# Package 'PaRe'

August 11, 2023

```
Type Package
Title A Way to Perform Code Review or QA on Other Packages
Version 0.1.12
Language en-US
Description Reviews other packages during code review by looking at their
      dependencies, code style, code complexity, and how internally defined
      functions interact with one another.
URL https://github.com/darwin-eu-dev/PaRe
BugReports https://github.com/darwin-eu-dev/PaRe/issues
License Apache License (>= 2)
Encoding UTF-8
LazyData true
RoxygenNote 7.2.3
Imports cli (>= 3.6.0),
      cyclocomp (>= 1.1.0),
      desc (>= 1.4.2),
      DiagrammeR (>= 1.0.9),
      DiagrammeRsvg (>= 0.1),
      dplyr (>= 1.1.0),
      glue (>= 1.6.2),
      lintr (>= 3.0.2),
      magrittr (>= 2.0.3),
      pak (>= 0.2.0),
      rmarkdown (>= 2.20),
      rsvg (>= 2.4.0),
      stringr (>= 1.5.0),
      igraph (>= 1.3.5),
      utils,
      R6 (>= 2.5.1),
      git2r (>= 0.31.0),
      checkmate (\geq 2.1.0)
Suggests ggplot2,
      plotly,
      ggraph,
      DT,
      magick,
```

```
withr,
cowplot,
knitr,
testthat (>= 3.0.0)

VignetteBuilder knitr

Roxygen list(markdown = TRUE)

Config/testthat/edition 3
```

# ${\sf R}$ topics documented:

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addPareArticle

addPareArticle

#### **Description**

Writes an Rmd-file to ./vignettes/articles/PaReReport.Rmd. The relative path is dictated by the specified path in the Repository object.

#### Usage

```
addPareArticle(repo)
```

#### **Arguments**

repo

(Repository) Repository object.

#### Value

NULL Writes Rmd-file to ./vignettes/articles/PaReReport.Rmd

```
fetchedRepo <- tryCatch(</pre>
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/darwin-eu/IncidencePrevalence.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
  },
  warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
  }
)
if (fetchedRepo) {
  # Run makeReport on the Repository object.
  addPaReArticle(repo)
}
```

4 checkDependencies

checkDependencies

checkDependencies

#### **Description**

Check package dependencies

#### Usage

```
checkDependencies(
  repo,
  dependencyType = c("Imports", "Depends"),
  verbose = TRUE
)
```

#### **Arguments**

```
repo (Repository)
Repository object.

dependencyType (character)
Types of dependencies to be included

verbose (logical: TRUE) TRUE or FALSE. If TRUE, progress will be reported.
```

#### Value

(data.frame)

Data frame with all the packages that are now permitted.

column data type package character version character

```
# Set cahce, usually not required.
withr::local_envvar(
    R_USER_CACHE_DIR = tempfile()
)

fetchedRepo <- tryCatch(
    {
        # Set dir to clone repository to.
        tempDir <- tempdir()
        pathToRepo <- file.path(tempDir, "glue")

        # Clone repo
        git2r::clone(
            url = "https://github.com/tidyverse/glue.git",
            local_path = pathToRepo
        )</pre>
```

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```
# Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
   TRUE
  },
  error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
  },
  warning = function(w) {
   # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
  }
)
if (fetchedRepo) {
  # Use checkDependencies on the Repository object.
  checkDependencies(repo)
 checkDependencies(repo, dependencyType = c("Imports", "Suggests"))
```

checkInstalled

checkInstalled

#### **Description**

Checks if suggested packages are installed.

#### Usage

checkInstalled()

#### Value

## logical

Logical depending if suggested packages are installed.

Code

R6 Code class

#### Description

Class representing a piece of code.

6 Code

#### Methods

```
Public methods:
  • Code$new()
  • Code$print()
  • Code$getLines()
  • Code$getNLines()
  • Code$getName()
  • Code$clone()
Method new(): Initializer method
 Usage:
 Code$new(name, lines)
 Arguments:
 name (character)
     Name of Code object.
 lines (character)
     Vector of lines Code object.
 Returns: invisible(self)
Method print(): Overload generic print, to print Code object.
 Usage:
 Code$print(...)
 Arguments:
 ... further arguments passed to or from other methods. See print.
 Returns: ([base]character)
Method getLines(): Get method for lines.
 Usage:
 Code$getLines()
 Returns: (character)
 Vector of lines in the Code object.
Method getNLines(): Get method for number of lines.
 Usage:
 Code$getNLines()
 Returns: (numeric) Number of lines in the Code object.
Method getName(): Get method for Name.
 Usage:
 Code$getName()
 Returns: (character)
 Name of the Code object.
Method clone(): The objects of this class are cloneable with this method.
 Usage:
 Code$clone(deep = FALSE)
 Arguments:
 deep Whether to make a deep clone.
```

countPackageLines 7

#### See Also

Other Representations: File, Function, Repository

countPackageLines

countPackageLines

#### **Description**

Counts the package lines of a Repository object.

#### Usage

```
countPackageLines(repo)
```

#### Arguments

repo

(Repository)
Repository object.

#### Value

(tibble

) Tibble containing the amount of lines per file in the Repository object.

```
fetchedRepo <- tryCatch(</pre>
  {
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/tidyverse/glue.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    \mbox{\#} Set fetchedRepo to FALSE if an error is encountered.
    FALSE
  },
  warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
  }
)
```

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```
if (fetchedRepo) {
    # Run countPackageLines on the Repository object.
    countPackageLines(repo = repo)
}
```

exportDiagram

exportDiagram

#### **Description**

Exports the diagram from pkgDiagram to a PDF-file.

#### Usage

```
exportDiagram(diagram, fileName)
```

#### Arguments

```
diagram (grViz)
Graph object from pkgDiagram.

fileName (character)
Path to save the diagram to, as PDF.
```

#### Value

(NULL)

```
fetchedRepo <- tryCatch(</pre>
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/tidyverse/glue.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    \mbox{\#} Set fetched
Repo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    \mbox{\# Set fetchedRepo} to FALSE if an error is encountered.
    FALSE
  },
  warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
```

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```
FALSE
}
)

if (fetchedRepo) {
    # Run pkgDiagram on the Repository object.
    pkgDiagram(repo = repo) %>%
        # Export the diagram to a temp file.
        exportDiagram(fileName = tempfile())
}
```

File

R6 File class

#### **Description**

Class representing a file containing code.

#### Super class

```
PaRe::Code -> File
```

#### Methods

#### **Public methods:**

```
• File$new()
```

- File\$getFunctions()
- File\$getFunctionTable()
- File\$getType()
- File\$getFilePath()
- File\$getBlameTable()
- File\$clone()

```
Method new(): Initializer method
```

```
Usage:
File$new(repoPath, filePath)
Arguments:
repoPath (character)
    Path to repository.
filePath (character)
    Relative path to file
Returns: invisible(self)
```

Method getFunctions(): Get method to get a list of Function objects

```
Usage:
File$getFunctions()
Returns: (list)
List of Function objects.
```

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```
Method getFunctionTable(): Get method to retrieve the function table.
       Usage:
       File$getFunctionTable()
       Returns: (data.frame)
                                    column
                                                  data type
                                     name
                                                  character
                                     lineStart
                                                  integer
                                     lineEnd
                                                  numeric
                                     nArgs
                                                  integer
                                     cycloComp
                                                  integer
      Method getType(): Gets type of file
       Usage:
       File$getType()
       Returns: (character)
      Method getFilePath(): Gets relative file path
       Usage:
       File$getFilePath()
       Returns: (character)
      Method getBlameTable(): Gets table of git blame
       Usage:
       File$getBlameTable()
       Returns: (tibble)
      Method clone(): The objects of this class are cloneable with this method.
       Usage:
       File$clone(deep = FALSE)
       Arguments:
       deep Whether to make a deep clone.
See Also
    Other Representations: Code, Function, Repository
Examples
    fetchedRepo <- tryCatch(</pre>
        # Set dir to clone repository to.
        tempDir <- tempdir()</pre>
        pathToRepo <- file.path(tempDir, "glue")</pre>
        # Clone repo
        git2r::clone(
          url = "https://github.com/tidyverse/glue.git",
          local_path = pathToRepo
```

Function 11

```
)
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
  },
  warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
  }
)
if (fetchedRepo) {
  files <- repo$getRFiles()</pre>
  files[[1]]
}
```

Function

R6 Function class.

#### **Description**

Class representing a function.

#### Super class

```
PaRe::Code -> Function
```

#### Methods

#### **Public methods:**

- Function\$new()
- Function\$getFunction()
- Function\$clone()

Method new(): Initializer for Function object.

```
Usage:
Function$new(name, lineStart, lineEnd, lines)
Arguments:
name (character)
Name of Function.
lineStart (numeric)
Line number where function starts in File.
lineEnd (numeric)
Line number where function ends in File.
```

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```
lines (c)
           Vector of type character Lines of just the function in File.
       Returns: invisible(self)
      Method getFunction(): Get method to get defined functions in a File object.
       Function$getFunction()
       Returns: (data.frame)
                                    column
                                                  data type
                                    name
                                                  (character)
                                    lineStart
                                                  (integer)
                                    lineEnd
                                                  (numeric)
                                    nArgs
                                                  (integer)
                                    cycloComp
                                                  (integer)
      Method clone(): The objects of this class are cloneable with this method.
       Usage:
       Function$clone(deep = FALSE)
       Arguments:
       deep Whether to make a deep clone.
See Also
    Other Representations: Code, File, Repository
Examples
    fetchedRepo <- tryCatch(</pre>
        # Set dir to clone repository to.
        tempDir <- tempdir()</pre>
        pathToRepo <- file.path(tempDir, "glue")</pre>
        # Clone repo
        git2r::clone(
          url = "https://github.com/tidyverse/glue.git",
          local_path = pathToRepo
        # Create instance of Repository object.
        repo <- PaRe::Repository$new(path = pathToRepo)</pre>
        # Set fetchedRepo to TRUE if all goes well.
        TRUE
      },
      error = function(e) {
        # Set fetchedRepo to FALSE if an error is encountered.
        FALSE
      },
      warning = function(w) {
```

# Set fetchedRepo to FALSE if a warning is encountered.

functionUseGraph 13

```
FALSE
}
)

if (fetchedRepo) {
  files <- repo$getRFiles()
  file <- files[[1]]
  funs <- file$getFunctions()
  funs[[1]]
}</pre>
```

function Use Graph

function Use Graph

## Description

function Use Graph

## Usage

functionUseGraph(repo)

## Arguments

repo (Repository)

## Value

(graph)

 ${\tt funsUsedInFile}$ 

funsUsedInFile

## Description

Support function

## Usage

```
funsUsedInFile(files, verbose = FALSE)
```

## Arguments

```
files (list) of (File) verbose (logical)
```

#### Value

(list)

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funsUsedInLine

funsUsedInLine

## Description

Support function for funsUsedInFile.

#### Usage

```
funsUsedInLine(lines, name, i, verbose = FALSE)
```

#### **Arguments**

lines (c) of (character)
name (character)
i (numeric)

verbose (logical: FALSE)

#### Value

(data.frame)

column data type pkg character fun character line numeric

getApplyCall

getApplyCall

## Description

```
getApplyCall
```

#### Usage

```
getApplyCall(fun, defFuns)
```

## Arguments

fun (Function)

Function object.

defFuns (data.frame)

 $See\ getDefinedFunctions$ 

#### Value

(data.frame)

getApplyFromLines 15

```
getApplyFromLines
```

getApplyFromLines

```
Description
```

```
getApplyFromLines
```

#### Usage

```
getApplyFromLines(lines)
```

## Arguments

```
lines
```

(c) Vector of (character). See getDefinedFunctions

#### Value

```
(character)
```

```
getDefaultPermittedPackages
```

getDefaultPermittedPackages

#### **Description**

Gets permitted packages. An internet connection is required.

#### Usage

```
getDefaultPermittedPackages()
```

### Value

(tibble)

column data type package character version character

```
# Set cache
withr::local_envvar(
   R_USER_CACHE_DIR = tempfile()
)

if (interactive()) {
   getDefaultPermittedPackages()
}
```

16 getDefinedFunctions

```
{\tt getDefinedFunctions} \qquad {\tt getDefinedFunctions}
```

#### **Description**

Gets all the defined functions from a Repository object.

#### Usage

```
getDefinedFunctions(repo)
```

#### Arguments

repo (Repository)
Repository object.

#### Value

(data.frame)

column data type
name character
lineStart integer
lineEnd numeric
nArgs integer
cycloComp integer
fileName character

```
fetchedRepo <- tryCatch(</pre>
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/tidyverse/glue.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
    FALSE
  },
```

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```
warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
}

if (fetchedRepo) {
    repo <- PaRe::Repository$new(pathToRepo)

    getDefinedFunctions(repo)
}</pre>
```

getDlplyCall

getDlplyCall

#### Description

getDlplyCall

#### Usage

```
getDlplyCall(fun, defFuns)
```

#### **Arguments**

fun (Function)

Function object.

defFuns (data.frame)

See getDefinedFunctions

#### Value

(data.frame)

```
{\tt getDlplyCallFromLines} \ \ \textit{getDlplyCallFromLines}
```

## Description

```
getDlplyCallFromLines\\
```

#### Usage

```
getDlplyCallFromLines(lines)
```

#### **Arguments**

lines (c

Vector of (character).

#### Value

(character)

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getDoCall

getDoCall

## Description

getDoCall

#### Usage

```
getDoCall(fun, defFuns)
```

## Arguments

fun (Function)

Function object.

defFuns (data.frame)

See getDefinedFunctions

#### Value

(data.frame)

getDoCallFromLines

getDoCallFromLines

## Description

get Do Call From Lines

## Usage

```
getDoCallFromLines(lines)
```

## **Arguments**

lines (c)

Vector of (character). See getDefinedFunctions

#### Value

(character)

getExportedFunctions 19

```
{\tt getExportedFunctions} \quad \textit{getExportedFunctions}
```

## Description

Gets all the exported functions of a package, from NAMESPACE.

#### Usage

```
getExportedFunctions(path)
```

#### Arguments

path (character)

Path to package

#### Value

(c) Vector of character exported functions.

getFunCall getFunCall

#### Description

getFunCall

#### Usage

```
getFunCall(fun, defFuns)
```

## **Arguments**

fun (Function)

Function object.

defFuns (data.frame)

See getDefinedFunctions.

## Value

(data.frame)

20 getFunctionDiagram

getFunctionDiagram subsetGraph

#### **Description**

Create a subset of the package diagram containing all in comming and out going paths from a specified function.

#### Usage

```
getFunctionDiagram(repo, functionName)
```

#### **Arguments**

```
repo (Repository) Repository object.
functionName (character) Name of the function to get all paths from.
```

#### Value

```
(htmlwidgets)
Subsetted diagram. See grViz
```

```
fetchedRepo <- tryCatch(</pre>
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/tidyverse/glue.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
    FALSE
  },
  warning = function(w) {
    \mbox{\tt\#} Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
  }
if (fetchedRepo) {
  # Run getFunctionDiagram on the Repository object.
```

getFunctionUse 21

```
getFunctionDiagram(repo = repo, functionName = "glue")
}
```

getFunctionUse

summarise Function Use

#### **Description**

Summarise functions used in R package.

#### Usage

```
getFunctionUse(repo, verbose = FALSE)
```

#### **Arguments**

repo (Repository)
Repository object.
verbose (logical: FALSE)

Prints message to console which file is currently being worked on.

#### Value

(tibble)

column data type file character line numeric pkg character fun character

```
fetchedRepo <- tryCatch(
    # Set dir to clone repository to.
    tempDir <- tempdir()
    pathToRepo <- file.path(tempDir, "glue")

# Clone repo
    git2r::clone(
        url = "https://github.com/tidyverse/glue.git",
        local_path = pathToRepo
    )

# Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)

# Set fetchedRepo to TRUE if all goes well.
    TRUE
    },
    error = function(e) {</pre>
```

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```
# Set fetchedRepo to FALSE if an error is encountered.
FALSE
},
warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
}
)

if (fetchedRepo) {
    # Run getFunctionUse on the Repository object.
    getFunctionUse(repo = repo, verbose = TRUE)
}
```

getFunsPerDefFun

getFunsPerDefFun

## Description

getFunsPerDefFun

#### Usage

```
getFunsPerDefFun(files, defFuns)
```

#### **Arguments**

files (list)

List of File objects.

defFuns (data.frame)

 $See\ get Defined Functions.$ 

#### Value

data.frame

column data type from character to character getGraphData 23

getGraphData

getGraphData

#### **Description**

Get the dependency interactions as a graph representation.

#### Usage

```
getGraphData(repo, packageTypes = c("Imports"))
```

#### **Arguments**

```
repo

(Repository)
Repository object.

packageTypes

(c: c("Imports")) of (character) Any of the following options may be included in a vector:

• "imports"

• "depends"

• "suggests"

• "enhances"

• "linkingto"
```

#### Value

```
(as_tbl_graph)
```

```
fetchedRepo <- tryCatch(</pre>
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/tidyverse/glue.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
    FALSE
  },
  warning = function(w) {
```

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```
# Set fetchedRepo to FALSE if a warning is encountered.
FALSE
}

if (fetchedRepo) {
    # Run getGraphData on the Repository object.
    if (interactive()) {
        getGraphData(repo = repo, packageTypes = c("Imports"))
    }
}
```

getMultiLineFun

getMultiLineFun

## Description

getMultiLineFun

#### Usage

```
getMultiLineFun(line, lines)
```

#### **Arguments**

line (numeric)

Current line number.

lines (c)

Vector of (character) lines.

## Value

(character)

getVersionDf

getVersionDf

## Description

Function to compare different versions.

## Usage

```
{\tt getVersionDf}({\tt dependencies},\ {\tt permittedPackages})
```

graphToDot 25

## Arguments

dependencies (data.frame)

column data type package character version character

permittedPackages

(data.frame)

column data type package character version character

#### Value

(data.frame)

column data type package character version character

graphToDot

graphToDot

## Description

graphToDot

## Usage

graphToDot(graph)

## **Arguments**

graph (graph)

#### Value

htmlwidgets See grViz. 26 lintRepo

lintRepo lintRepo

#### **Description**

Get all the lintr messages of the Repository object.

#### Usage

```
lintRepo(repo)
```

#### **Arguments**

repo (Repository)

#### Value

(data.frame)

```
column
                  data type
                             description
filename
                  character
                             Name of the file
line number
                  double
                             Line in which the message was found
                  double
column_number
                             Column in which the message was found
                  character
                             Type of message
type
message
                  character
                             Style, warning, or error message
line
                  character Line of code in which the message was found
                  character Linter used
linter
```

```
fetchedRepo <- tryCatch(</pre>
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/tidyverse/glue.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
    FALSE
  },
```

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```
warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
}

if (fetchedRepo) {
    # Run lintRepo on the Repository object.
    messages <- lintRepo(repo = repo)
}</pre>
```

lintScore

lintScore

#### **Description**

Function that scores the lintr output as a percentage per message type (style, warning, error). Lintr messages / lines assessed  $\ast$  100

#### Usage

```
lintScore(repo, messages)
```

#### Arguments

```
repo (Repository)
Repository object.

messages (data.frame)
Data frame containing lintr messages. See lintRepo.
```

#### Value

```
(tibble)type (character) Type of message.pct (double) Score.
```

```
fetchedRepo <- tryCatch(
    # Set dir to clone repository to.
    tempDir <- tempdir()
    pathToRepo <- file.path(tempDir, "glue")

# Clone repo
    git2r::clone(
        url = "https://github.com/tidyverse/glue.git",
        local_path = pathToRepo
    )

# Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
```

28 makeGraph

```
# Set fetchedRepo to TRUE if all goes well.
   TRUE
},
error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
   FALSE
},
warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
   FALSE
}

if (fetchedRepo) {
   messages <- lintRepo(repo = repo)

# Run lintScore on the Repository object.
lintScore(repo = repo, messages = messages)
}</pre>
```

makeGraph

makeGraph

#### **Description**

Makes the graph

## Usage

```
makeGraph(funsPerDefFun, pkgName, expFuns, ...)
```

#### **Arguments**

```
funsPerDefFun (data.frame)
Functions per defined function data.frame.

pkgName (character)
Name of package.

expFuns (data.frame)
Exported functions data.frame.

... Optional other parameters for grViz.
```

#### Value

```
(htmlwidget)
Diagram of the package. See grViz.
```

makeReport 29

makeReport

makeReport

#### **Description**

Uses rmarkdown's render function to render a html-report of the given package.

#### Usage

```
makeReport(repo, outputFile, showCode = FALSE)
```

### Arguments

```
repo (Repository)
Repository object.

outputFile (character)
Path to html-file.

showCode (logical: FALSE)
Logical to show code or not in the report.
```

#### Value

(NULL)

```
fetchedRepo <- tryCatch(</pre>
  {
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/darwin-eu/IncidencePrevalence.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
    TRUE
  },
  error = function(e) {
    \mbox{\#} Set fetchedRepo to FALSE if an error is encountered.
    FALSE
  },
  warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
  }
)
```

30 pkgDiagram

```
if (fetchedRepo) {
    # Run makeReport on the Repository object.
    makeReport(repo = repo, outputFile = tempfile())
}
```

pkgDiagram

pkgDiagram

#### Description

Creates a diagram of all defined functions in a package.

#### Usage

```
pkgDiagram(repo, verbose = FALSE, ...)
```

#### **Arguments**

```
repo (Repository)
Repository object.

verbose (logical)
Turn verbose messages on or off.

... Optional other parameters for grViz.
```

#### Value

```
(htmlwidget)
Diagram htmlwidget object. See createWidget
```

printMessage 31

```
FALSE
},
warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
}

if (fetchedRepo) {
    # Run pkgDiagram on the Repository object.
    pkgDiagram(repo = repo)
}
```

printMessage

printMessage

#### Description

Prints messages dependening of the nrow of the number of rows of the notPermitted and versionCheck data.frames

#### Usage

```
printMessage(notPermitted, versionCheck)
```

#### **Arguments**

```
notPermitted ([base]data.frame)
versionCheck ([base]data.frame)
```

#### Value

(data.frame)

column data type package character version character

Repository

R6 Repository class.

## Description

Class representing the Repository

32 Repository

#### Methods

Repository\$getPath()

Repository\$getFiles()

• Repository\$getRFiles()

• Repository\$getDescription()

• Repository\$getFunctionUse()

• Repository\$gitCheckout()

• Repository\$gitPull()

• Repository\$gitBlame()

• Repository\$clone()

## **Method** new(): Initializer for Repository class

Usage:

Repository\$new(path)

Arguments:

path (character)

Path to R package project

Returns: invisible(self)

#### **Method** getName(): Get method for name.

Usage:

Repository\$getName()

Returns: (character)
Repository name

## **Method** getPath(): Get method fro path

Usage:

Repository\$getPath()

Returns: (character)
Path to Repository folder

## **Method** getFiles(): Get method to get a list of File objects.

Usage:

Repository\$getFiles()

Returns: (list)
List of File objects.

## **Method** getRFiles(): Get method to get only R-files.

Usage:

Repository\$getRFiles()

Returns: (list)
List of File objects.

**Method** getDescription(): Get method to get the description of the package. See: description. Usage: Repository\$getDescription() Returns: (description) Description object. Method getFunctionUse(): Get method for functionUse, will check if functionUse has already been fetched or not. Usage: Repository\$getFunctionUse() Returns: (data.frame) See getFunctionUse. Method gitCheckout(): Method to run 'git checkout <branch/commit hash>' Repository\$gitCheckout(branch, ...) Arguments: branch (character) Name of branch or a hash referencing a specific commit. ... Further parameters for checkout. Returns: invisible(self) Method gitPull(): Method to run 'git pull' Usage: Repository\$gitPull(...) Arguments: ... Further parameters for pull. Returns: invisible(self) **Method** gitBlame(): Method to fetch data generated by 'git blame'. Usage: Repository\$gitBlame() Returns: (tibble) column data type character repository author character file character date character lines integer **Method** clone(): The objects of this class are cloneable with this method. Usage: Repository\$clone(deep = FALSE) Arguments: deep Whether to make a deep clone.

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#### See Also

Other Representations: Code, File, Function

#### **Examples**

```
fetchedRepo <- tryCatch(</pre>
  {
    # Set dir to clone repository to.
    tempDir <- tempdir()</pre>
    pathToRepo <- file.path(tempDir, "glue")</pre>
    # Clone repo
    git2r::clone(
      url = "https://github.com/tidyverse/glue.git",
      local_path = pathToRepo
    # Create instance of Repository object.
    repo <- PaRe::Repository$new(path = pathToRepo)</pre>
    # Set fetchedRepo to TRUE if all goes well.
  },
  error = function(e) {
    # Set fetchedRepo to FALSE if an error is encountered.
    FALSE
  },
  warning = function(w) {
    # Set fetchedRepo to FALSE if a warning is encountered.
    FALSE
  }
)
if (fetchedRepo) {
  repo
```

whiteList

whiteList

#### Description

data.frame containing links to csv-files which should be used to fetch white-listed dependencies.

## Usage

whiteList

#### **Format**

An object of class tbl\_df (inherits from tbl, data.frame) with 3 rows and 4 columns.

whiteList 35

#### **Details**

By default three csv's are listed:

- 1. darwin
- 2. hades
- 3. tidyverse

The data.frame is locally fetched under: system.file(package = "PaRe", "whiteList.csv") Manual insertions into this data.frame can be made, or the data.frame can be overwritten entirely.

The data.frame itself has the following structure:

```
column data type description
source character name of the source
link character link or path to the csv-file
package character columnname of the package name column in the csv-file being linked to
version character columnname of the version column in the csv-file being linked to
```

The csv-files that are being pointed to should have the following structure:

```
if (interactive()) {
    # Dropping tidyverse
    whiteList <- whiteList %>%
        dplyr::filter(source != "tidyverse")

# getDefaultPermittedPackages will now only use darwin and hades
    getDefaultPermittedPackages()
}
```

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