

Package ‘babyTimeR’

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Type Package

Title Parse Output from 'BabyTime' Application

Version 0.1.0

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Description 'BabyTime' is an application for tracking infant and toddler care activities like sleeping, eating, etc. This package will take the outputted .zip files and parse it into a usable list object with cleaned data. It handles malformed and incomplete data gracefully and is designed to parse one directory at a time.

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Depends dplyr (>= 1.1.4), glue (>= 1.8.0), janitor (>= 2.2.0),
lubridate (>= 1.9.3), methods (>= 4.4.1), R (>= 4.4.0), readr
(>= 2.1.5), snakecase (>= 0.11.1), stringr (>= 1.5.1)

Imports utils

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Encoding UTF-8

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LazyData true

RoxygenNote 7.3.2

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bt_list_db	<i>Sample 'BabyTime' Data List Database</i>
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Description

Sample output from 'read_one_bt_activity_file' and 'clean_bt_list_db'. A "Clean BT List DB" object.

Usage

```
bt_list_db
```

Format

```
## 'bt_list_db' A "Clean BT List DB" object.
```

pumping Breast Pumping Data (Data Frame; 3 obs. 8 variables)

pee Diaper Change Data (Data Frame; 1 obs. 5 variables)

pumped_milk Drinking Breast Milk from Bottle Data (Data Frame; 3 obs. 6 variables)

medicine Medications Given Data (Data Frame; 1 obs. 6 variables)

baby_food Data on Eating Solids (Data Frame; 1 obs. 6 variables)

sleep Sleep Data. Includes both Night and Daytime Sleep (Data Frame; 5 obs. 5 variables)

breastfeeding Breast Feeding Data (Data Frame; 4 obs. 7 variables)

Source

Synthetic Data used to test this package. Based loosely on author's personal data.

clean_bt_list_db	<i>Clean BabyTime List DB File</i>
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Description

Clean BabyTime List DB File

Usage

```
clean_bt_list_db(list_db)
```

Arguments

list_db output from 'read_one_bt_activity_file'

Value

a Clean BT List DB object

Examples

```
data_dir <- system.file('extdata', package = 'babyTimeR')
baby_dann_db <- read_one_bt_activity_file(
  infile = file.path(data_dir, 'activity_Dann_202411.txt')
) |>
  clean_bt_list_db()
names(baby_dann_db)
```

combine_clean_bt_list_dbs

Combine two 'BabyTime' List Databases (DBs)

Description

Generally not needed if you parse all files at once, but can be useful if combining data extracted at multiple times or across multiple directories

Usage

```
combine_clean_bt_list_dbs(la, lb)
```

Arguments

la	a Clean BT List DB object
lb	another Clean BT List DB object

Value

a Clean BT List DB object that contains all elements from 'la' and 'lb'

Examples

```
data_dir <- system.file('extdata', package = 'babyTimeR')
baby_dann_db_nov <- read_one_bt_activity_file(
  infile = file.path(data_dir, 'activity_Dann_202411.txt')
) |>
  clean_bt_list_db()
baby_dann_db_dec <- read_one_bt_activity_file(
  infile = file.path(data_dir, 'activity_Dann_202412.txt')
) |>
  clean_bt_list_db()
baby_dann_db <- combine_clean_bt_list_dbs(
  baby_dann_db_nov,
  baby_dann_db_dec
)
```

process_one_directory *Process One Directory of 'BabyTime' Activity Files*

Description

Only works with with .zip files

Usage

```
process_one_directory(directory, remove_txts = TRUE, verbose = TRUE)
```

Arguments

directory	directory with activity files in it
remove_txts	boolean. whether to remove txt files before processing
verbose	boolean. print out processing details?

Value

Clean BT List DB object (and also write it to the 'out' RDS file)

Examples

```
data_dir <- system.file('extdata', package = 'babyTimeR')
if (file.exists('parsed_data.RDS')) {
  baby_dann_db <- readRDS('parsed_data.RDS')
} else {
  baby_dann_db <- process_one_directory(
    directory = data_dir,
    remove_txts = FALSE
  )
}
```

read_one_bt_activity_file

Read One 'BabyTime' Activity File

Description

Read line-by-line and parse into a "database" in a list.

Usage

```
read_one_bt_activity_file(infile, list_db = NULL, verbose = FALSE)
```

Arguments

<code>infile</code>	a .zip or .txt file with the format <code>activity_BabyName_yyyymm</code> as the 'Baby-Time' app exports data.
<code>list_db</code>	a 'Raw BT List DB' object on which to append data. If none exists, this will create a new 'Raw BT List DB' object.
<code>verbose</code>	whether or not to write out progress messages.

Value

a populated 'Raw BT List DB' object

Examples

```
data_dir <- system.file('extdata', package = 'babyTimeR')
baby_dann_db <- read_one_bt_activity_file(
  infile = file.path(data_dir, 'activity_Dann_202411.txt')
) |>
  clean_bt_list_db()
names(baby_dann_db)
```

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