

vo.1pre-1 2017/02/22

eXercise Sheets IMproved

Clemens NIEDERBERGER

https://github.com/cgnieder/xsim

contact@mychemistry.eu

### **Table of Contents**

1	Licence, Requirements and		7 Exercise rags	3
	README	1	8 Collecting Exercises	3
2	Motivation and Background	1	9 Printing Solutions	3
3	Exercises and Solutions	2	10 Styling the Exercises - Templates	3
4	New Exercise Types	3	11 Exercise Translations	3
5	Exercise Properties	3	12 Other Commands	3
6	Exercise Goals	3	13 Index	4

# 1 Licence, Requirements and README

Permission is granted to copy, distribute and/or modify this software under the terms of the LATEX Project Public License (LPPL), version 1.3 or later (http://www.latex-project.org/lppl.txt). The software has the status "maintained."

**XSIM** loads the packages expl3 [L3Pa], xparse [L3Pb], etoolbox [Leh15], booktabs [Fea05] and translations [Nie15].

## 2 Motivation and Background

It has been quite a while since I first published exsheets [Nie17] in Juni 2012. Since then it has gained a user base and a little bit of popularity as the number of questions on tex.sx shows

(98 at the time of writing). User questions, bug reports and feature requests improved it over the time. Still it has a version number starting with a zero which in my versioning system means I still consider it experimental.

This is due to several facts. It lacks a few features which I consider essential for a full version 1. For one thing it is not possible to have several kinds of exercises numbered independently. Using verbatim material such as listings inside questions and solutions is not possible and the current workaround isn't that ideal either. One request which dates back quite a while now was to have different types of points to questions...

All of those aren't easy to add due to the way exsheets is implemented right now. As a consequence I wanted to re-implement exsheets for a long time. This is what lead to **xsim**. Internally the package works completely different. It will be the official successor of exsheets which is now considered obsolete and will only receive bugfix releases any more.

## 3 Exercises and Solutions

```
\begin{question} [\langle properties \rangle] Input and typeset an exercise.
```

\begin{solution}[⟨options⟩]

Input and typeset the solution to the exercise of the previous question environment.

#### Question 1

A first example for a question.

- **4** New Exercise Types
- **5** Exercise Properties
- **6** Exercise Goals
- 7 Exercise Tags
- **8** Collecting Exercises
- **9** Printing Solutions
- 10 Styling the Exercises Templates
- 11 Exercise Translations
- 12 Other Commands

#### References

- [Feao5] Simon FEAR. booktabs. version 1.61803, Apr. 14, 2005 (or newer).
  URL: http://mirror.ctan.org/macros/latex/contrib/booktabs/.
- [L<sub>3</sub>Pa] THE LATEX3 PROJECT TEAM. l<sub>3</sub>kernel. version SVN 6377, Jan. 19, 2016 (or newer). URL: http://mirror.ctan.org/macros/latex/contrib/l<sub>3</sub>kernel/.
- [L3Pb] THE IATEX3 PROJECT TEAM.
  | I3packages. version SVN 6377, Jan. 19, 2016 (or newer).
  URL: http://mirror.ctan.org/macros/latex/contrib/l3packages/.
- [Leh15] Philipp Lehman, current maintainer: Joseph Wright. etoolbox. version 2.2a, Aug. 2, 2015 (or newer). URL: http://mirror.ctan.org/macros/latex/contrib/etoolbox/.
- [Nie15] Clemens NIEDERBERGER. translations. version 1.2e, Nov. 7, 2015 (or newer). URL: http://mirror.ctan.org/macros/latex/contrib/translations/.
- [Nie17] Clemens NIEDERBERGER. exsheets. version 0.21i, Feb. 8, 2017 (or newer). URL: http://mirror.ctan.org/macros/latex/contrib/exsheets/.

# 13 Index

В	N
booktabs (package)	Niederberger, Clemens
E etoolbox (package)1	Q question (environment)
expl3 (package)	S
exsheets (package)	solution (environment)
F	Т
FEAR, Simon	THE IATEX3 PROJECT TEAM
L	W
l3kernel (bundle)	Wright, Joseph
l3packages (bundle)	
Lehman, Philipp1	X
LPPL 1	xparse (package)