# Package 'RQDA'

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Title Qualitative Data Analysis
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Imports RGtk2 (>= 2.20), igraph, gWidgets (>= 0.0-31), methods
Enhances tcltk, rjpod, d3Network
Description  Software for qualitative text analysis (Kuckartz, 2014, <doi:10.4135 9781446288719="">). Current version only supports plain text, but it can import PDF highlights if package 'rj-pod' (<https: projects="" r-forge.r-project.org="" rqda=""></https:>) is installed.</doi:10.4135>
Additional_repositories http://r-forge.r-project.org/
License BSD_3_clause + file LICENSE
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R topics documented:
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# Description

Qualitative Data Analysis based on R language. Current version supports plain text. In addition, it can import PDF highlights.

#### **Details**

The workhorse function for end-user is the RQDA(), you can use RQDA() to start the GUI after library(RQDA). Please Refer to the documentation section of the project homepage for the usage of RQDA.

The position of ViewFile widget can be controlled by "widgetCoordinate" options, with default value c(400,2). You can change it by options("widgetCoordinate"=c(x,y)), where x and y are integers specifying the position.

The size of many widgets (e.g. ViewFile widgets) can be controlled by "widgetSize" options, with default value c(550,700). You can change it by options("widgetSize"=c(x,y)), where x and y are integers specifying width and height.

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### Author(s)

Ronggui Huang

Maintainer: Ronggui Huang <ronggui.huang@gmail.com>

### References

Kelle, U. (ed). 1995. "Computer-aided qualitative data analysis: theory, methods and practice." Sage Publications.

Lewins, A. & Silver, C.2007. Using Software in Qualitative Research: A Step-by-Step Guide. Sage Publications.

Kuckartz, Udo. 2014. Qualitative Text Analysis. Sage Publications.

# **Examples**

```
## Not run: library(RQDA)
RQDA()
## End(Not run)
```

casesCodedBy

Get cases coded by specific codes, by specifying the code IDs.

### **Description**

Get cases coded by specific codes, by specifying the code IDs.

### Usage

```
casesCodedByAnd(cid)
casesCodedByOr(cid)
casesCodedByNot(cid)
```

### **Arguments**

cid

an integer vector of code IDs.

### **Details**

```
casesCodedByAnd returns case IDs which are coded by all codes from cid. casesCodedByOr returns case IDs which are coded by any code from cid. casesCodedByNot returns case IDs which are not coded by any code from cid.
```

#### Value

```
a vector of file IDs, with class of "RQDA.vector" and "caseId".
```

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### Author(s)

Ronggui HUANG

### See Also

```
getCaseNames
```

# **Examples**

```
## Not run:
filesCodedByAnd(1:2) ## coded by code 1 and 2
filesCodedByOr(1:2) ## coded by code 1 or 2
filesCodedByNot(1:2) ## coded by codes other than 1 and 2
## End(Not run)
```

codingBySearch

Auto-coding by pattern matching

# **Description**

Applies the specified code to a specified file based on given text pattern.

# Usage

# Arguments

pattern	a text string, to l	be matched to	the text in the RQ	DA project file
---------	---------------------	---------------	--------------------	-----------------

fid File id, in the GUI 'File' tab click on file to see its id

cid Code id, in the GUI 'Codes' tab click on code to see its id

seperator single character string, specifying the separator of unit of analysis.

concatenate a boolean value, if TRUE then matches in adjacent units (ie only separated by

'seperator') are fused into a single coding.

... arguments passed to gregexpr.

A useful example is the 'ignore.case' argument.

crossCodes 5

### **Details**

The function can be used if one is interested in automatically applying a code to paragraphs in a file based on certain words specified by 'pattern'.

It first splits the whole text into pieces which depend on the separator, then matches the pattern with each pieces. When a match is found, the piece is coded to the code specified by cid. The default separator defines paragraph as unit of analysis. The separator is passed to the pattern argument of gregexpr.

This function is also useful for keyword in context (KWIC) analysis.

#### Value

The function is used for its side effect.

#### Author(s)

Ronggui Huang

### See Also

getFileIds

# **Examples**

```
## Not run:
codingBySearch("internet",fid=1,cid=2)

codingBySearch("internet",fid=getFileIds(),cid=2)

codingBySearch("internet",fid=getFileIds(),cid=2, seperator="[.!?]")

## End(Not run)
```

crossCodes

Inter-codes relationship

# Description

Return a matrix, give a summary of inter-codes relationship.

# Usage

6 crossCodes

# **Arguments**

relation	The relation between codes
codeList	A character vector, the codes list on which the inter-code relationship is based
data	Data frame returned by getCodingTable,may be subset of the full coding table
print	When TRUE, print the results automatically
cid1	Length-1 code id. It is numeric.
cid2	Length-1 code id. It is numeric.
	is not used yet.

### **Details**

The inter-codes relationship calculation is based on the relationship between the associated codings of the codes.

Giving the code name list (a character list), crossCodes returns the inter-relationship of 2 or more than 2 codes. crossCodes make heavy use of for loops, so it may take a while to get the result when the coding table is large.

crossTwoCodes returns the summary of inter-codes relationship of two codes based on the code id (each code id is a length-1 integer vector).

# Value

For crossCodes, it is a matrix. The upper matrix contains the number of codings fitting the relation between the respective two codes. the lower matrix is all NA. rownames of the matrix is the name of the codes, and the colnames of the matrix is the corresponding id of codes.

For crossCodes, it is a numeric vector.

### See Also

relation

```
## Not run:
crossCodes()
## End(Not run)
```

Deletion 7

Deletion	Functions for dealing with the temporarily deleted data

#### **Description**

list.deleted shows the temporarily deleted data (deleted by delete button, which is only tagged with deletion mark in the \*.rqda file). pdelete permanently deletes them. CleanProject cleans the \*.rqda file (call pdelete with every possible value for the type argument). undelete removes the temporarily deletion mark to reuse the temporarily deleted data.

### Usage

### Arguments

type	Types of elements in the *.rqda file. "file" is the name of file (in the Files Tab). "code" is the name of codes (in the Codes Tab). "case" is the name of case (in the Case Tab). "codecategory" is name of code category (in the C-Cat Tab). "filecategory" is name of file category (in the F-Cat Tab). "coding" is the text segment associated with specific code.
ask	You can choose which ones to be deleted when is TRUE. Otherwise, it will delete all with temporarily deletion mark.

# Details

By GUI, you can delete file, code, case, code category and file category. When you click the delete button, the status of related elements (e.g. for file, the elements including file, related coding, related case category and file category) are set from 1 to 0. In this sense, deletion from GUI is temporary. After that, you can use list.deleted to show which ones are tagged as deleted. By pdelete, you can permanently delete those tagged with temporarily deletion mark. By undelete, you can undo the temporary deletion, the status of related elements are set back to 1.

When ask is FALSE, it will apply to all the appropriate elements of specific type. When it is TRUE, you can choose the elements of the specific type which the action (pdelet or undelete) applies to.

### Value

For list.deleted, a data frame if there are some records with temporarily deletion mark for the specified type. For pdelete, CleanProject and undelete, no value is return. These functions are used for the side-effects.

8 exportCodedFile

# Note

In order to make the temporarily deletion of code and the associated coding can be undeleted again, RQDA differentiates the temporarily deletion of codings (which are deleted by deleting a code) from that produced by unmark button in the Coding Tab: the former with status = 0 while the latter with status = -1.

# Author(s)

Ronggui HUANG

exportCodedFile

exported a coded file to HTML file

### **Description**

Exported a coded file to a HTML file with codings and code labels

# Usage

```
exportCodedFile(file, fid, closeAfter = TRUE)
```

# Arguments

file character string to specify the HTML file path.

fid the file id for export.

closeAfter When TRUE, the file widget is closed after export.

# Value

No returned value, for its side effect only.

# Author(s)

Ronggui HUANG

```
## Not run:
exportCodedFile(file=tempfile(), fid=1)
## End(Not run)
```

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exportCodings	Export codings to a HTML file.	

# Description

To export retrieved codings to a HTML file.

# Usage

# **Arguments**

file	Length-one character vector, specify the name of exported file.
Fid	Integer vector of file id. The retrieved codings are from this subset of files. When it is NULL, it means all the files.
order	Specify the order of retrieved codings. See details for the meanings.
append	Logical, when TRUE the exported codings are appended to the existing file (if it exists); otherwise, it overwrites the existing file.
codingTable	name of sqlite data table where codings are stored. It should be either "coding" or "coding2"

# **Details**

"fname" means order the codings by file names, "ftime" by file imported time, and "ctime" by time of coding.

# Value

A html file.

# Author(s)

**HUANG** Ronggui

10 filesCodedBy

filesByCodes

Relation between files and codes.

### **Description**

Return a data frame which indicates what codes are associated with each file.

# Usage

```
filesByCodes(codingTable = c("coding", "coding2"))
```

# **Arguments**

codingTable

name of the coding table in rqda database.

# **Details**

The result is a data frame. Each row represents one file, and each variable represents one code. If a file is coded by a code, the value of that variable is 1, otherwise it is 0.

#### Value

A data frame.

### Author(s)

Ronggui HUANG

filesCodedBy

Get files coded by specific codes, by specifying the code IDs.

### **Description**

Files coded by a specific set of codes.

#### Usage

```
filesCodedByAnd(cid,codingTable=c("coding","coding2"))
filesCodedByOr(cid,codingTable=c("coding","coding2"))
filesCodedByNot(cid,codingTable=c("coding","coding2"))
```

#### **Arguments**

cid an integer vector of code IDs.

codingTable name of coding table.

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# **Details**

```
filesCodedByAnd returns file IDs which are coded by all codes from cid.
filesCodedByOr returns file IDs which are coded by any code from cid.
filesCodedByNot returns file IDs which are not coded by any code from cid.
```

### Value

```
a vector of file IDs, with class of "RQDA.vector" and "fileId".
```

# Author(s)

Ronggui HUANG

### See Also

```
getFileNames
```

# **Examples**

```
## Not run:
filesCodedByAnd(1:2) ## coded by code 1 and 2
filesCodedByOr(1:2) ## coded by code 1 or 2
filesCodedByNot(1:2) ## coded by codes other than 1 and 2
## End(Not run)
```

getAttr

attributes

# **Description**

Get the attributes of case or file.

# Usage

12 getAttr

# **Arguments**

type	Type of attributes.
attrs	character vector, subset of attributes to retrieve.
subset	when subset is not missing, return subset only.
Х	an object from getAttr
	Not used currently.

#### **Details**

You can add and modify the attributes of cases or files. getAttr returns this attributes as a data frame.

Sometimes, you only want to show a subset of files or cases according to their attributes. You can do the subset operation of the result from getAttr and pass it to showSubset, or you can pass a subset argument to GetAttr. The meaning of subset is the same as that in subset function.

#### Value

For getAttr, when type is "case", it is a data frame with class of "CaseAttr"; when type is "file", it is a data frame with class of "FileAttr". For showSubset, no value is returned, the side-effect is to change the file list or case list in the respective widget.

# Note

All the variables in the data frame is of class "character", you need to convert to suitable class when conducting statistical analysis.

# Author(s)

**HUANG Ronggui** 

```
## Not run:
attr <- getAttr("case")
showSubset(subset(attr,attribute1==1)) ## assuming there is a variable
named atttribute1 in attr.
## End(Not run)</pre>
```

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getCases

Get the Case ID and Case Name.

# **Description**

Return cases IDs or names which a set of files belong to.

# Usage

```
getCaseIds(fid = GetFileId(), nFiles = FALSE)
getCaseNames(caseId = GetCaseId(nFiles = FALSE))
getCases(fid, names = TRUE)
```

# **Arguments**

fid numeric vector, the file IDs.

nFiles logical, return the number of files that belong to a case.

caseId numeric vector, the case IDs.

names logical.

#### **Details**

GetCaseId returns the case IDs which a file belongs to given the file IDs.

GetCaseName returns the case Names given the case IDs.

getCases returns the case Names or IDs depending on the argument of names. It is a wrapper of GetCaseId and GetCaseName.

# Value

GetCaseId returns a data frame of two columns when nFiles is TRUE, and a numeric vector when FALSE.

GetCaseName returns a character vector or NULL if no cases are associated with the file IDs.

getNames returns the names of cases when names is TRUE, id of files when FALSE.

### Author(s)

**HUANG Ronggui** 

### See Also

See Also getFileIds

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### **Examples**

```
## Not run:
GetCaseName(GetCaseId(GetFileId("filecategory")))
## End(Not run)
```

getCodingsByOne

Return codings of one code.

# Description

get codings of a code.

# Usage

```
getCodingsByOne(cid, fid=NULL,codingTable=c("coding","coding2"))
```

# **Arguments**

cid code id, an integer.
fid file id, an integer vector.
codingTable name of coding table.

# **Details**

It gets codings of a code with cid from files which are specified by fid.

### Value

a data frame with additional class of "codingsByOne".

### Author(s)

Ronggui HUANG

# See Also

```
%and%, %or%, %not%
```

```
## Not run:
getCodingsByOne(1)
## End(Not run)
```

getCodingTable 15

getCodingTable	Get the information of codings
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# Description

Get the information of codings.

### Usage

```
getCodingTable()
```

# **Details**

Codings are stored in the coding table of \*.rqda file. The coding table contains necessary information, but not informative to end-users. For example, it has id of code list and file list, but not the name of them, which are stored in freecode table and source table respectively. GetCodingTable joins information from the three tables, and returns more informative data. See value section on the the returned components.

# Value

### A data frame:

cid Code id fid File id

code name, in accordance with cid filename File name, in accordance with fid

CodingLength The number of characters in the coding

index1 beginning index of a coding

index2 end index of a coding

# Author(s)

HUANG Ronggui

16 getFileIdSets

getFileIdSets

Get file id from sets.

# **Description**

Get the file id from file-sets given the type of relation between sets. File-set is defined by the case or filecategory.

# Usage

```
getFileIdSets(set = c("case", "filecategory"), relation = c("union", "intersect"))
```

# **Arguments**

set type of set, either "case" or "filecategory".

relation relation between sets, either "union" or "interset".

# **Details**

File-set is defined by case or file category. Files belonging to a case/filecategory are in a set. This function gets file id from the selected sets. When multiple sets are selected, the relation between them can be defined. When relation is union, file ids from either selected set are returned. When relation is intersect, only file ids that appear in all the selected sets are returned.

### Value

A numeric vector or NULL if no file id is well-defined.

# Author(s)

**HUANG Ronggui** 

# See Also

retrieval, getFileIds

getFiles 17

		_
get	Fί	les

Get the ids or names of files list

### **Description**

Get the ids or names of files list.

### Usage

### **Arguments**

condition Any one of "unconditional", "case", "filecategory" or "both".

type Any one of "all", "coded" or "uncoded", "selected".

fid integer vector, the id of files.

names logical.

### **Details**

The imported files are stored in a data base table (called source) in the \*.rqda file. Every file in the source table has a unique id. Besides, every file can be assigned to a case or file category.

Given that files meet the condition, the type argument "all" means all files, "coded" means the coded files, "uncoded" means the uncoded files and "selected" means the selected files; in "files" widget, "files of case" widget and "files of category" widget respectively.

When condition is "both", the result is intersection of File Id of "case" and "filecategory".

GetFileId returns the ids of files which fit the combined criterion of condition and type.

#### Value

Normally, it is a numeric vector of file id. If condition is "case" or "filecategory" but no case or file category is selected, it returns NULL.

getFiles returns a vector of file IDs (with class of "RQDA.vector" and "fileId") when names is FALSE, and a vector of file names ((with class of "RQDA.vector" and "fileName") when names is TRUE.

#### Author(s)

**HUANG Ronggui** 

18 getMemos

# See Also

```
retrieval, getFileIdSets
```

# **Examples**

```
## Not run:
GetFileId() ## Id of all files
GetFileId("unconditional","coded") ## id of all coded files.
GetFileId("case","uncoded") ## id of uncoded files for the selected case.
GetFileId("filecategory","all") ## id of all files in the selected file category.
## End(Not run)
```

getMemos

Collection of code memos

# Description

This function collects all code memos into an object and displays them in a widget.

# Usage

```
getMemos(type = "codes")
```

# Arguments

type

Currently, only "codes" is supported.

#### Value

```
An object of class c("memos", "Info4Widget", "data.frame").
```

# Author(s)

Ronggui HUANG

gselect.list 19

gselect.list

Select Items from a List

### **Description**

Select item(s) from a character vector.

# Usage

```
gselect.list(list, multiple = TRUE, title = NULL, width = 200, height = 500, ...)
```

# Arguments

list character vector. A list of items. multiple logical: can more than one item be selected? title optional character string for window title. width integer. Width of the widget. integer. Height of the widget. height Not used currently.

### **Details**

. . .

GTK version of select.list.

### Value

A character vector of selected items with UTF-8 encoding. If no item was selected and 'OK' is clicked, it returns length 0 character vector. If 'Cancel' is clicked, '""' is returned.

# Note

The license of this function is subject to interpretation of the first author.

# Author(s)

John Verzani and Ronggui HUANG

# See Also

```
select.list
```

```
## Not run:
select.list(sort(.packages(all.available = TRUE)))
## End(Not run)
```

20 Ops.codings

Show the relationship between \*codedBy using a matrix.

# Description

It returns the number of files or cases coded by two code in a matrix form.

# Usage

```
nCodedByTwo(FUN, codeList = NULL, print = TRUE, ...)
```

# Arguments

FUN a function. It is usually a function from filesCodeBy\* and casesCodedBy\*.

codeList character vector of code names.

print logical, print the result automatically when TRUE.

... not used currently.

# Author(s)

Ronggui HUANG

Ops.codings

Boolean operation on codings.

# Description

Return the result codings of the Boolean operation.

# Usage

```
and(CT1, CT2)
or(CT1, CT2)
not(CT1, CT2)
```

# Arguments

CT1 Coding of code one.
CT2 Coding of code two.

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# **Details**

CT1 and CT2 are subset of getCodingTable of a specific code or returned value of getCodingsByOne. In former situation, only columns of "index1", "index2", "fid", "filename" from CT1 and CT2 are used by this function.

These functions are the same as %and%, %or%, %not%.

### Value

```
An object of class "codingsByOne" and "data.frame". It consists: index1 index2 fid filename rowid
```

The codings, or the text segments.

# Author(s)

coding

Ronggui HUANG

#### See Also

```
relation, getCodingTable, %and%
```

```
## Not run:
a <- getCodingTable()
c1 <- subset(a,cid==6)
c2 <- subset(a,cid==24)
ans <- and(c1, c2)
ans ## put it into a widget for inspection
## another way to do the same
and(getCodingsByOne(6), getCodingsByOne(24))
## or operator
or(getCodingsByOne(6), getCodingsByOne(24))
## not operator
not(getCodingsByOne(6), getCodingsByOne(24))
## End(Not run)</pre>
```

Ops.RQDA

Ops.RQDA

Binary operations of some types of RQDA objects

# **Description**

Binary operations of RQDA.vector or codingsByOne.

# Usage

```
e1 %and% e2
```

- e1 %or% e2
- e1 %not% e2

### **Arguments**

```
e1 a RQDA object.
```

e2 a RQDA object.

#### **Details**

e1 and e2 can be objects of class "RQDA.vector" includes classes of "fileId", "fileName", "caseId", "caseName". They can be objects of class "codingsByOne", see getCodingsByOne. e1 and e2 must be the same class.

For class of "RQDA.vector", %and% is the intersect of e1 and e2. %or% is the union of e1 and e2. %not% is the defined as setdiff(e1, e2).

### Value

an object with the same structure and class of e1 and e2.

### Author(s)

**HUANG Ronggui** 

# See Also

```
intersect, union, setdiff
```

```
## Not run:
filesCodeByAnd(1:2) %and% filesCodeByAnd(3) ## files coded by 1 and 2 as well as 3
filesCodeByAnd(1:2) %or% filesCodeByAnd(3) ## files coded by 1 and 2 or 3
filesCodeByAnd(1:2) %not% filesCodeByAnd(3) ## files coded by 1 and 2 but not 3
getCodingsByOne(1) %or% getCodingsByOne(2) ## codings of 1 or 2.
```

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```
## End(Not run)
```

Project

Open and close project.

# **Description**

To open or close a project (a \*.rqda file) by command.

# Usage

```
openProject(path, updateGUI = FALSE)
closeProject(conName = "qdacon", assignenv = .rqda, ...)
```

### **Arguments**

path The path of of the \*.rqda project file.

updateGUI When TRUE, also update information on the GUI widgets.

conName Do not change it.
assignenv Do not change it.
Do not change it.

# **Details**

These functions correspond to the internal functions of the "open project" and "close project" buttons.

### Value

No value is returned. For the side-effect only.

# Author(s)

Ronggui HUANG

24 queryFiles

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Retrieval of file names according to their codings.

### **Description**

To retrieve file names according to their codings.

### Usage

```
queryFiles(or=NULL, and = NULL, not = NULL, names = TRUE)
```

# **Arguments**

or integer vector of code id.
and integer vector of code id.
not integer vector of code id.

names logical, returns file names when TRUE.

#### **Details**

Let fid.or are files coded by any code from or, fid.and are files coded by all codes of and, and fid.not are files not coded by any code of not. Then the result is setdiff(intersect(fid.or, fid.and), fid.not).

This function is succeeded by filesCodedByAnd, filesCodedByOr, filesCodedByNot and their operators.

### Value

A vector of file id when names is FALSE. A vector of file names, with the side effect of updating files widget with these file names when names is TRUE.

### Author(s)

**HUANG Ronggui** 

```
## Not run:
QueryFile(or=1:2) ## files coded to code 1 or 2.
QueryFile(and=1:2) ## files coded to code 1 and 2.
QueryFile(or=1:2, not=3:4) ## files coded to code 1 or 2 but neither 3 nor 4.
## End(Not run)
```

relation 25

relation Relation between two codings
---------------------------------------

# Description

To calculate the relation between two codings, given the coding indexes.

# Usage

```
relation(index1, index2)
```

# Arguments

index1	The first coding index, it is length-2 integer vector with the first element (index1[1]) less than the second element (index1[2]).
index2	The second coding index, it is length-2 integer vector with the first element (index2[1]) less than the second element (index2[2]).

# Details

The relation between two codings can be any one of inclusion, overlap, exact (special case of inclusion and overlap) and proximity (Neither overlap nor inclusion). It should be noted that two adjacent codings are regarded as proximity with distance of 0.

# Value

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Relation	Length-1 character, standing for the type of relation. It may be one of inclusion, overlap, exact or proximity.
OverlapIndex	Length-2 vector, the index of overlapping between two coding indexes. It is $c(NA,NA)$ when relation is proximity.
UnionIndex	Length-2 vector, the index of union of the two coding indexes. It is $c(NA,NA)$ when relation is proximity.
Distance	Distance of two coding indexes. It is NA when relation is not proximity.
WhichMin	Which argument (index1 or index2) has the minimum value. If both have the same minmum value, return NA.
WhichMax	Which argument (index 1 or index 2) has the maximum value. If both have the same maxmum value, return $NA$ .

# Author(s)

HUANG Ronggui

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### **Examples**

```
## Not run: relation(c(20,30),c(22,28)) # inclusion relation(c(10,40),c(20,80)) # overlap relation(c(10,20),c(30,50)) # proximity with distance of 10 relation(c(10,20),c(20,50)) # proximity with distance of 0 relation(c(10,20),c(10,20)) # exact relation(c(10,20),c(10,30)) # WhichMin is c(1,2) ## End(Not run)
```

retrieval

Retrieval of codings conditional on the file id.

### **Description**

To retrieve the codings of a selected code from specific set of files.

### Usage

### **Arguments**

Fid Numeric vector, the file id.

order The method of sort of retrieved codings.

CodeNameWidget The name of code list widget.

codingTable name of sqlite data table where codings are stored. It should be either "coding"

or "coding2"

# **Details**

This function retrieves the codings of a selected code from CodeNameWidget, given that all the codings are from a set of files which are determined by Fid.

# Value

A gtext widget is open and all the codings are pushed into that widget.

### Author(s)

**HUANG Ronggui** 

#### See Also

```
getFileIds
```

RQDAQuery 27

RQDAQuery

Execute a SQL statement on the open \*.rqda file.

# Description

Submits and executes an arbitrary SQL statement on the open \*.rqda file.

# Usage

```
RQDAQuery(sql)
```

### **Arguments**

sql

a character vector of length 1 with the SQL statement.

### **Details**

It is a wrapped version of dbSendQuery, to make it more convenient to submit and execute a SQL statement.

### Value

The same of dbSendQuery, possible NULL (for the side effects of sql on the \*.rqda file) or a data.frame with the output (if any) of the query.

# Author(s)

**HUANG Ronggui** 

# See Also

See Also as dbSendQuery

```
## Not run:
RQDAQuery("select name from source where status=1")
## End(Not run)
```

RQDATables Data Tables in rqda file

# **Description**

The internal data table structures in rqda file, which is a SQLite data base.

#### **Details**

Table "annotation" contains file annotations.

fid: file id.

position: position of annotation. annotation: content of annotation. owner: owner of annotation. date: created date.

date: created date.
dateM: not used currently.

status: 1 for standard status and 0 for temporarily deleted annotation.

Table "attributes" contains information about the name list of attributes. They are held in the widget of ".AttrNamesWidget".

name: name of attributes.

status: 1 for standard status and 0 for a temporarily deleted attribute.

date: created date of an attribute.

dateM: not used currently. owner: owner of an attribute.

memo: memo of an attribute. Useful for definition of attributes. class: class of an attribute. It might be "character" or "numeric".

Table "caseAttr" contains information about attributes of cases.

variable: name of case attributes, corresponding to name in attributes table.

value: variable value.

caseID: corresponding case id of a variable value. date: created date of a case attribute record.

dateM: not used currently.

owner: creator of the case attribute record.

Table "caselinkage" contains information about the relationship between case and files of case.

caseid: case id. file id.

selfirst: beginning position of a text segment associated with a case. selend: ending position of a text segment associated with a case. status: 1 for standard status and 0 for temporarily deleted record.

owner: creator of the case linkage. date: date of a created case linkage.

memo: not used currently.

Table "cases" contains information about case list.

name: name of a case. memo: case memo. owner: creator of a case.

date: date of creation of a case. dateM: not used currently.

id: case id.

status: 1 for standard status and 0 for temporarily deleted record.

Table "codecat" contains information about upper-level of code list.

name: name of code category.
cid: not used currently.
catid: id of code category.
owner: creator of code category.

date: date of creation of code category.

dateM: not used currently. memo: code category memo.

status: 1 for standard status and 0 for temporarily deleted record.

Table "coding" contains information on codings.

cid: code id. file id.

seltext: a coding, that is the coded text segment.
selfirst: beginning position of the coded text segment.
selend: ending position of the coded text segment.

status: 1 for standard status. 0 for deleted codings (for example when a code is deleted, the status of all associated codings

owner: name of coder or creator of a coding.

date: date of creation of a coding.

memo: coding memo.

Table "fileAttr" contains information about attributes of files.

variable: character, name of file attribute, corresponding to name in attributes table

value: value of the file attribute.

fileID: corresponding file id of the attribute. date: created date of the file attribute.

dateM: not used currently.

owner: creator of the file attribute.

Table "filecat" contains information on the file categorization.

name: name of the file category.

fid: Not used.

catid: if of file category.
owner: creator of file-category.

date: date of creation of a file category.

dateM: not used currently. memo: file category memo.

status: 1 for standard status and 0 for temporarily deleted record.

Table "freecode" contains information on the codes list.

name: code name.
memo: code memo.
owner: creator of a code.

date: date of creation of a code.

dateM: not used currently.

id: code id.

status: 1 for standard status and 0 for temporarily deleted record.

color: color for code marker (added in version 0.19)

Table "image" contains information about images. It is not used currently.

Table "imageCoding" contains images coding. It is not used currently.

Table "journal" contains information about field work journal. Journal titles are held in widget of ".JournalNamesWidget".

name: name of a journal.
journal: content of a journal.
date: created date of a journal.
dateM: not used currently.
owner: owner of a journal.

status: 1 for standard status and 0 for temporarily deleted journal.

Table "project" contains information about the project and \*.rqda file.

encoding: not used currently. databaseversion: version of RQDAtables.

date: created date of the project.

dateM: not used currently.
memo: project memo.
BOM: not used currently.

imageDir: directory of image. Not used currently. about: meta information about the rqda file.

Table "source" contains the content of files. Files are held in widget of ".fnames\_rqda".

name: name of the file.
id: id of the file.
file: content of a file.
memo: memo of the file.
owner: creator the file.
date: the date of the file-import.

dataM: date of last editing of the file content.

status: 1 for standard status and 0 for temporarily deleted file.

The "treecode" table contains information on the codes categorization (relationship between codes and the codecat). They are held in widget of ".CodeCatWidget". Codes of specific category are held in widget of ".CodeofCat".

cid: code id.

catid: code category id.

date: date of creation of a code categorization.

dateM: not used currently. memo: not used currently.

status: 1 for standard status and 0 for temporarily deleted file.

owner: creator the the treecode.

Table "treefile" contains information about file categorization (relation between source files and filecat).

fid: file id.

catid: file category id.

date: date of creation of the file categorization.

dateM: not used currently. memo: not used currently.

status: 1 for standard status and 0 for temporarily deleted record.

owner: creator the the tree file.

# Author(s)

**HUANG Ronggui** 

32 searchFiles

# **Description**

Search files according to the pattern.

### Usage

```
searchFiles(pattern, content = FALSE, Fid = NULL, Widget = NULL, is.UTF8 = FALSE)
```

### **Arguments**

pattern	The criterion of search, see examples section for examples.
content	When it is TRUE, the content of files fitting the pattern will be returned as well.
Fid	integer vector, the ids of subset of files to search.
Widget	Character, name of a gtable widget. If it is not NULL, the file names fitting the pattern will pushed to that gtable widget using svalue method. One useful value is ".fnames_rqda", so the file names will be pushed to the Files Tab of RQDA. Others are ".FileofCat" and ".FileofCase".
is.UTF8	If the coding of pattern is UTF-8. If you are not sure, always use FALSE.

### **Details**

This function uses select statement of sql to search files (from source database table). The pattern is the WHERE clause (without the keyword WHERE). For more information, please refer to the website of SQLite syntax. All data in \*.rqda use UTF-8 encoding, so the encoding of pattern matters. It will be converted to UTF-8 if it is not (is.UTF8=FALSE).

# Value

A data frame with variables (which is invisible and you need to print it explicitly):

id The file id.
name The file name.

file The file content. Only return when content is TRUE.

# Author(s)

HUANG Ronggui

# References

```
http://www.sqlite.org/lang_expr.html
```

summaryCodings 33

### See Also

```
gtable, localeToCharset
```

### **Examples**

```
## Not run:
searchFiles("file like '%keyword%'")
## search for files who contain the word of "keyword"
searchFiles("file like 'keyword%'")
## search for files whose content begin with the word of "keyword"
searchFiles("name like '%keyword'")
## search for files whose name end with the word of "keyword"
searchFiles("name like '%keyword one' and file like '%keyword tow%'")
## combined conditions
## End(Not run)
```

summaryCodings

Summary of codings

### **Description**

Give a summary of codings of current project.

# Usage

```
summaryCodings(byFile = FALSE, ...)
## S3 method for class 'summaryCodings'
print(x, ...)
```

# Arguments

byFile When it is FALSE, return the summary of current project. When it is TRUE, return the summary of coding for each coded file.

x An object returned by summaryCoding.

Other possible arguments.

#### Value

A list:

NumOfCoding Number of coding for each code.

AvgLength Average number of characters in codings for each code.

NumOfFile Number of files coded for each code.

CodingOfFile Number of codings for each file. Returns NULL if byFile is FALSE.

34 viewPlainFile

### Author(s)

**HUANG Ronggui** 

#### See Also

```
getFileIds and getCodingTable
```

### **Examples**

```
## Not run:
summaryCodings()
summaryCodings(FALSE)
## End(Not run)
```

viewPlainFile

View the file content of the selected file in File Widget without displaying the codings and annotations etc.

# **Description**

This function displays a data file in its bare form. The codings, annotations or other modifications done in RQDA won't be displayed.

# Usage

```
viewPlainFile(FileNameWidget = .rqda$.fnames_rqda)
```

### **Arguments**

FileNameWidget Users should leave it as it is.

### **Details**

This function is useful to view the raw version of the data files. None of the codings, annotations, memos done in RQDA will be displayed on the file when it's called by this function. To use the function open a project and select the data file you wish to view and type 'ViewPlainFile()' in the command line.

#### Value

No value is return. It is used for the side effect: the function returns a widget window with the plain file in it.

### Author(s)

HUANG Ronggui

write.FileList 35

write.FileList	Import a batch of files to the source table
----------------	---

# **Description**

If importing a single file to the project, you can do it by clicking import button in the Files Tab. Sometimes, you want to import a batch of files quickly, you can do it by command. write.FileList can be used to import a batch of files into the source table in the \*.rqda file. addFilesFromDir can add all files from a directory into \*.rqda.

# Usage

```
write.FileList(FileList, encoding = .rqda$encoding, con = .rqda$qdacon, ...)
addFilesFromDir(dir, pattern = "*.txt$")
```

#### **Arguments**

FileList	A list. Each element of the list is the file content, and the names(FileList) are the respective file name.
encoding	Don't change this argument.
con	Don't change this argument.
dir	Path of a directory where plain files are located.
pattern	Argument passed to list.files; only files matching this pattern are imported.
	is not used.

### **Details**

The file content will be converted to UTF-8 character before being written to \*.rqda. The original content can be in any suitable encoding, so you can inspect the content correctly; In other words, the better practices is to used the corresponding encoding (you can get a hint by localeToCharset function) to save the imported files.

# Value

This function is used for the side-effects. No value is return.

# Author(s)

Huang Ronggui

36 write.FileList

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