Package 'dcmodify'

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```
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Title Modify Data Using Externally Defined Modification Rules
Type Package
LazyLoad yes
Description Data cleaning scripts typically contain a lot of 'if this change that'
      type of statements. Such statements are typically condensed expert knowledge.
      With this package, such 'data modifying rules' are taken out of the code and
      become in stead parameters to the work flow. This allows one to maintain, document,
      and reason about data modification rules as separate entities.
Version 0.9.0
Depends methods
URL https://github.com/data-cleaning/dcmodify
BugReports https://github.com/data-cleaning/dcmodify/issues
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      utils,
Suggests simplermarkdown, tinytest,
VignetteBuilder simplermarkdown
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```

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2 demodify

R topics documented:

dcmodify					Data Modification By Modifying Rules																													
Index																																		5
	modify_so		•			•			•	٠	•	•		•	•	٠	•	•		 •	•	•	•	•	•	•	•	•	 •	•	•	•	•	4
	modify																																	
	modifier .																																	3
	demodify																																	2

Description

Data often contain errors and missing data. Experts can often correct commonly occuring errors based on simple conditional rules. This package facilitates the expression, management, and application of such rules on data sets.

The general workflow in dcmodify follows the following pattern.

- Define or read a set of rules with modifier.
- modify data with the modification rules.
- Examine the results either graphically or by summary.

There are several convenience functions that allow one to define modification rules from the commandline, through a (freeform or yaml) file and to investigate and maintain the rules themselves. Please have a look at the introductory vignette

```
vignette("introduction",package="dcmodify")
```

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See Also

Useful links:

- https://github.com/data-cleaning/dcmodify
- Report bugs at https://github.com/data-cleaning/dcmodify/issues

modifier 3

modifier

Create or read a set of data modification rules

Description

Create or read a set of data modification rules

Usage

```
modifier(..., .file, .data)
```

Arguments

... A comma-separated list of modification rules.

. file (optional) A character vector of file locations.

.data (optional) A data.frame with at least a column "rule" of type character. Op-

tionally, the following columns of metadata can be provided (all character, except "created" which should be POSIXct): "name", "label", "description",

"origin", "created".

Value

An object of class modifier.

Examples

```
m <- modifier( if (height < mean(height)) height <- 2*height
, if ( weight > mean(weight) ) weight <- weight/2 )
modify(women,m)</pre>
```

modify

Modify a data set

Description

Modify a data set

4 modify_so

Usage

```
modify(dat, x, ref, ...)
## S4 method for signature 'data.frame,modifier,environment'
modify(dat, x, ref, logger = NULL, ...)
## S4 method for signature 'data.frame,modifier,ANY'
modify(dat, x, logger = NULL, ...)
## S4 method for signature 'data.frame,modifier,data.frame'
modify(dat, x, ref, logger = NULL, ...)
## S4 method for signature 'data.frame,modifier,list'
modify(dat, x, ref, logger = NULL, ...)
```

Arguments

dat A data.frame

x A modifier object containing modifying rules.

ref A environment

... Extra arguments.

logger Optional. A lumberjack-compatible logger object.

Examples

```
m <- modifier( if (height < mean(height)) height <- 2*height
, if ( weight > mean(weight) ) weight <- weight/2 )
modify(women,m)</pre>
```

 ${\tt modify_so}$

Shortcut to modify data

Description

Shortcut to modify data

Usage

```
modify_so(dat, ...)
```

Arguments

dat A data.frame

. . . A comma-separated list of modifying rules.

Index