

Creating Custom LyX Layout for Articles

Muhammad Nadzir Bin Marsono
Assoc Prof of Electronics and Computer Eng.
School of Electrical Engineering
Universiti Teknologi Malaysia

Outline

- 1 Introduction
- 2 Creating custom layout for technical paper
- 3 Conclusion

Introduction

- This slide is the continuation from the thesis writing tutorial
- It is assumed that you are now comfortable with LyX
- This slide covers on how to use LyX to write articles and conference papers when LaTeX templates are given by the publishers

Custom LyX templates¹

- Most publishers published LaTeX class files in addition of Doc templates
- Only some have layouts included in LyX
 - Examples are IEEE, Springer, Elsevier
- Note: Manuscript generated in LyX has to be re-converted to LaTeX when submitting the codes to the publisher
 - Only after the acceptance of manuscript

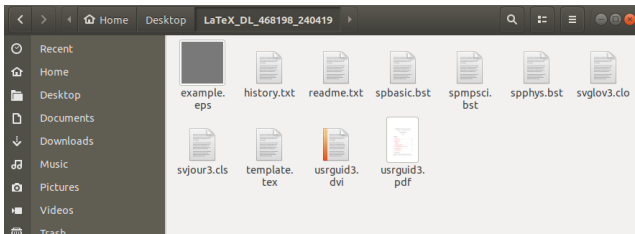
¹This section is based on original tutorial by Dr Loo Hui Ru

What files are needed?

- Download the LaTeX template provided by the publisher
 - Usually in a zipped files
- Locate the following files essential to create the LyX template
 - *.cls
 - *.sty – optional if a style is separately defined in the *.cls file
 - *.tex – TeX template
 - *.bst – some do not have BibT_EX style file, i.e. using standard *.bst file
- We need to create
 - *.layout – to call the *.cls file
 - *.lyx – where we do the actual writing

Example: Creating LyX template for Springer journal

- The Springer LaTeX template is downloadable from http://static.springer.com/sgw/documents/468198/application/zip/LaTeX_DL_468198.zip
- Download the zipped file and extract in a folder



Step 1: Creating the layout file

- Create *.layout file – use your text editor
- Save the file as the svjour3.layout

```
% Do not delete the line below; configure depends on this
# \DeclareLaTeXClass[svjour3]{article (Springer)}

#Read the definitions from article.layout
Input article.layout
```

- The last line tells LyX to use environment options available in Article class
- This also means that non-standard environments have to be called in LaTeX mode

Step 2: Identifying three markers in template.tex

- Open template.tex file and identify THREE (3) markers

```
\documentclass[smallextended]{svjour3}
```

Marker 1 column (second format)

```
\smartqed % flush right qed marks, e.g. at end of proof
\usepackage{graphicx}
```

```
\begin{document}
```

Marker 2

```
\title{Insert your title here}
\subtitle{Do you have a subtitle?\\ If so, write it here}
\author{First Author \and
        Second Author}
\institute{F. Author \at
            first address \\
            Tel.: +123-45-678910\\
            Fax: +123-45-678910\\
            \email{fauthor@example.com} % \\
            \and
            S. Author \at
            second address}
\date{Received: date / Accepted: date}
\maketitle
\begin{abstract}
Insert your abstract here.
\keywords{First keyword \and Second keyword \and More}
\end{abstract}
```

```
\section{Introduction}
```

Marker 3

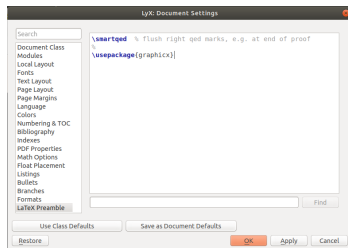
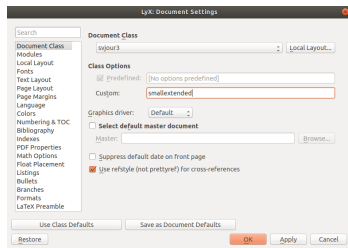
```
\label{intro}
```

Your text comes here. Separate text sections with

```
\section{Section title}
```

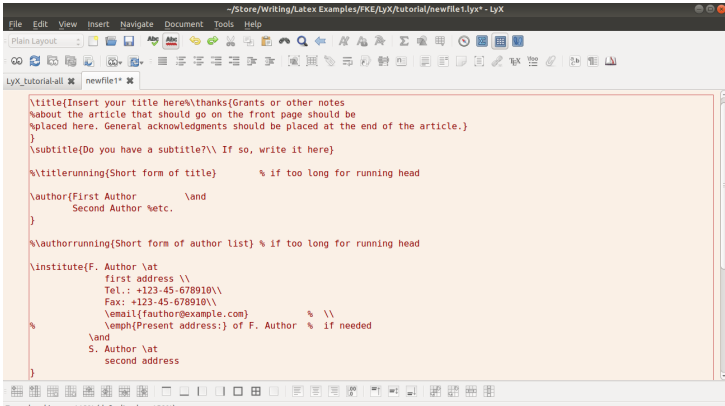

Step 3: Create a LyX document based on svjour3.layout

- Select Document ▸ Setting ▸ Document Class ▸ Local Layout and select the svjour3.layout file
- Declare smallextended in the Document ▸ Setting ▸ Document Class ▸ Class Option ▸ Custom
- Copy LaTeX preamble codes between marker (1) and marker (2) in the LaTeX Preamble
 - Shift+Ctrl+V in Document ▸ Setting ▸ LaTeX Preamble



Step 4: Copying LaTeX codes from template.tex

- Copy LaTeX codes between marker (2) and marker (3) in the LyX file
 - Shift+Ctrl+V in LaTeX environment (Ctrl+L)
- Section, subsection, floats, equations etc. can be added using techniques that we have demonstrated previously



```

\title{Insert your title here%\thanks{Grants or other notes
%about the article that should go on the front page should be
%placed here. General acknowledgments should be placed at the end of the article.}
}
\subtitle{Do you have a subtitle?\\ If so, write it here}

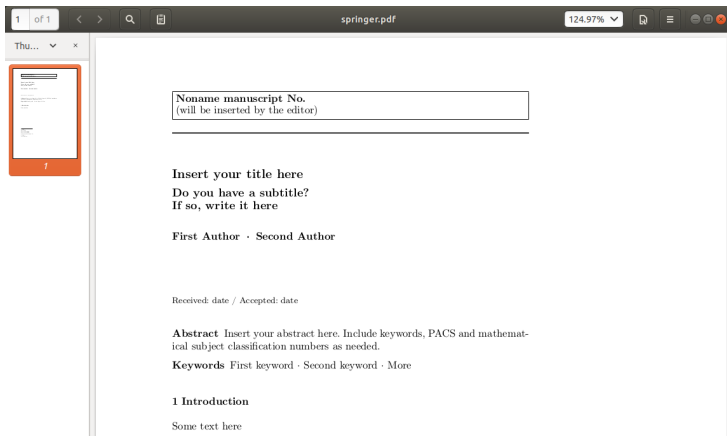
%\titlerunning{Short form of title}          % if too long for running head

\author{First Author          \and
        Second Author %etc.
}

%\authorrunning{Short form of author list} % if too long for running head

\institute{F. Author \at
           first address \\
           Tel.: +123-45-678910\\
           Fax: +123-45-678910\\
           \email{fauthor@example.com}          % \\
% \emph{Present address:} of F. Author % if needed
%
\and
S. Author \at
second address
}
  
```

The generated PDF



Uploading LaTeX files upon acceptance

- After you manuscript get accepted, you would need to upload all LaTeX sources to the publisher
- LyX can convert LyX document back to LaTeX document
 - File ▷ Export ▷ LaTeX (pdflatex) OR
 - File ▷ Export ▷ LaTeX (plain)

Last words

- If you find it useful, please share the knowledge with others