on, the sphere's forward direction will snap to every 90 degree.

Capsule

Mode	Edit
Required Ver	Pro1.0
Desc	Creates a capsule
Steps	<ol style="list-style-type: none"> Select Capsule tool Drag the mouse to draw a disk on a plane. Release LMB and move the mouse cursor in a normal direction of the plane to raise up a capsule. Click LMB to stop. Type the count of edges in Segment field, radius in Radius field and height in Height field if necessary. Press SPACE to complete or Press ESC to cancel.
Demo	 <p>The properties panel shows the following settings for the capsule:</p> <ul style="list-style-type: none"> Segment: 5 Radius: 2.295103 Height: 5.146248 Angle Snap: <input type="checkbox"/> Border Test: <input checked="" type="checkbox"/> Height Alignment: <input type="checkbox"/>

Interface

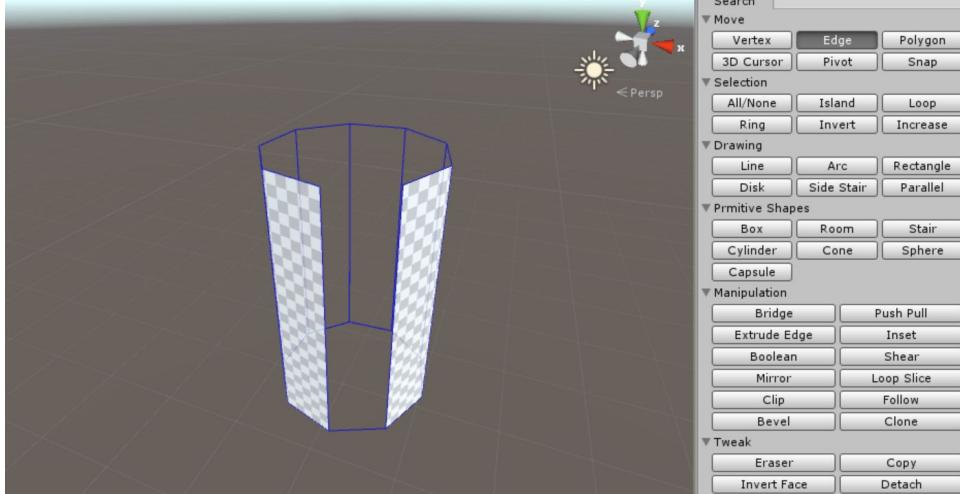
LMB Drag	Draws a disk to create a capsule
SPACE	Completes creating a capsule
ESC	Cancels creating a capsule

Properties

Segment	The count of side faces
Radius	A radius of a cone
Height	A height of a cone
Angle Snap	When you drag the mouse with this property on, the capsule's forward direction will snap to every 90 degree.
Border Test	If this is enabled, the ray cast will run and it checks if the created capsule is beyond the other polygons.
Glue	This property in Capsule tool isn't used.

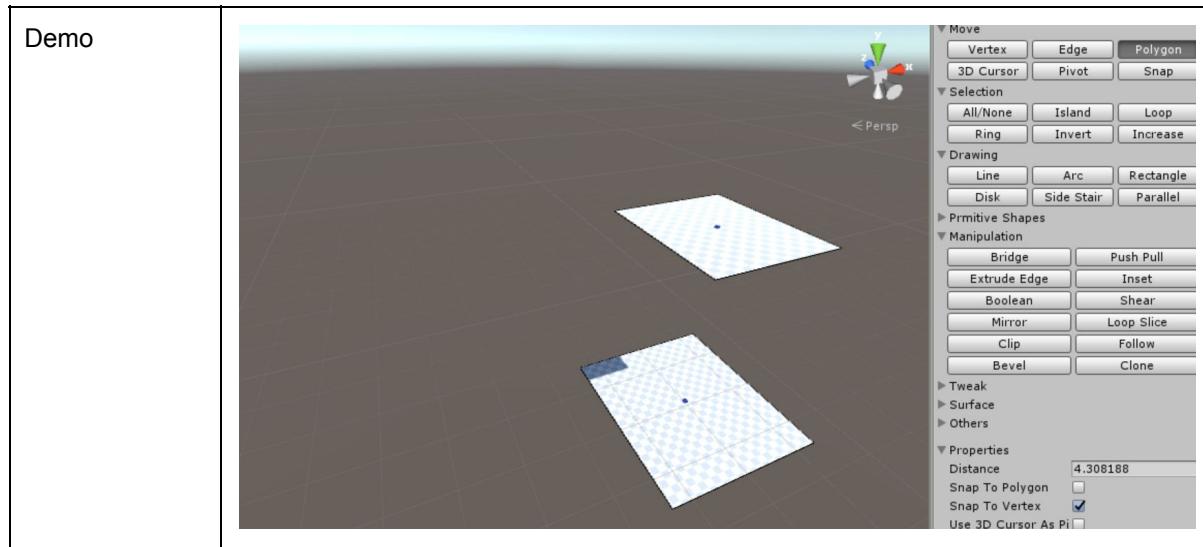
Manipulation

Bridge - Fill

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	A series of vertices should be selected. A series of edges should be selected. Two edges should be selected.
Desc	Fills space surrounded by the selected elements with a polygon.
Steps	<ol style="list-style-type: none"> 1. Select vertices/edges using Vertex tool or Edge tool. 2. Select Bridge tool.
Demo	

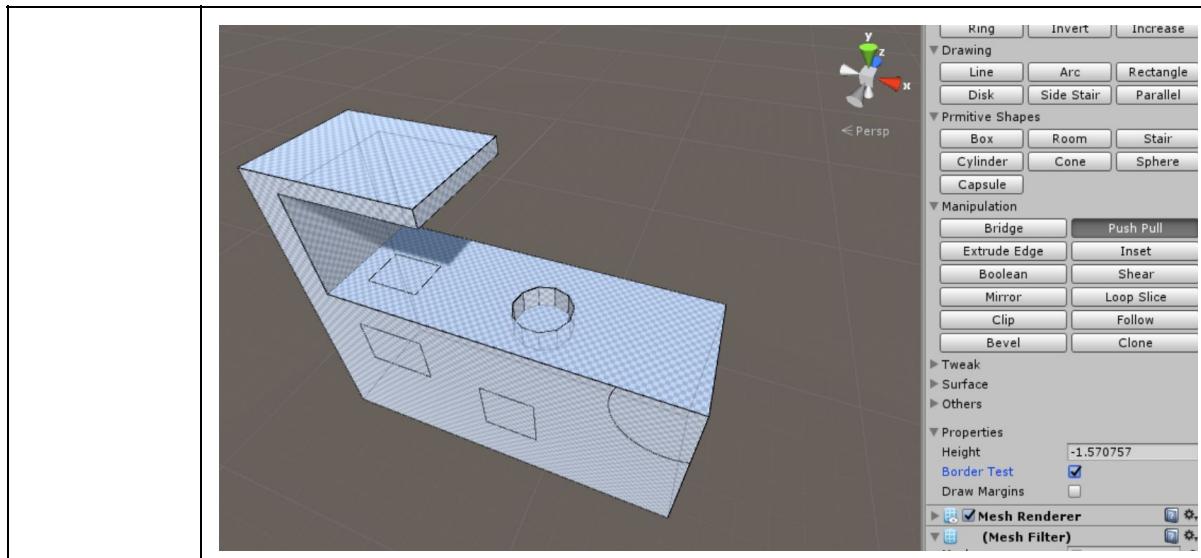
Bridge

Mode	Immediate
Required Ver	Pro1.0
Condition	Several polygons should be selected.
Desc	Bridges gaps between the selected polygons. The edge counts of the polygons don't need to be same.
Steps	<ol style="list-style-type: none"> 1. Select several polygons using Polygon tool. 2. Select Bridge tool.



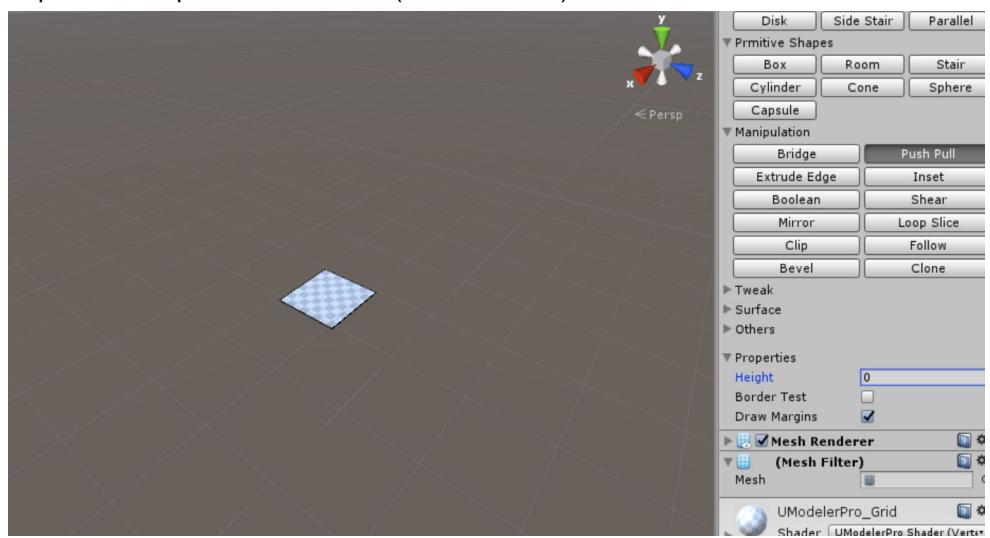
Push/Pull - 1 (Single Push Pull)

Mode	Edit
Required Ver	Pro1.0, Basic1.0
Condition	No polygon is selected.
Desc	You can extrude a polygon in a normal direction of the polygon and cutting a 3d shape is possible with this.
Steps	<ol style="list-style-type: none"> 1. Go to Push Pull tool with no selection 2. Move the mouse cursor to a polygon you want to extrude 3. Start to drag from the polygon in a normal direction of the polygon. 4. Release LMB when you finish the extrusion. 5. If you need the precise height, fill Height field out in Properties. 6. Press SPACE to complete the upper extrusion or Press ESC to cancel it.
Demo.1	<p>Basic behaviour and Draw Margins property</p>
Demo.2	<p>Border Test property</p>



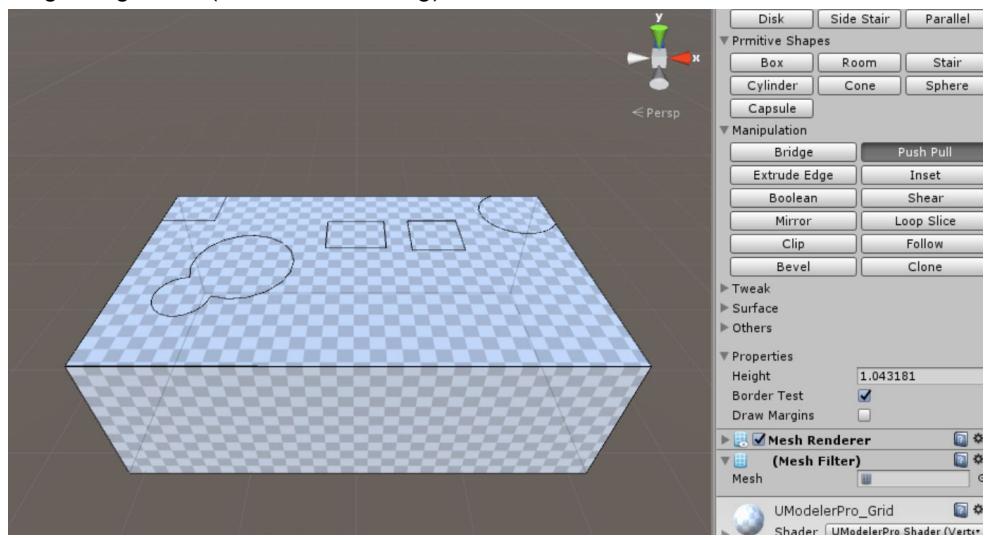
Demo.3

Duplicates the previous extrusion (SHIFT + LMB)



Demo.4

Height Alignment (CTRL + LMB Drag)



Interface

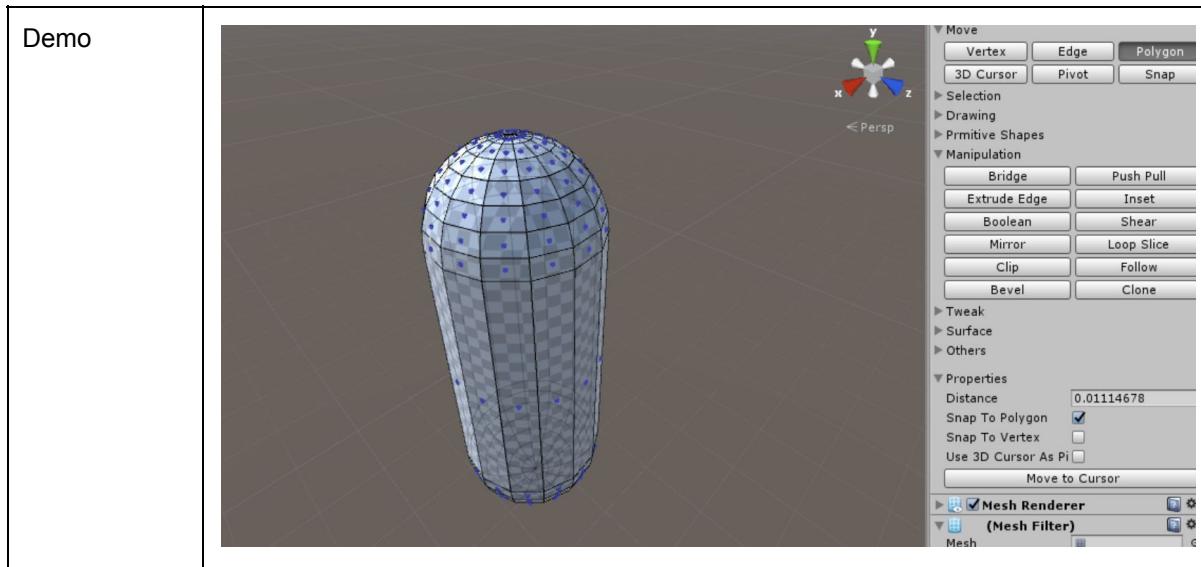
LMB Drag	Pushes or pulls a polygon in a normal direction of the polygon.
CTRL + LMB Drag	Pushes or pulls a polygon at a time so that its height will be aligned to the other parallel polygon where the mouse points.
SHIFT + LMB	Repeats the previous extrusion to double the size of the extrusion or create a separate but identical extrusion.
SPACE	Confirms Push Pull .
ESC	Cancels Push Pull or exit Push Pull .

Properties

Height	Precise height. * You can type the height between after push/pull and before confirming or cancelling.
Border Test	If this is enabled, the ray cast will run and it checks if the new created polygons while pushing or pulling will be beyond the other polygons. This can be used to cut a 3d shape, too..
Draw Margins	Leaves edges of the extruded polygon at a starting point after Push Pull .

Push/Pull - 2 (Multiple Push Pull)

Mode	Edit
Required Ver	Pro1.0
Condition	Polygon(s) is(are) selected
Desc	Multiple polygons are pushed or pulled along a helper line
Steps	<ol style="list-style-type: none"> 1. Go to Push Pull tool with some polygons selected. 2. Click LMB on any point on the helper line. 3. Drag the mouse along the line. 4. If necessary, adjust Distance property.



Interface

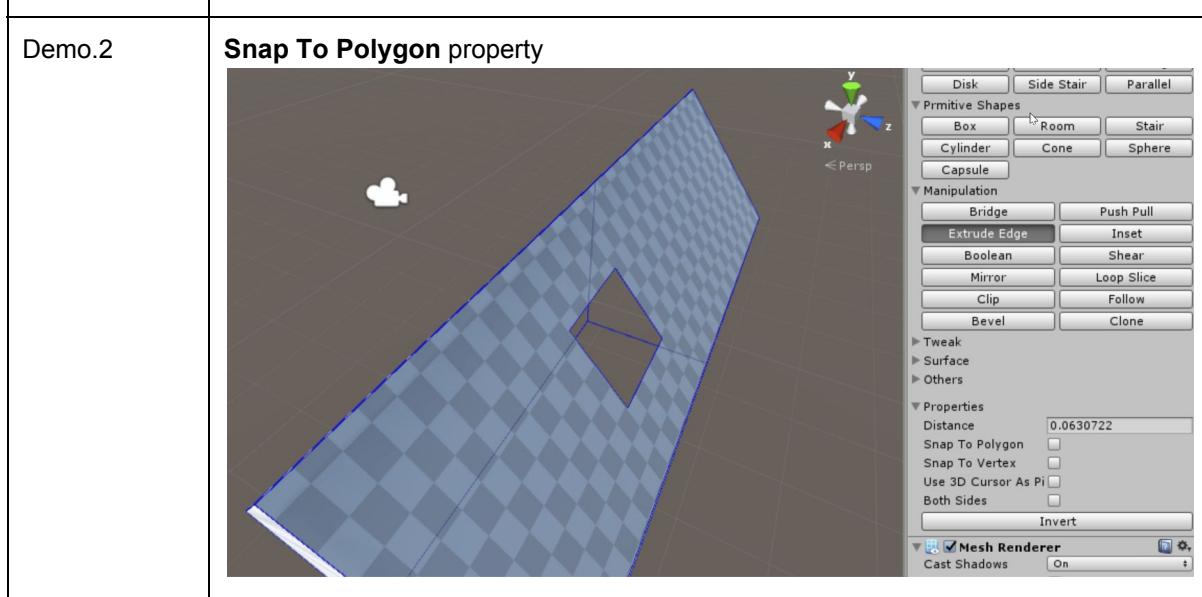
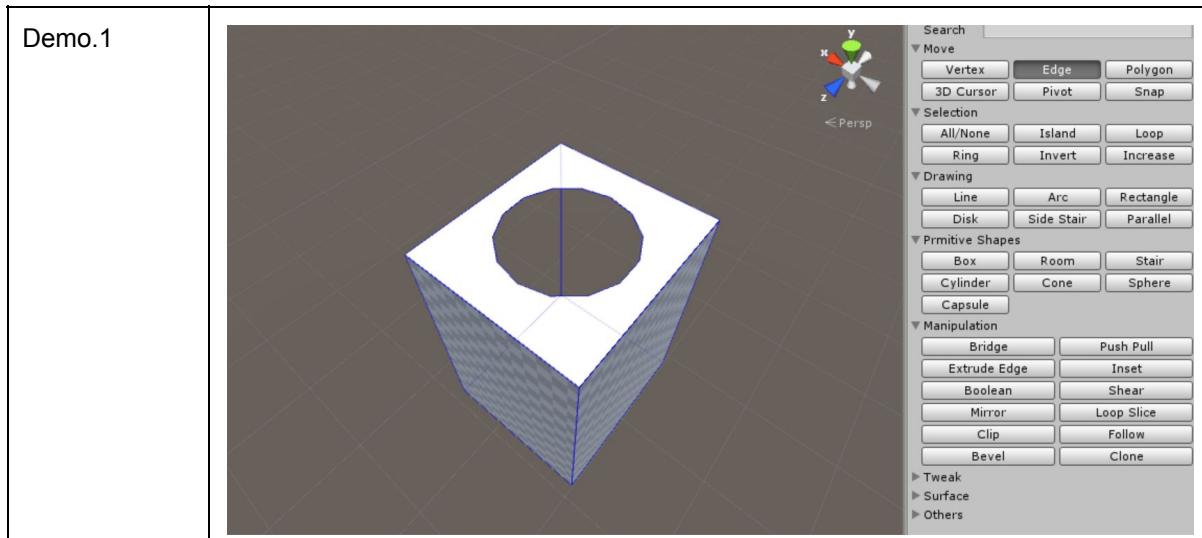
LMB Drag	It should start on a helper line and the mouse should be dragged along the helper line.
ESC	Exits to go to Single Push Pull .

Properties

Distance	How long the selected polygons are extruded
Pushpull Type	<ul style="list-style-type: none"> 1. Individual : The selected polygons are extruded in each direction of the polygons. 2. Average Normal :The selected polygons are extruded in the average direction of them. 3. X : The selected polygons are extruded in X-axis direction. 4. Y : The selected polygons are extruded in Y-axis direction. 5. Z : The selected polygons are extruded in Z-axis direction.
Draw Margins	Leaves edges of the extruded polygons at starting points after Push Pull

Extrude Edge

Mode	Edit
Required Ver	Pro1.0
Condition	Edges are selected or no selection is needed.
Desc	Fills gaps between the original edges and the corresponding transformed edges with polygons.
Steps	<ol style="list-style-type: none"> 1. Select Extrude Edge tool. 2. Select several edges. 3. Move the translation gizmo by dragging to create polygons between the first edges and the new edges.

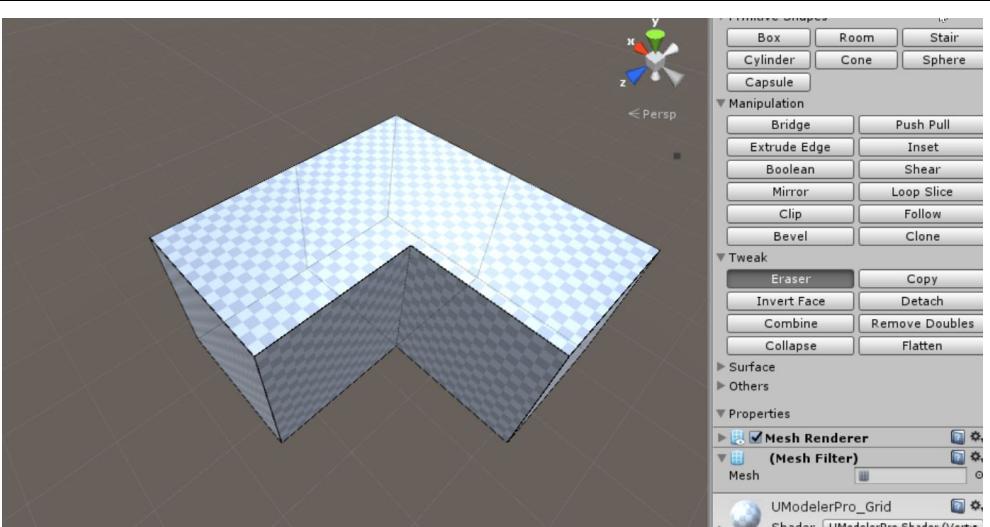
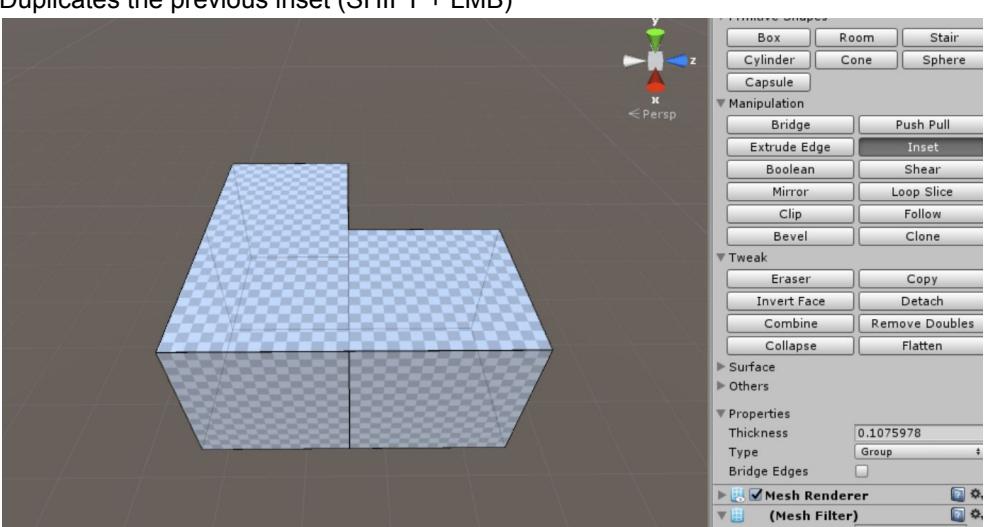


Properties

Distance	The extruded distance.
Snap to Polygon	An edge is snapped to a close polygon within a specific distance.
Snap to Vertex	Unused.
Use 3D Cursor as Pivot	Unused.
Both Sides	Creates both sided polygons.
Invert	Flips the last created polygons.

Inset - 1 (Single Inset)

Mode	Edit
Required Ver	Pro1.0, Basic1.0

Condition	No elements are selected.
Desc	This tool creates a slightly smaller or bigger polygon of the selected one.
Steps	<ol style="list-style-type: none"> 1. Select Inset tool with no selection. 2. Click the polygon you want to apply Inset to. 3. Drag the cursor to define thickness. 4. Release LMB 5. Adjust Thickness properties if necessary 6. Press SPACE or start another inset action to confirm.
Demo.1	
Demo.2	<p>Duplicates the previous inset (SHIFT + LMB)</p> 

Interface

LMB Drag	Creates an inset of the selected polygon.
SHIFT + LMB	Duplicates the previous inset.
SPACE	Confirms the current inset.
ESC	Cancels the current inset or exit Inset tool .

Properties

Thickness	How smaller or bigger the polygon is. This is a distance between the closest edge from the starting point and the current point.
Type	This is available for Multiple Inset .
Bridge Edges	Links corresponding edges between the original polygon and the inset polygon.

Inset - 2 (Multiple Inset)

Mode	Edit
Required Ver	Pro1.0
Condition	Some polygons should be selected.
Desc	You can apply inset to several polygons at the same time.
Steps	<ol style="list-style-type: none"> Select Inset tool with some polygons selected using Polygon tool. Start to drag the mouse from a polygon. If necessary, adjust Thickness property in Properties to give the precise value. Press SPACE to complete or Press ESC to cancel.
Demo	

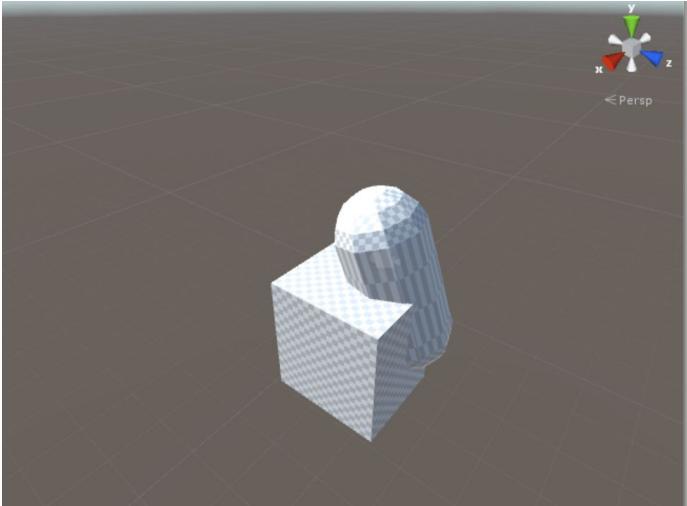
Interface

LMB Drag	Creates an inset of the selected polygon.
SHIFT + LMB	Duplicates the previous inset.
SPACE	Confirms the current inset.
ESC	Cancels the current inset or exit Inset tool .

Properties

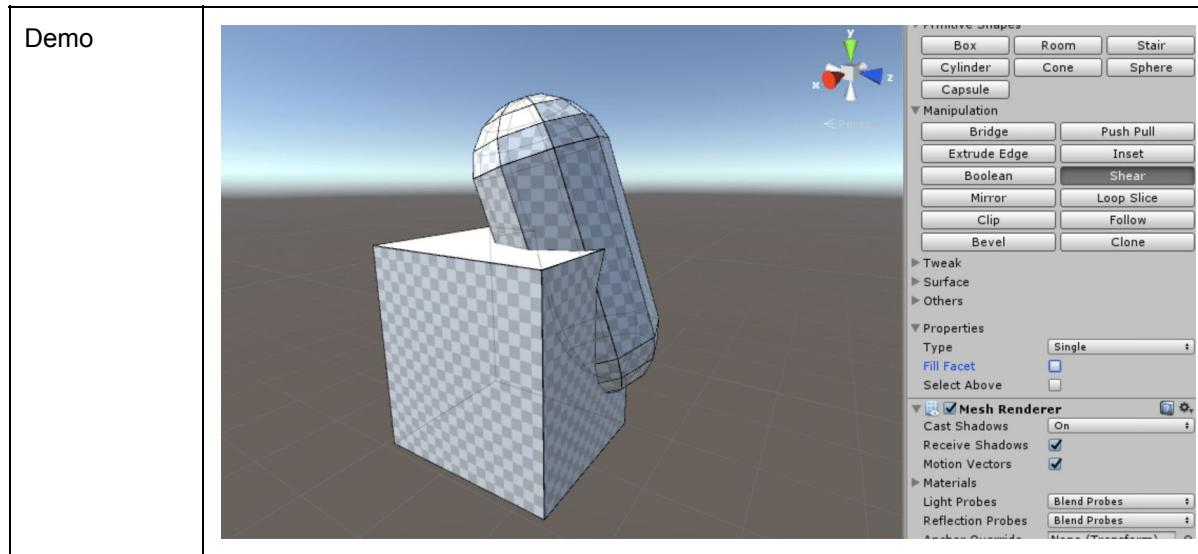
Thickness	How smaller or bigger the polygon is. This is a distance between the closest edge from the starting point and the current point.
Type	Individual - With this option each selected polygon can be inset on its own. Group - The Inset tool operates on the region around selected polygons
Bridge Edges	Links corresponding edges between the original polygon and the inset polygon.

Boolean

Mode	Edit
Required Ver	Pro1.0
Condition	Two game objects with UModeler components should be selected.
Desc	This tool creates a single game object out of two game objects by apply one of the three boolean operations.
Steps	<ol style="list-style-type: none"> 1. Select two game objects with UModeler component. 2. Select Boolean tool 3. Choose one of Union, Subtract and Intersection in the inspector.
Demo	

Shear

Mode	Edit
Required Ver	Pro1.0
Desc	Cuts a mesh into two along a custom plane.
Steps	<ol style="list-style-type: none"> 1. Select Shear tool 2. Rotates the custom plane by LMB dragging to cut a mesh.



Interface

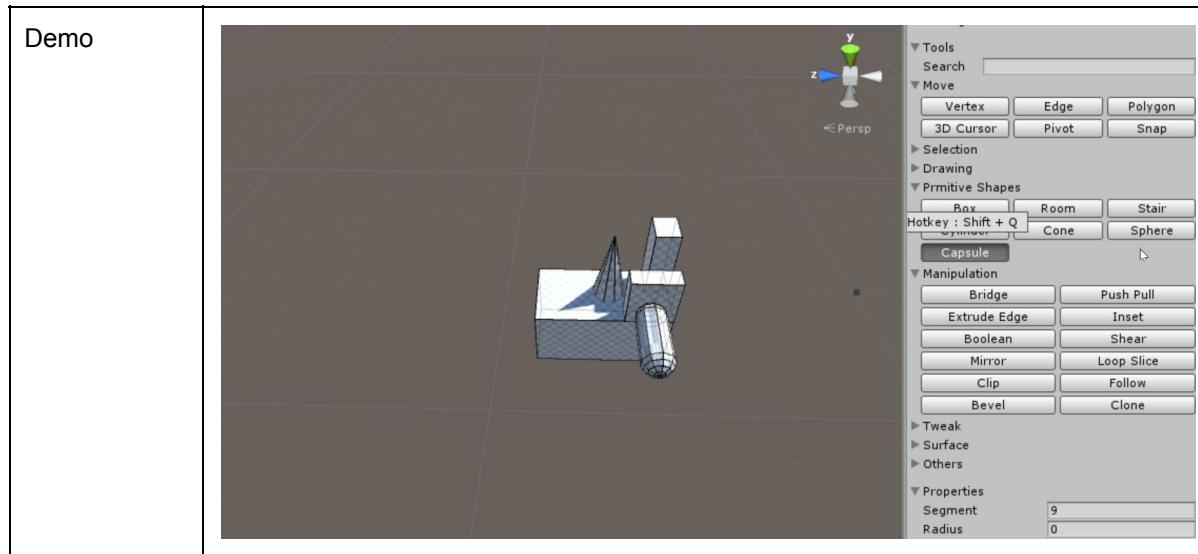
LMB + Drag	Rotates the custom plane.
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Properties

Type	Single - Removes the polygons below the custom plane. Both - Simply cuts a mesh and leaves all polygons.
Fill Facet	Fills facets with polygons.
Select Above	After cut a mesh, selects all polygons above the custom plane.

Mirror

Mode	Edit
Required Ver	Pro1.0
Desc	Mirrors a mesh along its local X, Y or Z Axes. When the mirror mode is enabled, every change will be reflected to the other side each time the mesh is modified.
Steps.1	To start the mirror mode. 1. Select Mirror tool . 2. Adjust Axis , Distance and Invert properties to set the plane mirror. 3. Click on Start button .
Steps.2	To finish the mirror mode. 1. Select Mirror tool . 2. If you want to leave a boundary between the original part and the mirrored part, check Leave Boundary property.

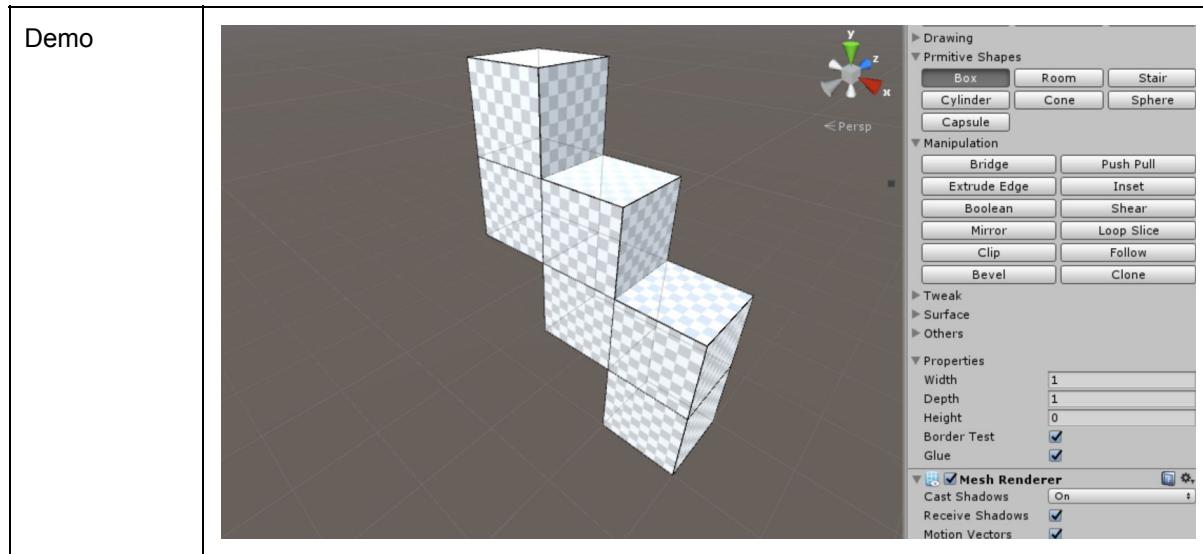


Properties

Axis	Plane mirror axis
Invert	Inverts the direction of the plane mirror.
Distance	The distance of the plane mirror
Leave Boundary	Leaves a boundary after finishing the mirror mode.
Start	Starts the mirror mode.
Done	Finishes the mirror mode.

Loop Slice

Mode	Edit
Required Ver	Pro1.0
Desc	This tool splits a loop of polygons inserting new edge loops intersecting the chosen edge.
Steps	<ol style="list-style-type: none"> 1. Select Loop Slice tool. 2. Choose the initial loop location by moving the mouse cursor on a mesh. 3. Scroll the wheel of the mouse to increase or decrease the number of edge loops. 4. Drag the mouse to changes the offset of the edge loops. 5. Release LMB to finish.



Interface

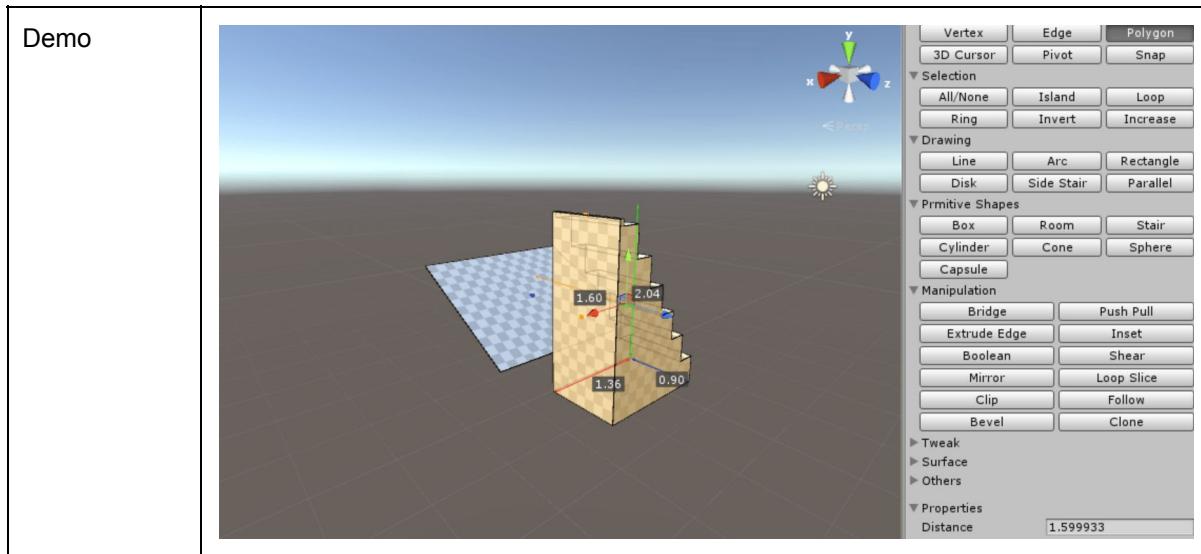
LMB + Drag	Moves the edge loops.
Scroll Wheel	Increases or decreases the number of edge loop.

Properties

Split Number	The number of the edge loop.
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Clip

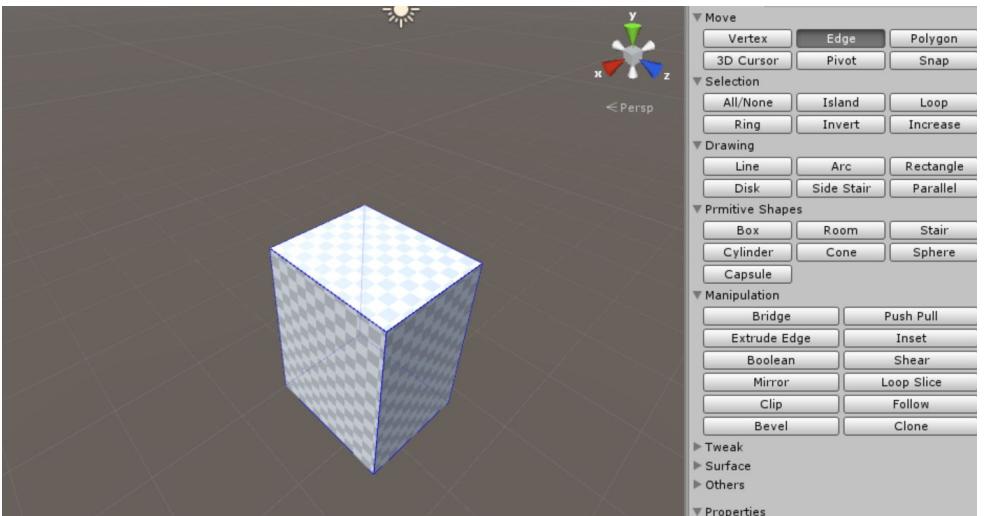
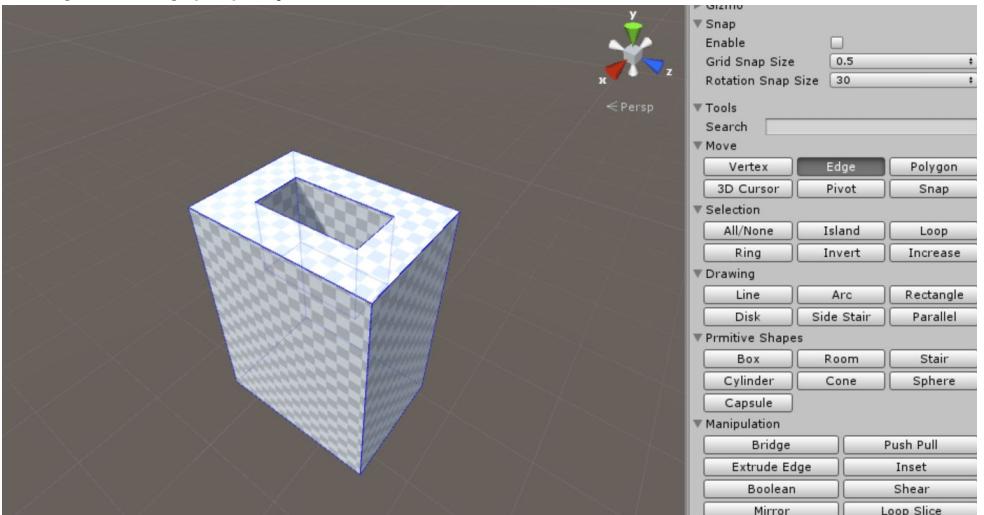
Mode	Edit
Required Ver	Pro1.0
Condition	Some polygons should be selected.
Desc	Cuts away the selected polygons below the specific polygon's plane.
Steps	<ol style="list-style-type: none"> 1. Select polygons you want to clip. 2. Select Clip tool. 3. Click on the polygon which will be used for a clipping plane.



Follow

Mode	Edit
Required Ver	Pro1.0
Condition	Two polygons are necessary. One of them is a profile polygon and the other one is a path polygon.
Desc	Extrudes the profile polygon along the path polygon.
Steps	<ol style="list-style-type: none"> 1. Draw a profile of the polygon you want to follow the path. 2. Move the profile polygon near the starting point of a polygon, called the path polygon. Snap tool will be able to help to do this. 3. Select the profile polygon. 4. Select the path polygon. 5. Click on Follow tool.
Demo	

Bevel

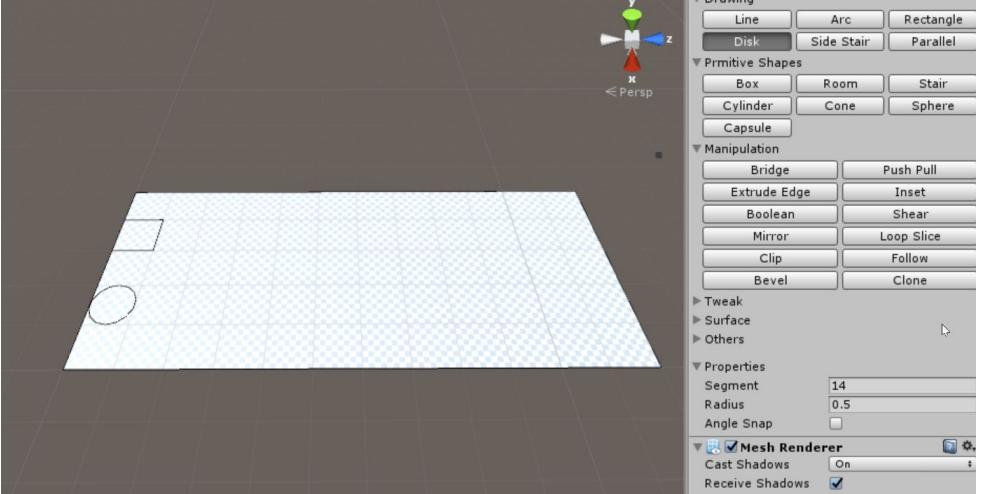
Mode	Edit
Required Ver	Pro1.0
Condition	Vertex(s), edge(s), or polygon(s) should be selected.
Desc	You can create chamfered or rounded corners of geometry.
Steps	<ol style="list-style-type: none"> Select Vertex(s), edge(s) or polygon(s) with Vertex tool, Edge tool, or Polygon tool. Adjust the width, the number of segments or the profile value in Properties.
Demo.1	
Demo.2	<p>Clamp Overlap property</p> 

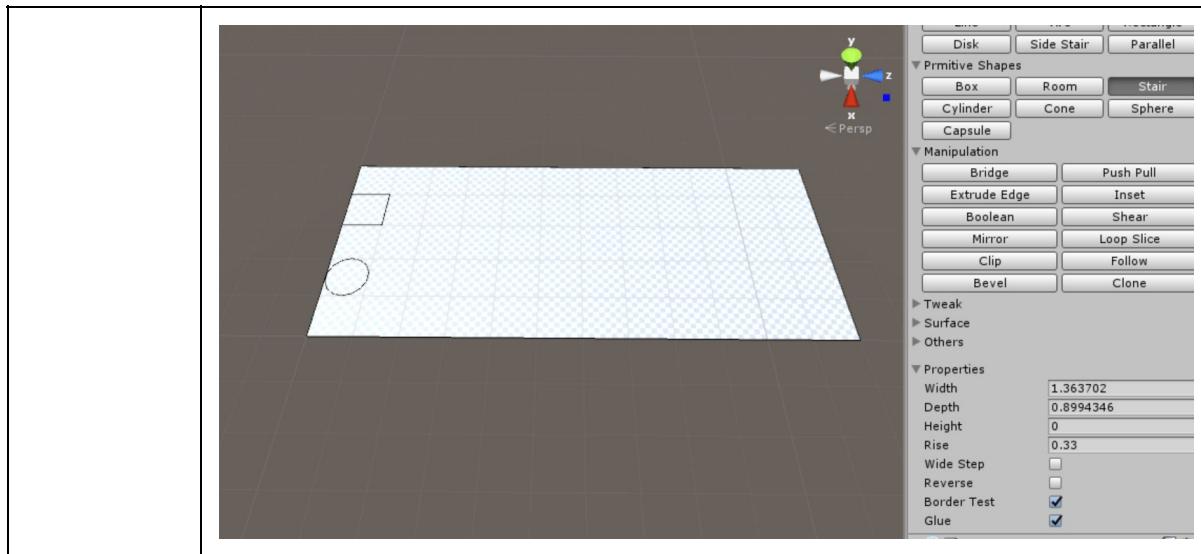
Properties

Width	The width of the bevel polygon.
Segments	The number of segments. The greater the number of segments, the smoother the bevel.

Profile	The side view of the bevel edge. This is between 0 and 1. 0.5 is completely flat. Values less than that gives concave bevel and values more than that gives convex bevel.
Clamp Overlap	When selected, the bevel amount isn't allowed to go larger than an amount that causes overlapping collisions with other geometry.

Clone

Mode	Edit
Required Ver	Pro1.0
Desc	Clones the selected polygon to make several the same polygon along the line.
Steps	<ol style="list-style-type: none"> Enters Clone tool. Points a polygon you want to clone by putting the mouse cursor on it. Drags the mouse to draw a line. You can make sure that the cloned polygons will be aligned with the line. Adjusts the number of clones, the distance of the line and the arrangement type in Properties.
Demo.1	<p>Divide type</p>  <p>The screenshot shows a 3D modeling environment with a perspective view of a mesh. A line is drawn across the mesh, indicating the division path. The right side of the screen features a toolbar with buttons for 'Drawing' (Line, Arc, Rectangle, Disk, Side Stair, Parallel), 'Primitive Shapes' (Box, Room, Stair, Cylinder, Cone, Sphere, Capsule), and 'Manipulation' (Bridge, Push Pull, Extrude Edge, Inset, Boolean, Shear, Mirror, Loop Slice, Clip, Follow, Bevel, Clone). Below these are sections for 'Tweak', 'Surface', 'Others', and 'Properties'. The 'Properties' section includes settings for 'Segment' (14), 'Radius' (0.5), and 'Angle Snap'. At the bottom, there's a 'Mesh Renderer' section with checkboxes for 'Cast Shadows' (On), 'Receive Shadows' (checked), and 'Motion Vectors' (checked).</p>
Demo.2	<p>Multiply type</p>



Interface

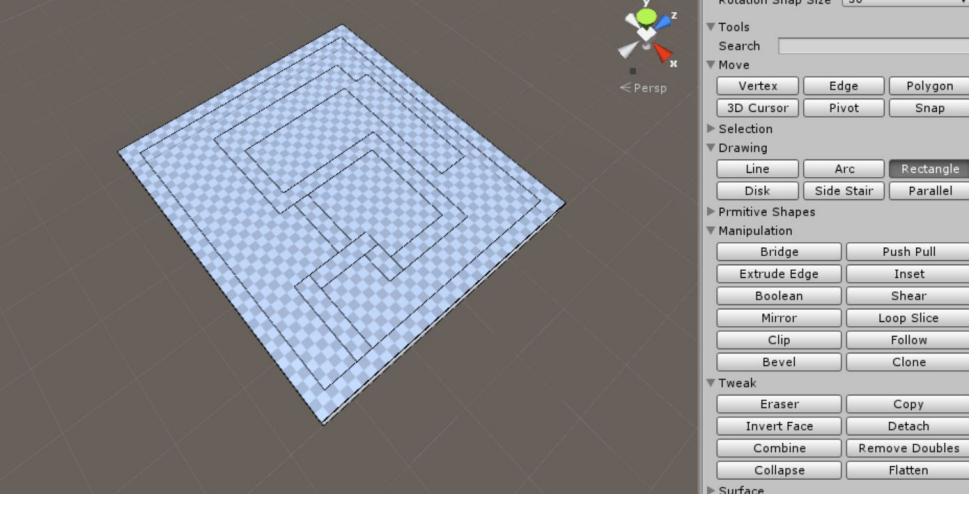
LMB + Drag	Draws an edge where the clones will be placed.
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Properties

Number	The number of clones
Distance	The distance of an edge where the clones will be placed.
Arrangement	<p>Divide - Creates clones arranged evenly between the starting point and the end point of the edge.</p> <p>Multiply - Makes clones along the edge. The distance between the clones is the value of Distance property in Properties.</p>

Tweak

Eraser - 1 (One by one)

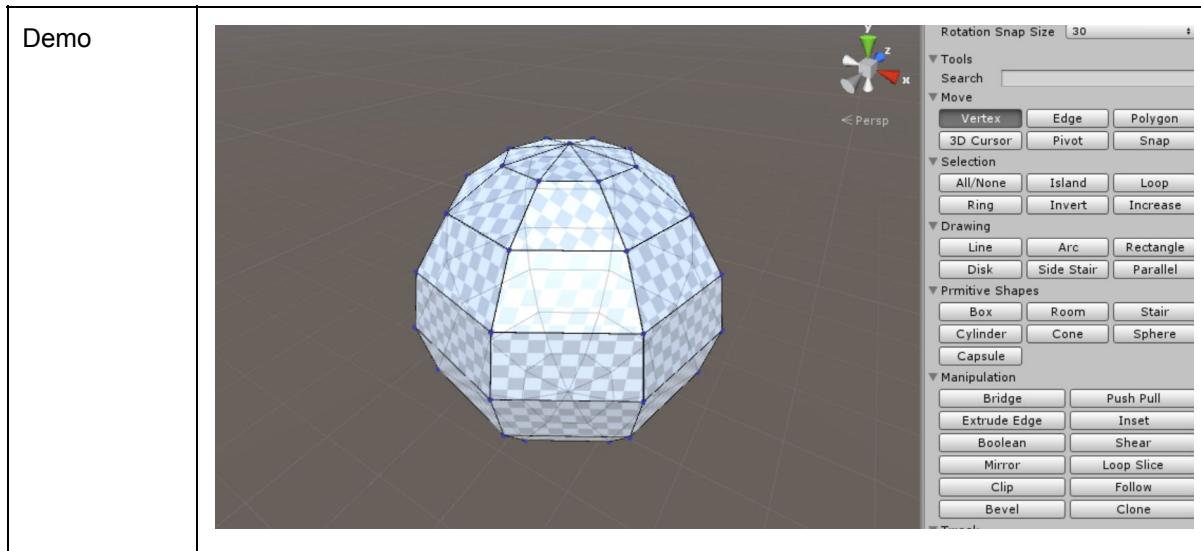
Mode	Edit
Required Ver	Pro1.0, Basic1.0
Condition	No elements are selected
Desc	You can remove edges by moving the mouse cursor to an edge and clicking LMB on it.
Steps	<ol style="list-style-type: none"> 1. Select Eraser tool with no selected elements. 2. Move the mouse to an edge which you want to remove. 3. Click LMB to remove it.
Demo	

Interface

LMB	Erases an edge under the mouse cursor.
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Eraser - 2 (Vertex)

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Vertex(s) is(are) selected
Desc	Polygon sharing the each selected vertex are removed immediately.
Steps	<ol style="list-style-type: none"> 1. Select a vertex or vertices using Vertex tool 2. Select Eraser tool.

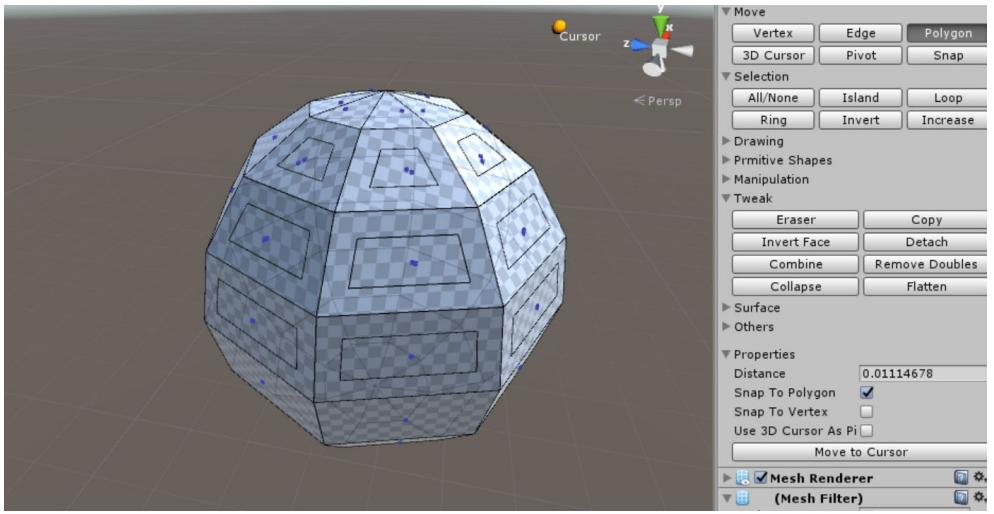


Eraser - 3 (Edge)

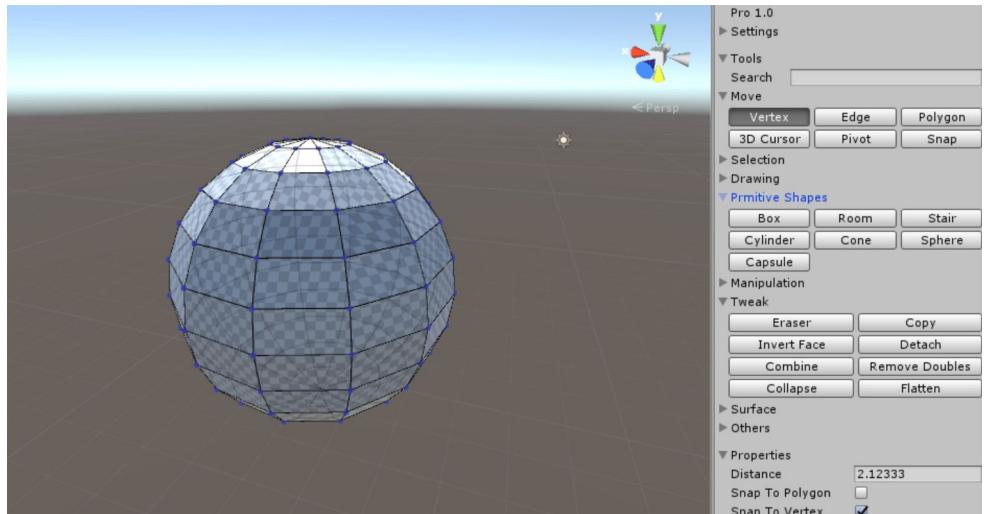
Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Edge(s) is(are) selected.
Desc	If two polygons sharing the each edge are adjacent and parallel, just the edge is removed so that the two polygons are merged immediately. If the polygons are not parallel, they are deleted instantly.
Steps	<ol style="list-style-type: none"> 1. Select an edge or edges using Edge tool 2. Select Eraser tool.
Demo	

Eraser - 4 (Polygon)

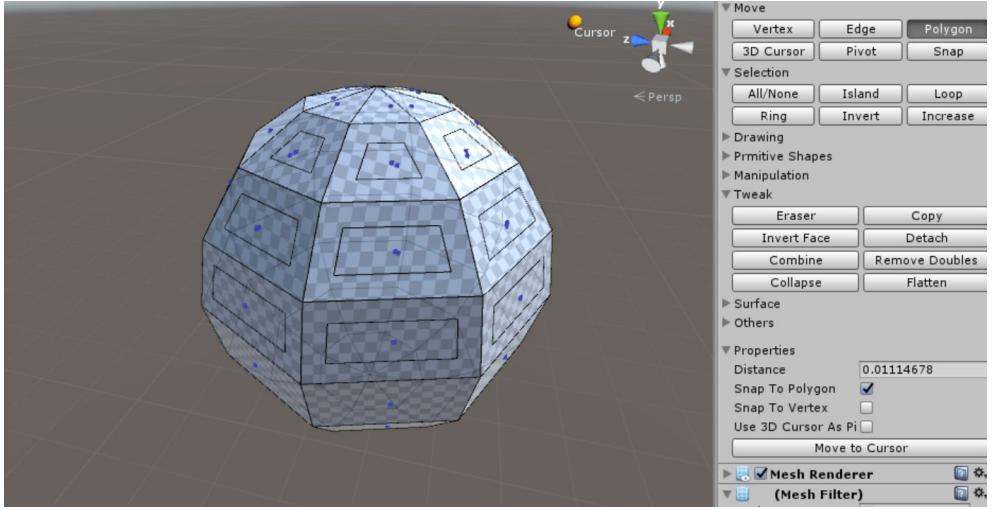
Mode	Immediate
Required Ver	Pro1.0, Basic1.0

Condition	Polygon(s) is(are) selected.
Desc	The selected polygons are removed immediately
Steps	<ol style="list-style-type: none"> Select a polygon or polygons using Polygon tool Select Eraser tool
Demo	

Copy

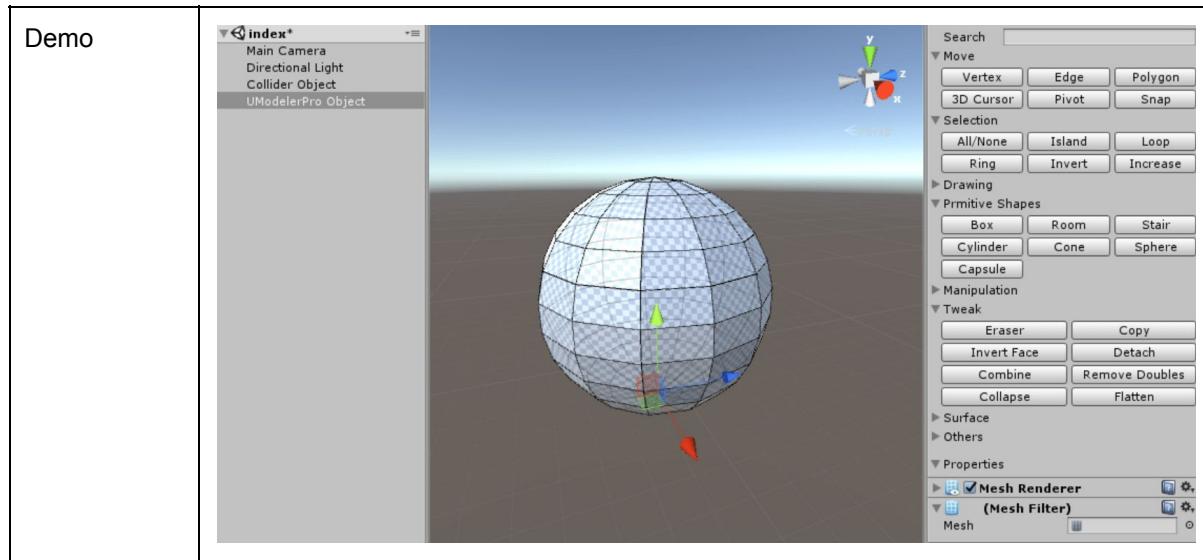
Mode	Immediate
Required Ver	Pro1.0
Condition	Some vertices, edges or polygons should be selected.
Desc	The selected polygons will be copied. The copied polygons will have the pink center cubes. This means that the copied polygon can be moved separately by dragging the gizmo.
Steps	<ol style="list-style-type: none"> Select some polygons with Polygon tool. Select Copy tool.
Demo	

Invert Face

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Polygon(s) is(are) selected.
Desc	Polygons are flipped as soon as selecting Invert Face tool .
Steps	<ol style="list-style-type: none"> Select a polygon or polygons using Polygon tool. Select Invert Face tool.
Demo	

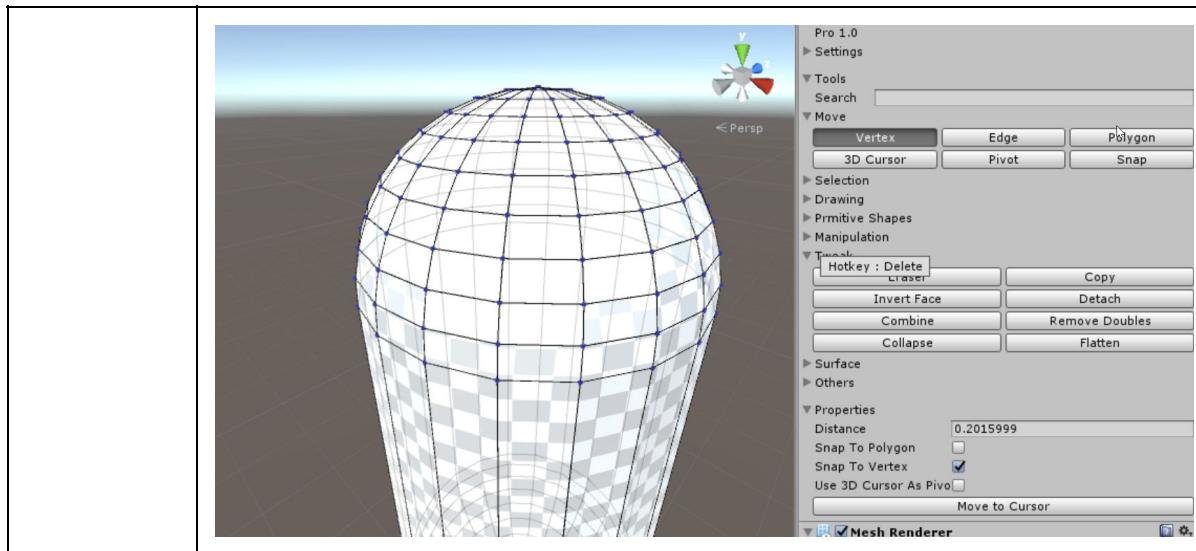
Detach

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Vertex(s), Edge(s) or Polygon(s) are selected.
Desc	You can detach the selected polygons from the current game object to get them into the new game object.
Steps	<ol style="list-style-type: none"> Select vertex(s), edge(s) or polygon(s) using Vertex tool or Edge tool or Polygon tool Select Detach tool



Combine - 1 (Combines several vertices)

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Several vertices or edges should be selected.
Desc	Merges all selected vertices in one unique one. You can choose the location of the surviving vertex before executing this tool.
Steps	<ol style="list-style-type: none"> 1. Select Combine tool without selected elements. 2. Make sure that Vertex Combine Type and Collapse properties are set as you want. 3. Select several vertices or edges with Vertex tool or Edge tool. 4. Select Combine tool.
Demo.1	<p>Vertex Combine Type property</p>
Demo.2	<p>Collapse property</p>

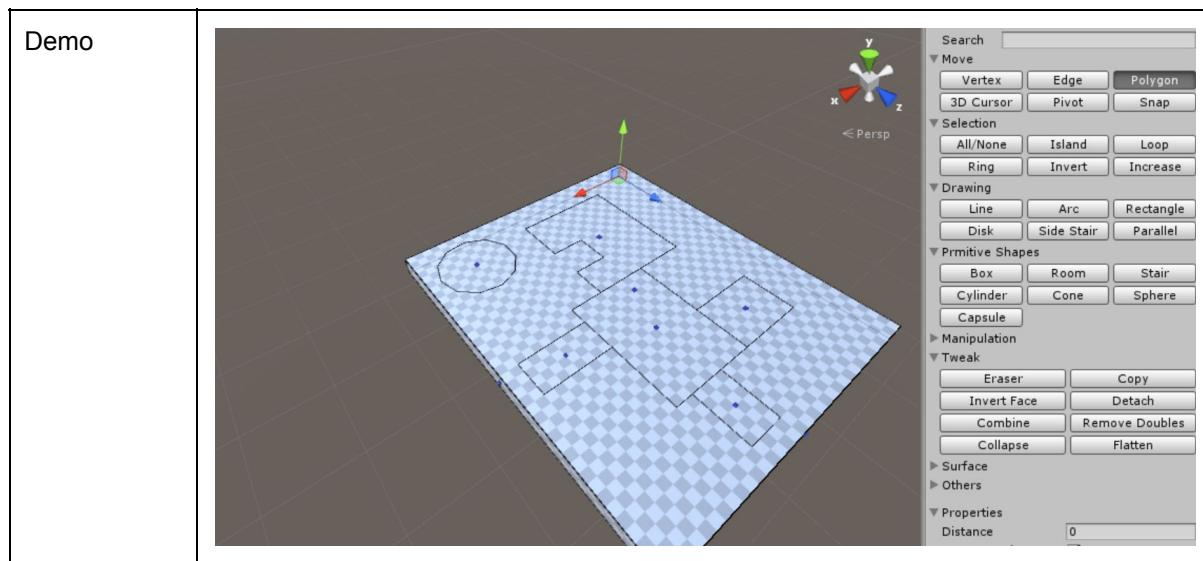


Properties

Vertex Combine Type	First - Places the remaining vertex at the location of the first one selected. Last - Places the remaining vertex at the location of the last one selected. Center - Places the remaining vertex at the center of the selected vertices.
Collapse	It may let alive more than one vertex. In fact, you will have as many remaining vertices as you had islands of selection (i.e. groups of linked selected vertices). The remaining vertices will be positioned at the center of their respective islands.

Combine - 2 (Combines polygons)

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Polygons should be selected.
Desc	Using this tool, adjacent and coplanar polygons can be combined
Steps	<ol style="list-style-type: none"> 1. Select polygons using Polygon tool 2. Select Combine tool



Combine - 3 (Combines game objects with UModeler Component)

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Game objects with UModeler component are selected.
Desc	Several game objects with UModeler component will be combined to be one game object.
Steps	<ol style="list-style-type: none"> 1. Select game objects with UModeler component. 2. Select Combine tool.
Demo	

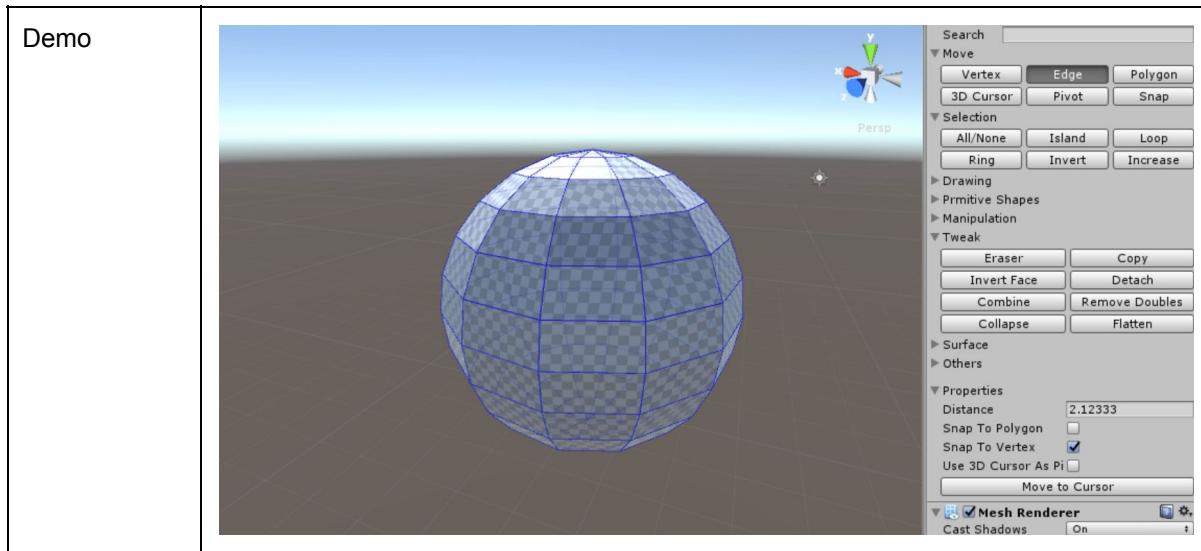
Remove Doubles

Mode	Immediate
Required Ver	Pro1.0

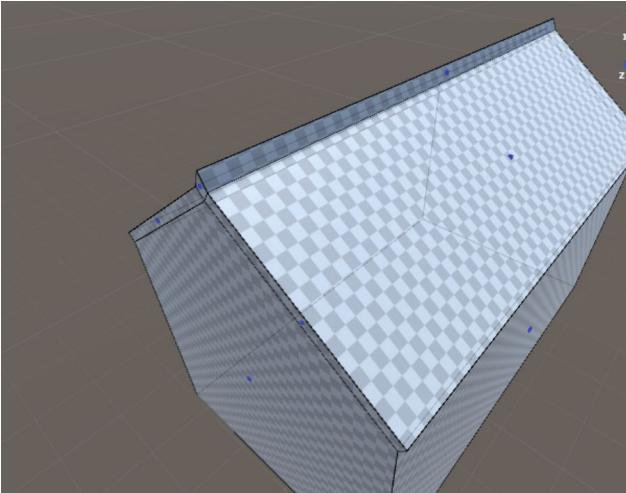
Condition	Several vertices should be selected.
Desc	Lets you merge automatically all the selected vertices within the specific distance.
Steps	<ol style="list-style-type: none"> 1. Select several vertices, edges or polygons with Vertex tool, Edge tool, or Polygon tool. 2. Select Remove Doubles tool. 3. Adjust Distance property in Properties.
Demo	

Collapse

Mode	Immediate
Required Ver	Pro1.0
Condition	Several vertices or edges should be selected.
Desc	Merges each edge island or vertex island into one vertex. This makes as many remaining vertices as you had islands of selection. (i.e. groups of linked selected vertices).
Steps	<ol style="list-style-type: none"> 1. Select several vertices or edges with Vertex tool or Edge tool. 2. Select Collapse tool.



Flatten

Mode	Immediate
Required Ver	Pro1.0
Condition	Some polygons should be selected.
Desc	Flattens the selected polygons so that all polygons will be aligned with the last polygon's plane.
Steps	<ol style="list-style-type: none"> 1. Select Flatten tool with no selections. 2. Choose one of Up, Right, Forward and Last polygon as a projection direction. 3. Select several polygons with Polygon tool. 4. Select Flatten tool.
Demo	 <div style="float: right; width: 300px; height: 150px; background-color: #f0f0f0; padding: 5px;"> <p>Search <input type="text"/></p> <p>Move</p> <p>Vertex Edge Polygon 3D Cursor Pivot Snap</p> <p>Selection</p> <p>Up Right Forward Last polygon</p> <p>Drawing</p> <p>Primitive Shapes</p> <p>Manipulation</p> <p>Tweak</p> <p>Eraser Copy Invert Face Detach Combine Remove Doubles Collapse Flatten</p> <p>Surface</p> <p>Others</p> <p>Properties</p> <p>Distance: 0.1656814 Snap To Polygon: <input type="checkbox"/> Snap To Vertex: <input checked="" type="checkbox"/> Use 3D Cursor As Pi: <input type="checkbox"/></p> <p>Move to Cursor</p> <p>Mesh Renderer <input checked="" type="checkbox"/> Cast Shadows: On Receive Shadows: <input checked="" type="checkbox"/> Motion Vectors: <input checked="" type="checkbox"/></p> </div>

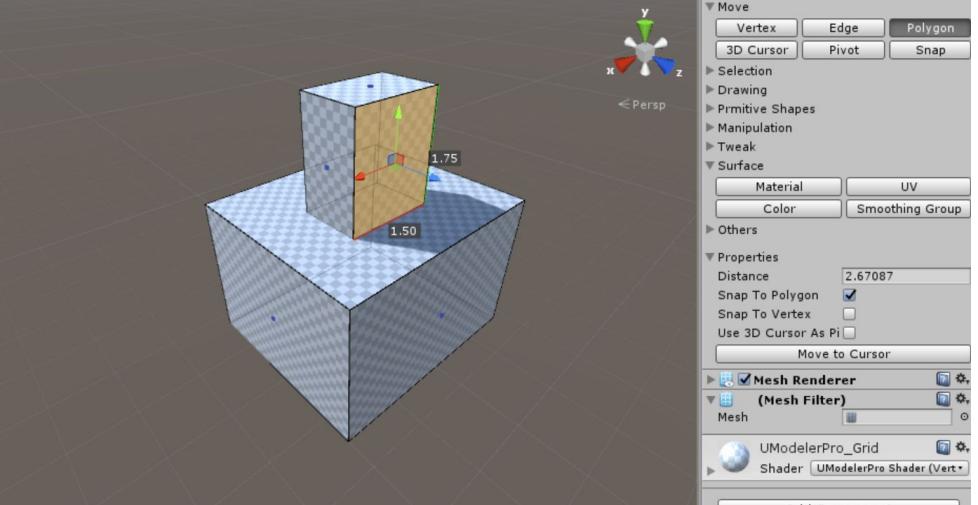
Properties

Projection Dir	Projection direction. Up - Y direction
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	<p>Right - X direction Forward - Z direction Last Polygon - the normal direction of the last selected polygon.</p>
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Surface

Material

Mode	Edit
Required Ver	Pro1.0, Basic1.0
Condition	Polygons are selected or no polygons are selected.
Desc	This tool helps you in assigning materials to each polygon.
Steps.1	<ol style="list-style-type: none"> Select Material tool without selected polygons. Select polygons where you want to assign a material. If Materials doesn't have a material you want, add a new material by clicking Add Material button and opening the material box and selecting a material. Or you can pick Mat ID by clicking LMB on a polygon. Make sure that Mat ID is the id which you want to use. Click LMB holding SHIFT on polygons to which you want to assign the Mat ID.
Steps.2	<ol style="list-style-type: none"> Select polygons using Polygon tool Select Material tool If Materials doesn't have a material you want, add a new material by clicking Add Material button and opening the material box and selecting a material. Or you can pick Mat ID by clicking LMB on a polygon. Make sure that Mat ID is the id which you want to use. Click LMB holding SHIFT on polygons to which you want to assign the Mat ID.
Demo	

Interface

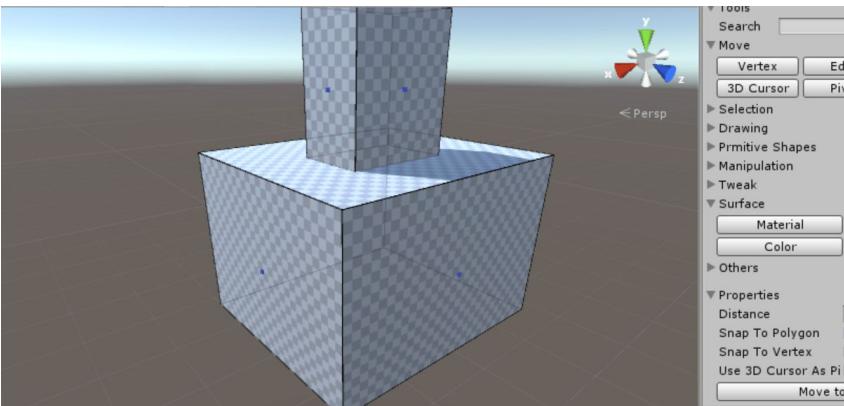
LMB	Selects a polygon and get a material id from the polygon.
SHIFT + LMB	Assigns Mat ID to a polygon where the mouse cursor points.

LMB Drag Selects polygons in a rectangle drawn by dragging.

Properties

Mat ID	The current material ID. This is the index of the Material array below.
Apply	Assigns the Mat ID to the selected polygons.
Select	Selects polygons having the Mat ID.
Add Material	Adds a new material to the Material array below.
Materials	Material array

UV

Mode	Edit
Required Ver	Pro1.0, Basic1.0
Conditions	Polygons are selected or no polygons are selected.
Desc	UV parameters such as SHIFT , Scale and Rotation are assigned using UV tool .
Steps 1.	<ol style="list-style-type: none"> 1. Select polygons with Polygon tool 2. Select UV tool. 3. Adjust SHIFT, Scale and Rotation properties in Properties.
Steps 2.	<ol style="list-style-type: none"> 1. Select UV tool. 2. Select polygons like you did in Polygon tool. 3. Adjust SHIFT, Scale and Rotation properties in Properties.
Demo	 <p>The screenshot shows a 3D scene in a software interface. A cube and a central pillar are selected. The UV tool panel is open on the right, displaying options for Move, Selection, Drawing, Primitive Shapes, Manipulation, Tweak, Surface, Material, UV, Color, Smoothing Group, and Others. Under Properties, Distance is set to 2.67087, and Snap To Polygon is checked. The Mesh Renderer section is also visible.</p>

Interface

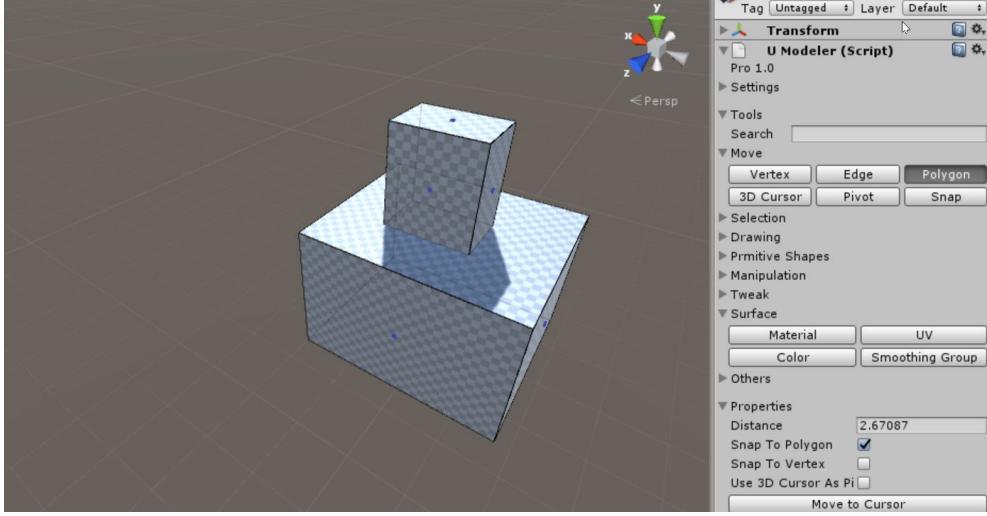
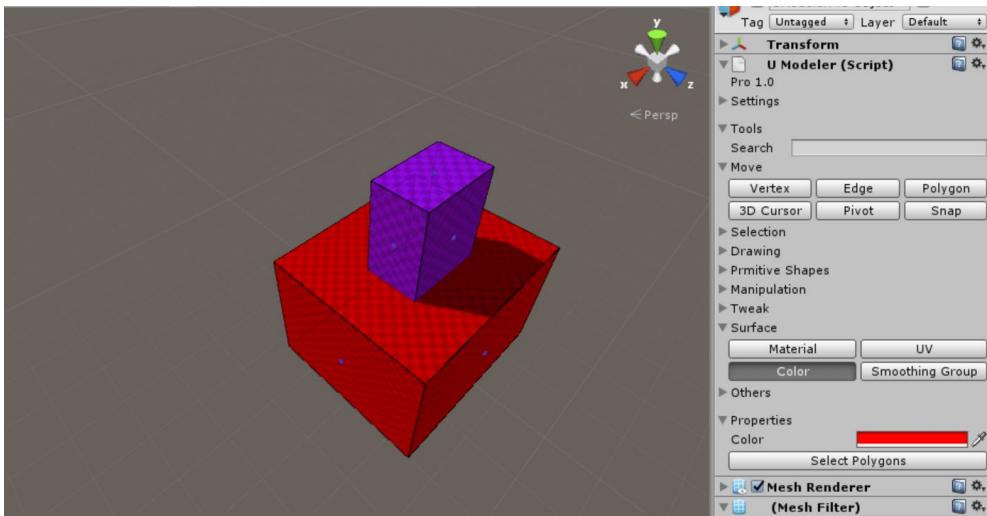
LMB	Selects a polygon
LMB Drag	Selects polygons in a rectangle

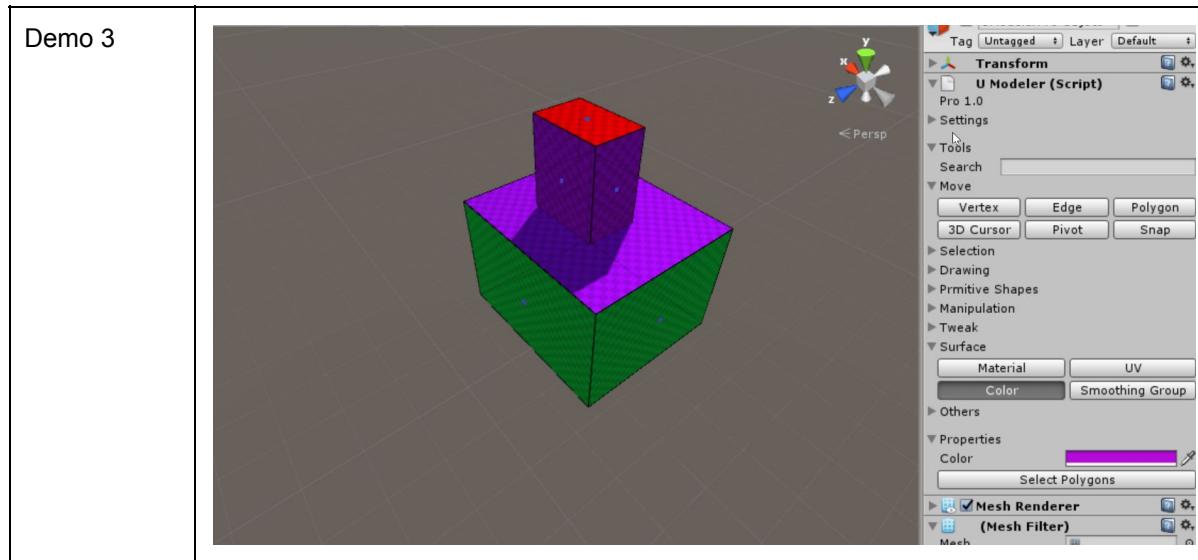
Properties

Mode	Absolute : The properties are set to the selected polygons directly Relative : The properties are added to the selected polygons.
Shift	Shift of UVs
Scale	Scale of UVs
Rotation	Rotation of UVs
Tiling	X : Changes texture tiling on selected surfaces in the X direction. Y : Changes texture tiling on selected surfaces in the Y direction.
Fix UVs according to Tiling	Based on Tiling properties the UVs of the selected polygons are fixed. The bigger Tiling properties are, the denser texture tiling is.
Reset UVs	Resets UV parameters of the selected polygons.

Color

Mode	Edit
Required Ver	Pro1.0, Basic1.0
Conditions	Polygons are selected or no polygons are selected.
Desc	<p>You can assign colors to polygons.</p> <p>A material with a shader supporting Vertex Color should be set to assign colors. Such a material can be set in Material tool</p> <p>Recommended materials for assigning colors (VC - Vertex Color) UModelerPro_OnlyVC UModelerBasic_OnlyVC</p> <p>Recommended shaders for assigning colors UModelerPro Shader (Only Vertex Color) UModelerBasic Shader (Only Vertex Color)</p>
Steps 1.	<ol style="list-style-type: none"> 1. Select polygons using Polygon tool 2. Go to Color tool 3. Click LMB on Color bar in Properties 4. Choose a color which you want.

Demo 1	
Steps 2.	<ol style="list-style-type: none"> 1. Go to Color tool 2. Select polygons like you did in Polygon tool 3. Click LMB on Color bar in Properties 4. Choose a color which you want.
Demo 2	
Steps 3.	<ol style="list-style-type: none"> 1. Go to Color tool 2. Click LMB on a polygon which have a color which you want. 3. Click LMB holding SHIFT on a polygon where you want to assign a color.



Interface

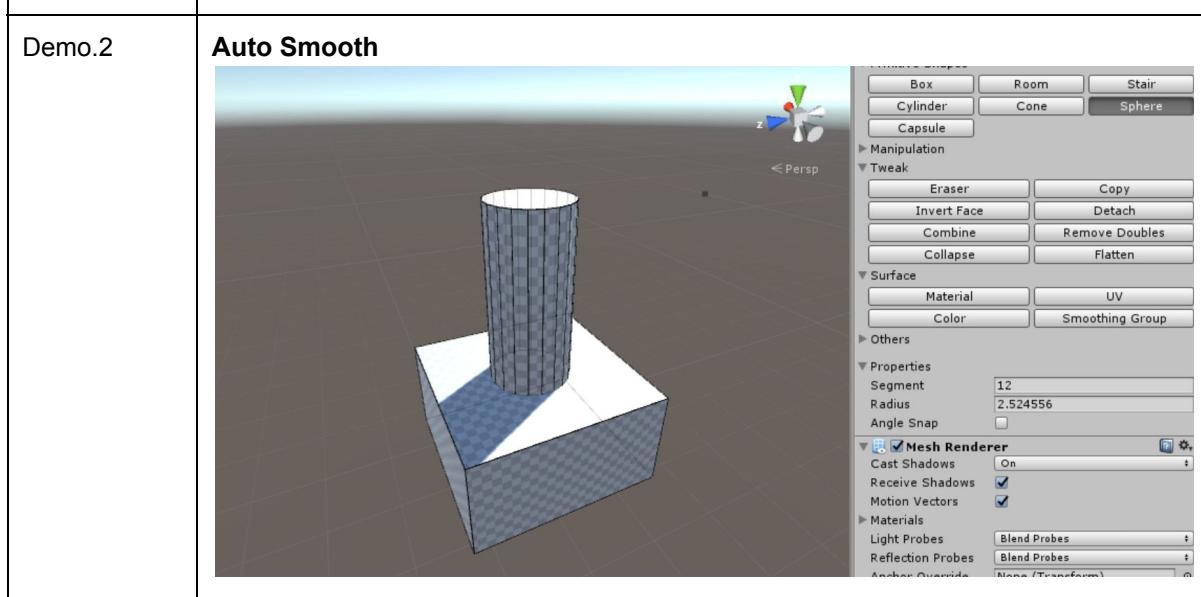
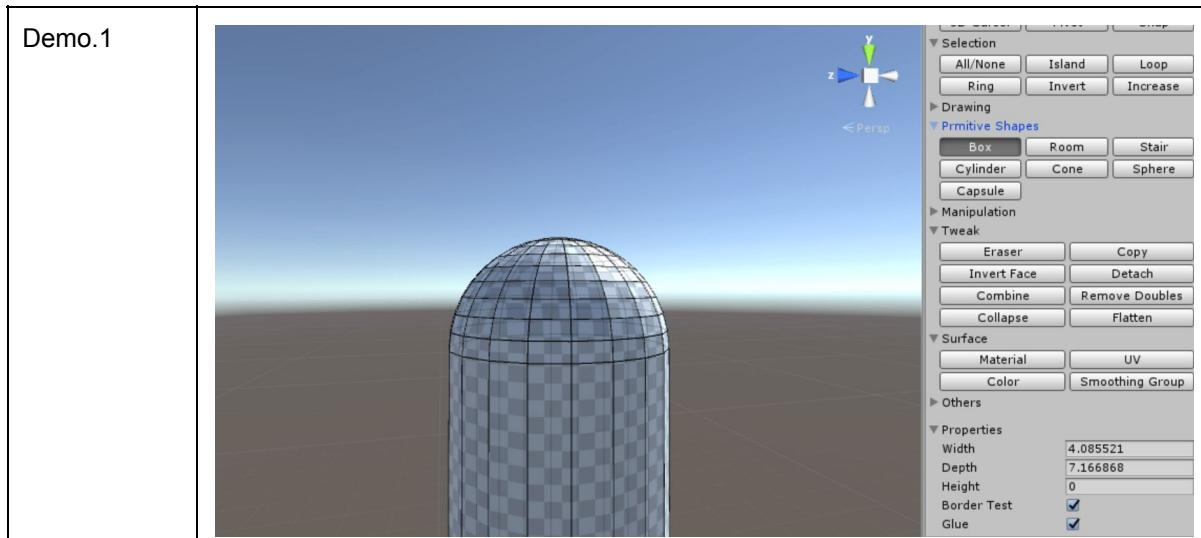
LMB	Selects a polygon and pick a color of the color.
SHIFT + LMB	Assigns the color in Color bar in Properties to a polygon where the mouse cursor point.
LMB Drag	Selects several polygons in a rectangle.

Properties

Color	Color which you want to assign.
Select Polygons	Selects polygons which have the color in Color bar in Properties .

Smoothing Group

Mode	Edit
Required Ver	Pro1.0
Desc	Manages smoothing groups.
Steps.1	<ol style="list-style-type: none"> 1. Select Smoothing Group tool. 2. Select polygons with which you want to make a new smoothing group. 3. Type a smoothing group name in Group Name in Properties. 4. Click on Add Group button in Properties to add a new smoothing group. 5. Make sure that the new smoothing group with the name in Group Name property will be created.
Steps.2	<p>Auto smooth</p> <ol style="list-style-type: none"> 1. Select Smoothing Group tool. 2. Select polygons you want to include for Auto Smooth. 3. Fill Angle property out with the specific angle. 4. Click on Auto Smooth.



Properties

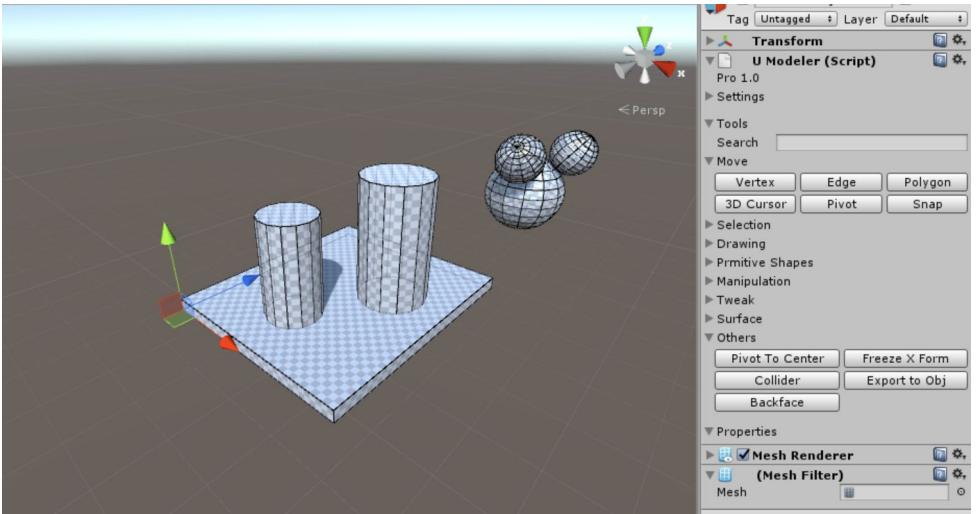
Group Name	The current smoothing group name
Polygon Count	The polygon count in the current smoothing group.
Angle	The threshold angle for Auto Smooth .
Add Group	Adds a new smoothing group from the current selected polygons.
Remove Group	Removes the current smoothing group.
Remove Empty	Removes smoothing groups which have no polygons.
Select Polygons	Selects polygons in the current smoothing group.
Add Polygons	Adds the selected polygons to the current smoothing group.
Remove Polygons	Gets rid of the selected polygons from the current smoothing group.
Auto Smooth	Runs Auto Smooth from the selected polygons based on the angle in Angle

property.

Auto Smooth sets the smoothing groups based on the angle between faces. Any two adjacent faces are put in the same smoothing group if the angle between their normals is less than the threshold angle.

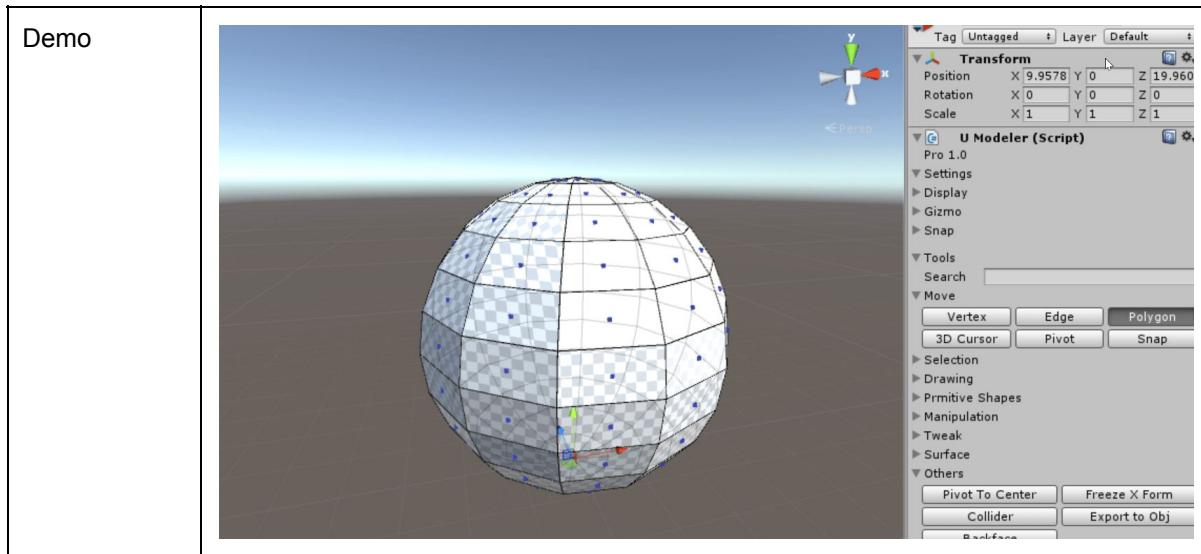
Others

Pivot to Center

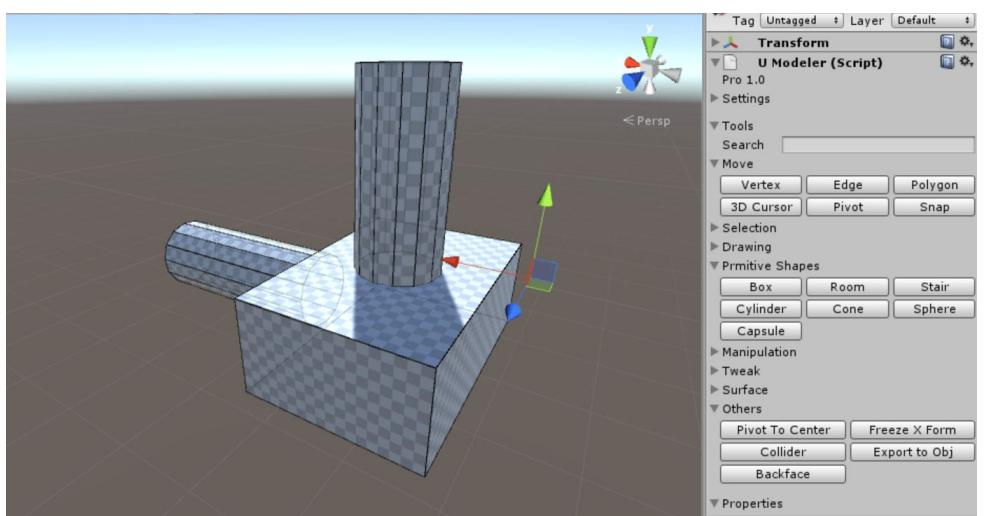
Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Game objects with UModeler component are selected.
Desc	This tool moves the pivot to the bottom-center.
Steps	<ol style="list-style-type: none"> Select game objects with UModeler component Select Pivot to Center tool
Demo	

Freeze X Form

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	<ol style="list-style-type: none"> One UModeler object should be selected. Several UModeler objects should be selected.
Desc	Resets Rotation and Scale in Transform component and apply them to each polygon in UModeler component.
Steps	<ol style="list-style-type: none"> Select several game objects with UModeler component. Select Freeze X Form tool. <p>Or</p> <ol style="list-style-type: none"> Select Freeze X Form tool directly to apply this to only the selected object.



Collider

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	Game object with UModeler component are selected.
Desc	You can add or remove a Mesh Collider component.
Add Steps	<ol style="list-style-type: none"> 1. Select game objects with UModeler component 2. Select Collider tool 3. Select Add Collider button in Properties.
Removal Steps	<ol style="list-style-type: none"> 1. Select game objects with UModeler component 2. Select Collider tool 3. Select Remove Collider button in Properties
Demo	

Export to Obj

Mode	Immediate
Required Ver	Pro1.0
Desc	Exports the mesh created with UModeler to .obj file.
Steps	<ol style="list-style-type: none"> Select Export to Obj tool. Type a file name.

Backface

Mode	Immediate
Required Ver	Pro1.0, Basic1.0
Condition	One game object with UModeler component should be selected
Desc	With this tool you can turn on and off drawing back faces. If backfaces are being drawn, the button's name in Properties is Turn off . If backfaces aren't being drawn, the button's name in Properties is Turn on .
Steps	<ol style="list-style-type: none"> Select Backface tool. The button's name in Properties depends on whether backfaces are being drawn or not. Press the button to toggle backfaces.
Demo	