Package ‘timeR’

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Type Package
Title Time Your Codes
Version 1.2.0
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Description Provides a 'timeR' class that makes timing codes easier. One can create 'timeR' objects and use them to record all timings, and extract recordings as data frame for later use.

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BugReports https://github.com/yusuzech/timeR/issues
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**createTimer**  
*Create a timer object*

**Description**  
Create a timer object

**Usage**

```r
createTimer(verbos = T, precision = "s")
```

**Arguments**

- **verbose**
  - A parameter to control whether to print messages while using methods. Default to **TRUE**.
- **precision**
  - Precision for time, default to s, valid values are: s,ms and us

**Value**

- a timer object.

**Examples**

```r
timer1 <- createTimer() # print is enabled
timer1 <- createTimer(FALSE) # print is disabled
timer1$start("event1") # start timing for event 1
timer1$stop("event1", comment = "event 1 stopped") # stop timing for event 1(comment is optional)
getTimer(timer1) # get all records in a data frame
```

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**getTimer**  
*Get the data frame in timer object*

**Description**  

timer object has a built-in data frame that contains all timings. run this function to extract the data frame.

**Usage**

```r
getTimer(object)
```

**Arguments**

- **object**
  - The name for timer object.
Value

A data frame containing all records of a timer object.

Examples

timer1 <- createTimer()
timer1$start("event1")
Sys.sleep(1)
timer1$stop("event1")
getTimer(timer1)

Description

The timeR package saves your time by timing your code and save recordings to a data frame automatically. So you don’t have to do all these steps manually by yourself.

timer is a R6 Class that represent a timer.

Usage

timeR

Format

An object of class R6ClassGenerator of length 24.

Fields

time  A POSIXct/POSIXlt value of your latest timing.
event  A string of your latest timing.
eventTable  A data frame that stores all timings.
verbose  A printing setting that controls whether to print messages.

Public Methods

initialize(time,event,verbose,eventTable)  Initialize a timer object. You can also use createTimer() function to initialize a timer object.
start(eventName)  Start timing for a event, eventName should be a string
stop(eventName)  Stop timing for a event.
getTimer()  Get a data frame that stores all recordings. You can also use getTimer() function to get the data frame.
removeEvent(eventName)  Remove an given row in the eventTable.
toggleVerbose()  Toggle between TRUE and FALSE for verbose
getStartTime()  Get start time for a selected event.
getStopTime()  Get stop time for a selected event.
getTimeElapsed()  Get time elapsed for a selected event.
getComment()  Get comment for a selected event.
getEventf()  Get entire row for a selected event.

print()  Custom print method for timer class. However, you don’t need to use this function to generate custom printing. Custom printing is triggered by default.

Private Methods

slprint(msg, flag = self$verbose)  A function that controls whether to print extra message.

Examples

timer <- createTimer(precision = "ms")
timer$start("event1")
  # put some codes in between
  timer$stop("event1")

timer$start("event2")
  # put some codes in between
  timer$stop("event2", comment = "event 2 completed")

table1 <- getTimer(timer)
timer$toggleVerbose()  # set verbose to FALSE as default is TRUE

table1  # print all records in a tibble(data frame)

  # get attributes for selected events
  timer$getStartTime("event1")
timer$getStopTime("event1")
timer$getTimeElapsed("event1")
timer$getComment("event1")
timer$getEvent("event1")
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