1
How to Use

These instructions will set up Latex with an editor, viewer, git version control and automatic online backup. The latex file will automatically compile when a change is detected, thus streamlining the editing process.

1.1 Setup

Note: These instructions are for Mac OSX.

1. Install Latex etc as usual.

2. (Optional: editor) Install Atom (or change the second line in runThesis.sh), and within its settings install the packages (the first two are important, the remainder are up to preference):

   - language-latex

   - autocomplete-latex-cite

   - autocomplete-paths

   - highlight-selected

   - Zen

   - typewriter

- wordcount

It is also recommended to set the theme to One Dark. **Settings -> Themes**

3. (Optional) Install Skim (pdf viewer). If not installed, remove the first line in the latexmkrc file. Skim allows auto-refreshing when the source file is changed, and CMD-SHIFT-clicking on a word will direct the cursor to that line in Atom. In Skim, set **Preferences - Sync - Preset = Atom**.

4. Move or download this `OxThesis-Setup` folder to your desktop. Open a terminal window and run the command:
   `cd ~/Desktop`

5. (Optional: git repository) If desired, this script will automatically commit changes to a git repo and push to an online repository. This is recommended to maintain a versioned, online backup.

   - To do so, create an account with `https://bitbucket.org/` (BitBucket offers private repositories whereas Github does not). Create a repository from their web UI (use default settings, but don't create readme). Once created, it should display a command in the format of:
     `git clone https://USERNAME@bitbucket.org/USERNAME/REPO-NAME.git`
     In the terminal window, run the command copied from BitBucket. This will create the thesis folder on your desktop.

   - Copy the contents of this 'OxThesis-Setup' folder into the new folder with the command:
     `DITTO OxThesis-Setup REPO-NAME`
     `rm -iR OxThesis-Setup`

   - This file has now been deleted. Close this window (without saving) and open the new readme in `~/Desktop/REPO-NAME/Oxford`$_T hesis.pdf tocontinue.navigatethe$
     '`cd REPO-NAME`'.

- Open the `runThesis.sh` file and uncomment the three git lines (remove the preceding hash).

- It is recommended to run the following commands in terminal, with your details:

  `git config -global user.name "Your Name"`

  `git config -global user.email you@example.com`

6. Set Mendeley to automatically create a Bibtex file for 'whole library' (or group if relevant) at an appropriate directory (i.e. `/YOUR-MENDELEY-LIBRARY-DIR/_bibtex`). The setting in the `Oxford_Thesis.tex` file currently expects the filename `library.bib`, which should be the default for Mendeley's output. This should work with other reference managers but these haven't been tested.

7. Remove the existing `./bib` folder. Use Terminal to create a symlink of the Mendeley folder containing your bib file in its place. Run the symlink command in terminal (don't miss the period at the end):

   `ln -s /YOUR-MENDELEY-LIBRARY-DIR/_bibtex/ .`

   Drag the `_bibtex` folder into the terminal window rather than typing the path to autocomplete. The symlink will be created in the current directory, which should be this folder but if not, check with '`pwd`' and move the symlink into the thesis folder manually. If using git repository, uncomment the bib line in .gitignore.

   Alternatively if using a static bib file, keep the existing bib folder and simply replace the `library.bib` file. If using git and a static file, don't uncomment the bib line in `.gitignore`.

8. Make the startup script executable with the terminal command: '`chmod a+x runThesis.sh`'. Create an alias (right-click file - create alias) to this script where needed (e.g., the dock).

9. Copy the thesis folder somewhere appropriate if desired.

10. (Note:) If the `Oxford_Thesis.tex` file name is changed, you will need to update the name of the `Oxford_Thesis.pdf` filename on lines 4 and 7 in the `runThesis.sh` file. This script acts as a 'auto-run' which will open the folder in Atom and run the compiler in the background. It is set to watch for changes and autoupdate the PDF output, which will update in the Skim view. Lines 4-7 are added to clean the directory once the terminal process is terminated using ctrl-c. Removing these files increases build time so these commands can be removed if preferred.

1.2   Writing

1. **To begin a work session**, open the `runThesis.sh` file (or alias). If it tries to open in an editor by default, right click the file - 'Get Info' - 'Opens With' and choose Terminal. The script will open a terminal window which will persist. When a change is detected, it will automatically rebuild the pdf file. Once you are done, end the terminal process with the command 'CTRL-c'. This will end the process and clean up the directory. It will then push the changes to the online repository is configured, though it may ask for credentials the first time.

2. Create a first chapter file as `./text/CHAPTERNAME.tex`. It may be best to copy this `usage.tex` file as a template.

3. Edit the `Oxford_Thesis.tex` file. The comments describe customisation options. At least, update the title, author, college, degree and degreedate fields. Under the 'Chapters' section (approx line 193), add a line to include your new chapter and remove the line which includes this `usage` file. Add new chapters here as they are created. Comment them out to temporarily prevent compiling (e.g. when working on a single chapter).

4. When ready, uncomment other lines in `Oxford_Thesis.tex` as needed (eg, `\maketitle`, acknowledgements etc). The file is commented with explanation.

5. If a Word document is needed (e.g. for tracking changes by a supervisor), the most efficient way seems to be to generate the pdf then convert that into a .doc using a web service.

1.3 Formatting

See the source file for the commands used to produce the below.

1.3.1 Citation

Using cite: Palen 2008

Using textcite: Palen (2008)

Using parencite: (Palen 2008)

Using autocite: (Palen 2008)

With page numbers: (Palen 2008, pp. 22–33)

Using authorcite: Palen

1.3.2 Labels

Mark labels as `\label{ch:use}` and use the naming style here:

`https://en.wikibooks.org/wiki/LaTeX/Labels_and_Cross-referencing`

Reference as either 1 or (1)

1.3.3 Tables

Two table examples:

	Item1	Item2	Item3
Group1	0.8	0.1	0.1
Group2	0.1	0.8	0.1
Group3	0.1	0.1	0.8
Group4	0.34	0.33	0.33

Table 1.1: Caption Title Text

	Item1	Item2	Item3
Group1	0.8	0.1	0.1
Group2	0.1	0.8	0.1
Group3	0.1	0.1	0.8
Group4	0.34	0.33	0.33

Table 1.2: Caption Title Text

1.3.4 Figures

Figure 1.1: Application Framework

1.3.5 Formulas

Wrap formulas in $ signs to use inline formulas. Use two $$ to create formula on its own line.

e.g.: $N_{\overline{ret}} \cap_{rel}$

Create formulas using a web service e.g.: `www.hostmath.com/`