Package 'assertive'

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Type Package

Title Readable Check Functions to Ensure Code Integrity

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Description Lots of predicates (is_* functions) to check the state of your variables, and assertions (assert_* functions) to throw errors if they aren't in the right form.

URL https://bitbucket.org/richierocks/assertive

BugReports https://bitbucket.org/richierocks/assertive/issues

Depends R (>= 3.0.0)

Imports assertive.base (>= 0.0-4), assertive.properties (>= 0.0-2), assertive.types (>= 0.0-2), assertive.numbers, assertive.strings, assertive.datetimes, assertive.files, assertive.sets (>= 0.0-2), assertive.matrices, assertive.models, assertive.data, assertive.data.uk, assertive.data.us, assertive.reflection (>= 0.0-2), assertive.code, knitr

Suggests testthat

License GPL (>= 3)

LazyLoad yes

LazyData yes

VignetteBuilder knitr

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`are_identical` *Are the inputs identical?*

Description

See `are_identical`.

are_same_length *Are the inputs the same length/dimension?*

Description

See are_same_length.

are_set_equal *Set comparisons*

Description

See is_set_equal.

assertionError *Condition classes*

Description

See assertionError.

assertive *Readable check functions to ensure code integrity.*

Description

assertive contains lots of is_* functions to check the state of your variables, and assert_* functions to throw errors if they aren't in the right form.

Details

When the package loads, it creates a global option "assertive.severity" that determines what happens when an assert_* function's input fails the condition. By default, an error is thrown but it is possible to generate warnings or messages instead (see the examples).

Author(s)

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Examples

```
is_numeric(1:10)
assert_all_are_positive(1:10)
dont_stop(assert_is_scalar(runif(10)))
```

assert_engine *Throws an error if a condition isn't met*

Description

See assert_engine.

assert_is_all_of *Does x belong to these classes?*

Description

See assert_is_all_of.

bapply *Wrapper to vapply that returns booleans.*

Description

See bapply.

call_and_name *Call a function, and give the result names.*

Description

See call_and_name.

cause *Get or set the "cause" attribute*

Description

See cause.

changes *Important changes to assertive*

Description

Changes since 0.3-0:

Virtuality

The assertive package is now a virtual package: that is, it no longer contains its own functions, but instead rexports them from lower-level packages.

For interactive use, you can carry on using assertive as before.

For programmatic use, you can have more fine-grained control over what gets loaded by using the lower-level packages.

`assertive.base` contains the core functionality. `assertive.properties` contains checks on properties of variables. `assertive.types` contains checks on types of variables. `assertive.numbers` contains checks for numbers. `assertive.strings` contains checks for strings. `assertive.datetimes` contains checks for dates and times. `assertive.files` contains checks for files and connections. `assertive.sets` contains checks for sets. `assertive.matrices` contains checks for matrices. `assertive.models` contains checks for models. `assertive.data` contains checks for complex data types. `assertive.data.uk` contains checks for UK-specific complex data types. `assertive.data.us` contains checks for US-specific complex data types. `assertive.reflection` contains checks on the state of R. `assertive.code` contains checks for code.

Translations

The infrastructure for errors and warnings in multiple langauges is in place, and translations are planned for future versions. If you want to be a translator, email me at <richierocks@gmail.com>.

`character_to_list_of_integer_vectors`
Convert a character vector to a list of integer vectors See `character_to_list_of_integer_vectors`.

Description

Convert a character vector to a list of integer vectors

See `character_to_list_of_integer_vectors`.

coerce_to *Coerce variable to a different class*

Description

See coerce_to.

DIM *Get the dimensions of an object*

Description

See DIM.

See DIM.

dont_stop *Run code without stopping*

Description

See dont_stop.

false *FALSE, with a cause of failure*

Description

See false.

get_name_in_parent *Get the name of a variable in the parent frame*

Description

See get_name_in_parent.

has_any_attributes *Does the input have any attributes?*

Description

See has_any_attributes.

has_arg *Does the current call have an argument? See has_arg.*

Description

Does the current call have an argument?

See has_arg.

has_attributes *Does the input have the specified attributes?*

Description

See has_attributes.

has_cols *Does the input have rows/columns?*

Description

See has_cols.

has_dims *Does the input have dimensions?*

Description

See has_dims.

has_duplicates *Does the input have duplicates?*

Description

See has_duplicates.

has_names *Does the input have names?*

Description

See has_names.

has_slot *Does the S4 input have a slot?*

Description

See has_slot.

has_terms *Does the input have terms?*

Description

See has_terms.

is2 *Alternative version of is*

Description

See is2.

is_array *Is the input an array or matrix?*

Description

See is_array.

is_atomic *Is the input atomic/recursive/vector?*

Description

See is_atomic.

is_batch_mode *How is R running?*

Description

See is_batch_mode.

is_binding_locked *Is the binding of a variable locked? See* is_binding_locked.

Description

Is the binding of a variable locked?

See is_binding_locked.

is_cas_number *Does the character vector contain CAS registry numbers?*

Description

See is_cas_number.

`is_character` *Is the input of type character?*

Description

See `is_character`.

`is_class` *Is the input the name of a (formally defined) class?*

Description

See `is_class`.

`is_complex` *Is the input complex?*

Description

See `is_complex`.

`is_connection` *Is the input a connection?*

Description

See `is_connection`.

`is_credit_card_number` *Does the character vector contain credit card numbers?*

Description

See `is_credit_card_number`.

is_data.frame *Is the input is a data.frame?*

Description

See is_data.frame.

is_data.table *Is the input a data.table?*

Description

See is_data.table.

is_date *Is the input a date?*

Description

See is_date.

is_date_string *Does the character vector contain dates?*

Description

See is_date_string.

is_debugged *Is the input function being debugged? See* is_debugged.

Description

Is the input function being debugged?

See is_debugged.

is_diagonal_matrix *Is the input a diagonal matrix?*

Description

See is_diagonal_matrix.

is_dir *Is the path a directory?*

Description

See is_dir.

is_divisible_by *Is the input divisible by a number?*

Description

See is_divisible_by.

is_email_address *Does the character vector contain email addresses?*

Description

See is_email_address.

is_empty *Is the input empty/scalar?*

Description

See is_empty.

is_empty_character *Does the input contain empty or missing strings?*

Description

See is_empty_character.

is_empty_file *Is a file too big or small?*

Description

See is_empty_file.

is_empty_model *Is the input the empty model?*

Description

See is_empty_model.

is_environment *Is the input an environment?*

Description

See is_environment.

is_equal_to *How does the input relate to a value?*

Description

See is_equal_to.

`is_error_free` *Does the code run without throwing an error? See* `is_error_free`.

Description

Does the code run without throwing an error?

See `is_error_free`.

`is_executable_file` *Is the file accessible?*

Description

See `is_executable_file`.

`is_existing` *Does the variable exist? See* `is_existing`.

Description

Does the variable exist?

See `is_existing`.

`is_existing_file` *Does the file exist?*

Description

See `is_existing_file`.

`is_factor` *Is the input a factor?*

Description

See `is_factor`.

is_finite *Are the inputs (in)finite?*

Description

See is_finite.

is_formula *Is the input a formula?*

Description

See is_formula.

is_function *Is the input a function?*

Description

See is_function.

is_hex_color *Does the character vector contain hex colors?*

Description

See is_hex_color.

is_honorific *Is the string an honorific?*

Description

See is_honorific.

is_identity_matrix *Is the input an identity matrix?*

Description

See is_identity_matrix.

is_if_condition *Is suitable to be used as an if condition See is_if_condition.*

Description

Is suitable to be used as an if condition

See is_if_condition.

is_inherited_from *Does the object inherit from some class?*

Description

See is_inherited_from.

is_integer *Is the input an integer?*

Description

See is_integer.

is_in_past *Is the input in the past/future?*

Description

See is_in_past.

is_in_range *Is the input in range?*

Description

See is_in_range.

is_ip_address *Does the character vector contain IP addresses?*

Description

See is_ip_address.

is_isbn_code *Does the character vector contain ISBN book codes?*

Description

See is_isbn_code.

is_language *Is the input a language object?*

Description

See is_language.

is_leaf *Is the input a (dendrogram) leaf?*

Description

See is_leaf.

`is_library` *Is the directory a known R library?*

Description

See `is_library`.

`is_list` *Is the input a list?*

Description

See `is_list`.

`is_loaded` *Is the input DLL loaded? See* `is_loaded`.

Description

Is the input DLL loaded?

See `is_loaded`.

`is_logical` *Is the input logical?*

Description

See `is_logical`.

`is_lower_triangular_matrix`
Is the matrix upper/lower triangular?

Description

See `is_lower_triangular_matrix`.

is_matching_fixed *Does the string match a pattern? See* `is_matching_fixed`.

Description

Does the string match a pattern?

See `is_matching_fixed`.

is_monotonic_increasing *Is the vector monotonically increasing or decreasing?*

Description

See `is_monotonic_increasing`.

is_nan *Is the input (not) NaN?*

Description

See `is_nan`.

is_null *Checks to see if the input is (not) null.*

Description

See `is_null`.

is_numeric *Is the input numeric?*

Description

See `is_numeric`.

is_numeric_string *Does the string contain a number? See* is_numeric_string.

Description

Does the string contain a number?

See is_numeric_string.

is_on_os_path *Is the path on the OS path?*

Description

See is_on_os_path.

is_package_current *Is the installed version of a package current?*

Description

See is_package_current.

is_qr *Is the input a QR decomposition of a matrix?*

Description

See is_qr.

is_r *Are you running R?*

Description

See is_r.

is_raster *Is the input a raster?*

Description

See is_raster.

is_raw *Is the input raw?*

Description

See is_raw.

is_real *Is the input real/imaginary?*

Description

See is_real.

is_relistable *Is the input relistable?*

Description

See is_relistable.

is_rstudio_current *Is RStudio the current version?*

Description

See is_rstudio_current.

is_rstudio_desktop *Is RStudio running in desktop or server mode?*

Description

See is_rstudio_desktop.

is_r_current *Is this version of R up to date?*

Description

See is_r_current.

is_s4 *Is the input an S4 object?*

Description

See is_s4.

is_single_character *Is the input a single character? See* is_single_character.

Description

Is the input a single character?

See is_single_character.

is_square_matrix *Is the input a square matrix?*

Description

See is_square_matrix.

is_symmetric_matrix *Is the input a symmetric matrix?*

Description

See is_symmetric_matrix.

is_table *Is the input a table?*

Description

See is_table.

is_tbl *Is the input a tbl?*

Description

See is_tbl.

is_try_error *Is the input a condition?*

Description

See is_try_error.

is_ts *Is the input a time series?*

Description

See is_ts.

`is_uk_car_licence` *Is the string a valid UK car licence plate number?*

Description

See `is_uk_car_licence`.

`is_uk_national_insurance_number` *Is the string a valid UK national insurance number?*

Description

See `is_uk_national_insurance_number`.

`is_uk_postcode` *Is the string a valid UK postcode?*

Description

See `is_uk_postcode`.

`is_uk_telephone_number` *Is the string a valid UK telephone number?*

Description

See `is_uk_telephone_number`.

`is_unsorted` *Is the input unsorted?*

Description

See `is_unsorted`.

is_us_social_security_number

Is the string a valid US SSN?

Description

See is_us_social_security_number.

is_us_telephone_number

Is the string a valid US telephone number?

Description

See is_us_telephone_number.

is_us_zip_code

Is the string a valid US zip code?

Description

See is_us_zip_code.

is_valid_r_code

Is the input valid R code? See is_valid_r_code.

Description

Is the input valid R code?

See is_valid_r_code.

is_valid_variable_name

Is the string a valid variable name? See is_valid_variable_name.

Description

Is the string a valid variable name?

See is_valid_variable_name.

`is_whole_number` *Is the input a whole number?*

Description

See `is_whole_number`.

`is_windows` *What OS is running?*

Description

See `is_windows`.

`is_xxx_for_decimal_point`
What does the current locale specify for the decimal point?

Description

See `is_xxx_for_decimal_point`.

`is_zero_matrix` *Is the input a zero matrix?*

Description

See `is_zero_matrix`.

`merge_dots_with_list` *Merge ellipsis args with a list.*

Description

See `merge_dots_with_list`.

na *NA, with a cause of failure*

Description

See na.

n_elements *Get the number of elements*

Description

See n_elements.

See n_elements.

parenthesize *Wrap a string in brackets*

Description

See parenthesize.

r_can_find_tools *Can R find tools?*

Description

See r_can_find_tools.

r_has_jpeg_capability *Does R have a capability?*

Description

See r_has_jpeg_capability.

set_cause — *Set a cause and return the input*

Description

See set_cause.

strip_attributes — *Strip all attributes from a variable*

Description

See strip_attributes.

sys_get_locale — *Get or set the system locale*

Description

See sys_get_locale.

Truth — *Is the input TRUE/FALSE/NA?*

Description

See Truth.

use_first — *Only use the first element of a vector*

Description

See use_first.

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