# Package 'pisar'

October 18, 2019

Type Package

**Version** 0.1.0.9000

Title pisar: pISA-tree Support Functions

| <b>Description</b> The package provides several functions for support and use of pISA-tree. |    |
|---|----|
| License GPL-3   |    |
| JRL https://github.com/ablejec/pisar  |    |
| Encoding UTF-8  |    |
| LazyData true   |    |
| RoxygenNote 6.1.1   |    |
| mports knitr, rio, tools  |    |
| R topics documented:  |    |
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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, ...)
```

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## **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>

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

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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, deafaults 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)</pre>
```

getMeta

Get metadata value

# **Description**

Get metadata value

## Usage

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

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## **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)</pre>
```

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
path path within the pISA-tree
... any other arguments
```

## Value

relative path to the layer directory (from working directory)

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#### 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>

```
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")
```

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pisar

pisar: pISA-tree support functions

# Description

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

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

### Usage

```
pisar(path = getwd(), addArgs = NULL, global = FALSE)
```

# **Arguments**

path, defaults to working directory

addArgs character vector, additional arguments

#### Value

a list with layer information components

#### Usage

pISA-tree is a standardized directory tree for storing projet information under ISA paradigm. The set of functions have two fold purpose: 1. To enable use of metadata for reproducible documents 2. To enable automated upload to external repository (FAIRDOMhub).

#### Author(s)

```
Andrej Blejec <andrej.blejec@nib.si>
```

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

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print.pISAmeta

Print metadata object as Dlist

## **Description**

Print metadata object as Dlist

## Usage

```
## S3 method for class 'pISAmeta'
print(x, ...)
```

# Arguments

x metadata object, data.frame with two columns

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)</pre>
```

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'

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## Note

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

# Author(s)

```
Andrej Blejec <andrej.blejec@nib.si>
```

```
## 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)</pre>
```

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