Package: SENDsanitizer (via r-universe)

March 2, 2025

Title Generate Synthetic SEND Data

Version 0.0.0.9000

Description An R package that generate synthetic SEND data based on real SEND data.

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URL https://github.com/phuse-org/SENDsanitizer

BugReports https://github.com/phuse-org/SENDsanitizer/issues

Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Imports data.table, dplyr, DT, fs, haven, magrittr, MCMCpack, shiny, shinyFiles, stringr, tibble, tidyr, zip

Suggests knitr, rmarkdown

Config/pak/sysreqs make libicu-dev libx11-dev zlib1g-dev

Repository https://yousuf28.r-universe.dev

RemoteUrl https://github.com/phuse-org/SENDsanitizer

RemoteRef HEAD

RemoteSha 41dfff9c5e7a0e6819df880a1d87bfcde9808f1c

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compare_real_synthetic_shiny
Compare real and synthetic data

Description

This is an shiny app that can be used to visually inspect real and synthetic data

Usage

```
compare_real_synthetic_shiny(root = NULL, root_synthetic = NULL)
```

Arguments

root	where real data
root_synthetic	where synthetic data located

Value

App

Examples

```
## Not run:
compare_real_synthetic()

## End(Not run)
```

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sanitize   *Function to generate synthetic SEND data*

Description

This function generate synthetic SEND data from real SEND data.

Usage

```
sanitize(
  path,
  where_to_save = NULL,
  recovery = FALSE,
  number = 1,
  write_xpt = TRUE,
  setcd = NULL,
  test_original = FALSE,
  app = FALSE
)
```

Arguments

`path`	Mandatory Path where real data/xpt files located, should be a directory that contains xpt files, one or multiple directory can be given.
`where_to_save`	mandatory Where to save generated xpt files. Should be a directory.
`recovery`	optional Whether recovery animal data should be generated. Default FALSE. If FALSE, no recovery animal data will be generated.
`number`	mandatory, default 1 How many studies to generate. Currently only work with 1
`write_xpt`	mandatory, boolean Should write the file or not. If TRUE, then xpt file will be created. Default is TRUE.
`setcd`	optional, vector If there are more than one control or Low dose or High dose, function will give an error. User can choose which setcd should use. If recovery FALSE, then only provide c('1','2','3','4') setcd like this. But if recovery is TRUE, then also add setcd for recovery group c('1','2','3','4','1R','2R','3R','4R')
`test_original`	mandatory, boolean This will print dataset that have original(real) value and generated(synthetic) value. This is just comparison purpose. In RStudio IDE, you can see all the datasets and visually inspect. default FALSE.
`app`	Mandatory, boolean Only true if function is calling from shiny app. In that case, all generated synthetic data will be saved in list of dataframe. Default FALSE.

Examples

```
## Not run:

# To generate one synthetic study dataset from one real study

SENDsanitizer::sanitize(path='path/to/directory/of/xpt/files/of/study/',
where_to_save='path/to/directory/where/generated/files/should/be/saved/')

# To generate one synthetic study dataset from multiple real studies

study_01 <- 'path/to/directory/of/xpt/files/of/study_01/'
study_02 <- 'path/to/directory/of/xpt/files/of/study_02/'
multiple_studies <- c(study_01,study_02)

SENDsanitizer::sanitize(path= multiple_studies,
where_to_save='path/to/directory/where/generated/files/should/be/saved/')


## End(Not run)
```

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