#### Commandl

- + virtual bool Execute()=0
- + virtual bool ExecuteUndo()=0
- + virtual bool ExecuteRedo()=0
- + virtual bool IsUndoable()=0
- + virtual bool IsRedoable()=0
- + virtual bool IsThreaded()=0
- + virtual bool ChangesProgram StateIrreversibly()=0

## DeleteElementCommand

- std::string file\_path
- std::shared\_ptr< GUII</li>gui
- std::shared\_ptr< SDFormat Parserl > sdformatParser
- sdf::ElementPtr element \_to\_delete
- sdf::ElementPtr element to deletes parent
- bool is\_currently\_undoable
- bool is\_currently\_redoable
- + DeleteElementCommand (std::shared\_ptr< GUII > gui, std::shared\_ptr
  - < SDFormatParserI > sdformatParser, sdf::ElementPtr element\_to\_delete)
- bool Execute() override
- bool ExecuteUndo() override
- bool ExecuteRedo() override
- bool IsUndoable() override
- bool IsRedoable() override
- bool IsThreaded() override
- bool ChangesProgramState Irreversibly() override

## GenericCommand

- std::function< void ()> function\_handle
- + GenericCommand(std ::function< void()> function\_handle)
- bool Execute() override
- bool ExecuteUndo() override
- bool ExecuteRedo() override
- bool IsUndoable() override
- bool IsRedoable() override
- bool IsThreaded() override
- bool ChangesProgramState Irreversibly() override

# OpenFileCommand

- std::string file\_path
- std::shared\_ptr< GUII</li>gui
- std::shared\_ptr< SDFormat Parserl > sdformatParser
- + OpenFileCommand(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() override
- bool ChangesProgramState Irreversibly() override

# SaveFileCommand

- std::shared\_ptr< GUII</li>gui
- std::shared\_ptr< SDFormat Parserl > sdformatParser
- + SaveFileCommand(std ::shared\_ptr< GUII > gui, std::shared\_ptr < SDFormatParserI > sdformatParser, bool force\_save\_as\_not\_save)
- bool Execute()
- bool ExecuteUndo() override
- bool ExecuteRedo() override
- bool IsUndoable() override
- bool IsRedoable() override
- bool IsThreaded() override
- bool ChangesProgramState Irreversibly() override