po - uilib ①

po - uilib - forms

```
:Type : class
«abstract»

Field

- _prompt : string
- _clear : boolean
# _value : Type

+ prompt() : String
+ set(value : Type) : void
+ value() : Type
+ clear() : void
# dirty() : void
+ cleared() : boolean
+ isReadOnly() : boolean
+ «abstract» parse(in : String) : boolean
```

```
Field Boolean

- «final» BOOLEAN_WORD_YES
- «final» BOOLEAN_WORD_NO
- «final» BOOLEAN_CHAR_YES
- «final» BOOLEAN_CHAR_NO

+ parse(in : String) : boolean
```

```
Field Integer

+ parse(in : String) : boolean
```

```
Field None

+ parse(in : String) : boolean
```

```
Field Real

+ parse(in : String) : boolean
```

```
Field String

+ parse(in : String) : boolean
```

```
Form

- _ui : Dialog
- _title : string
- _fields : Map<String, Field<?>>

+ title() : String
+ entries() : Collection<Field<?>>
+ field(key : String) : Field<?>
# add(key : String, in : Field<?>) : void
+ addBooleanField(key : String, label : String)
+ addStringField(key : String, label : String)
+ addRealField(key : String, label : String)
+ addIntegerField(key : String, label : String)
+ addOptionField(key : String, label : String)
- get(key : String, type : String) : Object
+ booleanField(key : String) : Boolean
+ stringField(key : String) : String
+ realField(key : String) : Double
+ optionField(key : String) : String
+ integerField(key : String) : Integer
+ parse(clear : boolean) : Form
+ clear() : void
+ confirm(prompt : String) : Boolean
+ requestInteger(prompt : String) : Integer
+ requestReal(prompt : String) : Double
+ requestString(prompt : String) : String
+ requestOption(prompt : String, options : String...) : String
```

```
Form Exception
```

PO - uilib - menus

Receiver Class

<>

Command

- _lost : boolean
- _title : String
- # <<final>> _receiver : Receiver
- # _valid : Predicate<Receiver>
- <<final>> _form : Form
- # <<final>> _display : Display

+ isLost (): boolean

+ IsValid (): boolean

+ addBooleanField (Key: String, prompt: String): void

+ addRealField (Key: String, prompt: String): void

+ addIntegerField (Key: String, prompt: String): void

+ addStringField (Key: String, prompt: String): void

+ addOptionField (Key: String, prompt: String): void

+ booleanField (Key: String): Boolean

+ realField (Key: String): Double

+ integerField (Key: String): Integer

+ stringField (Key: String): String

+ optionField (Key: String): String

+ performCommand (): void

<> execute (): void

CommandException

DoOpenMenu

<<final>> execute (): void

Menu

- _ui: Dialog
- _title: String
- _commands: Command<?>[]

+ title(): String

+ size(): int

+ entry (n: int): Command<?>

+ entries (): Command<?>[]

+ open (): void

«interface» Property

WRITE_INPUT : String

BOTH_CHANNELS : String

INPUT_CHANNEL : String

OUTPUT_CHANNEL : String

LOG_CHANNEL : String

Run EOF Exception

Text Interaction

- -_in : BufferedReader
- -_out : PrintStream
- -_log : PrintStream
- -_writeInput : boolean

+ close() : void

+ open (menu : Menu) : void

+ fill (form : Form) : void

+ render (title : String, text : String) : void

+ readInteger (prompt : String) : int

Composite Print Stream

- -_streams : Collection < PrintStream >

- -_error : boolean

+ add (ps : PrintStream) : void

+ check Error () : boolean

+ close() : void

+ flush() : void

+ ~~print (b : boolean) : void~~
   print (type : Type) : void

+ println (type : Type) : void

setError () : void

+ write (buf : byte[], off : int, len : int) : void

+ write (b : int) : void

+ write (b : byte[]) : void

po-uilib

Dialog

- «final» ACTION_CHANNEL : String
- «final» CHANNEL_SWING : String
- «final» CHANNEL_NEW_SWING : String
- «final» CHANNEL_TEXT : String

+ UI : Dialog
- _backend : InteractionDriver

+ open (menu : Menu) : void
+ fill (form : Form) : void
+ render (title : String, text : String) : void
+ close () : void

«interface»
InteractionDriver

+ open (menu : Menu) : void
# fill (form : Form) : void
# render (title : String, text : String)
close () : void   : void

Display

- _ui : Dialog
- _title : String
- _text : StringBuilder

+ add (toAdd : Object) : Display
+ addAll (items : Collection<?>) : Display
+ addLine (toAdd : Object) : Display
+ addNewline (toAdd : Object , force : boolean) : Display
+ «final» display () : void
+ «final» display text () : void
+ popup (topop : Object) : void
+ popup (topop : Collection<?>) : void
+ clear () : void

UML

Field Boolean — «bind» Type → Boolean

Field Integer — «bind» Type → Integer

Field Word — «bind» Type → Void

Field Option — «bind» Type → String

«abstract» Field

«bind» Field Real — Type → double

«bind» Field String — Type → String

Form — -fields — -ui

«interface» Interaction Driver

-ui   -backend

Dialog

-commands

Menu

Receiver : class
«abstract»
Command

-form → Form

-receiver

-valid

Receiver

«interface» Predicate

«bind» Receiver → Menu

Do Open Menu

Display

-ui

«interface» Property

String Builder

PrintStream   2   *

-streams

Composite Print Stream

«bind» Type → Print stream

Type : E
«interface» Collection

-out
-log

Text Interaction

-in

Buffered Reader

RunTime EOF Exception

Form Exception

Runtime Exception

Exception