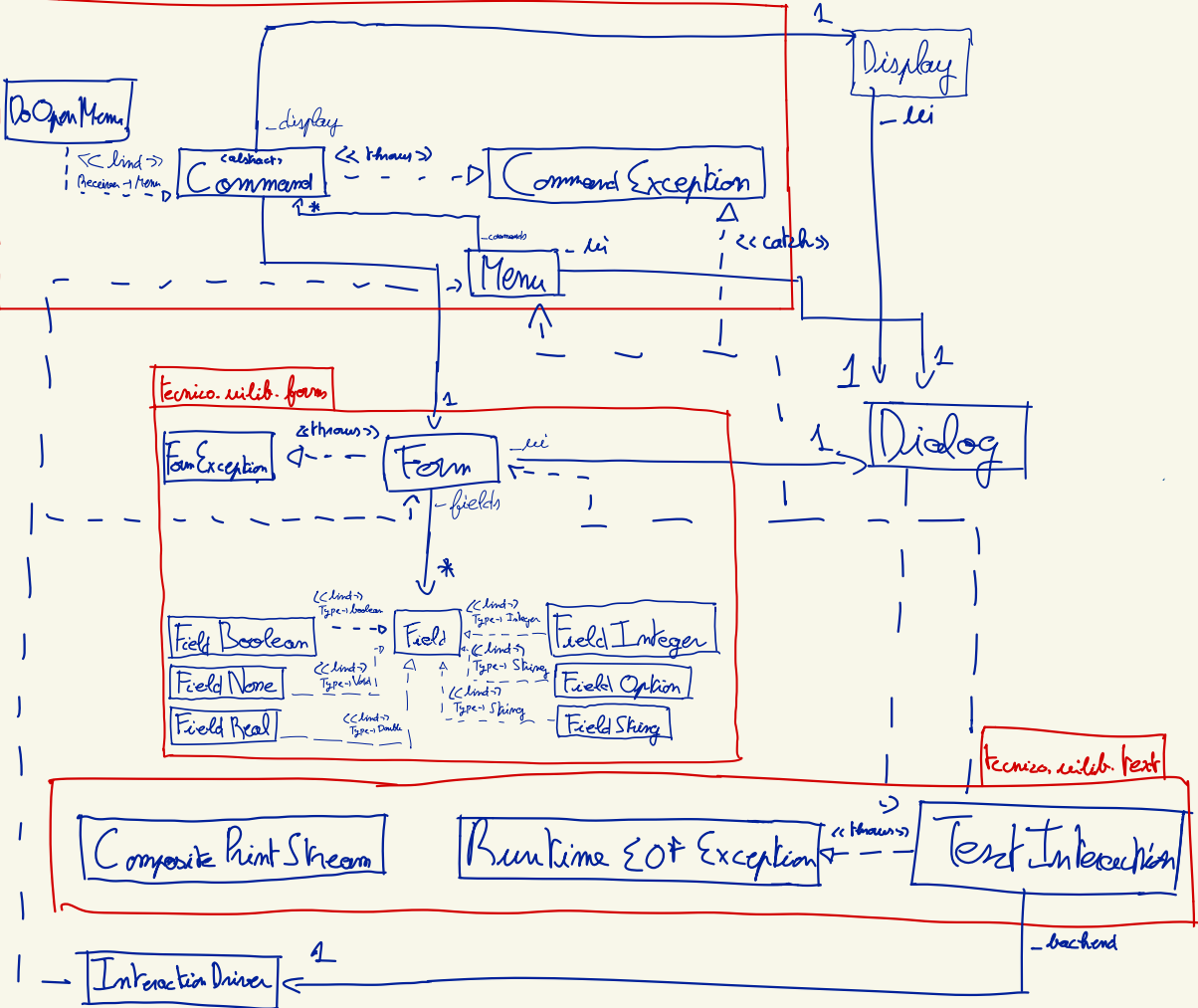


# UML PO-UILIB:

Classes Message, Prompt and Property have been omitted since it's a bag of functions and have never been instantiated.

tecnico.uilib.menus



## po-ilib: menus

<<abstract>>  
**Command**

```
-_last: boolean
-_title: String
#_RECEIVER: Receiver <<final>>
#_valid: Predicate<Receiver> = receiver -> true
-_FORM: Form <<final>>
#_DISPLAY: Display <<final>>

+TITLE(): String <<final>>
+isLast(): 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, options: String...): void
+booleanField(key: String): void
+realField(key: String): void
+integerField(key: String): void
+stringField(key: String): void
+optionField(key: String): void
+PERFORMCOMMAND(): void
#<<abstract>> execute(): void
```

<<abstract>>  
**CommandException**

-SERIALVERSIONUID = 202010150838L <<final>>

**Menu**

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

+size(): int
+entry(n: int): Command<?>
+entries(): Command<?>[]
+open(): void
```

<<interface>>  
**Message**

+operationFailed(error: String): String

## po-ilib: text

**Composite PrintStream**

```
-_streams: Collection<PrintStream> = new ArrayList<>()
-_error: boolean = false

+ADD(ps: PrintStream): void <<final>>
```

<<interface>>  
**Prompt**

```
+option(): String
+exit(): String
```

<<interface>>  
**Property**

```
+WRITE_INPUT: String = "writeInput" <<final>>
+BOTH_CHANNELS: String = "both" <<final>>
+INPUT_CHANNEL: String = "in" <<final>>
+OUTPUT_CHANNEL: String = "out" <<final>>
+LOG_CHANNEL: String = "log" <<final>>
```

<<interface>>  
**Message**

```
+invalidOperation(error: String): String
+invalidOption(): String
+errorEOF(e: EOFException): String
+errorInvalidNumber(e: NumberFormatException): String
+errorEOF(e: RuntimeEOFException): String
+inputError(e: FileNotFoundException): String
+errorClosingInput(e: IOException): String
+endOfInput(): String
+outputError(e: FileNotFoundException): String
+logError(e: FileNotFoundException): String
```

**RuntimeEOFException**

-SERIALVERSIONUID = 202010150838L <<final>>

**Text Interaction**

```
-_in: Buffered Reader = new Buffered Reader (new InputStream Reader (System.in))
-_out: PrintStream = System.out;
-_log: PrintStream = null
-_writeInput: boolean

-readString(prompt: String): String
-readInteger(prompt: String): int
```

# po-utilib-forms

**Field**

- prompt: String
- clear: boolean
- # value: Type
- + prompt(): String
- + set(value: Type): void
- + value(): Type
- + clear(): void
- # dirty(): void
- + cleared(): boolean
- + isReadOnly(): boolean
- + parse(in: String): boolean

**Field Boolean**

- BOOLEAN\_WORD\_YES: String = "sim" <<final>>
- BOOLEAN\_WORD\_NO: String = "nao" <<final>>
- BOOLEAN\_CHAR\_YES: char = 's' <<final>>
- BOOLEAN\_CHAR\_NO: char = 'n' <<final>>
- + parse(in: String): boolean

**Field Integer**

- + parse(in: String): boolean

**Field None**

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

**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: Map<String, 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...): void
- 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

**FormException**

- SERIAL\_VERSION\_UID: long = 202010272136L

Runtime Exception

<<interface>>  
**Message**

- + keyAlreadyExists(form: String, key: String): String
- + formNotFilled(form: String): String
- + keyNotFound(form: String, key: String): String
- + typeMismatch(form: String, key: String, actualType: String, requestedType: String): String

## po-utilib

### Dialog

- ACTION\_CHANNEL: String = "ui" <<final>>
- CHANNEL\_SWING: String = "swing" <<final>>
- CHANNEL\_NEW\_SWING = "new swing" <<final>>
- CHANNEL\_TEXT: String = "text" <<final>>

+ UI: Dialog = new Dialog()

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

### Display

- ui: Dialog
- title: String = ""
- text: String Builder = new String Builder()

- + add(toAdd: Object): Display
- + addAll(items: Collection<?>): Display
- + addLine(toAdd: Object): Display
- + addNewLine(toAdd: Object, force: boolean): Display
- + display(): void <<final>>
- + displayText(): void <<final>>
- + popup(toPop: Object): void
- + popup(toPop: Collection<?>): void
- + clear(): void

### <<interface>> Interaction Driver

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

Declaro por minha honra que este diagrama foi realizado apenas pelos elementos que constituem o grupo do projeto. *Matheus*

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*Isidoro*