Package 'FFdownload'

October 12, 2023

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Type Package
Title Download Data from Kenneth French's Website
Version 1.1.1
Description Downloads all the datasets (you can exclude the daily ones or specify a list of those you are targeting specifically) from Kenneth French's Website at https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html , process them and convert them to list of 'xts' (time series).
Depends R (>= 3.5.0), utils, stats, rvest, xts, xml2, zoo, plyr
Imports timetk
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<pre>URL https://github.com/sstoeckl/ffdownload,</pre>
https://sstoeckl.github.io/ffdownload/
<pre>BugReports https://github.com/sstoeckl/ffdownload/issues Encoding UTF-8</pre>
RoxygenNote 7.2.1
Suggests knitr, rmarkdown, dplyr, viridis, ggplot2, tidyr
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NeedsCompilation no
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converter

Converter to read downloaded datasets and automatically put them into one large dataframe with xts

Description

converter read/clean/write

Usage

converter(file)

Arguments

file

downloaded dataset

Value

list of annual/monthly/daily files

converter_tbl

Converter to read downloaded datasets and automatically put them into one large dataframe with xts

Description

converter read/clean/write

Usage

```
converter_tbl(file)
```

Arguments

file

downloaded dataset

Value

list of annual/monthly/daily files

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FFdownload 1	Downloads Datasets from I	Kenneth French's Website
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Description

FFdownload returns an RData file with all (possibility to exclude the large daily) datasets from Kenneth French's Website. Should help researchers to work with the datasets and update the regularly. Allows for reproducible research. Be aware that processing (especially when including daily files) takes quite a long time!

Usage

```
FFdownload(
  output_file = "data.Rdata",
  tempd = NULL,
  exclude_daily = FALSE,
  download = TRUE,
  download_only = FALSE,
  listsave = NULL,
  inputlist = NULL,
  format = "xts"
)
```

Arguments

output_file	name of the .RData file to be saved (include path if necessary)
tempd	specify if you want to keep downloaded files somewhere save. Seems to be necessary for reproducible research as the files on the website do change from time to time
exclude_daily	excludes the daily datasets (are not downloaded) ==> speeds the process up considerably
download	set to TRUE if you actually want to download again. set to false and specify tempd to keep processing the already downloaded files
download_only	set to FALSE if you want to process all your downloaded files at once
listsave	if not NULL, the list of unzipped files is saved here (good for processing only a limited number of files through inputlist). Is written before inputlist is processed.
inputlist	if not NULL, FFdownload tries to match the names from the list with the list of zip-files
format	(set to xts) specify "xts" or "tbl"/"tibble" for the output format of the nested lists

Value

RData file

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Examples

```
## Not run:
tempf <- tempfile(fileext = ".RData"); outd <- paste0(tempdir(), "/", format(Sys.time(), "%F_%H-%M"))</pre>
temptxt <- tempfile(fileext = ".txt")</pre>
# Example 1: Use FFdownload to get a list of all monthly zip-files. Save that list as temptxt.
FFdownload(exclude_daily=TRUE,download=FALSE,download_only=TRUE,listsave=temptxt)
read.delim(temptxt,sep = ",")
# set vector with only files to download (we try a fuzzyjoin, so "Momentum" should be enough to get
# the Momentum Factor)
inputlist <- c("Research_Data_Factors","Momentum_Factor","ST_Reversal_Factor","LT_Reversal_Factor")
# Now process only these files if they can be matched (download only)
FFdownload(exclude_daily=FALSE,tempd=outd,download=TRUE,download_only=FALSE,
inputlist=inputlist,output_file = tempf)
list.files(outd)
# Then process all the downloaded files
FFdownload(output_file = tempf, exclude_daily=TRUE,tempd=outd,download=FALSE,
download_only=FALSE,inputlist=inputlist)
load(tempf); FFdata$`x_F-F_Momentum_Factor`$monthly$Temp2[1:10]
# Example 2: Download all non-daily files and process them
# Commented out to not being tested
# tempf2 <- tempfile(fileext = ".RData");</pre>
# outd2<- paste0(tempdir(),"/",format(Sys.time(), "%F_%H-%M"))</pre>
# FFdownload(output_file = tempf2,tempd = outd2, exclude_daily = TRUE, download = TRUE,
# download_only=FALSE, listsave=temptxt)
# load(tempf2)
# FFdownload$x_25_Portfolios_5x5$monthly$average_value_weighted_returns
## End(Not run)
```

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