Package ‘TimeProjection’

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URL https://github.com/jeffwong/TimeProjection
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Version 0.2.0
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Title Time Projections
Description Extract useful time components of a date object, such as
day of week, weekend, holiday, day of month, etc, and put it in
a data frame. This can be used to create many predictor
variables out of a single time variable, which can then be used
in a regression or decision tree. Also includes function
plotCalendarHeatmap which draws a calendar and overlays a
heatmap based on values.
Suggests testthat, roxygen2, ggplot2, plyr
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projectDate

Description

Project dates to lower dimensional subspace. Extracts components year, month, yday, mday, hour, minute, weekday, bizday and season from a date object

Usage

projectDate(dates, size = c("narrow", "wide"),
holidays = holidayNYSE(year = unique(year(dates))),
as.numeric = F, drop = T)

Arguments

dates: date or datetime objects
size: either "narrow" or "wide". If narrow, returns a data frame containing the projections as column variables using factors. If wide, returns a sparse matrix containing the projections as column variables using 0-1 variables
holidays: argument to determine which days are considered holidays, affecting the business day projection. By default uses holidayNYSE() provided by the timeDate package, or can be specified as a vector of strings representing dates in the yyyy-mm-dd format

plotCalendarHeatmap

Calendar Heatmap

Description

Create a plot mimicking a calendar with a heatmap of values

Usage

plotCalendarHeatmap(dates, values)

Arguments

dates: a vector of date objects
values: a numeric vector with same length as dates

Examples

dates = timeSequence(from = '2012-01-01', to = '2012-12-31', by = 'day')
plotCalendarHeatmap(as.Date(dates), 1:366)
as.numeric logical only used when size = "narrow". Returns the columns as numeric values instead of factors

drop logical. If true, drop any column that only has 1 level or only 1 unique element in it

Examples

dates = timeSequence(from = "2001-01-01", to = "2004-01-01", by = "day")
projectDate(as.Date(dates))
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