theofig

figure implementation of theorem environments

A Typst package for creation and customization
of theorem environments built on top of `std.figure`.

`github.com/Danila-Bain/typst-theorems`

Version 0.0.1

Guide

Reference

Usage examples

Importing everything with * is recommended:

```
#import "@preview/theofig:0.0.1": *
```

```
== Basic usage
#theorem[
  #lorem(5)
] <theorem-1>

#theorem[Lorem][#lorem(10)]

#proof[It follows directly from @theorem-1.]
```

Basic usage

Theorem 1. Lorem ipsum dolor sit amet.

Theorem 2 (Lorem). Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

Proof. It follows directly from Theorem 1. ∎

```
== Default environments
#theorem[#lorem(5)]

#lemma[#lorem(5)]

#statement[#lorem(5)]

#remark[#lorem(5)]

#corollary[#lorem(5)]

#example[#lorem(5)]

#definition[#lorem(5)]

#algorithm[#lorem(5)]

#proof[#lorem(5)]

#problem[#lorem(5)]

#solution[#lorem(5)]
```

Default environments

Theorem 1. Lorem ipsum dolor sit amet.

Lemma 1. Lorem ipsum dolor sit amet.

Statement 1. Lorem ipsum dolor sit amet.

Remark 1. Lorem ipsum dolor sit amet.

Corollary. Lorem ipsum dolor sit amet.

Example 1. Lorem ipsum dolor sit amet.

Definition 1. Lorem ipsum dolor sit amet.

Algorithm 1. Lorem ipsum dolor sit amet.

Proof. Lorem ipsum dolor sit amet. ∎

Problem 1. Lorem ipsum dolor sit amet.

Solution. Lorem ipsum dolor sit amet.

```
== Custom numbering

#definition[Default.]

#definition(numbering: none)[No numbering.]

#definition[Equivalent to @def-2.]<def-1>

#definition(number: <def-1>, numbering: "1'")[
  Equivalent to @def-1.
]<def-2>

#definition(number: 100)[
  This is @def-100.
]<def-100>

#definition(number: 5, numbering: "A")[
  This is @def-3.
]<def-3>

#definition(number: $e^pi$)[
  This is @def-exp
]<def-exp>

#definition[Back to default.]
```

Custom numbering

Definition 1. Default.

Definition. No numbering.

Definition 2. Equivalent to Definition 2'.

Definition 2'. Equivalent to Definition 2.

Definition 100. This is Definition 100.

Definition E. This is Definition E.

Definition e^π. This is Definition e^π

Definition 3. Back to default.

```
== Ways to specify numbering

#definition[Default @def-a-1.]<def-a-1>

#show figure-where-kind-in(
  theofig-kinds
): set figure(numbering: "I")
#definition[Show rule @def-a-2.]<def-a-2>

#let definition = definition.with(numbering: "A")
#definition[Redefined @def-a-3.]<def-a-3>

#definition(numbering: numbering.with("(i)"))[
  Argument @def-a-4.
]<def-a-4>
```

Ways to specify numbering

Definition 1. Default Definition 1.

Definition II. Show rule Definition II.

Definition C. Redefined Definition C.

Definition (iv). Argument Definition (iv).

```
== Different styles

#theorem[Default]

#show figure.where(kind: "definition"): it => {
  show figure.caption: emph
  show figure.caption: strong.with(delta: -300)
  it
}
#definition[Italic caption.]

// #show figure.where(kind: "theorem"): emph
// #show figure.where(kind: "theorem"): show-figure-
caption(emph) // undo emph for caption
// #theorem[Italic body.]

// #show figure-where-kind-in(theofig-kinds): show-
figure-caption(emph)
//
// #definition[#lorem(5)]
//
// #solution[]
```

Different styles

Theorem 1. Default

Definition 1. Italic caption.

```
== Ways to specify a style
#solution[]
```

Ways to specify a style

Solution.

```
== Languages support
#solution[]
```

Languages support

Solution.

Styling

Numbering

Limitations

Main functions