Composit Point Stream

<<interface>>
Interaction Driver

<<Interaction>>

Runtime EOF Exception

Menu

Display

#_display

<>
Command

DoOpen Menu

Dialog

Form Exception

<<throws>>

Form

CommandFeature

<<uses>>

<>
Field

FieldBoolean

FieldInteger

FieldName

FieldOption

FieldReal

FieldString

_behend

_ui

command

_form

*

Field

```
- -prompt : String
- -clear : boolean
# -value : Type
```
```
+ prompt () : String
+ set (value : Type) : void
+ value () : Type
+ clear () : void
# dirty () : void
+ cleared () : boolean
+ isReadyOnly () : boolean
+ <<abstract>> parse (in : String) : boolean
+ toString () : String
```

Field Boolean

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

Field Integer

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

Field None

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

Field Option

```
- -options : String []
```
```
+ parse (in : String) : boolean
```

Field Real

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

Field String

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

Form

```
- -ui : Dialog
- -title : String
- -fields = new LinkedHashMap <>() : Map <String, Field<?>>
```
```
+ title () : String
+ entries () : Collection<Field<?>>
+ field (key : String) : Field<?>
+ add (key : String, in : Field<?>) : void
+ addBooleanField (key : String, label : String) : void
+ addStringField (key : String, label : String) : void
+ addRealField (key : String, label : String) : void
+ addIntegerField (key : String, label : String) : void
+ addOptionField (key : String, label : String, options : String ...)
- get (key : String, type : String) : Object
+ booleanField (key : String) : Boolean
+ stringField (key : String) : String
+ optionField (key : String) : String
+ realField (key : String) : Double
+ integerField (key : String) : Integer
+ parse () : Form
+ 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
```

Menu

```
- -ui : Dialog
- -title : String
- -commands : Command<?>[]
```
```
+ title () : String
+ size () : int
+ entry (n : int) : Command<?>
+ entries () : Command<?>[]
+ open () : void
```

CommonEl

```
- _last : boolean
- _title : String
# _receiver : Receiver
# _valid = receiver → true : Predicate <Receiver>
- _form : Form
# _display : Display
```

```
+ title () : String
+ isLast () : boolean
+ isValid () : boolean
+ addBoolean Field (key : String, prompt : String) : void
+ add Real Field (key : String, prompt : String) : void
+ add Integer Field (key : String, prompt : String) : void
+ add String Field (key : String, prompt : String) : void
+ add Option Field (key : String, prompt : String, options : String ...) : void
+ boolean Field (key : String) : Boolean
+ real Field (key : String) : Double
+ integer Field (key : String) : Integer
+ string Field (key : String) : String
+ option Field (key : String) : String
```

DoOpenMenu

```
+ execute () : void
```

TextInteraction

```
- in = new BufferReader (new InputStream Reader (System.in)) : Buffered Reader
- out = System.out : PrintStream
- log = null : PrintStream
- writeInput : boolean
```

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

InteractionDriver

CompositePrintStream

```
- streams = new ArrayList <> () : Collection <PrintStream>
- error = false : boolean
```

```
+ add (Rm ps : Print Stream) : void
+ checkError () : boolean
+ close () : void
+ flush () : void
+ print (b : boolean) : void
+ print (c : char) : void
+ print (c : char[]) : void
+ print (d : double) : void
+ print (f : float) : void
+ print (i : int) : void
+ print (l : long) : void
+ print (obj : Object) : void
+ print (str : String) : void
+ println (b : boolean) : void
+ println (c : char) : void
+ println (c : char[]) : void
+ println (d : double) : void
+ println (f : float) : void
+ println (i : int) : void
+ println (l : long) : void
+ println (obj : Object) : void
+ println (str : String) : void
+ setError () : void
+ write (buf : byte[], off : int, len : int) : void
+ write (b : int) : void
+ write (b : byte[]) : void
```

Dialog

```
- ACTION_CHANNEL : String = "ui"
- CHANNEL_SWING : String = "swing"
- CHANNEL_NEW_SWING : String = "newswing"
- CHANNEL_TEST : String = "test"
- backend : InteractionDriver
```
```
~~[illegible]~~
+ open (menu : Menu) : void
+ fill (form : Form) : void
+ render (title : String, text : String) : void
+ close () : void
```

Display

```
- ui : Dialog
- title = " " : String
- text = new StringBuilder() : StringBuilder
```
```
+ add (toAdd : Object) : Display
+ addAll (items : Collection<?>) : Display
+ addLine (toAdd : Object) : Display
+ addNewline (toAdd : Object, force : boolean) : Display
+ display () : void
+ popup (toPop : Object) : void
+ popup (toPop : Collection<?>) : void
+ clear () : void
```

Declaro por minha honra que este diagrama foi realizado
apenas pelos elementos que constituem o grupo de projeto

Diogo Vieira 99205

Declaro por minha honra que este diagrama foi realizade apenas pelos elementos que constituem o grupo do projeto

Gonçalo Azevedo 93075