UNIVERSITI MALAYSIA PERLIS

Workshop on Examination Questions Preparation Using LATEX [Bengkel Penyediaan Soalan Peperiksaan Menggunakan LATEX]

by

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Please make sure that this instruction manual has **FOUR** (4) printed pages including this front page before you start reading.

[Sila pastikan manual arahan ini mengandungi **EMPAT (4)** muka surat yang bercetak termasuk muka hadapan sebelum anda membaca.]

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1 Introduction

This article provide explanations on the LATEX software setup and preparation of finalxm.sty package. Note that this instruction manual has been generated using finalxm.sty package.

1.1 Software Installation

There are several things to do before attending the workshop.

First and foremost, of course the software required to run LATEX. You can get the latest MiKTeX software via the link provided. MiKTeX available for Windows, MacOS, and Linux. Just follow the instruction on how to install MiKTeX. The Macbook user can opt to install MacTeX instead. The complete version of MacTeX (over 2 gigabytes of material) installs TeXShop, a GUI front end to TeX, TeX Live 2017, a GUI front end to manage LATEX core and packages, and other important materials. The basic version of MacTeX is lightweight (around 110 megabytes) but require user to install TeX Live 2017 separately.

Finally, setup your newly installed MiKTeX via MiKTeX console. Please set the automatic package installation to Always install missing packages on-the-fly. Basic MacTeX doesn't have this kind of features thus require intervention from user to manually install missing packages.

Second, you need the TeXstudio software, a GUI front end to TeX to start writing your exam paper.

Next, go to Options » Build. Make sure these two Meta Commands are specified as below.

- Build & View » PDF Chain
- Default Compiler » PdfLaTeX

1.2 Package Installation

The simplest installation require no technical knowledge. The finalxm.sty can be used inside a folder containing your exampaper2018.tex file. But as you will create a number of files every semester for mid-term & final examinations, this method seems not quite right.

Another method is to put your finalxm.sty in the custom TEXMF root directories that are in-compliant with the LATEX tree directory system (TDS).

The finalxm. sty can be downloaded from my webpage or this link.

1.2.1 MiKTeX

- (a) Create a directory, say **~/texmf**, which serves as the new TEXMF root directory. For example, **D:/Dropbox/texmf**.
- (b) Create TDS-compliant subdirectories (ie. **D:/Dropbox/texmf/tex/latex/**)
- (c) Start MiKTeX Console and open the **Settings** page.
- (d) Click the **Directories** tab.
- (e) Click the Add button and browse to /texmf created earlier in step (a).
- (f) Copy/move finalxm.sty file to ~/texmf/tex/latex/

1.2.2 MacTeX and TeX Live

- (a) Create a directory ~/Library/texmf in your home directory, if there is not one there already.
- (b) Install the various package files into subdirectories of texmf as follows:
 - (i) All .bst and .bib files into **texmf/bibtex** (or subdirectories)
 - (ii) All font-related files into **texmf/fonts** (or subdirectories)
 - (iii) All documentation files into texmf/docs
 - (iv) All other files (.sty, .cls, .tex, etc.) should go into texmf/tex.

1.3 Testing Package Installation

Now you are ready to test the newly installed finalxm.sty package.

Open and run the testRun.tex provided in the link using TeXstudio. Click on the double arrow or press F5 to build & view pdf file. First run might take some time. This is because, MiKTeX is trying to get all the packages from the server. Please be patient.

If you manage to get testRun.pdf file.. then, you are ready to attend the workshop. Otherwise, please consult me during the workshop.

Also, please bring along your exam questions...

See you on 4 April 2018!...

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