Paper Title

Firstname Lastname and Firstname Lastname

Institute

Abstract. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer 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.

Keywords: keyword1, keyword2

1 Introduction

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer 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.

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.

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

2 Firstname Lastname and Firstname Lastname

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 lectonec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

The remainder of the paper starts with a presentation of related work (Sect. 2). It is followed by a presentation of hints on LATEX (Sect. 3). Finally, a conclusion is drawn and outlook on future work is made (Sect. 4).

2 Related Work

Winery [2] is a graphical modeling tool. The whole idea of TOSCA is explained by Binz et al. [1].

3 LaTeX Hints

This section contains hints on writing LaTeX. It focuses on minimal examples, which can be directly adapted to the content

3.1 Handling of paragraphs

One sentence per line. This rule is important for the usage of version control systems. A new line is generated with a blank line. As you would do in Word: New paragraphs are generated by pressing enter. In LaTeX, this does not lead to a new paragraph as LaTeX joins subsequent lines. In case you want a new paragraph, just press enter twice (!). This leads to an empty line. In word, there is the functionality to press shift and enter. This leads to a hard line break. The text starts at the beginning of a new line. In LaTeX, you can do that by using two backslashes (\\). This is rarely used.

Please do *not* use two backslashes for new paragraphs. For instance, this sentence belongs to the same paragraph, whereas the last one started a new one. A long motivation for that is provided at http://loopspace.mathforge.org/HowDidIDoThat/TeX/VCS/#section.3.

```
Corresponding LATEX code of paper-newtx.tex
472 One sentence per line.
473 This rule is important for the usage of version control systems.
474 A new line is generated with a blank line.
475 As you would do in Word:
476 New paragraphs are generated by pressing enter.
477 In LaTeX, this does not lead to a new paragraph as LaTeX joins
        subsequent lines.
478 In case you want a new paragraph, just press enter twice (!).
   This leads to an empty line.
   In word, there is the functionality to press shift and enter.
   This leads to a hard line break.
   The text starts at the beginning of a new line.
   In LaTeX, you can do that by using two backslashes
        (\textbackslash\textbackslash).\\
   This is rarely used.
484
485
Please do \textit{not} use two backslashes for new paragraphs.
487 For instance, this sentence belongs to the same paragraph, whereas the
        last one started a new one.
  A long motivation for that is provided at
        \url{http://loopspace.mathforge.org/HowDidIDoThat/TeX/VCS/#section.3}.
```

3.2 Hyphenation

LATEX automatically hyphenates words. When using microtype, there should be less hypnetations than in other settings. It might be necessary to tweak the hyphenations nevertheless. Here are some hints:

In case you write "application-specific", then the word will only be hyphenated at the dash. You can also write applica\allowbreak{}tion-specific (result: applica tion-specific), but this is much more effort.

You can now write words containing hyphens which are hyphenated at other places in the word. For instance, application"=specific gets application"=specific. This is enabled by an additional configuration of the babel package.

```
Corresponding LATEX code of paper-newtx.tex
```

3.3 Typesetting Units

Numbers can written plain text (such as 100), by using the siunity package like that: $100 \frac{\text{km}}{\text{h}}$, or by using plain LaTeX (and math mode): $100 \frac{\text{km}}{\text{h}}$.

```
Corresponding LATEX code of paper-newtx.tex

Numbers can written plain text (such as 100), by using the siunitx package like that:

SII \SI{100}{\km\per\hour},

or by using plain \LaTeX{} (and math mode):

$13 $100 \frac{{\mathit{km}}{h}$.
```

5 % of 10 kg

```
Corresponding LATEX code of paper-newtx.tex

517 \SI{5}{\percent} of \SI{10}{kg}
```

Numbers are automatically grouped: 123 456.

```
Corresponding LATEX code of paper-newtx.tex

Numbers are automatically grouped: \num{123456}.
```

3.4 Surrounding Text by Quotes

Please use the "enquote command" to quote something. Quoting with "quote" or "quote" also works.

```
Corresponding LATEX code of paper-newtx.tex

527 Please use the \enquote{enquote command} to quote something.
528 Quoting with "`quote"' or ``quote'' also works.
```

3.5 Cleveref examples

Cleveref demonstration: Cref at beginning of sentence, cref in all other cases.

Figure

Fig. 1. Example figure for cref demo

Figure 1 shows a simple fact, although Fig. 1 could also show something else.

Table **Table 1.** Example table for cref demo

Table 1 shows a simple fact, although Table 1 could also show something else. Section 3.5 shows a simple fact, although Sect. 3.5 could also show something else.

```
Corresponding LATEX code of paper-newtx.tex

551 \Cref{fig:ex:cref} shows a simple fact, although \cref{fig:ex:cref} could also show something else.

552 \Cref{tab:ex:cref} shows a simple fact, although \cref{tab:ex:cref} could also show something else.

554 \Cref{sec:ex:cref} shows a simple fact, although \cref{sec:ex:cref} could also show something else.
```

3.6 Figures

Figure 2 shows something interesting.

Golden ratio (Original size: 32.361×200 bp)

Fig. 2. Simple Figure. Based on Scharrer [3].

6 Firstname Lastname and Firstname Lastname

One can also have pictures floating inside text:

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[q]{a} \cdot \sqrt[q]{b} = \sqrt[q]{ab}$. This text should



Fig. 3. A floating figure

contain all letters of the alphabet and it should be written in of the original language. $\frac{\sqrt[q]{a}}{\sqrt[q]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special content, but the length of words should match the language. $a\sqrt[q]{b} = \sqrt[q]{a^nb}$. Hello, here is some text without a meaning. $d\Omega = \sin\vartheta d\vartheta d\varphi$. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. $\sin^2(\alpha) + \cos^2(\beta) = 1$. This text should contain all letters of the alphabet and it should be written in of the original language $E = mc^2$. There is no need for special content, but the length of words should match the language. $\sqrt[q]{a} \cdot \sqrt[q]{b} = \sqrt[q]{ab}$.

```
Corresponding LATEX code of paper-newtx.tex

574 \begin{floatingfigure}{.33\linewidth}
575 \includegraphics[width=.29\linewidth]{example-image-a}
576 \caption{A floating figure}
577 \end{floatingfigure}
578 \blindtext[2]
```

3.7 Tables

Table 2. Simple Table

Heading1	Heading2
One	Two
Thee	Four

Corresponding \LaTeX code of paper-newtx.tex 585 \begin{table} \caption{Simple Table} **\label**{tab:simple} 587 \centering 588 \begin{tabular}{ll} 589 \toprule 590 Heading1 & Heading2 \\ 591 \midrule 592 593 0ne & Two & Four Thee \\ $\verb|\bottomrule|$ \end{tabular} 597 \end{table}

Table 3. Table with diagonal line

Diag Column Head II Diag Column Head I		Third
	foo	bar

```
Corresponding LATEX code of paper-newtx.tex
601 % Source: https://tex.stackexchange.com/a/468994/9075
602 \begin{table}
603 \caption{Table with diagonal line}
604 \label{tab:diag}
605 \begin{center}
\begin{tabular}{|l|c|c|}
   \hline
_{608} \diagbox[width=10em]{Diag\\Column Head I}{Diag Column\\Head II} &
         Second & Third \ \
609 \hline
_{610} & foo & bar \backslash \backslash
611 \hline
612 \end{tabular}
613 \end{center}
614 \end{table}
```

```
1 
2 Floating
3
```

Listing 1.2. Example XML listing – placed as floating figure

3.8 Source Code

Listing 1.1 shows source code written in XML. Line 2 contains a comment.

Listing 1.1. Example XML Listing

```
Corresponding LATEX code of paper-newtx.tex
    \Cref{lst:XML} shows source code written in XML.
621
622 \Cref{line:comment} contains a comment.
623
624 \begin{lstlisting}[
625
     language=XML,
     caption={Example XML Listing},
    label={lst:XML}]
_{\rm 628} \,  clisting name="example">
     <!-- comment --> (* \label{line:comment} *)
629
     <content>not interesting</content>
630
631 </listing>
632 \end{lstlisting}
```

One can also add float as paramter to have the listing floating. Listing 1.2 shows the floating listing.

```
1 {
2 key: "value"
3 }
```

Listing 1.3. Example JSON listing – placed as floating figure

```
public class Hello {
    public static void main (String[] args) {
        System.out.println("Hello World!");
    }
}
```

Listing 1.4. Example Java listing

```
Corresponding LATEX code of paper-newtx.tex
   \begin{lstlisting}[
639
     % one can adjust spacing here if required
640
     % aboveskip=2.5\baselineskip,
641
     % belowskip=-.8\baselineskip,
     float,
     language=XML,
     caption={Example XML listing -- placed as floating figure},
     label={lst:flXML}]
646
647 647 647 = "example">
    Floating
648
649 </listing>
   \end{lstlisting}
```

One can also typeset JSON as shown in Listing 1.3.

Java is also possible as shown in Listing 1.4.

3.9 Itemization

One can list items as follows:

- Item One
- Item Two

```
Corresponding LATEX code of paper-newtx.tex

688 \begin{itemize}
689 \item Item One
690 \item Item Two
691 \end{itemize}
```

One can enumerate items as follows:

- 1. Item One
- 2. Item Two

```
Corresponding LATEX code of paper-newtx.tex

| begin{enumerate} |
| item Item One |
| item Item Two |
| lend{enumerate} |
```

With paralist, one can even have all items typset after each other and have them clean in the tex document:

1. All these items... 2. ...appear in one line 3. This is enabled by the paralist package.

3.10 Other Features

The words "workflow" and "dwarflike" can be copied from the PDF and pasted to a text file.

```
Corresponding LATEX code of paper-newtx.tex

718 The words \enquote{workflow} and \enquote{dwarflike} can be copied from the PDF and pasted to a text file.
```

The symbol for powerset is now correct: \mathcal{P} and not a Weierstrass p (\mathcal{P}). $\mathcal{P}(1,2,3)$

```
Corresponding LATEX code of paper-newtx.tex

The symbol for powerset is now correct: $\powerset$ and not a
Weierstrass p ($\wp$).

*\powerset({1,2,3})$
```

Brackets work as designed: <test> One can also input backquotes in verbatim text: `test`.

```
Corresponding LATEX code of paper-newtx.tex

728 Brackets work as designed:
729 <test>
730 One can also input backquotes in verbatim text: \verb|`test`|.
```

4 Conclusion and Outlook

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer 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.

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.

Acknowledgments ...

In the bibliography, use \textsuperscript for "st", "nd", ...: E.g., "The 2nd conference on examples". When you use JabRef, you can use the clean up command to achieve that. See https://help.jabref.org/en/CleanupEntries for an overview of the cleanup functionality.

References

- Binz, T., Breiter, G., Leymann, F., Spatzier, T.: Portable Cloud Services Using TOSCA. IEEE Internet Computing 16(03), 80–85 (May 2012)
- Kopp, O., et al.: Winery A Modeling Tool for TOSCA-based Cloud Applications. In: Proceedings of 11th International Conference on Service-Oriented Computing (ICSOC'13). LNCS, vol. 8274, pp. 700–704. Springer Berlin Heidelberg (2013)
- 3. Scharrer, M.: The mwe Package (2017), http://texdoc.net/mwe

All links were last followed on October 5, 2020.