Package 'TimeProjection'

August 29, 2016

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

Depends lubridate, timeDate, Matrix

Collate 'TimeProjection-package.r' 'projection.R' 'calendarHeatmap.R'

Repository CRAN

Date/Publication 2013-02-03 08:07:12

NeedsCompilation no

R topics documented:

plotCalendarHeatmap *Calendar Heatmap*

Description

Create a plot mimicing 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)
```

projectDate *Time Projection*

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

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))
```

TimeProjection *TimeProjection*

Description

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