SomePyRevitSnippets

Apr 20, 2019

Contents:

Just some samples of code I use in PyRevit. Your miles may vary.

CHAPTER 1

Dealing With Elements

1.1 elementId to element

```
##where doc = __revit__.ActiveUIDocument.Document
element = doc.GetElement(elementId)
```

1.2 Element to ElementId

```
elementId = element.Id
```

1.3 Get a property of an element

```
##The orientation property of a wall returns a normalvector
##Showing which way the wall's external side is facing.
normalvector = wall.Orientation
```

1.4 Query an element for it's mark or other parameter

```
##Mark can be replaced by any parameter the element has.
##http://www.revitapidocs.com/2018.1/0cf342ef-c64f-b0b7-cbec-da8f3428a7dc.htm
##This one returns a list, even if only one element
markString = element.GetParameter("Mark")
##Or... Returns the first match (order may be random or change)
markString = element.LookupParameter("Mark").AsString()
##Or... This is mark for everything but doors. DOOR_NUMBER for doors.
```

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```
##Other built in parameters:
##http://www.revitapidocs.com/2018.1/fb011c91-be7e-f737-28c7-3f1e1917a0e0.htm
markString = element.getParameter(BuiltInParameter.ALL_MODEL_MARK)
```

CHAPTER 2

Collecting all the (relevant) things!

2.1 Find all elements of a type in active view

OfClass docs:

http://www.revitapidocs.com/2018.1/b0a5f22c-6951-c3af-cd29-1f28f574035d.htm

Autodesk.Revit.DB Namespace, for categories to be filtered:

http://www.revitapidocs.com/2018.1/87546ba7-461b-c646-cbb1-2cb8f5bff8b2.htm

```
##Where doc = __revit__.ActiveUIDocument.Document
elementList = DB.FilteredElementCollector(doc, selected_view.Id)\
.OfClass(DB.IndependentTag)\
.ToElements()
```

Another collecting walls:

```
collector = FilteredElementCollector(doc)\
.OfCategory(BuiltInCategory.OST_Walls)\
.WhereElementIsNotElementType()\
.ToElements()
```

CHAPTER 3

Locations, Coordinates, Levels

3.1 Location of point elements

```
##Grabbing Min and Max points of a crop box
maxXYZ = revit.activeview.CropBox.Max
minXYZ = revit.activeview.CropBox.Min
##http://www.revitapidocs.com/2018.1/c2fd995c-95c0-58fb-f5de-f3246cbc5600.htm
##individual double for each coord
minX = minXYZ.X
minY = minXYZ.Y
minZ = minXYZ.Z
```