

new("multiverse")

creates a new, empty object which will contain the multiverse analysis

M

code = *_empty_*
parameters = *_empty_list_*
conditions = *_empty_list_*
m. table = *empty_data.frame_*
current assgn = *_empty_*

inside()

is used to add code to the multiverse. This code can include different analysis pathways at any step of the analysis (see `branch`). This code is captured, not executed.

M

code = *<expression>*
parameters = *_empty_list_*
conditions = *_empty_list_*
m. table = *empty_data.frame_*
current assgn = *_empty_*

branch()

If a certain step in the analysis can be performed in multiple different ways, use this to assign a parameter to this step, and define the different analysis options for this parameter.

parse_multiverse()

inspects the code, and identifies the parameters and options declared. It then updates the corresponding slots of the multiverse object.

get_code()

takes as input a multiverse object, and a list of options for each parameter. It returns the code for a single analysis, which can then be evaluated.

This function can be called after `parse_multiverse()`. It is also called internally by `execute_multiverse()`.

list of all **conditions** declared in the code. When value(s) of parameter are dependent on the value(s) of another parameter, it is captured as conditions.

M

code = *<expression>*
parameters = *<list[n]>*
conditions = *<list>*
m. table = *<data.frame [n+1 x q]>*
current assgn = *<list[n]>*

list of all **parameters** declared in the code (say, **n**). Each parameter, p_i ($i = 1 \dots n$) has k_i options associated with it

list of one set of options for each parameter; corresponds to the first row of the multiverse table

multiverse table

A table, where each row corresponds to one analysis in the multiverse. Each column is a parameter, and each row is a unique combination of the options for each parameter; one column stores as a list the options for each parameter. Thus, $\text{dim}(\text{m. table}) = n + 1$ columns and q rows, where, $q = \prod_{i=1}^n k_i$

two columns are added: `universe code` and `universe environment`.

parameters (i = 1...n) [n columns]					parameter assignment list	universe code	universe environment
1	1				Each row is a list of values for each parameter.	Each row is an expression for a single analysis.	Each row is an environment where the analysis can be run, and the result inspected.
2	1						
.	.						
.	.						
k ₁	1						
1	2						
2	2						
.	.						
.	.						
.	.						
.	.						
.	.						
.	.						
.	.						
.	k ₂						

execute_default()

execute_multiverse()

executes default analysis code

creates code for single analysis using default options for each parameter; executes the code (in global environment, so that output can be inspected).

M

code = *<expression>*
parameters = *<list[n]>*
conditions = *<list>*
m. table = *<data.frame [n+3 x q]>*
current assgn = *<list[n]>*