handin - manual v0.1.1(build 52)

Andreas Strauman

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2 Problem

I remember when I first started out with LaTeX, as a student, it was very new and challenging just to make a simple nicely typeset document. We've all seen documents that has problem numbering using sections, like I did here. (The header says **2 Problem**.)

This is a package that makes it easy for student to hand in a formatted document in LaTeX. It just creates a couple of commands that typesets the document with nice headers (problem numbers and part problem numbers e.g. (1a)).

If you are a teacher, this package works just as well for creating exercises!

If you found any bugs or want new functionality, to contribute, view the commented source, get latest version of this package or get in touch with me, you can do all of that at

https://github.com/Strauman/handin-LaTeX. If you have questions of functionality, kindly direct them to the community

http://tex.stackexchange.com. The author is active on this site regularly.

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1 Reference

1.1 Making exercises

Here are commands related to creating exercises

```
\problem{\langle text \rangle}
```

This command will print out a problem header. For example \problem \{1\} prints a nice big header **Problem 1** You can do a star (*) after \problem to prevent it from showing in the table of contents

```
\problem*{\langle text \rangle}
```

Does the same as \problem, but does not add the problem to the table of contents

```
\problem{\langle text \rangle}
```

 $\frac{\mathrm{U}\mathrm{v}0.1.1}{2018/07/22}$

This command will print out a part problem header based on what problem you are on. For example if you already have done \problem{1}, then \pproblem{a} prints a nice big header (1a). Note that the default behaviour is such that if you are on a new page, then the part problems are shown with the exercise number in front of it. If not it is omitted. If you want to change this behaviour, see \keyRef{part problem header}

```
\problem*{\langle text \rangle}
```

Does the same as \pproblem, but does not add the part problem to the table of contents

1.2 Package options

```
light = \langle true/false \rangle \qquad (\langle default \rangle = false)
```

Pass this option if you don't want to define a different \maketitle and include basic math packages.

1.3 Package options (\handinsetup)

You can do configurations on this package, and probably even more to come in later versions!

Here is a list of the different keys and their meaning

```
problem header=\langle macro \rangle
```

```
(\langle default \rangle = \Otr{Problem} \currentProblem)
```

This options contains the formatting of the problem header. Use \currentProblem to access the number of the current exercise, and \@tr{Problem} to access the translation of Problem. Defaults to \@tr{Problem} \currentProblem

```
part problem header=\langle macro \rangle
```

 $(\langle default \rangle = \text{See below})$

This defaults to: $\colone{1.5mu} \colone{1.5mu} \$

```
problem TOC=\langle macro \rangle
```

 $(\langle default \rangle = \langle contents \ of \ problem \ header \rangle)$

This key decides what is written to the table of contents. It defaults to extract the content in problem header P.4

```
part problem TOC = \langle macro \rangle
```

 $(\langle default \rangle = \langle contents \ of \ part \ problem \ header \rangle)$

This key decides what is written to the table of contents. It defaults to \currentPartProblem (which is what the user last sent to \pproblem).

```
logo\ width=\langle number \rangle
```

 $(\langle default \rangle = 0.4)$

Give as factor (between 0 and 1) of total text width. This is a temporary fix for logo not being customisable, and is scheduled to be updated in a later version.

```
title style=\langle wholepage or small\rangle
```

 $(\langle default \rangle = wholepage)$

If "wholepage", \maketitle will produce a full front-page. If "small", \maketitle will produce a smaller title containing the course name, course title, title, and author.

Example

If you don't want to have the exercise number ever in front of the letter, then you'd do

\handinsetup{part problem header=\currentPartProblem}

1.4 Page formatting commands

This package redefines \maketitle. Here are some front-page commands. See layout.pdf for where they will appear. These commands all have to be executed in the preamble (that is after \documentclass and before \begin{document}

The \title and \author commands are as per usual, but are made lasting (not cleared by \maketitle) with \thetitle and \theauthor for use in headers and footers

```
\title{\(\title\)}
\author{\(\(\title\)\)}
\logo{\(\path/to/image\)}
If you want an image below the title, you provide the path to the image here
\coursename{\(\title\title\)}
\coursetitle{\(\title\title\)}
The front page will show coursename - coursetitle on a "subtitle" format
\institute{\(\title\title\)}
Shows as text on bottom
\containspages{\(\title\title\title\)}
Here you can set a string that shows on bottom. Default is
\containspages{\(\title\title\title\)}
Here you can set a string that shows on bottom. Default is
\\containspages{\(\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title\title
```

1.5 Languages

This package supports.

- English
- Norwegian
- German (by africola)

Translations are welcome at https://github.com/Strauman/Handin-LaTeX-template/tree/master/src/languages. The current language is set by the iflang package, so you can use e.g. babel:

```
\usepackage[german]{babel}
```

1.6 General reference

\currentProblem

Contains the argument of the last call to \problem

\currentProblemIfNewPage % <- expands to empty

```
\pproblem{hello}
\pproblem{world}
\currentPartProblem %<- contains world</pre>
```

\currentPartProblem

Just as \currentProblem, but contains the argument of the last call to \pproblem

\currentProblemIfNewPage

If the problem is not defined on the current page, then The first time \currentProblemIfNewPage is called on a page, it expands to the current problem number. If not, it expands to empty. If the problem is defined on the current page, it also expands to empty. This is used in the default key for the \keyRef{part problem header}. Here are some examples

```
\problem{1}
\currentProblemIfNewPage % <- empty

\problem{4}
\clearpage
\currentProblemIfNewPage % <- expands to 4</pre>
```

$\stable{\langle text \rangle}$

```
\settable{hello}
```

if now \@hello is called, a warning is displayed with the text "\hello not set"

```
\hello{world}
```

if now \@hello is called, it prints "world" \@hello@noerror gives the returning content and empty without error if no content set.

```
\ifset@hello{true}{false}
```

1.7 Macro index reference

 \addledown \author $^{
ightarrow \, P.\, 5}$ \containspages $\coursename \rightarrow P.5$ $\backslash \mathtt{coursetitle}^{
ightarrow P.\, 5}$ $\verb|\currentPartProblem|^{\rightarrow\,P.\,6}$ $\colone{line} \colone{line} \colone{line}$ $\verb|\currentProblemIfNewPage|^{\to\,P.\,6}$ \h andinsetup $^{
ightarrow P.4}$ ackslashinstitute $^{\stackrel{ar{}}{ ext{P.5}}}$ \logo^{→ P.5} $\protect\pro$ $\verb|\pproblem|^{\to\,P.\,3}$ $\problem*^{\rightarrow P.3}$ $\texttt{\baselineskip}^{-2} P.3$ $\problem*^{\rightarrow P.3}$ \settable → P.6 ackslashtitle $^{
ightarrow P.5}$

2 Changelog

v0.0.2 2018/04/01

Problems are now added to the table of contents by default

$v0.0.2b34 \ 2018/04/02$

- Updated documentation syntax

v0.0.3b41 2018/04/04

- German language translation

v0.0.4 2018/04/06

- Made proper margins for problem headers and part problem headers
- $_{-}$ Added microtype and Latin Modern font (cfr-lm)

v0.1.0 2018/04/10

- Introduced package options
- New slick, minimalistic, front page
- Added support for \thetitle and \theauthor
- Footer bar by default
- New part problem counting features

https://github.com/africola

https://github.com/koppor

https://github.com/DanielTrosten https://github.com/MadsAdrian https://github.com/MadsAdrian

https://github.com/MadsAdrian

- Misc fixes of margin bugs
- Better file structuring on page style

$v0.1.1 \ 2018/07/22$

- Fixed bug where first page after title did not have header and footer.
- Makes sure $\problem^{\to P.3}$ is in horizontal mode, so that the \problem header is placed correctly.
- Added package option $light^{\rightarrow P.3}$