

## API CLASSES + METHODS

**Animation** (Parent: Object)

.nextFrame .pause .resume .stop

**AppObserver** (Parent: Object)

.onNewModel .onOpenModel .onQuit  
.onUnloadExtension

**ArcCurve** (Parent: Curve)

.center .end\_angle .normal .plane .radius  
.start\_angle .xaxis .yaxis

**Array** (Parent: Object)

.cross .distance .distance\_to\_line  
.distance\_to\_plane .dot .normalize  
.normalize! .offset .offset! .on\_line?  
.on\_plane? .project\_to\_line  
.project\_to\_plane .transform .transform!  
.vector\_to .x .x= .y .y= .z .z=

**AttributeDictionaries** (Parent: Object)

.[] .delete .each

**AttributeDictionary** (Parent: Object)

.[] .[]= .delete\_key .each .each\_key  
.each\_pair .keys .length .name .size  
.values

**Behavior** (Parent: Entity)

.always\_face\_camera=  
.always\_face\_camera? .cuts\_opening=  
.cuts\_opening? .is2d= .is2d?  
.no\_scale\_mask= .no\_scale\_mask?  
.shadows\_face\_sun= .shadows\_face\_sun?  
.snapto .snapto=

**BoundingBox** (Parent: Object)

.add .center .clear .contains? .corner  
.depth .diagonal .empty? .height  
.intersect .max .min .new .valid? .width

**Camera** (Parent: Object)

.aspect\_ratio .aspect\_ratio= .description  
.description= .direction .eye .focal\_length  
.focal\_length= .fov .fov= .height  
.height= .image\_width .image\_width=  
.new .perspective= .perspective? .set  
.target .up .xaxis .yaxis .zaxis

**Color** (Parent: Object)

.alpha .alpha= .blend .blue .blue=  
.green .green= .names .new .red  
.red= .to\_a .to\_i .to\_s

**Command** (Parent: Object)

.large\_icon= .menu\_text= .new  
.set\_validation\_proc .small\_icon=  
.status\_bar\_text= .tooltip=

**ComponentDefinition** (Parent:

Drawingelement)  
.<=> .== .add\_observer .behavior  
.count\_instances .description  
.description= .entities .group? .guid  
.hidden? .image? .insertion\_point  
.insertion\_point= .instances .internal?  
.invalidate\_bounds .name .name=  
.path .refresh\_thumbnail  
.remove\_observer .save\_as  
.save\_thumbnail

**ComponentInstance** (Parent:

Drawingelement)  
.add\_observer .definition .definition=  
.equals? .explode .glued\_to  
.glued\_to= .intersect .locked?  
.locked= .make\_unique .manifold?  
.move! .name .name= .outer\_shell  
.remove\_observer .show\_differences  
.split .subtract .transform!  
.transformation .transformation=  
.trim .union .volume

**ConstructionLine** (Parent:

Drawingelement)  
.direction .direction= .end .end=  
.position .position= .reverse! .start  
.start= .stipple .stipple=

**ConstructionPoint** (Parent:

Drawingelement)  
.position

**Curve** (Parent: Entity)

.count\_edges .each\_edge .edges  
.first\_edge .is\_polygon? .last\_edge  
.length .move\_vertices .vertices

**DefinitionList** (Parent: Entity)

.[] .add .add\_observer .at .count  
.each .length .load .load\_from\_url  
.purge\_unused .remove\_observer  
.unique\_name

**DefinitionObserver** (Parent: Object)

.onComponentInstanceAdded  
.onComponentInstanceRemoved  
.onComponentAdded  
.onComponentPropertiesChanged  
.onComponentRemoved  
.onComponentTypeChanged

**Drawingelement** (Parent: Entity)

.bounds .casts\_shadows=  
.casts\_shadows? .erase! .hidden=  
.hidden? .layer .layer= .material  
.material= .receives\_shadows=  
.receives\_shadows? .visible= .visible?

**Edge** (Parent: Drawingelement)

.all\_connected .common\_face .curve  
.end .explode\_curve .faces .find\_faces  
.length .line .other\_vertex  
.reversed\_in? .smooth= .smooth?  
.soft= .soft? .split .start .used\_by?  
.vertices

**EdgeUse** (Parent: Entity)

.edge .end\_vertex\_normal .face .loop  
.next .partners .previous .reversed?  
.start\_vertex\_normal

**Entities** (Parent: Object)

.[] .add\_3d\_text .add\_arc .add\_circle  
.add\_cline .add\_cpoint .add\_curve  
.add\_edges .add\_face  
.add\_faces\_from\_mesh .add\_group  
.add\_image .add\_instance .add\_line  
.add\_ngon .add\_observer .add\_text  
.at .clear! .count .each .erase\_entities  
.fill\_from\_mesh .intersect\_with .length  
.model .parent .remove\_observer  
.transform\_by\_vectors  
.transform\_entities

**EntitiesObserver** (Parent: Object)

~~.onContentsModified~~ .onElementAdded  
.onElementModified .onElementRemoved  
.onEraseEntities

**Entity** (Parent: Object)

.add\_observer .attribute\_dictionaries  
.attribute\_dictionary .delete\_attribute  
.deleted? .entityID .get\_attribute .model  
.parent .remove\_observer .set\_attribute  
.to\_s .typename .valid?

**EntityObserver** (Parent: Object)

.onChangeEntity .onEraseEntity

**Face** (Parent: Drawingelement)

.all\_connected .area .back\_material  
.back\_material= .classify\_point .edges  
.followme .get\_UVHelper  
.get\_glued\_instances .loops .material  
.material= .mesh .normal .outer\_loop  
.plane .position\_material .pushpull  
.reverse! .vertices

**Geom** (Parent: N/A)

.closest\_points .fit\_plane\_to\_points  
.intersect\_line\_line .intersect\_line\_plane  
.intersect\_plane\_plane .linear\_combination  
.point\_in\_polygon\_2D

**Group** (Parent: Drawingelement)

.add\_observer .copy .description  
.description= .entities .equals? .explode  
.intersect .local\_bounds .locked?  
.locked= .make\_unique .manifold?  
.move! .name .name= .outer\_shell  
.remove\_observer .show\_differences  
.split .subtract .to\_component  
.transform! .transformation  
.transformation= .trim .union .volume

**Image** (Parent: Drawingelement)

.explode .height .height= .normal .origin  
.origin= .path .pixelheight .pixelwidth  
.size= .transform! .width .width=  
.zrotation

**Importer** (Parent: Object)

.description .do\_options .file\_extension .id  
.load\_file .supports\_options?

**InputPoint** (Parent: Object)

.== .clear .copy! .degrees\_of\_freedom  
.depth .display? .draw .edge .face .new  
.pick .position .tooltip .transformation  
.valid? .vertex

**InstanceObserver** (Parent: Object)

.onClose .onOpen

**LatLng** (Parent: Object)

.latitude .longitude .new .to\_a .to\_s  
.to\_utm

**Layer** (Parent: Entity)

.<=> .== .name .name=  
.page\_behavior .page\_behavior= .visible=  
.visible?

**Layers** (Parent: Entity)

[] .add .add\_observer .at .count .each  
.length .purge\_unused .remove\_observer  
.unique\_name

**LayersObserver** (Parent: Object)

.onCurrentLayerChanged .onLayerAdded  
.onLayerRemoved .onRemoveAllLayers

**Length** (Parent: Object)

.< .<= .<=> .== .> .>= .inspect  
.to\_f .to\_s

**Loop** (Parent: Entity)

.convex? .edges .edgeuses .face .outer?  
.vertices

**Material** (Parent: Entity)

.<=> .== .alpha .alpha= .color .color=  
.display\_name .Type .name .texture  
.texture= .use\_alpha?

**Materials** (Parent: Entity)

[] .add .add\_observer .at .count .current  
.current= .each .length .purge\_unused  
.remove\_observer

**MaterialsObserver** (Parent: Object)

.onMaterialAdd .onMaterialChange  
.onMaterialRefChange .onMaterialRemove  
**.onMaterialRemoveAll**

.onMaterialSetCurrent

.onMaterialUndoRedo

**Menu** (Parent: Object)

.add\_item .add\_separator  
.add\_submenu .set\_validation\_proc

**Model** (Parent: Object)

.abort\_operation .active\_entities  
.active\_layer .active\_layer=  
.active\_path .active\_view .add\_note  
.add\_observer .attribute\_dictionaries  
.attribute\_dictionary .behavior .bounds  
.close\_active .commit\_operation  
.definitions .description .description=  
.edit\_transform .entities .export  
.georeferenced? .get\_attribute  
.get\_datum .get\_product\_family .guid  
.import .latlong\_to\_point .layers  
.list\_datums .materials .mipmapping=  
.mipmapping? .modified? .name  
.name= .number\_faces .options  
.pages .path .place\_component  
.point\_to\_latlong .point\_to\_utm  
.raytest .remove\_observer  
.rendering\_options .save  
.save\_thumbnail .select\_tool .selection  
.set\_attribute .set\_datum  
.shadow\_info .start\_operation .styles  
.tags .tags= .title .tools  
.utm\_to\_point .valid?

**ModelObserver** (Parent: Object)

.onActivePathChanged  
.onAfterComponentSaveAs  
.onBeforeComponentSaveAs  
.onDeleteModel .onEraseAll  
.onExplode **.onPreSaveModel**  
**.onPostSaveModel**  
.onPlaceComponent .onSaveModel  
.onTransactionAbort  
.onTransactionCommit  
.onTransactionEmpty  
.onTransactionRedo

.onTransactionStart

.onTransactionUndo

**Numeric** (Parent: Object)

.cm .degrees .feet .inch .km .m .mile  
.mm .radians .to\_cm .to\_feet .to\_inch  
.to\_km .to\_l .to\_m .to\_mile .to\_mm  
.to\_yard .yard

**OptionsManager** (Parent: Object)

[] .count .each .keys .size

**OptionsProvider** (Parent: Object)

[] .[]= .add\_observer .count .each  
.each\_key .each\_pair .each\_value  
.has\_key? .key? .keys .name  
.remove\_observer .size

**OptionsProviderObserver** (Parent: Object)

.onOptionsProviderChanged

**Page** (Parent: Entity)

.camera .delay\_time .delay\_time=  
.description .description=  
.hidden\_entities .label .layers .name  
.name= .rendering\_options  
.set\_visibility .shadow\_info .style  
.transition\_time .transition\_time=  
.update .use\_axes= .use\_axes?  
.use\_camera= .use\_camera?  
.use\_hidden= .use\_hidden?  
.use\_hidden\_layers=  
.use\_hidden\_layers?  
.use\_rendering\_options=  
.use\_rendering\_options?  
.use\_section\_planes=  
.use\_section\_planes?  
.use\_shadow\_info= .use\_shadow\_info?  
.use\_style= .use\_style?

**Pages** (Parent: Entity)

[] .add .add\_frame\_change\_observer  
.add\_matchphoto\_page .add\_observer  
.count .each .erase .parent  
.remove\_frame\_change\_observer  
.remove\_observer .selected\_page

.selected\_page= .show\_frame\_at .size  
.slideshow\_time

**PagesObserver** (Parent: EntitiesObserver)

.onContentsModified .onElementAdded  
.onElementRemoved

**PickHelper** (Parent: Object)

.all\_picked .best\_picked .count .depth\_at  
.do\_pick .element\_at .init .leaf\_at  
.path\_at .pick\_segment .picked\_edge  
.picked\_element .picked\_face .test\_point  
.transformation\_at .view

**Point3d** (Parent: Object)

.+ .- .< .<= .[] .[]= .clone .distance  
.distance\_to\_line .distance\_to\_plane  
.inspect .linear\_combination .new .offset  
.offset! .on\_line? .on\_plane?  
.project\_to\_line .project\_to\_plane .set!  
.to\_a .to\_s .transform .transform!  
.vector\_to .x .x= .y .y= .z .z=

**PolygonMesh** (Parent: Object)

.add\_point .add\_polygon .count\_points  
.count\_polygons .new .normal\_at  
.point\_at .point\_index .points .polygon\_at  
.polygon\_points\_at .polygons .set\_point  
.transform! .uv\_at .uvs

**RenderingOptions** (Parent: Object)

[] .[]= .add\_observer .each .each\_key  
.each\_pair .keys .remove\_observer

**RenderingOptionsObserver** (Parent: Object)

.onRenderingOptionsChanged

**SectionPlane** (Parent: DrawingElement)

.get\_plane .set\_plane

**Selection** (Parent: Object)

[] .add .add\_observer .at .clear  
.contains? .count .each .empty? .first  
.include? .is\_curve? .is\_surface? .length  
.model .nitems .remove .remove\_observer  
.shift .single\_object? .toggle

**SelectionObserver** (Parent: Object)

.onSelectionAdded .onSelectionBulkChange  
.onSelectionCleared .onSelectionRemoved

**Set** (Parent: Object)

.clear .contains? .delete .each .empty?  
.include? .insert .length .new .size .to\_a

**ShadowInfo** (Parent: Entity)

[] .[]= .add\_observer .each .each\_key  
.each\_pair .keys .remove\_observer

**ShadowInfoObserver** (Parent: Object)

.onShadowInfoChanged

**Sketchup** (Parent: N/A)

.active\_model .add\_observer .app\_name  
.break\_edges= .break\_edges?  
.create\_texture\_writer  
.display\_name\_from\_action .file\_new  
.find\_support\_file .find\_support\_files  
.format\_angle .format\_area  
.format\_degrees .format\_length  
.full\_detail\_render\_delay\_max=  
.full\_detail\_render\_delay\_min=  
.get\_datfile\_info .get\_i18ndatfile\_info  
.get\_locale .get\_resource\_path  
.get\_shortcuts .is\_online .is\_pro?  
.is\_valid\_filename? .load .open\_file  
.os\_language .parse\_length .read\_default  
.register\_extension .register\_importer  
.remove\_observer .require .save\_thumbnail  
.send\_action .set\_status\_text .status\_text=  
.template .template= .template\_dir .undo  
.vcb\_label= .vcb\_value= .version  
.version\_number .write\_default

**SketchupExtension** (Parent: Object)

.copyright .copyright= .creator .creator=  
.description .description= .name .name=  
.new .version .version=

**String** (Parent: Object)

.to\_!

**Style** (Parent: Object)

.description .description= .name .name=

**Styles** (Parent: Object)

[] .active\_style .active\_style\_changed  
.add\_style .count .each .parent  
.purge\_unused .selected\_style

.selected\_style= .size

.update\_selected\_style

**Text** (Parent: DrawingElement)

.arrow\_type .arrow\_type=  
.display\_leader= .display\_leader?  
.has\_leader? .leader\_type  
.leader\_type= .line\_weight  
.line\_weight= .point .point= .set\_text  
.text .text= .vector .vector=

**Texture** (Parent: Entity)

.average\_color .filename .height  
.image\_height .image\_width .size=  
.valid? .width

**TextureWriter** (Parent: Object)

.count .filename .handle .length .load  
.write .write\_all

**Tool** (Parent: Object)

.activate .deactivate .draw  
.enableVCB? .getExtents  
.getInstructorContentDirectory  
.getMenu .onCancel .onKeyDown  
.onKeyUp .onLButtonDoubleClick  
.onLButtonDown .onLButtonUp  
.onMButtonDoubleClick  
.onMButtonDown .onMButtonUp  
.onMouseEnter .onMouseLeave  
.onMouseMove .onRButtonDoubleClick  
.onRButtonDown .onRButtonUp  
.onReturn .onSetCursor .onUserText  
.resume .suspend

**Toolbar** (Parent: Object)

.add\_item .add\_separator  
.get\_last\_state .hide .new .restore  
.show .visible?

**Tools** (Parent: Object)

.active\_tool\_id .active\_tool\_name  
.add\_observer .model .pop\_tool  
.push\_tool .remove\_observer

**ToolsObserver** (Parent: Object)

.onActiveToolChanged  
.onToolStateChanged

**Transformation** (Parent: Object)

.\* .axes .clone .identity? .interpolate  
.inverse .invert! .new .origin .rotation  
.scaling .set! .to\_a .translation .xaxis  
.yaxis .zaxis

**UI** (Parent: N/A)

.add\_context\_menu\_handler .beep  
.create\_cursor .inputbox  
.inspector\_names .menu .messagebox  
.model\_info\_pages .openURL  
.openpanel .play\_sound  
.preferences\_pages .refresh\_inspectors  
.savepanel .set\_cursor  
.set\_toolbar\_visible .show\_inspector  
.show\_model\_info .show\_preferences  
.start\_timer .stop\_timer .toolbar  
.toolbar\_names .toolbar\_visible?

**UVHelper** (Parent: Object)

.get\_back\_UVQ .get\_front\_UVQ

**Vector3d** (Parent: Object)

.\* .+ .- .< .== .[] .[]=  
.angle\_between .axes .clone .cross  
.dot .inspect .length .length=  
.linear\_combination .new .normalize  
.normalize! .parallel? .perpendicular?  
.reverse .reverse! .samedirection? .set!  
.to\_a .to\_s .transform .transform!  
.unitvector? .valid? .x .x= .y .y= .z  
.z=

**Vertex** (Parent: Entity)

.common\_edge .curve\_interior? .edges  
.faces .loops .position .used\_by?

**View** (Parent: Object)

.add\_observer .animation=  
.average\_refresh\_time .camera  
.camera= .center .corner .draw  
.draw2d .draw\_line .draw\_lines  
.draw\_points .draw\_polyline  
.draw\_text .drawing\_color=  
.dynamic= .field\_of\_view  
.field\_of\_view= .force\_invalidate  
.guess\_target .inference\_locked?

.inputpoint .invalidate .last\_refresh\_time  
.line\_stipple= .line\_width= .lock\_inference  
.model .pick\_helper .pickray  
.pixels\_to\_model .refresh  
.remove\_observer .screen\_coords  
.set\_color\_from\_line .show\_frame  
.tooltip= .vpheight .vpwidth .write\_image  
.zoom .zoom\_extents

**ViewObserver** (Parent: Object)

.onViewChanged

**WebDialog** (Parent: Object)

.add\_action\_callback  
.allow\_actions\_from\_host .bring\_to\_front  
.close .execute\_script  
.get\_default\_dialog\_color  
.get\_element\_value .max\_height  
.max\_height= .max\_width .max\_width=  
.min\_height .min\_height= .min\_width  
.min\_width=  
.navigation\_buttons\_enabled=  
.navigation\_buttons\_enabled? .new  
.post\_url .set\_background\_color .set\_file  
.set\_full\_security= .set\_html .set\_on\_close  
.set\_position .set\_size .set\_url .show  
.show\_modal .visible? .write\_image

NOTE: ***.bold\_italic*** methods are new in this release

**MORE INFOS****Official API reference:**

<http://code.google.com/apis/sketchup/>

**Current Ruby version in SketchUp:** 1.8.6

**NOTES**

## ACTIONS

### Usage:

```
result = Sketchup.send_action "selectArcTool:"
```

addBuilding:  
 editHide:  
 editRedo:  
 editUndo:  
 editUnhide:  
 fixNonPlanarFaces:  
 getPhotoTexture:  
 pageAdd:  
 pageDelete:  
 pageNext:  
 pagePrevious:  
 pageUpdate:  
 renderHiddenLine:  
 renderMonochrome:  
 renderShaded:  
 renderTextures:  
 renderWireframe:  
 selectArcTool:  
 selectAxisTool:  
 selectCircleTool:  
 selectDimensionTool:  
 selectDollyTool:  
 selectEraseTool:  
 selectExtrudeTool:  
 selectFieldOfViewTool:  
 selectFreehandTool:  
 selectImagelglooTool:  
 selectLineTool:  
 selectMeasureTool:  
 selectMoveTool:  
 selectNorthTool:  
 selectOffsetTool:  
 selectOrbitTool:  
 selectPaintTool:  
 selectPolygonTool:  
 selectPositionCameraTool:  
 selectProtractorTool:

selectPushPullTool:  
 selectRectangleTool:  
 selectRotateTool:  
 selectScaleTool:  
 selectSectionPlaneTool:  
 selectSelectionTool:  
 selectTextTool:  
 selectTurnTool:  
 selectWalkTool:  
 selectZoomTool:  
 selectZoomWindowTool:  
 showRubyPanel:  
 terminate: (OS X)  
 viewBack:  
 viewBottom:  
 viewFront:  
 viewIso:  
 viewLeft:  
 viewPerspective:  
 viewRight:  
 viewShowAxes:  
 viewShowHidden:  
 viewTop:  
 viewUndo:  
 viewZoomExtents:  
 viewZoomToSelection:  
  
**PC only (send numeric value):**  
 10501: set view to Top  
 10502: set view to Front  
 10503: set view to Rear  
 10504: set view to Left  
 10505: set view to Right  
 10506: set view to Bottom  
 10507: set view to Axonometric  
 10510: set render mode to Wire  
 10511: set render mode to Hidden lines  
 removal  
 10512: set render mode to Surfaces  
 Shading  
 10513: set render mode to Transparency

10519: set camera to ortho (removes perspective)  
 10520: walk tool  
 10521: display the System Preferences dialog box (Files tab)  
 10522: removes axes display  
 10523: pan tool  
 10525: set the interactive eye height feature  
 10526: zoom window  
 10527: zoom extents  
 10529: zoom out 2  
 10531: toggle the Standard toolbar  
 10532: toggle the Camera toolbar  
 10533: display the Shadows Settings dialog box  
 10537: toggle the Views toolbar  
 10538: display the System Preferences dialog box (Display tab)  
 10545: toggle Color ByLayer  
 10546: toggle Shadows toolbar  
 10551: toggle Large icons  
 10576: toggle Render Mode toolbar  
 10596: set Render Mode to No Transparency (Preferences)  
 10597: set Render Mode to Wire (Preferences)  
 10598: set Render Mode to Transparency (Preferences)  
 10599: set Render Mode to Surfaces Shading (Preferences)  
 10600: set Render Mode to Texture (Preferences)  
 10601: set Render Mode to No Texture (Preferences)  
 10602: toggle Shadows  
 10603: toggle Profiles  
 10604: toggle Extension Lines  
 10605: toggle Jitter edges  
 21019: hide Status bar and VCB  
 21020: show Status bar and VCB  
 21022: hide Status bar and VCB

21023: place 3d text box  
 21024: select the Measure tool  
 21031: select the Freehand Draw tool  
 21041: select the PushPull tool  
 21048: select the Move tool  
 21052: hide selected objects  
 21056: create face with selected edges closed loop  
 21057: select the Protractor tool  
 21060: display Components Window  
 21061: toggle Draw toolbar  
 21063: toggle Model Bounding Box display  
 21065: select the Arc tool  
 21067: creat a new Page  
 21074: show the Materials Browser Window  
 21076: display the Preferences dialog box (Text activated)  
 21077: display the Tip of the day Window  
 21078: select the Paint Bucket tool  
 21080: display the Page Manager Window  
 21082: display the Macros Dialog Box  
 21086: display the Components Browser Window  
 21094: select the Rectangle tool  
 21095: select the Polygon tool  
 21096: select the Circle tool  
 21098: open the Open Window  
 21100: select the Offset tool  
 21101: slect all objects  
 21112: open the Import Window  
 21124: launch the validity check tool  
 21126: select the Axes tool  
 21029: select the Rotate tool  
 21032: toggle Layer toolbar  
 21036: display the Save as Window  
 21046: spin the model a full 360° and display report  
 21047: fast Pick Time report  
 21049: open the Export model Window  
 21169: select the Position Camera tool  
 21170: display the Preferences, Tour Guide activated

21180: create a new Page just right of selected page  
21200: display the Insert Image Window  
21233: display Area of selected face  
21234: display Area of all faces with selected material  
21236: select the Scale tool  
21237: display the Export 2D Graphics Window  
21245: display a Polygon Offset Factors dialog box  
21276: reverse selected face(s)  
21287: select the Divide feature  
21337: select the Section Plane Placement tool  
21354: open the Layer Window  
21386: open the Export Animation Window  
21405: select the Text tool  
21406: display Fog dialog box  
21410: select the Dim tool  
21433: toggle Edit toolbar  
21442: select the FollowMe tool  
21448: select the Axes tool  
21453: select all objects  
21460: display Licence  
21462: display Authorization dialog box  
21463: display un-authorizing message  
21464: display Open Licence files (Network) Window  
21466: display Quick reference Card in Adobe Reader  
21467: display Licences in use dialog box  
21469: zoom extents to selected objects  
21476: perform a non-planar check on selected objects  
21477: list accelerators in window  
21485: erase selected objects  
21487: display Edit current material dialog box  
21485: erase all new created pages  
21488: display Entity Info Window  
21490: display Soften Edges Window

21491: display Profiles  
21492: display Extended Edges  
21493: display Jitter Lines  
21494: select Field of view tool  
21513: display the outliner  
21520: override Tile Rendering Size dialog box  
21525: select the FollowMe tool  
21542: display the Insert Image Window  
21560 and up: causes a runtime Error

## NOTES

## PLUGIN TEMPLATE

**Default plugin folder (Win):** C:\Program Files\Google\Google SketchUp 8\Plugins\

**Default plugin folder (Mac):** /Library/Application Support/Google SketchUp 8/SketchUp/Plugins/

**Get plugin folder:** Sketchup.find\_support\_file("Plugins")

**my\_plugin\_loader.rb** (put in \Plugins\ directory)

```
require "sketchup.rb"
require "extensions.rb"

# Load plugin as extension (so that user can disable it)

my_plugin_loader = SketchupExtension.new "My_Plugin Loader",
"my_plugin/my_plugin.rb"
my_plugin_loader.copyright= "Copyright 2010 by Me"
my_plugin_loader.creator= "Me, myself and I"
my_plugin_loader.version = "1.0"
my_plugin_loader.description = "Description of plugin."
Sketchup.register_extension my_plugin_loader, true
```

**my\_plugin.rb\*** (put in \Plugins\my\_plugin\ directory)

```
=begin
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INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND
FITNESS FOR A PARTICULAR PURPOSE.
License: AuthorsLicenseStatement

Author: AuthorName
Organization: AuthorAffiliationOrOrganizationIfAny
Name: ScriptName
Version: ScriptVersion
SU Version: MinimumSketchUpVersion
Date: Date
Description: ScriptDescription
Usage: ScriptUsageInstructions
History:
  1.000 YYYY-MM-DD Description of changes
=end

require "sketchup.rb"

# Main code (start module name with capital letter)
module My_module
  def self.my_method
```

```
    # do something...
  end
  def self.my_second_method
    # do something...
  end
end

# Create menu items
unless file_loaded?(__FILE__)
  mymenu = UI.menu("Plugins").add_submenu("My Plugin Collection")
  mymenu.add_item("My Tool 1") {My_module::my_method}
  mymenu.add_item("My Tool 2") {My_module::my_second_method}
  file_loaded(__FILE__)
end
```

\*this file suffices as a plugin if no extension functionality is needed (put in \Plugins\ directory)

## SNIPPETS

<b>MessageBox</b>	result = UI.messagebox "Question or Alert", [MB_OK MB_OKCANCEL MB_ABORTRETRYCANCEL MB_YESNOCANCEL MB_YESNO MB_RETRYCANCEL MB_MULTILINE]
<b>Open, Save</b>	filename = UI.[openpanel savepanel] "File", "c:\\", "*.jpg"
<b>SketchUp version</b>	version_as_number = Sketchup.version.to_f
<b>MAC or PC</b>	PLATFORM = (Object::RUBY_PLATFORM =~ /mswin/i) ? :windows : ((Object::RUBY_PLATFORM =~ /darwin/i) ? :mac : :other)
<b>WebDialog</b>	dlg_html= "<html><head><title></title></head><body><p>Text</p></body></html>" dlg = UI::WebDialog.new("My Dialog", true, "MyDialog", 200, 200, 150, 150, true) dlg.navigation_buttons_enabled = false dlg.set_html(dlg_html) dlg.show
<b>Iterate Selection</b>	Sketchup.active_model.selection.each { entity  # do something... }
<b>Check Type</b>	an_entity.type_name [Face Edge Group ComponentInstance]
<b>Add face</b>	Sketchup.active_model.entities.add_face [0,0,0],[0,10,0],[0,10,10]
<b>Set/Get attributes</b>	an_entity.set_attribute "dictionary_name", "key", "value" value = an_entity.get_attribute "dictionary_name", "key"
<b>Add group</b>	group = Sketchup.active_model.entities.add_group group.entities.add_line [0,0,0],[50,50,50]

Look for \Plugins\Examples\ folder for more code samples.