

atask Example

Using ctext — 06.06.2017

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1 Introduction

ATASK introduces two (with options four) new sectioning commands, `\aufgabe{<>}` and `\teilaufgabe{<>}`. Using the starred version of the commands lets you manually increment the counters to a given state. Keep in mind that counters start from 0, so setting the counter with a starred version requires you to subtract 1 from the desired counter value as it is displayed.

2 Options

ATASK provides several options for loading the package.

2.1 Counter Styles

When using the default counters instead of custom ones, you can specify the style of those right at the start by calling

```
\usepackage[aufgabenCounter=X,teilaufgabenCounter=X]{atask}
```

with X being a counter style like `arabic`, `alph`, `Alph`, `roman`, `Roman`.... This property may vary for `aufgabenCounter` and `teilaufgabenCounter`.

2.2 Table of Contents

To not include tasks and subtasks in the table of contents, use the boolean flag `hideInToc`.

```
\usepackage[hideInToc]{atask}
```

2.3 Unlinking tasks from sections

By default, tasks are tied to sections, meaning that with an increase of the task counter (or any custom counter you passed earlier), the section counter increments as well. As this may produce some unwanted side effects, by using

```
\usepackage[untieFromSection]{atask}
```

you unlink tasks and sections. This as well means that with an incrementation of the subtask counter, subsections will no longer get incremented as well.

3 Commands

```
\aufgabenprefix{} | \teilaufgabenprefix{}
```

Defines the actual name of the created section abbreviation. Defaults to a translation of "Task" or "Subtask" in German or English, but can be used as a completely different type of section command.

```
\aufgabensuffix{} | \teilaufgabensuffix{}
```

Behaves like `\aufgabenprefix{}` (`\teilaufgabenprefix{}`) except defaulting to an empty string and **appending** its value to the section title

```
\marginBeforeAufgabe{} | \marginBeforeTeilaufgabe{}  
\marginAfterAufgabe{} | \marginAfterTeilaufgabe{}
```

Determines the spacing before and after tasks and subtasks.

```
\PassDynamicAufgabenCounter{} | \PassDynamicTeilaufgabenCounter{}
```

Use these commands to pass the name of a custom counter, which then will get incremented automatically.

```
\customAufgabenCounter{} | \customTeilaufgabenCounter{}
```

Whenever you want to replace the default counter for tasks and subtasks with another counter or a static string as well, use these commands.

```
\beforeAufgabe{} | \beforeTeilaufgabe{}  
\afterAufgabe{} | \afterTeilaufgabe{}
```

These will let you put whatever you want right in front of or behind the task / subtask. E.g. use `\beforeAufgabe{\vfill\pagebreak}` to place every new task on a new page. See examples for more use cases.

3.1 Resetting to Defaults

<code>\ResetCountersToDefault</code>		<code>\ResetAll</code>
<code>\ResetTranslationsToDefault</code>		
<code>\ResetMarginsToDefault</code>		
<code>\ClearBeforeAndAfterSpaces</code>		

Either individually reset any custom property of tasks and subtasks or globally reset all their properties to their default values by calling `\ResetAll`.

4 Examples

4.1 Example I

```
% Setup
\teilaufgabenPrefix{}
\teilaufgabenSuffix{}
\customTeilaufgabenCounter{\alph{teilaufgabe}}}
```

Exercise 1

a)

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4.2 Example II

```
% Setup
\aufgabenPrefix{Aufgabe}
\teilaufgabenPrefix{Quatsch}
\customTeilaufgabenCounter{\(e^{-i\pi}\)}
\marginBeforeAufgabe{2cm}
\marginAfterAufgabe{1cm}
\marginBeforeTeilaufgabe{1cm}
\marginAfterTeilaufgabe{0.5cm}
```

Aufgabe 1

Quatsch $e^{-i\pi}$ (Task)

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Quatsch $e^{-i\pi}$

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Quatsch $e^{-i\pi}$

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Quatsch $e^{-i\pi}$

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

4.3 Example III

```
% Setup
\newcounter{example}[subsection]
\PassDynamicAufgabenCounter{example}
\customAufgabenCounter{\Roman{example}}
\aufgabenPrefix{Example}
\aufgabenSuffix{\textendash\ Difficulty}
\marginBeforeAufgabe{0.2em}
\beforeAufgabe{\vskip 2em{\small\today}}
\afterAufgabe{\hfill {\small Team AlphabetClasses}\vskip 0.5em}
```

July 23, 2017

Example I (Easy) – Difficulty

Team AlphabetClasses

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

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Example II (Medium) – Difficulty

Team AlphabetClasses

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

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Example III (Hard) – Difficulty

Team AlphabetClasses

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

4.4 Example IV

```
% Setup
\aufgabenstil{\LARGE\rmfamily}
\teilaufgabenstil{\Large\rmfamily}
\aufgabenPrefix{\(\mathbb{R}\)}
\teilaufgabenPrefix{\(\mathbb{Q}\)}
\customAufgabenCounter{!\textsuperscript{\theaufgabe}}
\customTeilaufgabenCounter{!\textsuperscript{\theteilaufgabe}}
```

\mathbb{R}^1

\mathbb{Q}^1

\mathbb{Q}^2

\mathbb{Q}^3

\mathbb{R}^2

These are actual tasks and subtasks even though they seem to be vector fields. Be creative when configuring your task version!