String Constants: GUI Internationalization

Version 7.6

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This library provides the facility for multiple languages in DrRacket's GUI.

1   Using String Constants

```
(require string-constants)
     package: string-constants-lib
```

```
(string-constant name)
```

This form returns the string constant named *name* for `this-language`.

```
(string-constants name)
```

This form returns a list of string constants, one for each language that DrRacket's GUI supports.

```
(string-constant-in-current-language? name)
```

Produces `#t` if `key` has been translated for `this-language`.

```
(dynamic-string-constant name) → string?
  name : string-constant?
```

This, like `string-constant`, returns the string constant named *name*, but without any compile-time checking on the argument.

```
(dynamic-string-constants name) → (listof string?)
  name : string-constant?
```

This, like `string-constants`, returns the string constants matching *name*, but without any compile-time checking on the argument.

```
(string-constant? v) → boolean?
  v : any/c
```

Returns `#t` if *v* is a symbol naming a known string constant.

```
(dynamic-string-constant-in-current-language? key) → boolean?
  key : string-constant?
```

Like `string-constant-in-current-language?`, but without compile-time checking.

```
(this-language)
```

This form returns the name of the current language as a symbol.

```
(all-languages)
```

This form returns a list of symbols (in the same order as those returned from `string-constants`) naming each language.

```
(set-language-pref lang) → void?
  lang : string?
```

Sets the language for the next run of DrRacket to *lang*, which must be a symbol returned from `all-languages`. Does not affect the running DrRacket.

2 Adding String Constants

To add string constants to DrRacket, see the file `"private/english-string-constants.rkt"` and the other string constants files in the `"private"` directory.

Each file has the same format. They are each modules in the `string-constants/private/string-constant-lang` language. The body of each module is a finite mapping table that gives the mapping from the symbolic name of a string constant to its translation in the appropriate language. Multiple string constants that appear together are implicitly concatenated.

The `"english-string-constants"` is considered the master file; string constants will be set there and translated into each of the other language files. In addition, the `"english-string-constants.rkt"` file should contain hints about the context of the strings whose symbol name might not be clear.

3 Language Environment Variables

- PLTSTRINGCONSTANTS

- STRINGCONSTANTS

If either of these environment variables are set, DrRacket shows you, during startup, which string constants are not yet defined for each language.

You can also specify which languages you are interested in. If either environment variable is bound to a symbol (as interpreted by read) you see only the corresponding language's messages. If either one is bound to a list of symbols (again, as interpreted by read) you see the messages for all the languages in the list. If either is bound to anything else, you see all of the languages.

The PLTSTRINGCONSTANTS environment variable takes precedence over the STRINGCON-STANTS environment variable.

The PLTSTRINGCONSTANTSLANG controls the language choice, overriding the default saved in the preferences file. If it is not set to one of the languages in the result of all-languages, it is ignored.