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acceptable_formula  Checks that the formula can be parsed

Description

Uses an S3 method to check that a given formula can be parsed based on its class. It currently scans for contrasts that are not supported and in-line functions. (e.g: lm(wt ~ as.factor(am))). Since this function is meant for function interaction, as opposed to human interaction, a successful check is silent.

Usage

acceptable_formula(model)

Arguments

model An R model object

Examples

model <- lm(mpg ~ wt, mtcars)
acceptable_formula(model)

as_parsed_model Prepares parsed model object

Description

Prepares parsed model object

Usage

as_parsed_model(x)
parse_model

Arguments

x  A parsed model object

parse_model  Converts an R model object into a table.

Description

It parses a fitted R model’s structure and extracts the components needed to create a dplyr formula for prediction. The function also creates a data frame using a specific format so that other functions in the future can also pass parsed tables to a given formula creating function.

Usage

parse_model(model)

Arguments

model  An R model object.

Examples

library(dplyr)
df <- mutate(mtcars, cyl = paste0("cyl", cyl))model <- lm(mpg ~ wt + cyl * disp, offset = am, data = df)parse_model(model)

tidy.pm_regression  Tidy the parsed model results

Description

Tidy the parsed model results

Usage

## S3 method for class 'pm_regression'
tidy(x, ...)

Arguments

x  A parsed_model object

...  Reserved for future use
**tidypredict_fit**

*Returns a Tidy Eval formula to calculate fitted values*

**Description**

It parses a model or uses an already parsed model to return a Tidy Eval formula that can then be used inside a dplyr command.

**Usage**

```r
tidypredict_fit(model)
```

**Arguments**

- `model` An R model or a list with a parsed model.

**Examples**

```r
model <- lm(mpg ~ wt + cyl * disp, offset = am, data = mtcars)
tidypredict_fit(model)
```

**tidypredict_interval**

*Returns a Tidy Eval formula to calculate prediction interval.*

**Description**

It parses a model or uses an already parsed model to return a Tidy Eval formula that can then be used inside a dplyr command.

**Usage**

```r
tidypredict_interval(model, interval = 0.95)
```

**Arguments**

- `model` An R model or a list with a parsed model
- `interval` The prediction interval, defaults to 0.95

**Details**

The result still has to be added to and subtracted from the fit to obtain the upper and lower bound respectively.
Examples

```r
model <- lm(mpg ~ wt + cyl * disp, offset = am, data = mtcars)
tidypredict_interval(model)
```

Description

Compares the results of predict() and tidypredict_to_column() functions.

Usage

```r
tidypredict_test(
  model,
  df = model$model,
  threshold = 1e-12,
  include_intervals = FALSE,
  max_rows = NULL,
  xg_df = NULL
)
```

Arguments

- **model**: An R model or a list with a parsed model. It currently supports `lm()`, `glm()` and `randomForest()` models.
- **df**: A data frame that contains all of the needed fields to run the prediction. It defaults to the "model" data frame object inside the model object.
- **threshold**: The number that a given result difference, between predict() and tidypredict_to_column() should not exceed. For continuous predictions, the default value is 0.00000000001 (1e-12), and for categorical predictions, the default value is 0.
- **include_intervals**: Switch to indicate if the prediction intervals should be included in the test. It defaults to FALSE.
- **max_rows**: The number of rows in the object passed in the df argument. Highly recommended for large data sets.
- **xg_df**: A xgb.DMatrix object, required only for XGBoost models. It defaults to NULL recommended for large data sets.

Examples

```r
model <- lm(mpg ~ wt + cyl * disp, offset = am, data = mtcars)
tidypredict_test(model)
```
tidypredict_to_column

Adds the prediction columns to a piped command set.

Description

Adds a new column with the results from tidypredict_fit() to a piped command set. If add_interval
is set to TRUE, it will add two additional columns- one for the lower and another for the upper
prediction interval bounds.

Usage

tidypredict_to_column(
  df,
  model,
  add_interval = FALSE,
  interval = 0.95,
  vars = c("fit", "upper", "lower")
)

Arguments

df A data.frame or tibble
model An R model or a parsed model inside a data frame
add_interval Switch that indicates if the prediction interval columns should be added. De-
defaults to FALSE
interval The prediction interval, defaults to 0.95. Ignored if add_interval is set to FALSE
vars The name of the variables that this function will produce. Defaults to "fit", "upper", and "lower".
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