Package 'zTree'

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Type Package

Title Functions to Import Data from 'z-Tree' into R

Version 1.0.7

Date 2021-11-03

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Description Read '.xls' and '.sbj' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software for developing and carrying out economic experiments (see <http://www.ztree.uzh.ch/> for more information).

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Depends R (>= 3.1.0)

Imports plyr (>= 1.0)

NeedsCompilation no

Repository CRAN

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Contents

zTree-package *Functions to Import Data from 'z-Tree' into R*

Description

Read '.xls' and '.sbj' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software for developing and carrying out economic experiments (see <http://www.ztree.uzh.ch/> for more information).

Details

The DESCRIPTION file:

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Imports:	plyr (>= 1.0)

Index of help topics:

Author(s)

Oliver Kirchkamp Maintainer: Oliver Kirchkamp <oliver@kirchkamp.de>

References

Urs Fischbacher. "z-Tree: Zurich Toolbox for Ready-made Economic Experiments." Experimental Economics (2) 171-178, 2007.

Oliver Kirchkamp. "Importing z-Tree data into R." Journal of Behavioral and Experimental Finance (22), 1-2, 2019.

Examples

```
## Not run:
zTT <- zTreeTables(c("080712_1412.xls","080712_1818.xls"))

## End(Not run)
```

`toLongDate` *Converts short (old) 'z-Tree' dates into long (new) 'z-Tree' dates.*

Description

Old versions of 'z-Tree' stored dates as, e.g. 050613JN (the first six being year-month-date, the last two characters are the time). Newer versions use strings like 091112_1600 (time is now in the last four characters). This function converts the old format into the new format

Usage

```
toLongDate(shortDate)
```

Arguments

`shortDate`	This should be a vector of strings, each of length 8 characters. The first six characters of each element of `shortDate` are year, month, date. The last two chacters encode the time of the experiment.

Value

A vector of the same length as `shortDate`. The first six characters of each element are unchanged. The last five characters are now the time translated.

Author(s)

Oliver Kirchkamp

References

Urs Fischbacher. "z-Tree Manual 2.1 Experimenter's Manual". Zurich. 2002.

Examples

```
toLongDate("091112JN")
```

zTreeSbj *Read '.sbj' files generated by 'z-Tree' into R*

Description

Read '.sbj' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software for developing and carrying out economic experiments (see <http://www.ztree.uzh.ch/> for more information).

Usage

```
zTreeSbj(files, sep = "\t", zTree.silent=getOption("zTree.silent"),
zTree.encoding=getOption("zTree.encoding"),ignore.errors=FALSE)
```

Arguments

files	A vector of 'z-Tree' .sbj filenames
sep	'z-Tree' uses "\t" as a separator. If you have a manipulated file, you might need to change the separator.
zTree.silent	If TRUE, generates less verbose output.
zTree.encoding	zTree writes text files and seems to use latin1 (windows-1252) encoding for these files.
ignore.errors	Usually, zTreeSbj stops with an error when it detects a wrong encoding. With ignore.errors=TRUE it only generates a warning.

Value

A data frame with one entry for each subject.

Author(s)

Oliver Kirchkamp

References

Urs Fischbacher. "z-Tree: Zurich Toolbox for Ready-made Economic Experiments." Experimental Economics (2) 171-178, 2007.

See Also

See also zTreeTables

Examples

```
## Not run:
files <- list.files(pattern = "*.sbj$",recursive=TRUE)
fname <- sub(".*/","",files)
sbj <- zTreeSbj(aggregate(files,list(fname),function(x) x[1])$x)

## End(Not run)
```

`zTreeTables` *Read '.xls' files generated by 'z-Tree' into R*

Description

Read '.xls' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software for developing and carrying out economic experiments (see <http://www.ztree.uzh.ch/> for more information).

Usage

```
zTreeTables(files, tables = c("globals", "subjects"), sep = "\t",
zTree.silent=getOption("zTree.silent"),
zTree.encoding=getOption("zTree.encoding"),ignore.errors=FALSE)
```

Arguments

`files`	a vector of 'z-Tree' (xls-) filenames.
`tables`	a vector of table names. If you leave this empty, globals and subjects will be read. If you set tables=NULL, all tables will be read.
`sep`	Field separator. 'z-Tree' uses "\t" as a separator. If you have a manipulated file, you might need to change the separator.
`zTree.silent`	If `TRUE`, generates less verbose output.
`zTree.encoding`	zTree writes text files and seems to use latin1 (windows-1252) encoding for these files.
`ignore.errors`	Usually, `zTreeTables` stops with an error when it detects a wrong encoding or a manipulated file. With `ignore.errors=TRUE` it only generates a warning.

Value

A list of all tables (e.g. "globals", "subjects", etc.)

Author(s)

Oliver Kirchkamp

References

Urs Fischbacher. "z-Tree: Zurich Toolbox for Ready-made Economic Experiments." Experimental Economics (2) 171-178, 2007.

See Also

See also `zTreeSbj`

Examples

```
## Not run:
zTT <- zTreeTables(c("080712_1412.xls","080712_1818.xls"))
with(zTT$subjects, table(Treatment,Period))
To read all tables from all sessions in directories below the current one:
sessions<-list.files(".","[0-9]{6}_[0-9]{4}.xls",recursive=TRUE)
zTT<-zTreeTables(sessions,tables=NULL)

## End(Not run)
```

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