Base class for integrating USD Hydra based renderers.

USD Hydra Based Renderer

```
import bpy
class CustomHydraRenderEngine(bpy.types.HydraRenderEngine):
    # Identifier and name in the user interface.
   bl_idname = "CUSTOM_HYDRA_RENDERER"
   bl_label = "Custom Hydra Renderer"
    # Name of the render plugin.
   bl delegate id = "HdCustomRendererPlugin"
    # Use MaterialX instead of `UsdPreviewSurface` for materials.
   bl use materialx = True
    # Register path to plugin.
   @classmethod
   def register(cls):
        # Make `pxr` module available, for running as `bpy` PIP package.
        bpy.utils.expose_bundled_modules()
        import pxr.Plug
        pxr.Plug.Registry().RegisterPlugins(['/path/to/plugin'])
    # Render settings that will be passed to the delegate.
   def get render settings(self, engine type):
       return {
            'myBoolean': True,
            'myValue': 8,
            'aovToken:Depth': "depth",
        }
    # RenderEngine methods for update, render and draw are implemented in
    # HydraRenderEngine. Optionally extra work can be done before or after
    # by implementing the methods like this.
   def update(self, data, depsgraph):
        super().update(data, depsgraph)
        # Do extra work here
   def update_render_passes(self, scene, render_layer):
        if render layer.use pass z:
            self.register_pass(scene, render_layer, 'Depth', 1, 'Z', 'VALUE')
# Registration
def register():
   bpy.utils.register class (CustomHydraRenderEngine)
```

```
def unregister():
      bpy.utils.unregister class (CustomHydraRenderEngine)
 if __name__ == "__main__":
      register()
base classes — bpy struct, RenderEngine
class bpy.types.HydraRenderEngine(RenderEngine)
    Base class from USD Hydra based renderers
    get render settings(engine type: str)
        Provide render settings for HdRenderDelegate.
    render(depsgraph)
    update(data, depsgraph)
    view_draw(context, depsgraph)
    view_update(context, depsgraph)
    classmethod bl_rna_get_subclass(id, default=None)
        PARAMETERS:
            id (str) – The RNA type identifier.
        RETURNS:
            The RNA type or default when not found.
        RETURN TYPE:
             bpy.types.Struct subclass
    classmethod bl rna get subclass py(id, default=None)
        PARAMETERS:
            id(str) – The RNA type identifier.
        RETURNS:
            The class or default when not found.
        RETURN TYPE:
            type
```

Inherited Properties

- bpy_struct.id_data
- RenderEngine.is_animation
- RenderEngine.is_preview
- RenderEngine.camera_override
- RenderEngine.layer override
- RenderEngine.resolution x
- RenderEngine.resolution_y
- RenderEngine.temporary_directory
- RenderEngine.render

- RenderEngine.bl use preview
- RenderEngine.bl use postprocess
- RenderEngine.bl use eevee viewport
- RenderEngine.bl use custom freestyle
- RenderEngine.bl_use_image_save
- RenderEngine.bl_use_gpu_context
- RenderEngine.bl_use_shading_nodes_custom
- RenderEngine.bl_use_spherical_stereo
- PondorEngino hl was atores wiswhert

- RenderEngine.use highlight tiles
- RenderEngine.bl idname
- RenderEngine.bl label
- renderrudine.bi_ase_scereo_viewboic
- RenderEngine.bl use alembic procedural
- RenderEngine.bl use materialx

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy struct.driver remove
- bpy struct.get
- bpy struct.id properties clear
- bpy struct.id properties ensure
- bpy struct.id properties ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy struct.items
- bpy struct.keyframe delete
- bpy struct.keyframe insert
- bpy struct.keys
- bpy struct.path from id
- bpy_struct.path_resolve
- bpy struct.pop
- bpy struct.property overridable library set
- bpy_struct.property_unset
- bpy struct.type recast
- bpy struct.values
- RenderEngine.update
- RenderEngine.render
- RenderEngine.render_frame_finish
- RenderEngine.draw
- RenderEngine.bake
- RenderEngine.view update
- RenderEngine.view draw
- RenderEngine.update_script_node
- RenderEngine.update_render_passes

- RenderEngine.tag redraw
- RenderEngine.tag_update
- RenderEngine.begin result
- RenderEngine.update result
- RenderEngine.end_result
- RenderEngine.add_pass
- RenderEngine.get_result
- RenderEngine.test break
- RenderEngine.pass_by_index_get
- RenderEngine.active_view_get
- RenderEngine.active view set
- RenderEngine.camera shift x
- RenderEngine.camera model matrix
- RenderEngine.use spherical stereo
- RenderEngine.update stats
- RenderEngine.frame set
- RenderEngine.update progress
- RenderEngine.update_memory_stats
- RenderEngine.report
- RenderEngine.error_set
- RenderEngine.bind_display_space_shader
- RenderEngine.unbind_display_space_shader
- RenderEngine.support_display_space_shader
- RenderEngine.get_preview_pixel_size
- RenderEngine.free_blender_memory
- RenderEngine.tile_highlight_set
- RenderEngine.tile highlight clear all
- RenderEngine.register pass
- RenderEngine.bl_rna_get_subclass
- RenderEngine.bl_rna_get_subclass_py

Previous HueCorrectModifier(StripModifier)

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