refenums - ReferenceableEnumElements

Define named items and provide back-references with that name

This package provides commands to define enumerable items with a number and a long name, which can be referenced referenced later with the name or just the short form. For instance, “Milestone M1: Specification created” can be defined and later on be referenced with `M1` or `M1 ("Specification created")`. The text in the references is derived from the definition and also rendered as hyperlink to the definition. Thus, a change of the definition also leads to a change of all references to the text. This ensures consistency in the text.

Usage

`\usepackage{refenums}`

Load the package after all packages (hyperref, cleveref, . . .). For best results, use the `nameinlink` option at cleveref. The option `capitalise` is also useful if you use cleveref's `\cref` command, therefore we recommend loading `cleveref` before `refenums` with follwing line: `\usepackage[capitalise,nameinlink]{cleveref}`

Define the “Referenceable Enum Environment”

Decide for `<EnumId>`. E.g., `req`.

Initialize

`\setupRefEnums{<EnumId>}{<PrintName>}`

In case `<PrintName>` is set to `ONLYSHORT`, only the short name is used.

Optional parameter: Separator between `<EnumId>` and number.

(Optional) Define shorthand macro to define the macros for referencing

`\newcommand{\def<EnumId>}[2]{\defRefEnum{<EnumId>}{#1}{#2}}`

Usage in the text

Define a single enum

- `\defRefEnum{<EnumId>}{<FullName>}{<LabelId>}` (always supported)
- `\def<EnumId>{<FullName>}{<LabelId>}` (when the shorthand command is defined)

Define a single enum using the inline format

`\defineReferenceableEnumElementInline{<EnumId>}{<FullName>}{<LabelId>}`. Using this, a enumeration similar to the ones of the `inparaenum` environment is possible. `inparaenum` is offered by the [paralist package].

Referencing

- `\refEnumFull{<EnumId>}{<LabelId>}` = `<EnumId>-<Counter> ("<FullName>")`, e.g. `R-1 ("Quality")`
- `\refEnumFullP{<EnumId>}{<LabelId>}` is the long form for '\refEnumFull'.
- `\refEnumFullT{<EnumId>}{<LabelId>}` = `<EnumId>-<Counter>: "<FullName>"`, e.g. `R-1: "Quality"`
- `\refEnum{<EnumId>}{<LabelId>}` = `<EnumId>-<Counter>`, e.g. `R-1`
- References to the label
- `\nameref{enum:<EnumId>:<LabelId>}` = `<FullName>`
- `\ref{enum:<EnumId>:<LabelId>}` = `<Counter>`, e.g. `1`

Example

Initialize: `\setupRefEnums{R}{Requirement}`

Define a single enum: `\defRefEnum{R}{Quality}{qual}`. When you want to put the element in a section, use the optional parameter: `\defRefEnum[section]{R}{Quality}{qual}`

Referencing:

- Reference only Name + Number: `\refEnum{R}{qual}`
- Full reference with the print name in brackets: `\refEnumFull{R}{qual}`
- Full reference with the print name appended after ":": `\refEnumFullT{R}{qual}`

See also demo.tex.

Tuning

When defining a referenceable element, this element is enclosed using `\refenumenclosing` for normal enums and `\refenumenclosinginline` for inline enums. These commands can be redefined after package usage.

TODO

- The decision to put the enum in a section should be taken at `\setupRefEnums` not at `\defRefEnum`.

- Enable automatically generating `\def<EnumId>` at `\setupRefEnums` via a package parameter.

Source code

The latest source code is available at https://github.com/koppor/refenums

Files

- refenums.sty: the package
- demo.tex: small demonstration