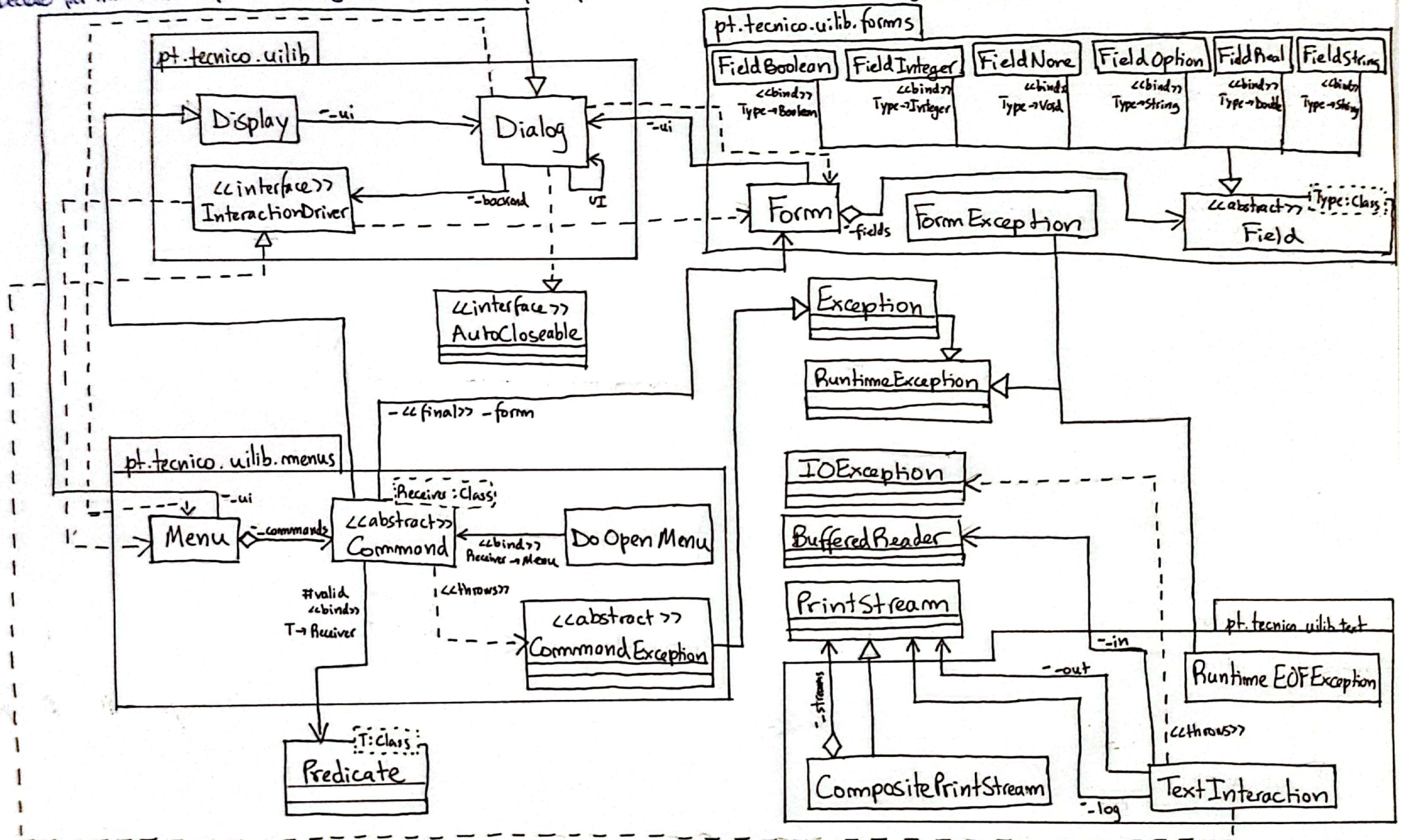Declaro por minha honra que este diagrama foi realizado apenas pelos elementos que constituem o grupo de projeto. Filipe Oliveira ist 1 110633

Declaro por minha honra que este diagrama foi realizado apenas pelos elementos que constituem o grupo de projetos. Eduardo Fernandes ist 1110628

pt.tecnico.uilib

Display

--ui

Dialog

--ui

<<interface>>
InteractionDriver

--backend

UI

<<interface>>
AutoCloseable

pt.tecnico.uilib.forms

FieldBoolean	FieldInteger	FieldNone	FieldOption	FieldReal	FieldString
<<bind>> Type→Boolean	<<bind>> Type→Integer	<<bind>> Type→Void	<<bind>> Type→String	<<bind>> Type→Double	<<bind>> Type→String

Form

--fields

Form Exception

<> Type:Class
Field

Exception

RuntimeException

IOException

BufferedReader

PrintStream

-- final>> --form

pt.tecnico.uilib.menus

Menu

--ui

--commands

:Receiver:Class
<>
Command

<<bind>>
Receiver→Menu

Do Open Menu

#valid
<<bind>>
T→Receiver

<<throws>>

<>
Command Exception

T:Class
Predicate

--streams

CompositePrintStream

--out

--in

--log

pt.tecnico.uilib.text

Runtime EOFException

<<throws>>

TextInteraction

Methods "equals" and "toString" have been ommited (since they are inherited from object), as well as getters and setters. Class serial numbers have also been ommited. Classes Message, Prompt and Property have been ommited as well, since they are specific to the implementation and not relevant for the overall structure of the project

Fields and methods of each (non-empty) class is represented on the following pages of this document.

Field <T>

```
        <<abstract>>         | Type : Class |
         Field <T>
─────────────────────────────────────────
- - 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 : String
- <<final>> BOOLEAN_WORD_NO : String
- <<final>> BOOLEAN_CHAR_YES : String
- <<final>> BOOLEAN_CHAR_NO : String
─────────────────────────────────────────
+ 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
```

Field Option

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

Form

```
- - title : String
─────────────────────────────────────────
+ 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[]): void
- get(key: string, type: String): Object
+ booleanField(key: String): Boolean
+ stringField(key: strings): String
+ optionField(key: strings): 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
```

Composite Print Stream

```
- - error : boolean
─────────────────────────────────────────
+ <<final>> add(ps: PrintStream): void
```

Text Interaction

```
- - writeInput : boolean
─────────────────────────────────────────
+ close(): void
+ open(menu: Menu): void
+ fill(form: Form): void
+ render(title: String, text: String): void
- readString(prompt: String): String
- readInteger(prompt: String): int
```

Menu

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

DoOpenMenu

```
# <<final>> execute(): void
```

```
+ requestReal (prompt String) : Double

+ requestString (prompt String) : String

+ requestOption (prompt : String, options : String[]) : String
```

<<Interface>> InteractionDriver

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

Receiver : class

<> Command

```
- - last : boolean
- - title: String
# <<final>> - receiver: Receiver
```

```
+ <<final>> title(): String
+ 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) : Boolean
+ realField (Key: String) : Double
+ integerField (Key: String) : Integer
+ stringField (Key: String) : String
+ optionField (Key: String): String
+ <<final>> performCommand (): void
# <<abstract>> execute (): void
```

Display

```
- - 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>> displayText(): void
+ popup (toPop: Object): void
+ popup (toPop: Collection <?>): void
+ clear (): void
```

Dialog

```
- <<final>> ACTION_CHANNEL: String
- <<final>> CHANNEL_SWING: String
- <<final>> CHANNEL_NEW_SWING: String
- <<final>> CHANNEL_TEXT: String
```

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