```
std::enable_shared
           from this < GUII >
                 GUII
+ virtual std::unique
   ptr< CommandI > Update
  (std::shared_ptr< CommandFactory
  I > command_factory)=0
+ virtual bool ShouldClose()=0
+ virtual void OpenChoiceDialog
  (DialogMessage dialogMessage,
   std::vector< std::pair< std
  ::string, bool > > &choices)=0
+ virtual void SetPreventInput
  Flag(bool set)=0
+ virtual std::unique
   lock< std::mutex >
  LockMutex()=0
# virtual void Initialize
  (const std::string &windowName,
   std::shared_ptr< SDFormatParserI
   > sdformat_parser, bool &success)=0
                  GUI
std::shared_ptr< Command
Factory > command_factory
std::atomic< bool >
```

GLFWwindow \* window

prevent\_input\_flag

- ImGuilO \* io
  - - std::shared\_ptr< SDFormat Parserl > sdformat\_parser
    - sdf::ElementPtr element to append to
    - ImVec4 background\_colour std::mutex gui\_mutex
    - sdf::ParamPtr attribute \_to\_edit
    - sdf::ElementPtr element
      - \_to\_edit
- + GUI(const std::string
  - &window\_name, std::shared
  - \_ptr< SDFormatParserl > sdformat \_parser, bool &success)
  - ~GUI() void OpenChoiceDialog
    - (DialogMessage dialogMessage, std::vector< std::pair< std
  - ::string, bool > > &choices) override void Initialize(const
  - std::string &window \_name, std::shared\_ptr < SDFormatParserl > sdformat
  - \_parser, bool &success) override bool ShouldClose()
  - override std::unique\_ \_ptr< Command
  - I > Update(std::shared command\_factory) override
  - void SetPreventInputFlag
  - (bool set) override void DisplaySDFRootElement (std::unique\_ptr< CommandI

> &command, std::shared\_ptr

- < SDFormatParserl > sdformat parser, std::shared ptr< CommandFactory I > command\_factory)
- bool SetupNewFrame() void DrawCoreFrame
- (std::unique\_ptr< CommandI
- > &command, std::shared \_ptr< CommandFactoryl > command factory)
- void CreateAppendElement Dropdown(sdf::ElementPtr
- element, std::unique\_ptr < Commandl > &command, std ::shared\_ptr< CommandFactoryI > command\_factory, int &unique\_id)
- void CreateDropdown (const std::vector< std::string > &items, const std::vector< std

::mutex > LockMutex()

override

- ::string > &item\_descriptions, int &selected\_item, int &unique\_id) std::unique\_lock< std
- static void GLFWErrorCallback (int error, const char \*description)