

Package ethuebung for ETH Exercise Sheets

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1 Quick Start Guide and Simple Usage.

Copy the style file `ethuebung.sty` into the same directory as your exercise sheet \LaTeX file. No other files are needed (no logo images etc. are needed as they are packaged with the style file). Start off with the following minimal template.

```
\documentclass[11pt,a4paper]{article}

\usepackage{ethuebung} % comment this and uncomment next line for solutions
%\usepackage[sol]{ethuebung} % uncomment for solutions

\UebungLecture{Microstructures of molten cheese.}
\UebungProf{Prof. Zebigboss}
\UebungSemester{HS 2999}

\UebungsblattNumber{1}

\begin{document}
\MakeUebungHeader

\exercise{Title of the exercise.}

In this exercise, you will be asked to do some work.

\begin{exenumerate}
\item Solve the following equation.
  \begin{align}
x^2 &= 1 \ .
\end{align}
  \hint{There might be more than one solution.}

  \begin{solution}
    Write here the solution to this exercise.
  \end{solution}
\end{exenumerate}

\end{document}
```

Obviously you'll have to fill in the title of your lecture, the lecturer and the semester accordingly using the `\UebungLecture`^(page 3), `\UebungProf`^(page 3) and `\UebungSemester`^(page 3)

commands. Use the `\UebungsblattNumber`^(page 3) command to specify the number of the exercise sheet (usually increases by one every week). Don't forget the `\MakeUebungHeader`^(page 2) command at the beginning of the document to actually draw the header.

Write the solutions to each exercise inline, using a `\begin{loesung}...\end{loesung}` or `\begin{solution}...\end{solution}` environment. When you compile the code above, then the solutions will not appear.

If you want to generate a solutions sheet with the solutions displayed (eg. for the TA's or for the students after they handed in), then simply change the two lines:

```
\usepackage{ethuebung} % comment this and uncomment next line for solutions
%\usepackage[sol]{ethuebung} % uncomment for solutions
```

to:

```
%\usepackage{ethuebung} % comment this and uncomment next line for solutions
\usepackage[sol]{ethuebung} % uncomment for solutions
```

Recompile the sheet, and the solutions will be displayed.

2 What This Package Does

This package provides a unified way of typing exercises for ETH Zurich. While you type in logically all aspects of your exercise using provided \LaTeX macros (title, text, hints, solution, etc.), it is rendered according to some predefined standard, and provides different versions of the sheet for distributing to students (without the solutions), or for TA's (with solutions).

The page header is generated automatically by the package, however the command `\MakeUebungHeader` must be called explicitly at the beginning of the document.

`\MakeUebungHeader` Draws the main header of the exercise sheet, in three parts, with ETH logo, centered title, and professor/semester displayed on the right. And a horizontal line under those.

header

ex numbering

both ex sheet/solution sheet

- eqns in solution numbered by themselves - can attach pdfs for solution

3 Setting Up The Exercise Sheet

`\UebungLecture{...}` This command sets the title of your lecture to the given argument. The lecture title is displayed in the main exercise header. Call this command once in your preamble.

`\UebungProf{...}` Use this command to set the professor or lecturer of the course to the given argument. Call this command once in your preamble.

`\UebungSemester{...}` This command sets the semester that will be displayed in the header. Call this command once in your preamble.

`\UebungsblattNumber{...}` This sets the exercise sheet number to the given argument. The exercise sheet number usually starts at 1, and increases every week as more exercise sheets are distributed. Call this command once in your preamble.

4 Exercises

`exenumerate (+resume)`

`\begin{exenumerate} ... \end{exenumerate}`
This is a list!! like `enumitem`...

hints

subexercises

notes about figures?

5 Solutions

6 Customization

7 Internals