

JAVARIA MALIK (191873)

Game engine project

CUSTOM UI PANEL

First I create a panel in blender using python scritping

```
'''javaria malik project'''

'''prject for Gam engine'''

import bpy

class PANEL_CUSTOM_UI(bpy.types.Panel):

    """Create custom Panel"""

    bl_label="Panel Custom UI"

    bl_idname="OBJECT_PT_panel"

    bl_space_type='VIEW_3D'

    bl_region_type='UI'

    bl_category = "Panel Custom UI"

    def draw(self, context):

        layout = self.layout

        row=layout.row()

        row.label(text = "ROW 5454")

def register():

    bpy.utils.register_class(PANEL_CUSTOM_UI)

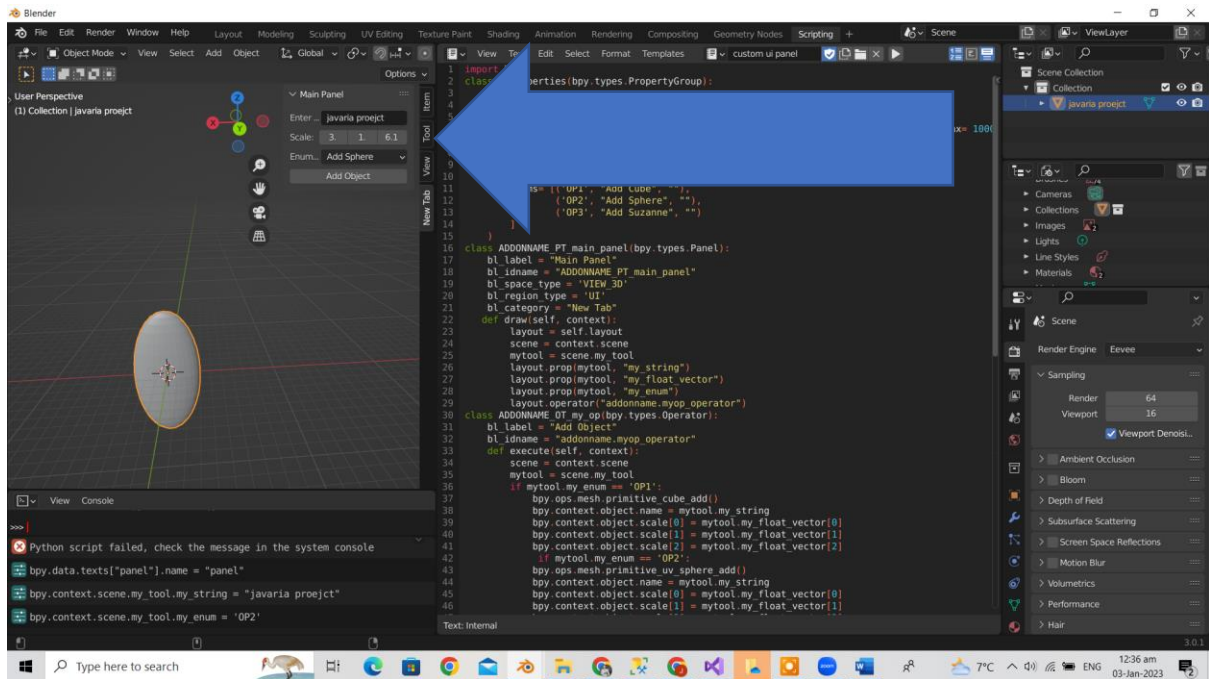
def unregister():

    bpy.utils.unregister_class(PANEL_CUSTOM_UI)

if __name__ == "__main__":

    register()
```

THEN I CREATE CUSTOM PANEL WHERE I CAN ADD OBJECT AND ADD NAME OF MY COLLECTION I can ALSO SCALE the object by using panel



This code of my python script

```
import bpy
```

```
class MyProperties(bpy.types.PropertyGroup):
```

```
    my_string : bpy.props.StringProperty(name= "Enter Text")
```

```
    my_float_vector : bpy.props.FloatVectorProperty(name= "Scale", soft_min= 0, soft_max= 1000, default=
(1,1,1))
```

```
    my_enum : bpy.props.EnumProperty(
```

```
        name= "Enumerator / Dropdown",
```

```
        description= "sample text",
```

```
        items= [('OP1', "Add Cube", ""),
```

```
                ('OP2', "Add Sphere", ""),
```

```
                ('OP3', "Add Suzanne", "")
```

```
    ]
```

```
)
```

```
class ADDONNAME_PT_main_panel(bpy.types.Panel):
```

```
    bl_label = "Main Panel"
```

```
    bl_idname = "ADDONNAME_PT_main_panel"
```

```

bl_space_type = 'VIEW_3D'

bl_region_type = 'UI'

bl_category = "New Tab"

def draw(self, context):

    layout = self.layout

    scene = context.scene

    mytool = scene.my_tool

    layout.prop(mytool, "my_string")

    layout.prop(mytool, "my_float_vector")

    layout.prop(mytool, "my_enum")

    layout.operator("addonname.myop_operator")

class ADDONNAME_OT_my_op(bpy.types.Operator):

    bl_label = "Add Object"

    bl_idname = "addonname.myop_operator"

    def execute(self, context):

        scene = context.scene

        mytool = scene.my_tool

        if mytool.my_enum == 'OP1':

            bpy.ops.mesh.primitive_cube_add()

            bpy.context.object.name = mytool.my_string

            bpy.context.object.scale[0] = mytool.my_float_vector[0]

            bpy.context.object.scale[1] = mytool.my_float_vector[1]

            bpy.context.object.scale[2] = mytool.my_float_vector[2]

            if mytool.my_enum == 'OP2':

                bpy.ops.mesh.primitive_uv_sphere_add()

                bpy.context.object.name = mytool.my_string

                bpy.context.object.scale[0] = mytool.my_float_vector[0]

                bpy.context.object.scale[1] = mytool.my_float_vector[1]

                bpy.context.object.scale[2] = mytool.my_float_vector[2]

            if mytool.my_enum == 'OP3':

                bpy.ops.mesh.primitive_monkey_add()

                bpy.context.object.name = mytool.my_string

                bpy.context.object.scale[0] = mytool.my_float_vector[0]

```

```
        bpy.context.object.scale[1] = mytool.my_float_vector[1]

        bpy.context.object.scale[2] = mytool.my_float_vector[2]

        return {'FINISHED'}

classes = [MyProperties, ADDONNAME_PT_main_panel, ADDONNAME_OT_my_op]

def register():

    for cls in classes:

        bpy.utils.register_class(cls)

        bpy.types.Scene.my_tool = bpy.props.PointerProperty(type= MyProperties)


def unregister():

    for cls in classes:

        bpy.utils.unregister_class(cls)

        del bpy.types.Scene.my_tool


if __name__ == "__main__":

    register()
```