Package 'plnr'

November 23, 2022

Title A System for Planing Analyses

Version 2022.11.23

Description A system to plan analyses within the mental model
where you have one (or more) datasets and want to run either A) the same
function multiple times with different arguments, or B) multiple functions.
This is appropriate when you have multiple strata (e.g. locations, age groups)
that you want to apply the same function to, or you have multiple variables
(e.g. exposures) that you want to apply the same statistical method to, or
when you are creating the output for a report and you need multiple different
tables or graphs.

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URL <https://www.csids.no/plnr/>, <https://github.com/csids/plnr>

BugReports <https://github.com/csids/plnr/issues>

Encoding UTF-8

LazyData true

Depends R (>= 3.3.0)

Imports data.table, R6, uuid, foreach, fs, glue, usethis, purrr,
utils, digest, stats

Suggests testthat, knitr, rmarkdown, progressr, ggplot2, readxl,
magrittr

RoxygenNote 7.1.2

VignetteBuilder knitr

NeedsCompilation no

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R topics documented:

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create_rmarkdown   *Create example rmarkdown project*

Description

Create example rmarkdown project

Usage

```
create_rmarkdown(home)
```

Arguments

home   Location of the 'home' directory

---

example_action_fn   *An example action_fn for an analysis*

Description

An example action_fn for an analysis

Usage

```
example_action_fn(data, argset)
```

Arguments

data   Named list.

argset   Named list.

Examples

```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$get_argsets_as_dt()
p$run_one("analysis_1")
```

---

example_data_fn_nor_covid19_cases_by_time_location

An example data_fn that returns a data set

Description

An example data_fn that returns a data set

Usage

```
example_data_fn_nor_covid19_cases_by_time_location()
```

---

expand_list   *Expand (cross) lists*

Description

The same as purrr::cross, but doesn't require an extra list()

Usage

```
expand_list(...)
```

Arguments

. . .   Dots

Examples

```
plnr::expand_list(
  a = 1:2,
  b = c("a", "b")
)
```

---

get_anything   *Gets anything (including with package scoping)*

Description

base::get does not work with package scoping (e.g. get("pkg::var")). plnr::get_anything works with package scoping.

Usage

```
get_anything(x)
```

Arguments

x   the string that we are getting

Examples

```
plnr::get_anything("plnr::nor_covid19_cases_by_time_location")
```

---

is_run_directly   *Is this code run directly?*

Description

This function determines if it is being called from within a function or if it is being run directly

Usage

```
is_run_directly()
```

---

nor_covid19_cases_by_time_location
                                 Covid-19 data for PCR-confirmed cases in Norway (nation and county)

Description

This data comes from the Norwegian Surveillance System for Communicable Diseases (MSIS). The date corresponds to when the PCR-test was taken.

Usage

```
nor_covid19_cases_by_time_location
```

Format

A csfmt_rts_data_v1 with 11028 rows and 18 variables:

granularity_time day/isoweek

granularity_geo nation, county

country_iso3 nor

location_code norge, 11 counties

border 2020

age total

isoyear Isoyear of event

isoweek Isoweek of event

isoyearweek Isoyearweek of event

season Season of event

seasonweek Seasonweek of event

calyear Calyear of event

calmonth Calmonth of event

calyearmonth Calyearmonth of event

date Date of event

covid19_cases_testdate_n Number of confirmed covid19 cases

covid19_cases_testdate_pr100000 Number of confirmed covid19 cases per 100.000 population

Details

The raw number of cases and cases per 100.000 population are recorded.

This data was extracted on 2022-05-04.

Source

https://github.com/folkehelseinstituttet/surveillance_data/blob/master/covid19/_DOCUMENTATION_
data_covid19_msis_by_time_location.txt

Plan *R6 Class representing a Plan*

Description

We work within the mental model where we have one (or more) datasets and we want to run multiple analyses on these datasets.

By demanding that all analyses use the same data sources we can:

- Be efficient with requiring the minimal amount of data-pulling (this only happens once at the start).
- Better enforce the concept that data-cleaning and analysis should be completely separate.

By demanding that all analysis functions only use two arguments (data and argset) we can:

- Reduce mental fatigue by working within the same mental model for each analysis.
- Make it easier for analyses to be exchanged with each other and iterated on.
- Easily schedule the running of each analysis.

By including all of this in one `Plan` class, we can easily maintain a good overview of all the analyses (i.e. outputs) that need to be run.

Details

An argset is:

- a set of arguments

An analysis is:

- one argset
- one (action) function

A plan is:

- one data pull
- a list of analyses

Public fields

`analyses` List of analyses.

Methods

Public methods:

- [Plan$new()](#)
- [Plan$add_data()](#)
- [Plan$add_argset()](#)
- [Plan$add_argset_from_df()](#)
- [Plan$add_argset_from_list()](#)
- [Plan$add_analysis()](#)
- [Plan$add_analysis_from_df()](#)
- [Plan$add_analysis_from_list()](#)

- [Plan$apply_action_fn_to_all_argsets()](#)
- [Plan$apply_analysis_fn_to_all()](#)
- [Plan$x_length()](#)
- [Plan$x_seq_along()](#)
- [Plan$set_progress()](#)
- [Plan$set_progressor()](#)
- [Plan$set_verbose()](#)
- [Plan$set_use_foreach()](#)
- [Plan$get_data()](#)
- [Plan$get_analysis()](#)
- [Plan$get_argset()](#)
- [Plan$get_argsets_as_dt()](#)
- [Plan$run_one_with_data()](#)
- [Plan$run_one()](#)
- [Plan$run_all_with_data()](#)
- [Plan$run_all()](#)
- [Plan$run_all_progress()](#)
- [Plan$clone()](#)

Method new(): Create a new Plan instance.

Usage:

```
Plan$new(verbose = interactive() | config$force_verbose, use_foreach = FALSE)
```

Arguments:

verbose Should this plan be verbose?

use_foreach ???

Method add_data(): Add a new data set.

Usage:

```
Plan$add_data(name, fn = NULL, fn_name = NULL, direct = NULL)
```

Arguments:

name Name of the data set.

fn A function that returns the data set.

fn_name A character string containing the name of a function that returns the data set.

direct A direct data set.

Examples:

```
p <- plnr::Plan$new()
data_fn <- function(){return(plnr::nor_covid19_cases_by_time_location)}
p$add_data("data_1", fn = data_fn)
p$add_data("data_2", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
p$add_data("data_3", direct = plnr::nor_covid19_cases_by_time_location)
p$get_data()
```

Method add_argset(): Add a new argset.

Usage:

```
Plan$add_argset(name = uuid::UUIDgenerate(), ...)
```

Arguments:

name Name of the (eventual) analysis that this argset will be connected to.

... Named arguments that will comprise the argset.

Examples:

```
p <- plnr::Plan$new()
p$add_argset("argset_1", var_1 = 3, var_b = "hello")
p$add_argset("argset_2", var_1 = 8, var_c = "hello2")
p$get_argsets_as_dt()
```

Method `add_argset_from_df()`: Add a batch of argsets from a data.frame.

Usage:

```
Plan$add_argset_from_df(df)
```

Arguments:

df A data.frame where each row is a new argset, and each column will be a named element in
    the argset.

Examples:

```
p <- plnr::Plan$new()
batch_argset_df <- data.frame(name = c("a", "b", "c"), var_1 = c(1, 2, 3), var_2 = c("i", "j", "k"))
p$add_argset_from_df(batch_argset_df)
p$get_argsets_as_dt()
```

Method `add_argset_from_list()`: Add a batch of argsets from a list.

Usage:

```
Plan$add_argset_from_list(l)
```

Arguments:

l A list of lists with named elements where each outermost element is a new argset, and each
   internal named element named element in the argset.

Examples:

```
p <- plnr::Plan$new()
batch_argset_list <- list(
  list(name = "a", var_1 = 1, var_2 = "i"),
  list(name = "b", var_1 = 2, var_2 = "j"),
  list(name = "c", var_1 = 3, var_2 = "k")
)
p$add_argset_from_list(batch_argset_list)
p$get_argsets_as_dt()
```

Method `add_analysis()`: Add a new analysis.

Usage:

```
Plan$add_analysis(name = uuid::UUIDgenerate(), fn = NULL, fn_name = NULL, ...)
```

Arguments:

name Name of the analysis.

fn Action function.

fn_name Action function name.

... Named arguments to be added to the argset.

Examples:

```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
p$add_analysis(
  name = "analysis_1",
  fn_name = "plnr::example_action_fn"
)
p$get_argsets_as_dt()
p$run_one("analysis_1")
```

Method add_analysis_from_df(): Add a batch of analyses from a data.frame.

Usage:

```
Plan$add_analysis_from_df(fn = NULL, fn_name = NULL, df)
```

Arguments:

fn Action function.

fn_name Action function name.

df A data.frame where each row is a new argset, and each column will be a named element in the argset.

Examples:

```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_df <- data.frame(name = c("a", "b", "c"), var_1 = c(1, 2, 3), var_2 = c("i", "j", "k"))
p$add_analysis_from_df(
  fn_name = "plnr::example_action_fn",
  df = batch_argset_df
 )
p$get_argsets_as_dt()
p$run_one(1)
```

Method add_analysis_from_list(): Add a batch of argsets from a list.

Usage:

```
Plan$add_analysis_from_list(fn = NULL, fn_name = NULL, l)
```

Arguments:

fn Action function.

fn_name Action function name.

l A list of lists with named elements where each outermost element is a new argset, and each internal named element named element in the argset.

Examples:

```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$get_argsets_as_dt()
p$run_one("analysis_1")
```

Method `apply_action_fn_to_all_argsets()`: Applies an action function to all the argsets

Usage:

`Plan$apply_action_fn_to_all_argsets(fn = NULL, fn_name = NULL)`

Arguments:

`fn` Action function.

`fn_name` Action function name. p <- plnr::Plan$new() p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location") batch_argset_list <- list(list(name = "analysis_1", var_1 = 1, var_2 = "i"), list(name = "analysis_2", var_1 = 2, var_2 = "j"), list(name = "analysis_3", var_1 = 3, var_2 = "k")) p$add_argset_from_list(fn_name = "plnr::example_action_fn", l = batch_argset_list) p$get_argsets_as_dt() p$apply_action_fn_to_all_argsets(fn_name = "plnr::example_action_fn") p$run_one("analysis_1")

Method `apply_analysis_fn_to_all()`: Deprecated. Use apply_action_fn_to_all_argsets.

Usage:

`Plan$apply_analysis_fn_to_all(fn = NULL, fn_name = NULL)`

Arguments:

`fn` Action function.

`fn_name` Action function name.

Method `x_length()`: Number of analyses in the plan.

Usage:

`Plan$x_length()`

Method `x_seq_along()`: Generate a regular sequence from 1 to the length of the analyses in the plan.

Usage:

`Plan$x_seq_along()`

Method `set_progress()`: Set an internal progress bar

Usage:

`Plan$set_progress(pb)`

Arguments:

pb Progress bar.

Method `set_progressor()`: Set an internal progressor progress bar

Usage:

```
Plan$set_progressor(pb)
```

Arguments:

pb progressor progress bar.

Method `set_verbose()`: Set verbose flag

Usage:

```
Plan$set_verbose(x)
```

Arguments:

x Boolean.

Method `set_use_foreach()`: Set use_foreach flag

Usage:

```
Plan$set_use_foreach(x)
```

Arguments:

x Boolean.

Method `get_data()`: Extracts the data provided via 'add_data' and returns it as a named list.

Usage:

```
Plan$get_data()
```

Returns: Named list, where most elements have been added via `add_data`.
One extra named element is called 'hash'. 'hash' contains the data hashes of particular datasets/variables, as calculated using the 'spookyhash' algorithm via digest::digest. 'hash' contains two named elements:

- current (the hash of the entire named list)
- current_elements (the hash of the named elements within the named list)

Examples:

```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
p$get_data()
```

Method `get_analysis()`: Extracts an analysis from the plan.

Usage:

```
Plan$get_analysis(index_analysis)
```

Arguments:

index_analysis Either an integer (1:length(analyses)) or a character string representing the name of the analysis.

Returns: An analysis.

Examples:
```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$get_analysis("analysis_1")
```

Method `get_argset()`: Extracts an argset from the plan.

Usage:
```
Plan$get_argset(index_analysis)
```

Arguments:

`index_analysis` Either an integer (1:length(analyses)) or a character string representing the name of the analysis.

Returns: An argset

Examples:
```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$get_argset("analysis_1")
```

Method `get_argsets_as_dt()`: Gets all argsets and presents them as a data.table.

Usage:
```
Plan$get_argsets_as_dt()
```

Returns: Data.table that contains all the argsets within a plan.

Examples:
```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
```

```
    list(name = "analysis_3", var_1 = 3, var_2 = "k")
  )
  p$add_analysis_from_list(
    fn_name = "plnr::example_action_fn",
    l = batch_argset_list
  )
  p$get_argsets_as_dt()
```

Method `run_one_with_data()`: Run one analysis (data is provided by user).

Usage:

```
Plan$run_one_with_data(index_analysis, data, ...)
```

Arguments:

index_analysis Either an integer (1:length(analyses)) or a character string representing the name of the analysis.

data Named list (generally obtained from p$get_data()).

. . . Not used.

Returns: Returned value from the action function.

Examples:

```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
data <- p$get_data()
p$run_one_with_data("analysis_1", data)
```

Method `run_one()`: Run one analysis (data is obtained automatically from self$get_data()).

Usage:

```
Plan$run_one(index_analysis, ...)
```

Arguments:

index_analysis Either an integer (1:length(analyses)) or a character string representing the name of the analysis.

. . . Not used.

Returns: Returned value from the action function.

Examples:

```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
```

```
    list(name = "analysis_1", var_1 = 1, var_2 = "i"),
    list(name = "analysis_2", var_1 = 2, var_2 = "j"),
    list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$run_one("analysis_1")
```

Method `run_all_with_data()`: Run all analyses (data is provided by user).

Usage:
```
Plan$run_all_with_data(data, ...)
```

Arguments:

data Named list (generally obtained from p$get_data()).

. . . Not used.

Returns: List where each element contains the returned value from the action function.

Examples:
```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
data <- p$get_data()
p$run_all_with_data(data)
```

Method `run_all()`: Run all analyses (data is obtained automatically from self$get_data()).

Usage:
```
Plan$run_all(...)
```

Arguments:

. . . Not used.

Returns: List where each element contains the returned value from the action function.

Examples:
```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
```

```
  )
  p$add_analysis_from_list(
    fn_name = "plnr::example_action_fn",
    l = batch_argset_list
  )
  p$run_all()
```

Method run_all_progress(): Run all analyses with a progress bar (data is obtained automatically from self$get_data()).

Usage:
```
Plan$run_all_progress(...)
```

Arguments:

... Not used.

Returns: List where each element contains the returned value from the action function.

Examples:
```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$run_all_progress()
```

Method clone(): The objects of this class are cloneable with this method.

Usage:
```
Plan$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Examples

```
## ------------------------------------------------
## Method `Plan$add_data`
## ------------------------------------------------

p <- plnr::Plan$new()
data_fn <- function(){return(plnr::nor_covid19_cases_by_time_location)}
p$add_data("data_1", fn = data_fn)
p$add_data("data_2", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
p$add_data("data_3", direct = plnr::nor_covid19_cases_by_time_location)
p$get_data()
```

```
## ------------------------------------------------
## Method `Plan$add_argset`
## ------------------------------------------------

p <- plnr::Plan$new()
p$add_argset("argset_1", var_1 = 3, var_b = "hello")
p$add_argset("argset_2", var_1 = 8, var_c = "hello2")
p$get_argsets_as_dt()


## ------------------------------------------------
## Method `Plan$add_argset_from_df`
## ------------------------------------------------

p <- plnr::Plan$new()
batch_argset_df <- data.frame(name = c("a", "b", "c"), var_1 = c(1, 2, 3), var_2 = c("i", "j", "k"))
p$add_argset_from_df(batch_argset_df)
p$get_argsets_as_dt()


## ------------------------------------------------
## Method `Plan$add_argset_from_list`
## ------------------------------------------------

p <- plnr::Plan$new()
batch_argset_list <- list(
  list(name = "a", var_1 = 1, var_2 = "i"),
  list(name = "b", var_1 = 2, var_2 = "j"),
  list(name = "c", var_1 = 3, var_2 = "k")
)
p$add_argset_from_list(batch_argset_list)
p$get_argsets_as_dt()


## ------------------------------------------------
## Method `Plan$add_analysis`
## ------------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
p$add_analysis(
  name = "analysis_1",
  fn_name = "plnr::example_action_fn"
)
p$get_argsets_as_dt()
p$run_one("analysis_1")


## ------------------------------------------------
## Method `Plan$add_analysis_from_df`
## ------------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_df <- data.frame(name = c("a", "b", "c"), var_1 = c(1, 2, 3), var_2 = c("i", "j", "k"))
p$add_analysis_from_df(
```

```
    fn_name = "plnr::example_action_fn",
    df = batch_argset_df
  )
p$get_argsets_as_dt()
p$run_one(1)


## ------------------------------------------------
## Method `Plan$add_analysis_from_list`
## ------------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$get_argsets_as_dt()
p$run_one("analysis_1")


## ------------------------------------------------
## Method `Plan$get_data`
## ------------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
p$get_data()


## ------------------------------------------------
## Method `Plan$get_analysis`
## ------------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$get_analysis("analysis_1")


## ------------------------------------------------
## Method `Plan$get_argset`
## ------------------------------------------------
```

```
p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$get_argset("analysis_1")

## ------------------------------------------------
## Method `Plan$get_argsets_as_dt`
## ------------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$get_argsets_as_dt()

## ------------------------------------------------
## Method `Plan$run_one_with_data`
## ------------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
data <- p$get_data()
p$run_one_with_data("analysis_1", data)

## ------------------------------------------------
## Method `Plan$run_one`
## ------------------------------------------------

p <- plnr::Plan$new()
```

```
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$run_one("analysis_1")

## ----------------------------------------------
## Method `Plan$run_all_with_data`
## ----------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
data <- p$get_data()
p$run_all_with_data(data)

## ----------------------------------------------
## Method `Plan$run_all`
## ----------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$run_all()

## ----------------------------------------------
## Method `Plan$run_all_progress`
## ----------------------------------------------

p <- plnr::Plan$new()
p$add_data("covid_data", fn_name = "plnr::example_data_fn_nor_covid19_cases_by_time_location")
```

```
batch_argset_list <- list(
  list(name = "analysis_1", var_1 = 1, var_2 = "i"),
  list(name = "analysis_2", var_1 = 2, var_2 = "j"),
  list(name = "analysis_3", var_1 = 3, var_2 = "k")
)
p$add_analysis_from_list(
  fn_name = "plnr::example_action_fn",
  l = batch_argset_list
)
p$run_all_progress()
```

---

set_opts   *set_opts*

Description

set_opts

Usage

```
set_opts(force_verbose = FALSE)
```

Arguments

force_verbose   Force verbose

---

test_action_fn   *A test action_fn for an analysis that returns the value 1*

Description

A test action_fn for an analysis that returns the value 1

Usage

```
test_action_fn(data, argset)
```

Arguments

data   Data

argset   argset

try_again
Try a code snipped multiple times.

Description

Adapted from function try_again from package testthat.

Usage

```
try_again(
  x,
  times = 2,
  delay_seconds_min = 5,
  delay_seconds_max = 10,
  verbose = FALSE
)
```

Arguments

x	code
times	Number of times to try
delay_seconds_min	
	Number of seconds to delay on failure
delay_seconds_max	
	Number of seconds to delay on failure
verbose	Boolean. Do you want information?

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