Fuzzy Tools Functionality List:

Preferences Window: - Found under Window/FuzzyTools. Allows you to change a variety of settings for FuzzyTools. Including the new custom hierarchy settings.

Maya type functions: - Found under Window menu

- **Hide** Disable and enable game objects by selecting them and pressing Alt+H
- Group Create groups by selecting the objects you would like to be in the group and pressing Alt+Ctrl/Cmd +G
- Parent Parent one GameObject to the other by selecting the parent and then the object/s you want to be listed as children of your first selection by pressing Alt+P
- **Un-Parent** Un-Parent a GameObject by selecting the object you want to un-parent, and then pressing Alt+Shift+P
- Solo* (disable all other objects in scene) by selecting the objects you want to stay active and then pressing Alt+Shift+I
- UnSolo* (undo solo) by clearing selection after soloing and then pressing Alt+Shift+I again
- Match Position- Select the object whose position you would like to match, and then select the objects you want to be in the same position and press Alt+Shift+M
- **Match Rotation** Select the object whose rotation you would like to match, and then select the objects you want to have the same rotation and press Alt+Shift+, (comma)
- Match Local Scale Select the object whose scale you would like to match, and then select the objects you want to to have the same scale and press Alt+Shift+. (period)
- Match Transform- Select the object whose Transform you would like to match, and then select the objects you want to have the same Transform and press Alt+M
- Remove All Attributes*- Select the object whose attributes you would like to remove and press Alt+Ctrl/Cmd+X
- Transfer All Attributes Select the object with the attributes you would like to transfer, and then the object you would like to have the same attributes and press Alt+Ctrl/Cmd+C - Deprecated for favor of GameObject variant
- Wireframe(Change scene view to wireframe mode)**- Press Alt+4

- **Shaded**(Change scene view to shaded mode)**- Press Alt+5
- **Shaded** Wireframe(Change scene view to shaded wireframe mode)**- Press Alt+6

Terrain Tools:

- **TerrainTools** Open Terrain tools by right clicking on an Asset from project window, mouse over FuzzyTools, and select AddToTerrain(The options will only work if you select a valid filetype. ie:texture,model,prefab)
- Add Texture Add Texture to first terrain in scene by selecting the Texture
 option from the AddToTerrain window and pressing Confirm(If you add normal
 maps it will ask you which normal maps you would like to add to which texture
 set)
- Add Tree Prefab Add Tree Prefab to first terrain in scene by selecting the Tree option from the AddToTerrain window and pressing Confirm
- Add Grass Add Grass to first terrain in scene by selecting the Grass option from the AddToTerrain window and pressing Confirm
- Add Detail Add Detail to first terrain in scene by selecting the Details option from the AddToTerrain window and pressing Confirm
- Add Brush Add Brush to terrains by selecting the Brush option from the AddToTerrain window and pressing Confirm

Files Menu:

- Open Last Scene(Open the scene you opened before the one currently open)-Click File and then Open Previous Scene(This is not persistent and will lose track of the scene if you close unity. Only works if you have opened at least 2 scenes including the first scene that opens when you open Unity)
- Recent Scenes***(Opens window that allows you to select from up to 5 of your recently opened scenes) Click File and then Recent Scenes to open Recent Scenes Window. Select the Button which displays the name of the scene you are wanting to open(This is not persistent and will lose track of the scene if you close unity. Only works if you have opened at least 2 scenes including the first scene that opens when you open Unity)

Assets Menu Functions: - Found under Assets Menu at the top and right clicking in project window

- Adjust Snapping Grid*(Only on GameObjects with a Renderer)- Checks the Bounds or world space size of the game objects and adjusts the XYZ parameters of the Auto Snap function accordingly
- Convert to PNG(Texture/image files only) Convert the selected object(s) to PNG format. Function gives the option to keep or discard the original file.

- Replace Shaders (Materials only) Opens a window which allows the user to add
 as many materials as they desire and then select either a shader or a material
 with the desired shader and then select the button to replace the shaders of all of
 the selected materials. If you have materials selected when you call this function,
 they will be automatically added to the window to be replaced.
- Replace SplatMap(Requires Terrain SplatMap) Found under FuzzyTools/Terrain. Opens a window which allows the user to select which SplatMap they would like to replace and then select which texture they would like to replace the SplatMap with. (Note in Unity 2017, this may not update right away and may even require repainting the terrain on 0 Opacity)

Context Functions:

- Cut Component*(Copies and then removes the component)- Right click on attribute and select Cut Component
- Remove All of Type(Works on any component except Transform) right click on the component, then select Remove All of Type. If the component inherits from another(ie Fixed Joint inherits from Joint), it will allow you to select Exact Class or Base Class. Note if anything requires the component you are wanting to remove (or if using the base class, the actual class on your object), it will present a message allowing you to keep the first instance of the component, the last instance or cancel and it won't remove that type.(currently ignores base classes: Component, MonoBehaviour, NetworkBehaviour. Preferences window in development)
- **Freeze**(Only on RigidBody component)- Right click on RigidBody and select Freeze. This will set mass to 0, set angular drag to 0, set Use Gravity to false, sets isKinimatic to true, freezes all constraints
- Remove All Attributes*(Only On Transform component)- Right click on Transform component and select Remove All Attributes. This will remove all components except for Transform component
- Randomize Rotation- (On Transform)- right click on Transform component and select Randomize Rotation. This with randomize the selected Transforms rotation between 0 and 360 on X, Y, and Z.
- Clear Splatmaps(Only on Terrain)- Right click on Terrain Component and select Clear Splatmaps. This will remove all Splatmaps on the selected Terrain.
- Clear Trees(Only on Terrain)- Right click on Terrain Component and select Clear Trees. This will remove all Tree Prefabs on the selected Terrain.
- Clear Detail Meshes (Only on Terrain) Right click on Terrain Component and select Clear Detail Meshes. This will remove all Detail Meshes on the selected Terrain.

- Clear Grasses(Only on Terrain)- Right click on Terrain Component and select Clear Grasses. This will remove all Grasses on the selected Terrain.
- Remove And Show Problematic Details (Only on Terrain) Right click on Terrain Component and select Remove And Show Problematic Details. This will remove all Detail Meshes that will not paint on the selected Terrain and display a message to let you know which Meshes had an issue.
- Adjust Snapping Grid(Renderer only) Right click on the Renderer Component and select Adjust Snapping Grid. This functions exactly like the Adjust Snapping Grid function of the Asset Menu.
- Replace Shaders (Material Only)- Right click on a material and select Replace Shaders. This functions exactly as the Assets Menu variant but instead of automatically populating your selection in the project menu, it populates the material that you right clicked.
- Make Locator- (Transform only) Right click on Transform Component and select Make Locator. This will make the selected transform(s) locators displaying a 3D wire locator icon at the center of the transform. (Note this is temporary. Leaving the scene or closing Unity will cause the locator Icon to disappear)

GameObject Functions: (Note if the right click menu does not show FuzzyTools, you can access the functions by clicking the GameObject option at the top of Unity)

- Basic Lighting Rig- Right click in Hierarchy window and mouse over FuzzyTools and select BasicLightRig. This creates a very simple light rig with a fill, key, and back light
- Randomize Rotation- right click on GameObject and select Randomize Rotation under FuzzyTools/Transform. This with randomize the selected Transforms rotation between 0 and 360 on X, Y, and Z.
- Transfer all Attributes- works the same as the MayaType version except you
 can access the option by right clicking in the Hierarchy window mousing over
 FuzzyTools/Components and selecting TransferAllAttributes
- Alphabetize Children Select the GameObject(s), in the Hierarchy window, whose children you want to alphabetize and then right click in the Hierarchy window, mouse over FuzzyTools/Names, and select Alphabetize children. This will reorder all of the children for each of your selected objects so that they are listed alphabetically in the hierarchy.
- Make Prefab Select the GameObject(s) you are wanting to turn into prefabs, right click, mouse over FuzzyTools/Prefabs and select MakePrefab. This will open a window asking you would like to save your prefab to. Automatically it will create a folder named "Prefabs" in your Assets folder. If the folder you enter in to save to does not exist, it will create it for you.

- Completely Break Prefab- Select prefabs from Hierarchy window and then right click or open GameObject window. FuzzyTools/Prefabs and select Completely Break Prefab. This will permanently convert the selected prefabs back to standard GameObjects- This cannot be undone.
- Apply Prefab Changes- Select the prefabs with changes made to them that you
 would like to apply the changes to. Right click or open GameObject window.
 FuzzyTools/Prefabs and select Apply Prefab Changes. You can also use the
 Hotkey Alt+A. This will apply any and all changes you have made to the
 prefab(s).
- Select And Remove Components*- Select the GameObject who's components
 you would like to manage, right click in the Hierarchy window, mouse over
 FuzzyTools/Components, and select Select And Remove Components. This will
 open a window that will display every component currently on the GameObject
 with a check box next to each one. Check the box for each one that you are
 wanting to remove and click Remove Selected. This will remove all of your
 selected components so long as they are not required by another component still
 on the GameObject.
- **Split Terrain-** Select the Terrain(s) you would like to divide/split. Right click or open GameObject menu. Select FuzzyTools/Split Terrain. This will open the Terrain splitter window tool. Which will allow you to split your Terrain(s) with several options.
- Replace Shader on all Materials- Select the GameObject(s) that contain a
 material you would like to replace the shader on. Right click or Open
 GameObject menu. Select FuzzyTools/Replace Shader on all Materials. This will
 open the Replace Shader tool auto-populating all of the materials found on the
 selected GameObjects.
- Create Locator Right click in hierarchy, mouse over FuzzyTools and select
 Create Locator. You also can access this under GameObject window and then
 selecting FuzzyTools. There is also a HotKey which is Alt+Ctrl/Cmd+N. A locator
 is an empty GameObject which displays a 3D wire gizmo at its location. (Note
 this is temporary. Leaving the scene or closing Unity will cause the locator Icon to
 disappear)
- Paste As Child- Right click in hierarchy, mouse over FuzzyTools/Hierarchy and select Paste as Child. Also Accessible with hotkey Alt+Ctrl/Cmd+V. Piggybacking off of the built in copy component this allows you to paste the clipboard GameObject contents into the hierarchy a child/children of the actively selected GameObject.

- Create GetAllComponents- Right click or open GameObject menu. Select FuzzyTools/Custom Attributes/Create GetAllComponents. This will create an empty GameObject and add the GetAllComponents Script (Found under Fuzzy Tools). This script finds all GameObjects on Awake and then runs the Auto GetComponent and GetComponents functions on Awake and Start.
- Find And Replace Or Rename- Right click or open GameObject menu. Select FuzzyTools/Names/ Find And Replace or Rename. This function will open a window and provide you with a number of options in renaming GameObjects. It has 2 modes with 3 sub modes. Meaning you can choose to completely rename a gameObject if it contains a string of rename the chosen gameobjects(if the search for field is left blank) the second version will allow you to only replace what you search for. ie: searching for woo in a gameObject named OhYeahWoo!, will only change the "Woo" segment. You can choose 3 selection modes. The first is the objects selected in the hierarchy. The second allows you to add selected objects to the list. The third will search the entire scene. When searching for what you input will determine which gameobjects show(they will be fiiltered by your search)
- Copy Multiple Components- Right click and open GameObject menu. Select FuzzyTools/Components/ Copy Multiple Components. This will open a window allowing you to select the origin GameObject and then select the components you would like to transfer, and then it will allow you to add the gameobjects you want to transfer the components to and select how you want duplicate components to be handled.
- Change Color Or Style-(Hierarchy Setting. Only Works When ColorMode is set to Custom Colors) Select the GameObjects you would like to customize. Right click or open GameObject menu. Select FuzzyTools/Hierarchy/Change Color Or Style. This will open a window allowing you to select a color for: BackGround Color, Font Color, and Font Style.

Generic Functions

- Auto Snap*(window opened and activated with Alt+ Ctrl/Cmd + L Also found under Window/FuzzyTools)- opens a window with XYZ coordinates and a toggle. The toggle defaults to on. While toggle is active, moving game objects in the scene view will snap to location as if on a grid.
- **Simulate Physics**(Found under Window/FuzzyTools)- This tool places objects as if they had actually naturally fallen. It gives you options of force that you can add and It allows you to select the max number of iterations you would like the physics to run, Randomize the force range between -100 and 100. Select the force direction, choose the force direction random range, and easily undo with

the touch of a button (Only can move back one stage). This tool does not require the objects have colliders or rigidbodies on them already as if they do not it will temporarily add them, run the simulation and then remove them.

• **Toggle Inspector Lock**(Found under Window/FuzzyTools)- Easily lock your active Inspector Window. Has hotkey of Alt+L.

Hierarchy Settings (Part of Preferences under Window/FuzzyTools)

- Off- Hierarchy will appear as default.
- **AutoColors-** Assigns Colors to all GameObjects in Hierarchy as dictated by user. Custom Options for this mode are:
 - 1. Default Font Color.
 - 2. Default Prefab Font Color
 - 3. Inactive GameObject Background Color
 - 4. Inactive Font Color
 - 5. Default Font Style
 - 6. Prefab Font Style
 - 7. Auto Invert Font Changes Font Color In accordance to Inactive Background Color.
- **CustomColors-** Using GameObject Function allows you to define how you want your Hierarchy to look. Currently No additional Settings in this mode.
- **Hierarchy** Adds colors to your Hierarchy up to 30 levels of Children. Each five levels are derived from Five default colors. You are able to Change all Five Colors.
- **VariedColor-** Using the Every Other method, each GameObject is drawn a defined background color. You are able to choose said colors.

Custom Attributes and Classes to speed up Development!

• **ReadOnly** - Placing this attribute before a public or serialized variable in your code(ex. [ReadOnly] public int foo;) will result in the variable being displayed but grayed out and not able to be interacted with or changed.

The following require an additional MonoBehaviour (Several premade scripts exist) or for the script you are using to inherit from them. Again examples exist.

- GetComponentAwake (does not work with arrays, lists or dictionaries)- Added
 in front of a single variable in your code (ex. [GetComponentAwake] private
 Camera cam;) This will run the GetComponent function of the variables type on
 Awake.
- **GetComponentsAwake** (Only works for arrays)- Added in front of an array variable in your code (ex. [GetComponentsAwake] private Camera[] cams;) This will run the GetComponent function of the variables type on Awake.

- **GetComponentStart** (does not work with arrays, lists or dictionaries)- Added in front of a single variable in your code (ex. [GetComponentStart] private Camera cam;) This will run the GetComponent function of the variables type on Start.
- **GetComponentsStart** (Only works for arrays)- Added in front of an array variable in your code (ex. [GetComponentsStart] private Camera[] cams;) This will run the GetComponent function of the variables type on Start.
- GetComponentOnEnable (does not work with arrays, lists or dictionaries)Added in front of a single variable in your code (ex. [GetComponentOnEnable]
 private Camera cam;) This will run the GetComponent function of the variables
 type on OnEnable.
- **GetComponentsOnEnable** (Only works for arrays)- Added in front of an array variable in your code (ex. [GetComponentOnEnable] private Camera[] cams;)
 This will run the GetComponent function of the variables type on OnEnable

Editor Preference Helper Functions Under FuzzyTools.FuzzyHelper

- SetEditorPrefBools(Takes a string for the key and a bool for value)- First checks
 if EditorPrefs does not contain the received key or if the value stored in EditorPrefs
 matches the received value. If either is true, it sets the EditorPrefs value to the received
 value.
- SetEditorPrefInt(Takes a string for the key and an Int for value)- First checks if EditorPrefs does not contain the received key or if the value stored in EditorPrefs matches the received value. If either is true, it sets the EditorPrefs value to the received value.
- SetEditorPrefFloat(Takes a string for the key and a float for value)- First checks if EditorPrefs does not contain the received key or if the value stored in EditorPrefs matches the received value. If either is true, it sets the EditorPrefs value to the received value.
- SetEditorPrefString(Takes a string for the key and string for value)- First checks if EditorPrefs does not contain the received key or if the value stored in EditorPrefs

^{*}Currently being developed and may cause issues to larger scenes

^{**}May be removed in future versions

^{***}Currently being developed and functionality may change some in future versions TODO: Sequential renaming (Adding # to end of objects)

- matches the received value. If either is true, it sets the EditorPrefs value to the received value.
- SetEditorPrefColor(Takes a string for the key and Color for value)- First checks if EditorPrefs does not contain the received key or if the value stored in EditorPrefs matches the received value. If either is true, it sets the EditorPrefs value to the received value.
- GetEditorPrefBools(Two variants. First only takes a string for the key and the second takes a string for key and a bool for defaultValue)- Checks EditorPrefs for the key received. If it has the key, return the stored value, otherwise: V1 returns false, V2 returns received defaultValue.
- GetEditorPrefInt(Two variants. First only takes a string for the key and the second takes a string for key and an Int for defaultValue)- Checks EditorPrefs for the key received. If it has the key, return the stored value, otherwise: V1 returns false, V2 returns received defaultValue.
- GetEditorPrefFloat(Two variants. First only takes a string for the key and the second takes a string for key and a float for defaultValue)- Checks EditorPrefs for the key received. If it has the key, return the stored value, otherwise: V1 returns false, V2 returns received defaultValue.
- GetEditorPrefString(Two variants. First only takes a string for the key and the second takes a string for key and a string for defaultValue)- Checks EditorPrefs for the key received. If it has the key, return the stored value, otherwise: V1 returns false, V2 returns received defaultValue.
- GetEditorPrefColor(Two variants. First only takes a string for the key and the second takes a string for key and a Color for defaultValue)- Checks EditorPrefs for the key received. If it has the key, return the stored value, otherwise: V1 returns false, V2 returns received defaultValue.