Package 'pisar'

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Type Package

Title pisar: pISA-tree Support Functions

Version 0.1.0.9000

Description The package provides several functions for support and use of pISA-tree.

License GPL-3

URL https://github.com/ablejec/pisar

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

Imports knitr,
rio,
tools

VignetteBuilder knitr

Suggests knitr,
rmarkdown

R topics documented:

fileName *Extract file name*

Description

Extract file name from a file path.

Usage

```
fileName(x, ...)
```

Arguments

x	Complete file path or file.type name.
...	Any other arguments.

Value

File name (string).

Note

Parameter ... is ignored at this time.

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

See Also

fileType

Examples

```
fileName(".\\validation.Rnw")
fileName("./bla/validation.Rnw")
fileName("./validation.")
fileName("./validation")
```

fileType *Extract file type*

Description

Extract file type from a file path.

Usage

```
fileType(x, ...)
```

Arguments

x	Complete file path or file name.
...	Any other arguments.

Value

File type (string).

Note

Parameter ... is ignored at this time.

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
fileName(".\\validation.Rnw")
fileName("./bla/validation.Rnw")
fileName("./validation.")
fileName("./validation")
```

---

fsummary *As factor summary of a data frame*

Description

As factor summary of a data frame

Usage

```
fsummary(x, ...)
```

Arguments

x	Data frame.
...	Any other arguments.

Value

Summary object.

Note

Argument ... not used

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
fsummary(data.frame(x=rnorm(20),txt=sample(letters,20,rep=TRUE)))
```

getLayer *Get pISA layer name*

Description

Get pISA layer name

Usage

```
getLayer(x, path = getwd())
```

Arguments

x	Layer character (one of p, I, S, or A).
path	Directory path, defaults to working directory.

Value

Character string with layer name.

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
## Not run:
astring <- "_p_Demo/_I_Test/_S_Show/_A_Work-R/other"
oldwd <- setwd(system.file("extdata",astring,package="pisar"))
oldwd
.pname <- getLayer("p")
.pname
getLayer("I")
getLayer("S")
getLayer("A")

## End(Not run)
```

getMeta *Get metadata value*

Description

Get metadata value

Usage

```
getMeta(x, item, nl = TRUE)
```

Arguments

x	Two column character data frame with Key / Value pairs.
item	String, item name.
nl	Logical, expand backslash character for new lines.
...	Any other arguments (not used at the moment).

Value

Character string with key value.

Note

Parameter item is matched exactly to the item names.

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
## Not run:
astring <- "_p_Demo/_I_Test/_S_Show/_A_Work-R/other"
oldwd <- setwd(system.file("extdata",astring,package="pisar"))
oldwd
.iroot <- getRoot("I")
.imeta <- readMeta(.iroot)
getMeta(.imeta, "Description")
setwd(oldwd)

## End(Not run)
```

---

getRoot *Get root directory for pISA layer*

Description

Get root directory for pISA layer

Usage

```
getRoot(x = "p", path = getwd(), ...)
```

Arguments

x	Character characteristic for pISA layer (one of p, I, S, or A).
path	Path within the pISA-tree.
...	Any other arguments.

Value

Relative path to the layer directory (from working directory).

Note

The path should be compliant with the pISA-tree structure. Path defaults to the working directory, which is usually in or below an assay. Argument ... is not used.

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
getRoot("p", path="d:/_p_prj/_I_inv/_S_st/_A_asy/other/doc")
```

---

out.path *Create output directory*

Description

Create output directory, name it with appended arguments.

Usage

```
out.path(out.dir = "../out", args = "", which = 1:length(args))
```

Arguments

out.dir	Character string, base output directory.
args	Character vector, arguments used for sub-analysis. or from a batch call
which	Numeric vector, which arguments to use.

Value

Directory name.

Note

Directory is created

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
out.path()
out.path(args="")
dir.exists("../out/xx-ena-dva")
out.path(args=c("xx.txt","ena","dva"))
dir.exists("../out/xx-ena-dva")
unlink("../out/xx-ena-dva",recursive=TRUE)
dir.exists("../out/xx-ena-dva")
```

`pisa` *Extract pISA-tree details*

Description

Extract pISA-tree details: name, root and metadata for all layers above the current directory (below or in the Assay).

Usage

```
pisa(path = getwd(), addArgs = NULL, global = TRUE)
```

Arguments

`path`	Path to part of pISA-tree, defaults to working directory.
`addArgs`	Character vector, additional arguments.
`global`	If `TRUE` (default) auxiliary objects will be created in the global environment (see note).

Value

A list with layer information components, possibly changing objects in the global environment (Se Note).

Note

If argument global is `TRUE` (default), auxiliary objects with pISA related information will be created in the global environment. Sometimes it is more convenient to use such object instead of the elements of the (invisibly) returned pisa list. The object are hidden (names start with dot); use `ls(pattern="^\.",all.names=TRUE)` to get a full list of hiddent objects. The created objects are

.[pisa name] layer name

.[pisa root] layer path (relative to the working directory)

.[pisa meta] data frame with corresponding layer metadata

.oroot output directory path

.inroot input (data) directory path

.reproot report directory path

.reproot report directory path

.outputFile output file path and name

.args a vector of additional arguments (possibly from a batch call)

.pfn phenodata file path and name (relative to Investigation)

.ffn featuredata fiel path and name

.outfn output file basename (no type)

.rnwfn knitr source file name (*.Rnw or *.Rmd)

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
## Not run:
astring <- "_p_Demo/_I_Test/_S_Show/_A_Work-R/other"
oldwd <- setwd(system.file("extdata",astring,package="pisar"))
oldwd
pisa <- pisa(global=FALSE)
str(pisa)
names(pisa)
dir(pisa$p$root)
setwd(oldwd)

## End(Not run)
```

`pisar` *pisar: pISA-tree support functions*

Description

The package provides several functions for support and use of pISA-tree.

`print.pISAmeta` *Print metadata object as Dlist*

Description

Print metadata object as Dlist

Usage

```
## S3 method for class 'pISAmeta'
print(x, width = max(nchar(x[, 1])) * 3.5, ...)
```

Arguments

`x`	Metadata object, data.frame with two columns.
`width`	Estimated text width.
`...`	Any other arguments.

Note

Metadata table is printed in convenient Dlist form.

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
.pISAloc <- system.file("extdata","_p_Demo",package="pisar")
readMeta(.pISAloc)
```

readMeta *Read metadata file from the given directory*

Description

Read metadata file from the given directory

Usage

```
readMeta(x = ".", ...)
```

Arguments

x	File path to the pISA layer.
...	Any other arguments.

Value

Data frame with Key/value pairs with class 'pISAmeta'.

Note

Metadata table gets the class 'Dlist' to inherit a convenient print.

Author(s)

Andrej Blejec <andrej.blejec@nib.si>

Examples

```
## Not run:
astring <- "_p_Demo/_I_Test/_S_Show/_A_Work-R/other"
oldwd <- setwd(system.file("extdata",astring,package="pisar"))
oldwd
.aroot <- getRoot("A")
.ameta <- readMeta(.aroot)
.ameta
setwd(oldwd)

## End(Not run)
```

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