CommandFactoryI + virtual std::unique _ptr< Commandl > MakeOpenFile Command()=0 + virtual std::unique ptr < CommandI > MakeDelete ElementCommand(sdf::ElementPtr element_to_delete)=0 + virtual std::unique ptr< Commandl > MakeAddElement Command(sdf::ElementPtr parent _element, sdf::ElementPtr new _element)=0 + virtual std::unique _ptr< Commandl > MakeUndoCommand()=0 + virtual std::unique ptr< Command()=0 + virtual std::unique ptr < CommandI > MakeSaveFile $\overline{Command()}=0$ + virtual std::unique ptr < Commandl > MakeModify AttributeCommand(sdf::ParamPtr attribute to modify, std::string new_value)=0 + virtual std::unique ptr< CommandI > MakeModify ElementCommand(sdf::ElementPtr element to_modify, std::string new value)=0

+ virtual void PushToUndoCommands Stack(std::unique_ptr< CommandI > command, const bool new_change=true)=0 virtual void PushToRedoCommands Stack(std::unique_ptr< CommandI

> command)=0 + virtual void ClearUndoRedo Stacks()=0

virtual void Initialize

> gui

(std::shared_ptr< GUII > gui, std::shared_ptr < SDFormatParserI > sdformatParser)=0

CommandFactory std::shared_ptr< GUII

- std::shared_ptr< SDFormat Parserl > sdformatParser std::stack< std::unique
- _ptr< Commandl > > undo _commands_stack std::stack< std::unique
- _ptr< CommandI > > redo _commands_stack
- + CommandFactory(std
- ::shared_ptr< GUII > gui, std::shared_ptr < SDFormatParserl > sdformat
- Parser) void Initialize(std ::shared_ptr< GUII > gui, std::shared_ptr
 - < SDFormatParserl > sdformat Parser) std::unique_ptr< Command I > MakeOpenFileCommand
- std::unique ptr< Command I > MakeDeleteElementCommand
- (sdf::ElementPtr element_to _delete) override std::unique_ptr< Command I > MakeAddElementCommand
- (sdf::ElementPtr parent_element, sdf::ElementPtr new_element)
- std::unique_ptr< Command I > MakeSaveFileCommand()
- std::unique_ptr< Command I > MakeUndoCommand() override

override

std::unique_ptr< Command I > MakeRedoCommand()

std::unique_ptr< Command

- I > MakeModifyAttributeCommand (sdf::ParamPtr attribute_to modify, std::string new value) override
- std::unique_ptr< Command I > MakeModifyElementCommand (sdf::ElementPtr element_to
- _modify, std::string new_value) override void ClearStack(std
- _ptr< Commandl > > &stack) void ClearUndoRedoStacks

::stack< std::unique

- () override void PushToUndoCommandsStack
- (std::unique_ptr< Commandl > command, const bool new _change=true) override
- void PushToRedoCommandsStack (std::unique_ptr< Commandl > command) override

void PopFromUndoCommands

Stack() void PopFromRedoCommands Stack()