CommandI

```
+ 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
```

AddElementCommand

```
- std::shared_ptr< GUII
  > gui
- std::shared_ptr< SDFormat
  ParserI > 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() override
- bool ChangesProgramState
  Irreversibly() override
```

DeleteElementCommand

```
- std::shared_ptr< GUII
  > gui
- std::shared_ptr< SDFormat
  ParserI > 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
  > gui
- std::shared_ptr< SDFormat
  ParserI > sdformatParser
```
```
+ OpenFileCommand(std
  ::shared_ptr< GUII >
  gui, std::shared_ptr
  < SDFormatParserI > 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
  > gui
- std::shared_ptr< SDFormat
  ParserI > sdformatParser
```
```
+ SaveFileCommand(std
  ::shared_ptr< GUII >
  gui, std::shared_ptr
  < SDFormatParserI > sdformatParser)
- bool Execute()
- bool ExecuteUndo()
  override
- bool ExecuteRedo()
  override
- bool IsUndoable() override
- bool IsRedoable() override
- bool IsThreaded() override
- bool ChangesProgramState
  Irreversibly() override
```