1 Introduction

This is a package by me and for me. The command

`\usepackage{daniel}`

grants you the package with the terms in English, and with the option

`\usepackage[fin]{daniel}`

you get all the terms in Finnish. Terms can also be renamed by hand e.g.

`\renewcommand{\theoremterm}{Lause}.`

Everything has preset colors, but they can be changed easily e.g.

`\definecolor{TheoremBg}{RGB}{rrr,ggg,bbb},`

however if you do change the colors know that you are infringing upon my artistic vision.

2 Macros

It's got some macros

```
%Basic shortcuts
\def\mbb#1{\mathbb{#1}}
\def\mfk#1{\mathfrak{#1}}

\def\bN{\mbb{N}}
\def\bC{\mbb{C}}
\def\bR{\mbb{R}}
\def\bQ{\mbb{Q}}
\def\bZ{\mbb{Z}}

%Macros
\newcommand{\floor}[1]{\left\lfloor#1\right\rfloor}
\newcommand{\ceil}[1]{\left\lceil#1\right\rceil}
\newcommand{\paren}[1]{\left(#1\right)}
\newcommand{\angles}[1]{\left\langle#1\right\rangle}
```

3 Theorembase environments

There's a `theorembase` environment. For example the code

```
\begin{theorembase}[name]{classification}{red}{green}
body text
\end{theorembase}
```

gives you

classification 3.1. name

body text

All theorembase environments are numbered with the `theorem` counter. There are also the built-in theorembase environments.

They are `theorem`, `corollary`, `lemma`, and `definition`. Their look can be tweaked by redefining `theorembase`.

For example:

```
\begin{theorem}[theorem name]
theorem text
\end{theorem}

\begin{corollary}[corollary name]
corollary text
\end{corollary}

\begin{lemma}[lemma name]
lemma text
\end{lemma}

\begin{definition}[definition name]
definition text
\end{definition}
```

Theorem 3.2. theorem name

theorem text

Corollary 3.3. corollary name

corollary text

Lemma 3.4. lemma name

lemma text

Definition 3.5. definition name

definition text

4 Exercises

All of the following environments in this section take an optional argument for their title.

Exercise 4.1. Prove that this package is worth using.
Hint 1 Solution 1

Hint 4.1.2. : Consider also the fact that you can have unlinked hints and solutions with the `hint` and `solution` environments respectively.

Hint : You can even have unnumbered hints and solutions with the `hint*` and `solution*` environments respectively.

The `hint` and `linkedhint` environments both use the `hint*` environment, so redefining it is sufficient to change all of their appearances. The statement symmetrically holds for solutions.

5 Misc

Remark: Check out this `remark` environment

The package of course also has a `proof` environment.

Proof.

This here proves the existence of that environment. □

All of the environments can be nested, but I cannot guarantee it will look good. For example, the nested remark

> **Remark:** Nested remark
>
> > **Remark:** Look mom I'm nested

6 Hints

Hint 4.1.1. : Consider how you can have linked hints at the end using the `linkedhint` environment

7 Solutions

Solution 4.1.1.

The proof is simple, consider the all the useful environments and assorted macros here. You would be stupid not to use my package. Numbered theorems, numerous macros, and a simple `exercise` environment, what more do you need? It also has a `linkedsolution` environment. □