Package 'analyz'

August 29, 2016

Type Package

Date 2015-02-16

Version 1.4

Title Model Layer for Automatic Data Analysis via CSV File Interpretation

Author Rodrigo Buhler

Maintainer Rodrigo Buhler <rodrigo.buhler@ymail.com>

Description Class with methods to read and execute R commands described as steps in a CSV file.

License GPL (>= 2)

Depends R (>= 2.15.1)

Imports methods

NeedsCompilation no

Repository CRAN

Date/Publication 2015-02-17 19:44:35

R topics documented:

Analyz-class 2
Analyz.coerceType 2
Analyz.getNrColumns 3
Analyz.getNrRows 3
Analyz.getResult 4
Analyz.getStepCommand 5
Analyz.getStepParameters 5
Analyz.getStepTitle 6
Analyz.loadSteps 7
Analyz.runAnalysis 7
Analyz.setResult<- 8
Analyz.setStepItems 9

Index **10**

Analyz-class *Class to manage analysis steps described in a CSV file.*

Description

Class Analyz

Slots

`steps` A data frame attribute with the steps loaded from a CSV file.

`nrRows` A numeric attribute with the quantity of steps.

`nrColumns` A numeric attribute with the quantity of items of the largest step definition.

`stepItems` A list attribute with the items of a step.

`results` A list attribute with the execution result of the steps.

Analyz.coerceType *Method Analyz.coerceType*

Description

Method for variable type coercion.

Usage

```
Analyz.coerceType(object, variable, type)

## S4 method for signature 'Analyz'
Analyz.coerceType(object, variable, type)
```

Arguments

`object`	Object instance.
`variable`	Variable to be coerced.
`type`	Data type to coerce the informed variable.

Value

result Coerced variable.

Examples

```
obj <- new("Analyz")
v_numeric <- Analyz.coerceType(obj, '2', 'numeric')
```

Analyz.getNrColumns *Method Analyz.getNrColumns*

Description

Method for returning the number of columns read from the analysis file.

Usage

```
Analyz.getNrColumns(object)

## S4 method for signature 'Analyz'
Analyz.getNrColumns(object)
```

Arguments

object	Object instance.

Value

nrColumns Number of read columns from the analysis file.

Examples

```
obj <- new("Analyz")
v_nrCol <- Analyz.getNrColumns(obj)
```

Analyz.getNrRows *Method Analyz.getNrRows*

Description

Method for returning the number of rows read from the analysis file.

Usage

```
Analyz.getNrRows(object)

## S4 method for signature 'Analyz'
Analyz.getNrRows(object)
```

Arguments

object	Object instance.

Value

nrRows Number of read rows from the analysis file.

Examples

```
obj <- new("Analyz")
v_NrRow <- Analyz.getNrRows(obj)
```

`Analyz.getResult` *Method Analyz.getResult*

Description

Method for getting the informed result from "results" class spot.

Usage

```
Analyz.getResult(object, index)

## S4 method for signature 'Analyz'
Analyz.getResult(object, index)
```

Arguments

`object`	Object instance.
`index`	Index number of the results to be read.

Value

result Result value of the informed index.

Examples

```
obj <- new("Analyz")
vIdx <- numeric()
v_result <- Analyz.getResult(obj, vIdx)
```

Analyz.getStepCommand *Method Analyz.getStepCommand*

Description

Method for returning the current step command.

Usage

```
Analyz.getStepCommand(object)

## S4 method for signature 'Analyz'
Analyz.getStepCommand(object)
```

Arguments

object	Object instance.

Value

stepCommand Description of the current step command.

Examples

```
obj <- new("Analyz")
v_Command <- Analyz.getStepCommand(obj)
```

Analyz.getStepParameters *Method Analyz.getStepParameters*

Description

Method for returning the current step command parameters.

Usage

```
Analyz.getStepParameters(object)

## S4 method for signature 'Analyz'
Analyz.getStepParameters(object)
```

Arguments

object	Object instance.

Value

stepParameters Description of the current step command parameters.

Examples

```
obj <- new("Analyz")
v_Parameters <- Analyz.getStepParameters(obj)
```

`Analyz.getStepTitle` *Method Analyz.getStepTitle*

Description

Method for returning the current step title.

Usage

```
Analyz.getStepTitle(object)

## S4 method for signature 'Analyz'
Analyz.getStepTitle(object)
```

Arguments

`object`	Object instance.

Value

stepTitle Description of the current step title.

Examples

```
obj <- new("Analyz")
v_Title <- Analyz.getStepTitle(obj)
```

Analyz.loadSteps *Method Analyz.loadSteps*

Description

Method for reading the analysis file and fill the "steps" class spot.

Usage

```
Analyz.loadSteps(object, path)

## S4 method for signature 'Analyz'
Analyz.loadSteps(object, path)
```

Arguments

object	Object instance.
path	Path and analysis file name.

Value

object Object instance.

Examples

```
obj <- new("Analyz")
v_path <- vector()
Analyz.loadSteps(obj, v_path)
```

Analyz.runAnalysis *Method Analyz.runAnalysis*

Description

Method for step execution.

Usage

```
Analyz.runAnalysis(object, command, parameters)

## S4 method for signature 'Analyz'
Analyz.runAnalysis(object, command, parameters)
```

Arguments

object	Object instance.
command	Description of the step command to be executed.
parameters	Paramater(s) for the informed step command.

Value

result Result of the step execution.

Examples

```
obj <- new("Analyz")
Analyz.runAnalysis(obj, 'mean', list(c(1,2,3)))
```

Analyz.setResult<- *Method Analyz.setResult<-*

Description

Method for storing the informed result to the "results" class spot.

Usage

```
Analyz.setResult(object) <- value

## S4 replacement method for signature 'Analyz'
Analyz.setResult(object) <- value
```

Arguments

object	Object instance.
value	Result value of an execution.

Value

object Object instance.

Examples

```
obj <- new("Analyz")
v_result <- vector()
Analyz.setResult(obj) <- v_result
```

`Analyz.setStepItems` *Method Analyz.setStepItems*

Description

Method for interpret an analysis line and fill a class spot.

Usage

```
Analyz.setStepItems(object, index)

## S4 method for signature 'Analyz'
Analyz.setStepItems(object, index)
```

Arguments

`object`	Object instance.
`index`	Index number of the step line to be read.

Value

object Object instance.

Examples

```
obj <- new("Analyz")
v_index <- numeric()
Analyz.setStepItems(obj, v_index)
```

Index

Analyz-class, 2
Analyz.coerceType, 2
Analyz.coerceType,Analyz,Analyz-method
(Analyz.coerceType), 2
Analyz.coerceType,Analyz-method
(Analyz.coerceType), 2
Analyz.getNrColumns, 3
Analyz.getNrColumns,Analyz,Analyz-method
(Analyz.getNrColumns), 3
Analyz.getNrColumns,Analyz-method
(Analyz.getNrColumns), 3
Analyz.getNrRows, 3
Analyz.getNrRows,Analyz,Analyz-method
(Analyz.getNrRows), 3
Analyz.getNrRows,Analyz-method
(Analyz.getNrRows), 3
Analyz.getResult, 4
Analyz.getResult,Analyz,Analyz-method
(Analyz.getResult), 4
Analyz.getResult,Analyz-method
(Analyz.getResult), 4
Analyz.getStepCommand, 5
Analyz.getStepCommand,Analyz,Analyz-method
(Analyz.getStepCommand), 5
Analyz.getStepCommand,Analyz-method
(Analyz.getStepCommand), 5
Analyz.getStepParameters, 5
Analyz.getStepParameters,Analyz,Analyz-method
(Analyz.getStepParameters), 5
Analyz.getStepParameters,Analyz-method
(Analyz.getStepParameters), 5
Analyz.getStepTitle, 6
Analyz.getStepTitle,Analyz,Analyz-method
(Analyz.getStepTitle), 6
Analyz.getStepTitle,Analyz-method
(Analyz.getStepTitle), 6
Analyz.loadSteps, 7
Analyz.loadSteps,Analyz,Analyz-method
(Analyz.loadSteps), 7
Analyz.loadSteps,Analyz-method
(Analyz.loadSteps), 7
Analyz.runAnalysis, 7
Analyz.runAnalysis,Analyz,Analyz-method
(Analyz.runAnalysis), 7
Analyz.runAnalysis,Analyz-method
(Analyz.runAnalysis), 7
Analyz.setResult,Analyz,Analyz-method
(Analyz.setResult<-), 8
Analyz.setResult<-, 8
Analyz.setResult<-,Analyz-method
(Analyz.setResult<-), 8
Analyz.setStepItems, 9
Analyz.setStepItems,Analyz,Analyz-method
(Analyz.setStepItems), 9
Analyz.setStepItems,Analyz-method
(Analyz.setStepItems), 9