HANDY TOOLS

DOCUMENTATION

Handy Tools:

A lightweight utility panel for fast and efficient level building.

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Known bugs / oddities:

1. Snap to grid:
This is not really a bug but just does what the tool suggest. If you have an object selected and you enable snap to grid, it will do just that. Snapping it to the next available slot. Also be aware that when you rotate / scale / position objects with "Snap to Grid" enabled, this will be taken into account.

Before you start:

These set of tools are not a perfect solution by any means, but they will surely help you speed up your work-flow. It's a given to experiment and see what each tool does; you'll soon discover that combining different tools will give you even more flexibility in your work-flow.

The layout of the tool panel may change over time per update, as new features will come.

All of these tools were created during the making of my own games.
Most of the tools are used to create corridors, scatter objects randomly, rotate items randomly. Etc.
It's up to your imagination how you can combine all these tools or decide to stick to Unity built-in tools. These tools are provided and created to blend towards your favorite way of working in Unity.
As always : experimentation is key, failure is learning your way to success.

In my attempt to build upon each release I will update the package often with more helpful tools and keep on updating the current tools. Because of this please note that the layout of the Handy Tools window might alter over the updates as structure and efficiency is my main goal for this package.

Thank you for leaving a rating and review on the Unity Asset Store. It will help to make the package grow and be more advanced each update.
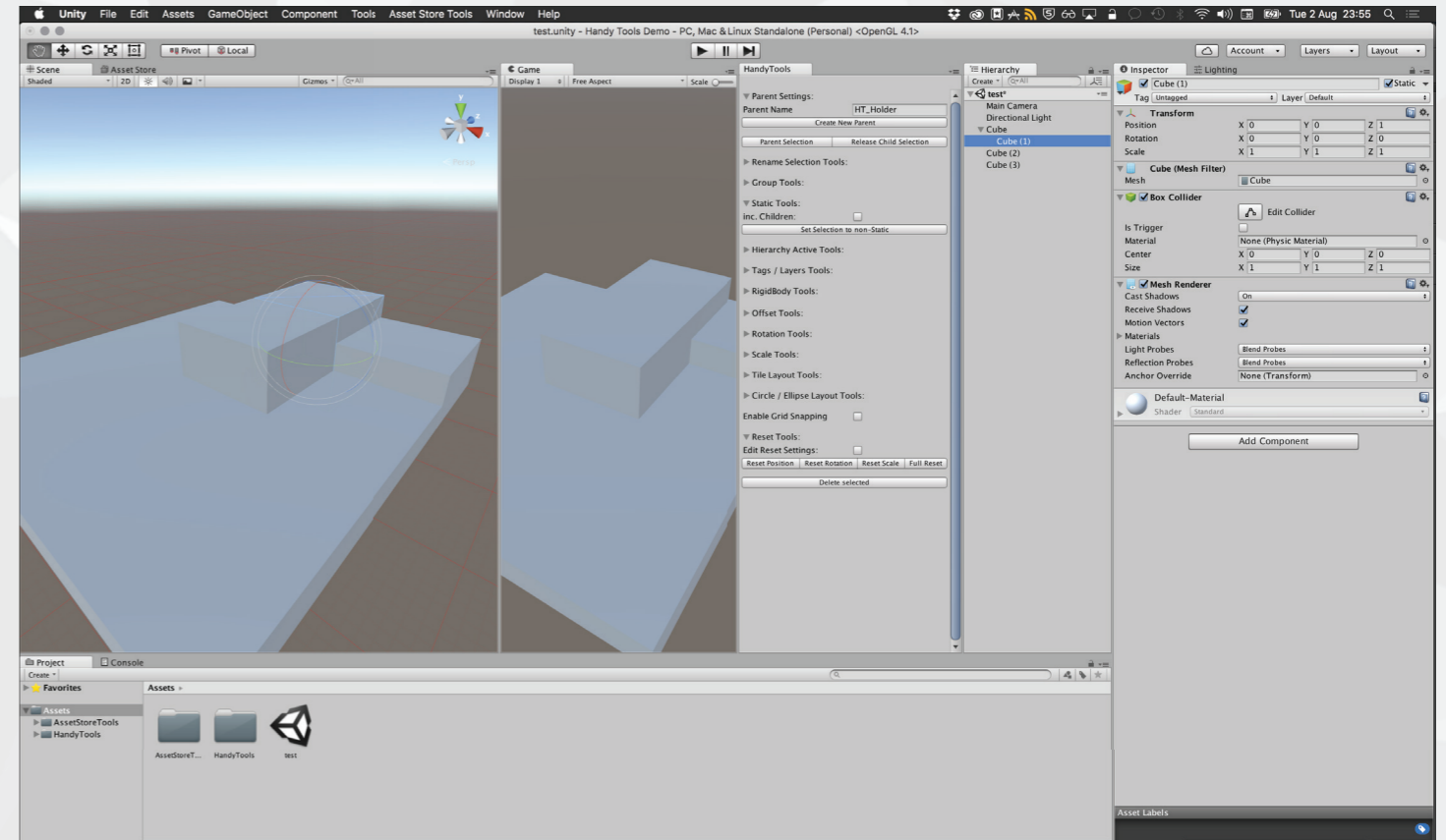And of course if you have feature suggestions please drop me a line.

New in update 1.0.5 are two new features: Handy Project Structure and Handy Editor Script. See the dedicated documentation for this.

Good luck and I hope you'll enjoy these tools.
Peter
www.nitras.be

Docking / Menu Item:
As seen above is my preferred docking.
As all tools are directly linked to the hierarchy and / or scene view I find it easiest to place it in between the hierarchy and scene view to minimize the mouse movement.

You can find Handy Tools under the Tools menu > Handy Tools > Handy Tools Window
(You can also find the shortcuts menu here)

When docking Handy Tools to the Unity Editor, the scrollbar might not be visible:
To fix this simply enlarge the window until you see the scrollbar and resize it again until it fits) -
I will update this asap.

In the Scenes folder you'll find a small scene with a few prefabs in order to get you started.

Find a demo video here:
https://www.youtube.com/watch?v=HmoDhZho41k

Parent Settings:

Parent Name	HT_Holder
Create New Parent	
Parent Selection	Release Child Selection

Parent Settings: Create new parent

Variables: Parent Name

Creates a new empty gameObject(s) with the given name at (XYZ - 0 0 0).
However if you edit the reset options, you can change this position.

This is useful if you are working for example at X 100 Y 0 Z 200.
A new parent will be created then in your working area.

Parent Selection:
Based on your current selection and the Parent Name (see Above), the Parent Selection button, will attach the selected gameObject(s) to the last created parent.
If you did not create a parent, Handy Tools will create one for you.

Release Child Selection:
This will release the selected gameObject(s) from the current parent.

Reset Options: see page 11

Rename Selection Tools:

New Name	HT_NewName
Add Prefix	☐
Add Suffix	☐
Add Instance Index	☑
Reset Index Per Selection	☑
Separator	–
Rename Selection	

Rename Selection Tools

Variables: New Name

Based on your selected gameObject(s) this feature will rename to the given name.

If you are working with copies it's useful to add an index to the renamed objects.
Do note that the index will be based on the amount of copies you have of the gameObject(s)
You can reset the index back to 1 when desired.
Add a prefix, suffix and custom separator (used to connect the prefix,suffix with the name of the object.

Group Tools:

Group Name:	HT_Group
Use Current Root:	☐
Group Selection	

Group GameObject Tools:
(Requires a selection of one or more gameObject(s))
Note: This is for structural / Hierarchy) purposes only.

Group Selection:
Based on your current selection the Group Selection tool will attach the given group name. (The group's parent will be based on your position reset settings)
In theory the grouping is for structural purposes only. But this could be useful to combine this with the reset options, if you are working from a distance to the origin (0 / 0 / 0)

Do note that the group GameObjects tools are for Hierarchy or structural purposes only. As the positions of the groups may not always be exactly where you want. Most of the time all groups will be placed at (0/0/0) unless you change the Reset options. See page 11.

Use current root:
Will create the group holder at the current selection's parent or root and it's position.
If the selection has no parent, the group holder will be created as. (In this case the reset options are not taken in account)

Static Tools:

inc. Children:	☐
Set Selection to non-Static	

Hierarchy Active Tools:

Only Children:	☐
Deactivate Selection	

Static / Active Tools:
(Requires a selection of one or more gameObject(s))

Set Selection to Static:
If the selection is static, the tool will make the selection not static and visa versa.
Include children: Will also apply on all children in the parent selection.

Deactivate Selection:
If the selection is active, the tool will make the selection deactivated and visa versa
Only Children: Applies the activation/deactivation only on the parent's children. (useful when having scripts attached on the parent object).

Include Children: ☐

Available Tags: Untagged ⬍

Set Selection to Tag

Available Layers: Default ⬍

Set Selection to Layer

Tags / Layer Tools
(Requires a selection of one or more gameObject(s))

Set the current selected gameObjects(s) to the available tags or layers.
In the drop-down menu you will have access to all tags and / or layers. You can also create new tags or layers here.
Only Children: Applies the activation/deactivation only on the parent's children.
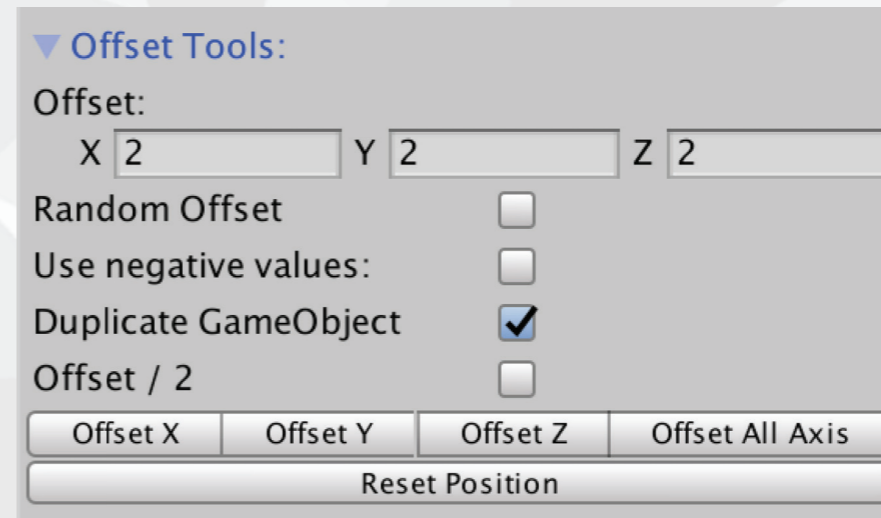
▼ RigidBody Tools:

Smart Rigidbody: ☑

Attach 3D RigidBody
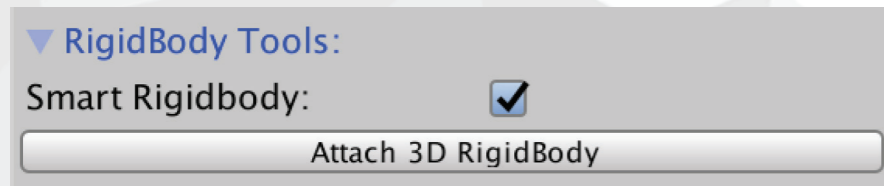
Rigidbody: Creates a Rigidbody to selection

Creates a new Rigidbody based on it's type.
(Rigidbody2D for sprites, and Rigidbody for other gameobjects)
When Smart Rigidbody is unchecked you can choose which Rigidbody you want to add.

▼ Offset Tools:

Offset:
  X 2   Y 2   Z 2
Random Offset ☐
Use negative values: ☐
Duplicate GameObject ☑
Offset / 2 ☐

Offset X | Offset Y | Offset Z | Offset All Axis

Reset Position

Offset Tools:
(Requires a selection of one or more gameObject(s))

The offset is based on the current gameObject(s) scale. Each value have their own buttons and will be available if the value is greater than zero. This value will also function as the maximum range for random offset.
Example: Your object is 1/1/1, so if you want to offset it exactly next to each other you can set the value to 1. If you want a gap of 1 between them simply set the offset to 2.

Random Selection: (Toggle)
This will open up 2 extra fields: Minimum offset and the Offset mode:
The offset mode has two extra options.
　　— **Minimum Offset:**
　　The minimum value for the random range. (The offset value will be the maximum range)
　　— **Offset Mode: (drop down menu)**
　　　　— **Offset from current Position:**
　　　　This will randomly offset the object based from the current position.
　　　　— **Random position:**
　　　　Will position the object randomly between the min and max value.

Use negative values:
Will invert the value for your offset, alternatively this is the same as putting -1 in the fields.
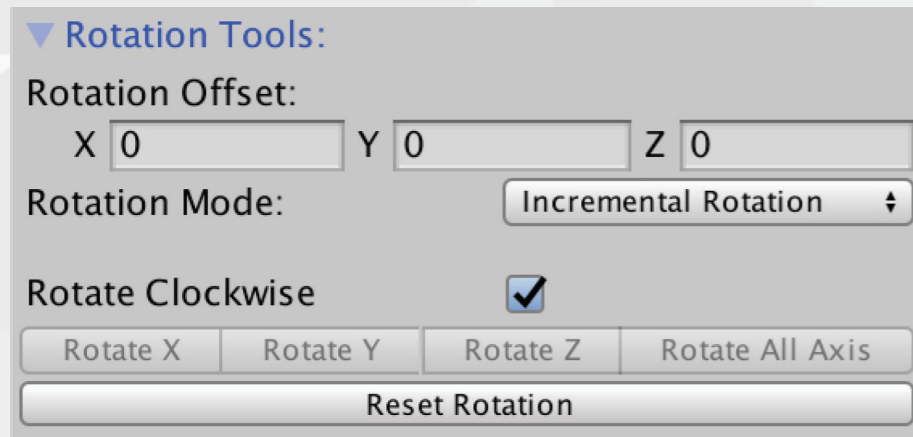
Duplicate GameObject: (on as default)
If you check (off) this option, the gameObject will offset only instead of duplicating the gameObject and then offset the position.

Offset / 2:
Divides the offset by 2. (This can be handy for building walls)

Another reset position button is close at hand for emergencies.
(Based on the Quick reset settings See page 11)

Rotation Tools
(Requires a selection of one or more gameObject(s))

Will rotate your selected gameObject(s) to the values. Each value have their own buttons and will be available if the value is greater than zero. This value will also function as the maximum range for random rotation

Rotation Mode:
> **— Incremental Rotation:**
> Will rotate your gameObject in an incremental way. Example : 90 / 180 / 270 ...

> **— Random Rotation:**
> Will rotate your selected gameObject(s) between a value of zero and the given Rotation offset (Useful for placing debris or clutter on your game world)

> **— Snap Random Rotation:**
> Will use a random rotation of your value based on the rotation offset and use it as an Incremental random rotation.
> *Example: if you set the Y rotation to 90. and use snap random rotation. This could be useful to create some randomness in your floor tiles, as they will have a different rotation based on the given 90 degrees (0 / 180 / 270 / 360)*

Another reset rotation button is close at hand for emergencies.
(Based on the Quick reset settings See page 11)
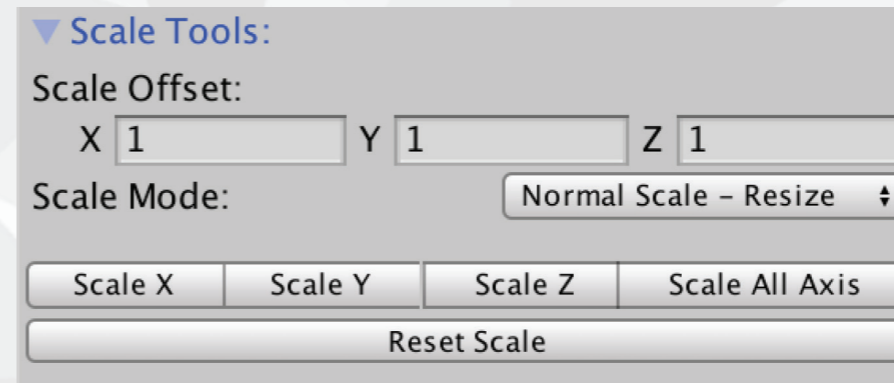
Scale Tools:
(Requires a selection of one or more gameObject(s))

The scale is based on the current gameObject(s) scale. Each value have their own buttons and are available at all time, as an object can be scaled down. This value will also function as the maximum range for the random scale offset.

Example: You can use negative values to flip the axis
(Handy Tools will feature more options for scaling in the next updates)

Scale mode: (Drop-down)

> **— Normal scale:**
> Will scale your selected gameObject(s) along the axis you gave in.
> Example: If you want to your selected gameObject(s) size to 5 / 1 / 2. Simply set it's axis in the offset fields and press scale all axis. If you only wish to scale the X-axis you can keep the filled in values and use the scale X-axis button.

> **— Random Uniform Scale:**
> **(Will display only the scale all axis button and a minimum scale field)**
> Scales your selected gameObject(s) in an uniform way based on the given value.
> This scaling mode will take X as it's reference. This will mean that Y and Z are neglected.

> **— Random Scale:**
> Will use a random scale of your value based on the scale offset.

> **— Flip Axis:**
> When this mode is active, the Scale Offset will be disabled, as the mode works on a local-scale base. The tool will invert the current Scaling per axis or all axis and visa versa.

Another reset scale button is close at hand for emergencies.
(Based on the Quick reset settings See page 11)

Tile Layout Tools:

Layout prefix:	HT_Grid
Display Size on Parent	☑
Tiles (X):	5
Tiles (Y):	5
Tiles (Z):	2
Tiles Offset:	2

Generate tile grid from selected Object

Tiled Layout Tools:
(Requires a selection of one or more gameObject(s))

Variables: Layout Prefix

Example: If you want to create a 10x10 grid of a cube, simply add X: 10 Z: 10 and match the Tiles offset to the cube's dimensions. (A standard Unity cube is 1) . Alternatively you can use an offset of 2 to create a gap between the gameObjects. You can set the "level" height as in the Y axis. This will create individual holders inside the root Object. The level needs to be 1 or more. At Y : 0 the Button will be disabled.

Display Size on Parent: (Toggle)

> Will add a numeric value based on the X / Y / Z axis amount of tiles next to the Layout Prefix name.

▼ Circle / Ellipse Layout Tools:

item Count;	0
Radius:	0
Name:	HT_Circle_Grid
Circle:	☑
Vertical Orientation:	☐
Hide Center:	☐
Use current center:	☐

Circle Ellipse Layout Tool:
(Requires a selection of one gameObject)

Item count: the amount of items in the circle / ellipse.
Radius: in circle mode. In ellipse mode the x and y radius will show.
Vertical Orientation: self explanatory.
Hide Center: Hides the initial selected gameObject.
Use Current Center: When selected the grid will be created on the selection's position. Alternatively the grid will be created based on the reset settings. (See page 11)

Enable Grid Snapping	☑
Snap X:	☑
Snap X Value	1
Snap Y:	☐
Snap Z:	☐
Snap All:	☐

Snap to Grid:

Enable Grid Snapping: (Toggle)

This feature will help you to snap your gameObjects to the grid.
Please do make sure, to turn it off when you use random rotations or offsets. As the snapping will always try to place the object to the closest snapping point.

If you have a gameObject selected an turn on the snapping, the gameObject will find a snapping point. Alternatively when selecting other gameObjects, these will also snap. Use this feature with care. You can choose X-Y-Z axis separately or to snap on all axis.

▼ Reset Tools:

Edit Reset Settings: ☑

Position Reset:

X 0	Y 0	Z 0

Rotation Reset:

X 0	Y 0	Z 0

Scale Reset:

X 1	Y 1	Z 1

| Reset Position | Reset Rotation | Reset Scale | Full Reset |

Quick Reset Tools:
(Requires a selection of one or more gameObject(s)s)

You can reset the position / rotation / scale apart from each other or do a full reset (PSR)

Edit Reset Settings: (Toggle option)
Per default both position and rotation are set to zero. The scale has been set to 1.
You can edit these settings to your desired working area.
Example: If you work in the 100 / 0 / 200 area. You can edit the reset settings so that the objects will be positioned or rotated to your desired workspace in the level or world you are creating.

Beta Tools:
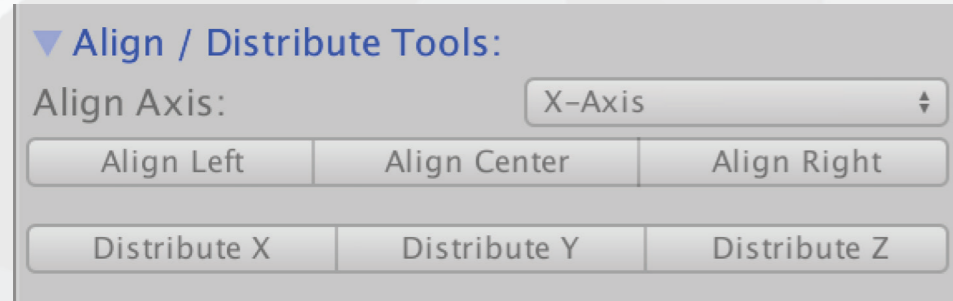
Align / Distribute Tools:
(Requires a selection of two or more gameObject(s))

(This tool is in beta. it does not currently take into account the size of the objects)

Align axis: On which axis you want to align the objects. Distribution is not referenced by this axis.

Do Apply Prefab:
(Requires a selection of one or more prefab(s))

Right click or shift alt A on a prefab (or multiple).

Due to a current issue in Unity this option is not validated in an elegant way.
Meaning: you can try this option on a non-prefab, yet a warning is triggered in the console.
The moment unity fixes this bug I will alter the code so that the menu or context menu is grayed out.
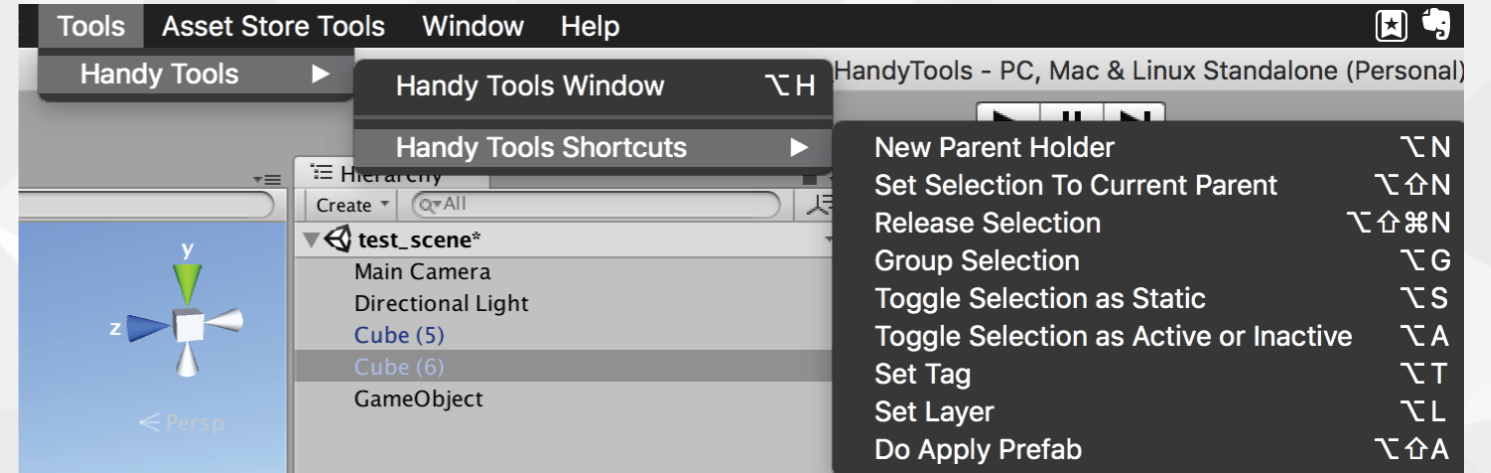
Shortcuts:

New since version 1.0.1 are a few shortcuts that can be changed in the source-code.
Handy Tools / Scripts / Editor / HandyTools.cs > (line 147 to 199)

Make sure you don't override Unity's standard shortcuts:

Standard Unity shortcuts:
http://blogs.unity3d.com/2011/08/24/unity-hotkeys-keyboard-shortcuts-in-unity/

Unity Hotkeys reference:
http://docs.unity3d.com/Manual/UnityHotkeys.html

Unity Editor hotkey / shortcuts reference:
To create a hotkey you can use the following special characters:

% (ctrl on Windows, cmd on OS X), # (shift), & (alt), _ (no key modifiers).

For example to create a menu with hotkey shift-alt-g use "MyMenu/Do Something #&g".
To create a menu with hotkey g and no key modifiers pressed use "MyMenu/Do Something _g".