

1 - Descrição do UML

Methods "get" and "toString" have been omitted since they are inherited from Object. Getters and setters, have also been omitted.

Class serial numbers for serialization have also been omitted. Constructors with no arguments have been omitted. Inherited methods have been omitted.

Every class, except interfaces, implement Serializable

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Calculator

- spreadsheet: Spreadsheet
- currentUser: User

- + Calculator (user: User)
- + new (lines: int, columns: int): void
- + save(): void
- + saveAs(filename: String): void
- + load(filename: String): void
- + importFile(filename: String): void
- + exit(): void

Exceptions:

- ImportFileException
- MissingFileAssociationException
- UnavailableFileException
- FileOpenFailedException

User

- name: String = "root"

- spreadsheets: Collection<Spreadsheet>

- + User (name: String)

- + addSpreadsheet(sheet: Spreadsheet): void

Spreadsheet

- lines: int

- columns: int

- cells: Collection<Cell<?>>

- inserts: Collection<Insert<?>>

- cutBuffer: CutBuffer

- + Spreadsheet (lines: int, columns: int)

- + insertContents(rangeSpecification: String, contentSpecification: String): void

- + deleteContents(rangeSpecification: String): void

- + showContents(rangeSpecification: String): void

- + showCutBuffer(): void

- + touchContents(filler: Filler): void

- + copyContents(rangeSpecification: String): void

- + cutContents(rangeSpecification: String): void

- + pasteContents(rangeSpecification: String): void

Exceptions:

- UnrecognizedEntryException

CellBuffer
- buffer: String = ""
+ retrieve(): String
+ show(): String
+ set(Cell<?> cell): void
+ set(Internal internal): void

XxL. cells

Cell
«abstract»
- line: int
- column: int
+ Cell(line: int, column: int)

Internal
- cells: Collection<Cell<?>>
+ internal(start: Cell<?>, end: Cell<?>)

CellInt
- value: int
CellInt(line: int, column: int, value: int)

CellString
- value: String
CellString(line: int, column: int, value: String)

CellRef
- value: Cell
CellRef(line: int, column: int, value: Cell)

CellFunction
- value: Function
CellFunction(line: int, column: int, value: Function)

XxL. cells. filter

XxL. cells. function

Filter
«interface»
+ isValid(cell: Cell<?>): boolean

FilterValue

FilterFunction

Function
«interface»
+ calculate(args: List<?>...)

Add

Sub

Mul

Div

Average

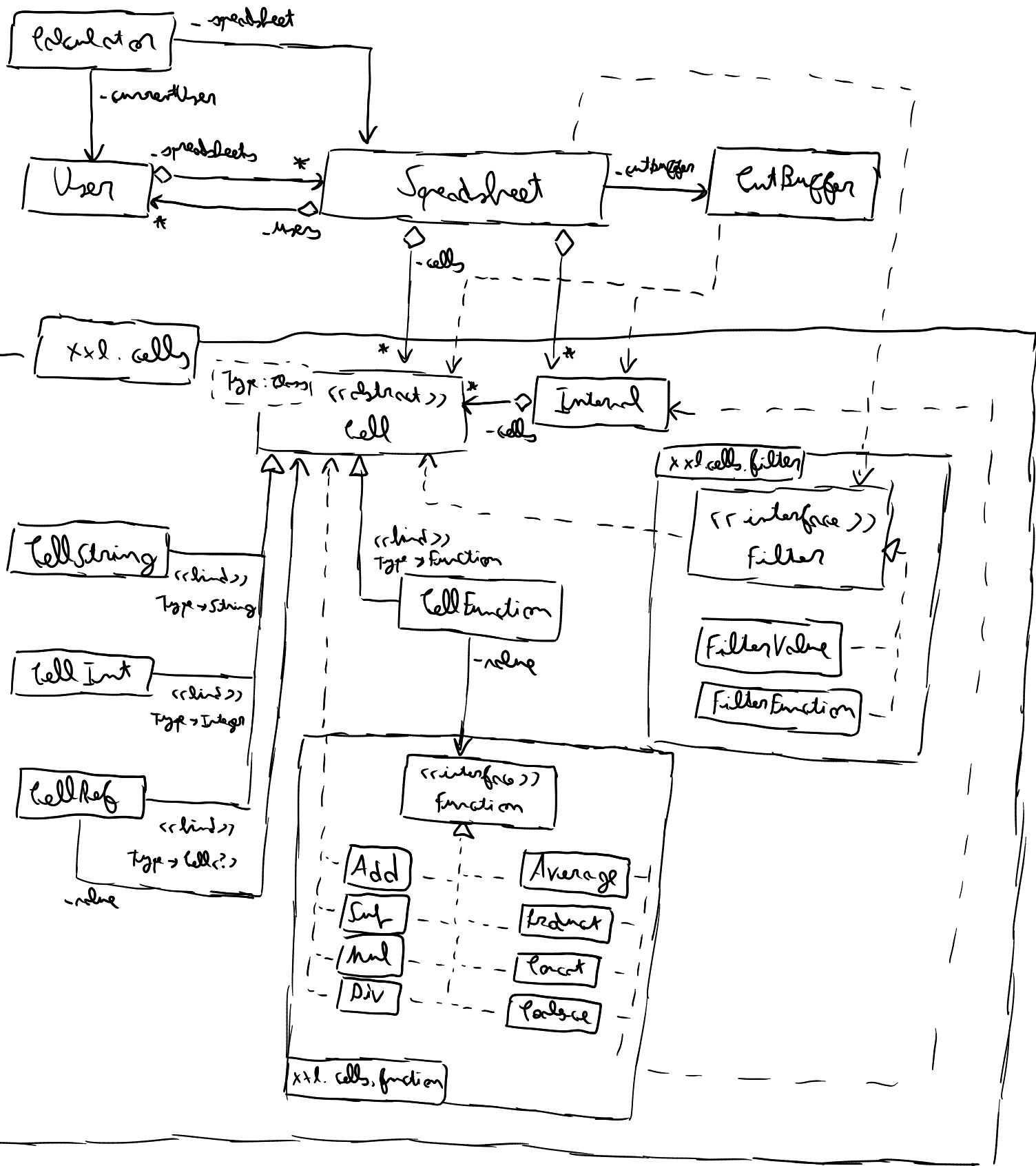
Product

Count

Coalesce

2 - Gráfico UML

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Declaro por minha honra que este diagrama foi
realizado apenas pelos elementos que constituem o grupo: João Fernandes