AddElementCommand

- std::shared ptr< GUII
- std::shared ptr< SDFormat Parserl > sdformatParser sdf::ElementPtr parent
- element sdf::ElementPtr new
- element
- bool is currently undoable bool is currently redoable
- AddElementCommand
- (std::shared ptr< GUII > gui, std::shared ptr
- < SDFormatParserI > sdformatParser, sdf::ElementPtr parent_element. sdf::ElementPtr new element)
- bool Execute() override
- bool ExecuteUndo() override
- bool ExecuteRedo() override
- bool IsUndoable() override
- bool IsRedoable() override
- bool IsThreaded(bool &prevent_user_input)
- bool ChangesProgramState Irreversibly() override
- void AddElement(sdf ::ElementPtr parent, sdf::ElementPtr element)

override

CloseModelViewerCommand

- std::shared ptr< ModelViewer $I > model \overline{viewer}$
- + CloseModelViewerCommand (std::shared ptr< ModelViewerl > model viewer)
- bool Execute() override
- bool ExecuteUndo() override
- bool ExecuteRedo() override
- bool IsUndoable() override
- bool IsRedoable() override
- bool IsThreaded(bool &prevent_user_input) override
- bool ChangesProgramState Irreversibly() override

CreateFileCommand

std::shared_ptr< GUII

- > gui
- std::shared ptr< SDFormat Parserl $> s\overline{df}$ ormatParser CreateFileCommand
- (std::shared_ptr< GUII > gui, std::shared ptr
- < SDFormatParserl > sdformatParser)
 - bool Execute() override
 - bool ExecuteUndo() override
 - bool ExecuteRedo() override
 - bool IsUndoable() override
 - bool IsRedoable() override
 - bool IsThreaded(bool &prevent user input) override
 - bool ChangesProgramState Irreversibly() override

DeleteElementCommand

- std::shared ptr< GUII > gui
- sdf::ElementPtr element
- sdf::ElementPtr element to deletes parent
- bool is currently undoable
- (std::shared_ptr< GUII
- > gui, std::shared ptr
- bool Execute() override
- bool ExecuteUndo() override
- bool IsUndoable() override
 - - bool IsThreaded(bool &prevent_user_input) override
 - bool ChangesProgramState Irreversibly() override
 - bool ElementRequired()

- std::shared ptr< SDFormat Parserl > sdformatParser
- to delete
- bool is currently redoable
- DeleteElementCommand
- < SDFormatParserl > sdformatParser, sdf::ElementPtr element to delete)

- bool ExecuteRedo() override
- bool IsRedoable() override

GenericCommand

- ()> function handle
- ::function< void()> function handle)
- bool Execute() override
- bool ExecuteUndo()
- override
- bool ExecuteRedo() override
- bool IsThreaded(bool

- std::function< void
- GenericCommand(std)

- bool IsUndoable() override
- bool IsRedoable() override
- &prevent_user_input) override -
- bool ChangesProgramState Irreversibly() override

ModifyAttributeCommand< T >

Commandl

+ virtual bool Execute()=0 + virtual bool ExecuteUndo()=0 + virtual bool ExecuteRedo()=0 + virtual bool IsUndoable()=0 + virtual bool IsRedoable()=0 virtual bool IsThreaded (bool &prevent user input)=0 virtual bool ChangesProgram StateIrreversibly()=0

- std::string file path
- std::shared ptr< GUII
- std::shared ptr< SDFormat Parserl > sdformatParser
- sdf::ParamPtr attribute _to_modify to modify
- T new value
- Told value
- bool is currently undoable
- bool is currently redoable
- + ModifyAttributeCommand (std::shared ptr< GUII
- > gui, std::shared ptr < SDFormatParser > sdformatParser sdf::ParamPtr attribute to modify, T new value)
- bool Execute() override
- bool ExecuteUndo() override
- bool ExecuteRedo()
- override
- bool IsUndoable() override bool IsRedoable() override
- bool IsThreaded(bool &prevent_user_input) override
- bool ChangesProgramState Irreversibly() override

ModifyElementCommand< T >

- std::string file path
- std::shared ptr< GUII > gui
- std::shared ptr< SDFormat Parserl > sdformatParser
- sdf::ElementPtr element
- T new value
- Told value
- bool is currently undoable
- bool is currently redoable + ModifyElementCommand
- (std::shared ptr< GUII > gui, std::shared ptr
- < SDFormatParserI > sdformatParser, sdf::ElementPtr element to_modify, T new value)
- bool Execute() override
- bool ExecuteUndo() override
- bool ExecuteRedo() override
- bool IsUndoable() override bool IsRedoable() override
- bool IsThreaded(bool &prevent_user_input) override
- bool ChangesProgramState Irreversibly() override

OpenFileCommand

- std::string file path
- std::shared ptr< GUII > gui
- std::shared ptr< SDFormat Parserl > sdformatParser
- + OpenFileCommand(std ::shared ptr< GUII > gui, std::shared ptr < SDFormatParserl > sdformatParser,
- std::string file path) bool Execute() override
- bool ExecuteUndo() override
- bool ExecuteRedo() override
- bool IsUndoable() override

bool IsRedoable() override

bool IsThreaded(bool &prevent user input)

override

bool ChangesProgramState Irreversibly() override

- OpenModelViewerCommand
- bool render collisions $I > model \overline{viewer}$ in model viewer + OpenModelViewerCommand (std::shared ptr< ModelViewer - RenderModelCommand

std::shared ptr< ModelViewer

- I > model viewer) bool Execute() override
- bool ExecuteUndo() override
- bool ExecuteRedo() override
- bool IsUndoable() override bool IsRedoable() override
- bool IsThreaded(bool &prevent_user_input) override
- bool ChangesProgramState Irreversibly() override

RenderModelCommand std::shared ptr< ModelViewer

I > model viewer

in model viewer)

bool ExecuteUndo()

bool ExecuteRedo()

override

override

override

bool Execute() override

std::shared ptr< SDFormat

(std::shared ptr< ModelViewer

I > model viewer, std::shared

parser, bool render collisions

ptr< SDFormatParserl > sdformat

Parserl > sdformat parser

- - std::shared ptr< SDFormat Parserl > sdformatParser
 - SaveFileCommand(std ::shared ptr< GUII >
 - bool ExecuteUndo() override
 - override
- bool IsUndoable() override bool IsThreaded(bool
- bool IsRedoable() override bool IsThreaded(bool &prevent user input)
- bool ChangesProgramState Irreversibly() override

SaveFileCommand std::shared_ptr< GUII

- gui, std::shared ptr < SDFormatParserl > sdformatParser)
- bool Execute()
- bool ExecuteRedo()
- bool IsUndoable() override
- bool IsRedoable() override
- &prevent user input) override
- bool ChangesProgramState Irreversibly() override