Maya UI mel pymel pyside ...

① 생성일	@2021년 8월 25일 오후 2:00
≔ 태그	
를 속성	

Maya UI mel pymel pyside ...

Maya UI setep 01 - helloWorld

Help

https://help.autodesk.com/view/MAYAUL/2020/ENU/?guid=GUID-04DBF1E2-73D1-4022-A935-D8256FB4C983

Mel 로 만든 샘플 코드 - autodesk maya

```
// Create the window.
window -title "Test Window" ExampleWindow7;
 columnLayout ColumnLayout;
 frameLayout -labelVisible false -marginWidth 5 -marginHeight 5;
 columnLayout;
 text -label "Overall Intensity";
 rowLayout -numberOfColumns 3;
 string $radioButton1, $radioButton2, $radioButton3;
 radioCollection;
 $radioButton1 = `radioButton -label "Low"`;
 $radioButton2 = `radioButton -label "Medium"`;
 $radioButton3 = `radioButton -label "High"`;
 setParent ..;
 text -label "Light Switches";
 rowColumnLayout -numberOfColumns 2
 -columnWidth 1 130 -columnWidth 2 130;
 string $checkBox1, $checkBox2, $checkBox3, $checkBox4;
 $checkBox1 = `checkBox -label "Front Spot"`;
 $checkBox2 = `checkBox -label "Center Spot"`;
 $checkBox3 = `checkBox -label "Near Flood"`;
 $checkBox4 = `checkBox -label "Sunlight"`;
 setParent ExampleWindow7|ColumnLayout;
 textField -text "Ready" -editable false -width 278 StatusLine;
 // Set initial state.
 radioButton -edit -select $radioButton1;
 checkBox -edit -value on $checkBox1;
 checkBox -edit -value off $checkBox2;
 checkBox -edit -value off $checkBox3;
 checkBox -edit -value on $checkBox4;
```

```
// Add functionality.
 //
 radioButton -edit -onCommand "showStatus \"Low Intensity\"" $radioButton1;
 radioButton -edit -onCommand "showStatus \"Med Intensity\"" $radioButton2;
 radioButton -edit -onCommand "showStatus \"High Intensity\"" $radioButton3;
 checkBox -edit
 -changeCommand "showStatus \"Front Spot: #1\""
 $checkBox1;
 checkBox -edit
 -changeCommand "showStatus \"Center Spot: #1\""
 $checkBox2;
 checkBox -edit
 -onCommand "showStatus \"Near Flood On\""
 -offCommand "showStatus \"Near Flood Off\""
 $checkBox3;
 checkBox -edit
 -onCommand "showStatus \"Sunlight On\""
 -offCommand "showStatus \"Sunlight Off\""
$checkBox4;
showWindow ExampleWindow7;
// Procedure to update the status line.
global proc showStatus (string $newStatus) {
textField -edit -text $newStatus ExampleWindow7|ColumnLayout|StatusLine;
}
```

Help

https://help.autodesk.com/view/MAYAUL/2020/ENU/?guid=__developer_Maya_SDK_MERGED_Maya_Python_API_Working with PySide in Maya PyQt and PySide Widget Best html

PyQt 및 PySide 위젯 모범 사례 → Autodesk Maya 에서 추천하는 윈도우 방식

```
from maya import OpenMayaUI as omui

from PySide2.QtCore import *
from PySide2.QtGui import *
from PySide2.QtWidgets import *
from PySide2 import __version__
from PySide2 import wrapInstance

mayaMainWindowPtr = omui.MQtUtil.mainWindow()
mayaMainWindow= wrapInstance(long(mayaMainWindowPtr), QWidget)

# WORKS: Widget is fine
hello = QLabel("Hello, World", parent=mayaMainWindow)
hello.setObjectName('MyLabel')
hello.setWindowFlags(Qt.Window) # Make this widget a standalone window even though it is parented
hello.show()
hello = None # the "hello" widget is parented, so it will not be destroyed.

# BROKEN: Widget is destroyed
```

```
hello = QLabel("Hello, World", parent=None)
hello.setObjectName('MyLabel')
hello.show()
hello = None # the "hello" widget is not parented, so it will be destroyed.
```

Help



tttps://help.autodesk.com/view/MAYAUL/2020/ENU/?guid=__PyMel_ui_html

PyMel 문서 UI 관련

with window 만들기 샘플

```
from pymel.core import *
template = uiTemplate('ExampleTemplate', force=True)
template.define(button, width=100, height=40, align='left')
template.define(frameLayout, borderVisible=True, labelVisible=False)
with window(menuBar=True, menuBarVisible=True) as win:
    # start the template block
    with template:
        with columnLayout( rowSpacing=5 ):
            with frameLayout():
                with columnLayout():
                    button(label='One')
                    button(label='Two')
                    button(label='Three')
            with frameLayout():
                with optionMenu():
                    menuItem(label='Red')
                    menuItem(label='Green')
                    menuItem(label='Blue')
# add a menu to an existing window
with win:
    with menu():
        menuItem(label='One')
        menuItem(label='Two')
        with subMenuItem(label='Sub'):
            menuItem(label='A')
            menuItem(label='B')
        menuItem(label='Three')
```

```
*^^* : 네이버 블로그
```

https://blog.naver.com/schnauzer109/222136182633

with 로 만든 샘플 코드

```
import pymel.core as pm
class BaseWithMayaUI():
   def __init__(self):
        self.windowName='BaseWithMayaUI00'
        if pm.window(self.windowName, exists=True):
            pm.deleteUI(self.windowName, window=True)
        self.UI()
    def UI(self):
        with pm.window(self.windowName, menuBar=True, menuBarVisible=True, title='BASE_UI', w=400) as win:
            with pm.columnLayout():
                pm.button('topAbutton',label=u'BASE BUTTON',w=400,c=lambda _:self.run('value'))
                pm.textField('topAtextfield',w=400)
        pm.showWindow(win)
   def run(self,test):
        print test
        pm.textField('topAtextfield',e=1,text='run')
a = BaseWithMayaUI()
```

pyside2 2021.08.25 자주 사용하는 UI 코드

```
#-*- coding:utf-8 -*-
import pymel.core as pm
import maya.cmds as cmds
import maya.cmds as mc
import math
import os, sys
import json
import importlib
from PySide2 import QtCore,QtGui,QtWidgets,__version__
from maya.app.general import mayaMixin
from collections import OrderedDict
titleA='sequence_run_script_UI_v20210503'
class sequence_run_script_UI(mayaMixin.MayaQWidgetBaseMixin,QtWidgets.QWidget):
    def __init__(self, parent=None):
        super(sequence_run_script_UI, self).__init__(parent)
        if pm.window(u'sequence_run_script_UI_01', q=True, ex=True):
            pm.deleteUI(u'sequence_run_script_UI_01', window=True)
        self.setObjectName('sequence_run_script_UI_01')
        self.setWindowTitle(titleA)
        self.setGeometry(500, 200, 350, 750)
        self.Log()
       self.UI()
sequence_run_script_UI().show()
```

Maya UI mel pymel pyside ...

Maya UI setep 01 - helloWorld

Help

https://help.autodesk.com/view/MAYAUL/2020/ENU/?guid=GUID-04DBF1E2-73D1-4022-A935-D8256FB4C983

Mel 로 만든 샘플 코드 - autodesk maya

```
// Create the window.
window -title "Test Window" ExampleWindow7;
columnLayout ColumnLayout;
 frameLayout -labelVisible false -marginWidth 5 -marginHeight 5;
 columnLayout;
 text -label "Overall Intensity";
 rowLayout -numberOfColumns 3;
 string $radioButton1, $radioButton2, $radioButton3;
 radioCollection;
 $radioButton1 = `radioButton -label "Low"`;
 $radioButton2 = `radioButton -label "Medium"`;
 $radioButton3 = `radioButton -label "High"`;
 setParent ..:
 text -label "Light Switches";
 rowColumnLayout -numberOfColumns 2
 -columnWidth 1 130 -columnWidth 2 130;
 string $checkBox1, $checkBox2, $checkBox3, $checkBox4;
 $checkBox1 = `checkBox -label "Front Spot"`;
 $checkBox2 = `checkBox -label "Center Spot"`;
 $checkBox3 = `checkBox -label "Near Flood"`;
 $checkBox4 = `checkBox -label "Sunlight"`;
 setParent ExampleWindow7|ColumnLayout;
 textField -text "Ready" -editable false -width 278 StatusLine;
 // Set initial state.
 radioButton -edit -select $radioButton1;
 checkBox -edit -value on $checkBox1;
 checkBox -edit -value off $checkBox2;
 checkBox -edit -value off $checkBox3;
 checkBox -edit -value on $checkBox4;
 // Add functionality.
 //
 radioButton -edit -onCommand "showStatus \"Low Intensity\"" $radioButton1;
 radioButton -edit -onCommand "showStatus \"Med Intensity\"" $radioButton2;
 radioButton -edit -onCommand "showStatus \"High Intensity\"" $radioButton3;
 checkBox -edit
 -changeCommand "showStatus \"Front Spot: #1\""
 $checkBox1;
 checkBox -edit
 -changeCommand "showStatus \"Center Spot: #1\""
 $checkBox2;
 checkBox -edit
```

```
-onCommand "showStatus \"Near Flood On\""
-offCommand "showStatus \"Near Flood Off\""
$checkBox3;
checkBox -edit
-onCommand "showStatus \"Sunlight On\""
-offCommand "showStatus \"Sunlight Off\""
$checkBox4;
showWindow ExampleWindow7;
// Procedure to update the status line.
//
global proc showStatus (string $newStatus) {
  textField -edit -text $newStatus ExampleWindow7|ColumnLayout|StatusLine;
}
```

Help

https://help.autodesk.com/view/MAYAUL/2020/ENU/?guid=__developer_Maya_SDK_MERGED_Maya_Python_API_Working_with_PySide_in_Maya_PyQt_and_PySide_Widget_Best_html

PyQt 및 PySide 위젯 모범 사례 → Autodesk Maya 에서 추천하는 윈도우 방식

```
from maya import OpenMayaUI as omui
from PySide2.QtCore import *
from PySide2.QtGui import *
from PySide2.QtWidgets import *
from PySide2 import __version__
from shiboken2 import wrapInstance
mayaMainWindowPtr = omui.MQtUtil.mainWindow()
mayaMainWindow= wrapInstance(long(mayaMainWindowPtr), QWidget)
# python 3.0
#mayaMainWindow= wrapInstance(int(mayaMainWindowPtr), QWidget)
# WORKS: Widget is fine
hello = QLabel("Hello, World", parent=mayaMainWindow)
hello.setObjectName('MyLabel')
hello.setWindowFlags(Qt.Window) # Make this widget a standalone window even though it is parented
hello.show()
hello = None # the "hello" widget is parented, so it will not be destroyed.
# BROKEN: Widget is destroyed
hello = QLabel("Hello, World", parent=None)
hello.setObjectName('MyLabel')
hello.show()
hello = None # the "hello" widget is not parented, so it will be destroyed.
```

```
Help

https://help.autodesk.com/view/MAYAUL/2020/ENU/?guid=__PyMel_ui_html
```

PyMel 문서 UI 관련

with window 만들기 샘플

```
from pymel.core import *
template = uiTemplate('ExampleTemplate', force=True)
template.define(button, width=100, height=40, align='left')
template.define(frameLayout, borderVisible=True, labelVisible=False)
with window(menuBar=True, menuBarVisible=True) as win:
    # start the template block
    with template:
        with columnLayout( rowSpacing=5 ):
            with frameLayout():
                with columnLayout():
                    button(label='One')
                    button(label='Two')
                    button(label='Three')
            with frameLayout():
                with optionMenu():
                    menuItem(label='Red')
                    menuItem(label='Green')
                    menuItem(label='Blue')
# add a menu to an existing window
with win:
    with menu():
        menuItem(label='One')
        menuItem(label='Two')
        with subMenuItem(label='Sub'):
            menuItem(label='A')
            menuItem(label='B')
        menuItem(label='Three')
```

```
*^^* : 네이버 블로그

https://blog.naver.com/schnauzer109/222136182633
```

with 로 만든 샘플 코드

```
import pymel.core as pm
class BaseWithMayaUI():
```

```
def __init__(self):
    self.windowName='BaseWithMayaUI00'
    if pm.window(self.windowName, exists=True):
        pm.deleteUI(self.windowName, window=True)
    self.UI()

def UI(self):
    with pm.window(self.windowName,menuBar=True,menuBarVisible=True,title='BASE_UI',w=400) as win:
        with pm.columnLayout():
        pm.button('topAbutton',label=u'BASE_BUTTON',w=400,c=lambda_:self.run('value'))
        pm.textField('topAtextfield',w=400)
    pm.showWindow(win)

def run(self,test):
    print test
    pm.textField('topAtextfield',e=1,text='run')

a = BaseWithMayaUI()
```

pyside2 2021.08.25 자주 사용하는 UI 코드

```
#-*- coding:utf-8 -*-
import pymel.core as pm
import maya.cmds as cmds
import maya.cmds as mc
import math
import os, sys
import json
import importlib
from PySide2 import QtCore, QtGui, QtWidgets, __version__
from maya.app.general import mayaMixin
from collections import OrderedDict
titleA='sequence run script UI v20210503'
class sequence_run_script_UI(mayaMixin.MayaQWidgetBaseMixin,QtWidgets.QWidget):
   def __init__(self, parent=None):
       super(sequence_run_script_UI, self).__init__(parent)
        if pm.window(u'sequence_run_script_UI_01', q=True, ex=True):
            pm.deleteUI(u'sequence_run_script_UI_01', window=True)
        self.setObjectName('sequence_run_script_UI_01')
        self.setWindowTitle(titleA)
        self.setGeometry(500, 200, 350, 750)
        self.Log()
       self.UI()
sequence_run_script_UI().show()
```