

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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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:

```
Package:      zTree
Type:        Package
Title:       Functions to Import Data from 'z-Tree' into R
Version:     1.0.7
Date:       2021-11-03
Author:      Oliver Kirchkamp
Maintainer:  Oliver Kirchkamp <oliver@kirchkamp.de>
Description: Read '.xls' and '.sbj' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software
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Depends:    R (>= 3.1.0)
Imports:    plyr (>= 1.0)
```

Index of help topics:

toLongDate	Converts short (old) 'z-Tree' dates into long (new) 'z-Tree' dates.
zTree-package	Functions to Import Data from 'z-Tree' into R
zTreeSbj	Read '.sbj' files generated by 'z-Tree' into R
zTreeTables	Read '.xls' files generated by 'z-Tree' into R

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	<i>Converts short (old) 'z-Tree' dates into long (new) 'z-Tree' dates.</i>
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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 characters encode the time of the experiment.
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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

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