Writing and Formatting

Most students write their thesis either in LaTeX or Word. Most of us are somewhat familiar with Word and find it easy to get started with writing. However, often you will spend significant time - especially when finalising your thesis - in getting the formatting right, e.g. aligning your captions, producing consistent headings and a correct reference list. That's where LaTeX comes in: It is more like writing code, so it takes some time to learn the basics, but thesis templates and strict separation of text and formatting might save you headache in the long run - if you are willing to invest some learning time in the beginning.

LaTeX

- Free
- Code instead of GUI
- Produces a clean layout, easy typesetting
- very few layout adjustments needed
- Auto-generated reference list
- Takes some effort to learn, but time savings in the long run
- Overleaf
    - Web-based Latex Editor
    - No setup needed
    - Limited collaboration possible
- Good Thesis Templates:
    - Hagenberg Thesis Template
    - Cambridge University Engineering Department - PhD Thesis Template
- TexMaker (Multi Platform)
- Sublime Text Plugin for Latex
- How to use BibTex for references: https://www.youtube.com/watch?v=KS9GvK7cvmo
- Templates are cool, but creativity wins

Word / Open Office

- Use the Document Styles like "Heading1"
    - Right click on format template to change these

- Use Table of Content/Images etc. only from *references - table of contents*
  - Formatting headings and Table of Contents:

    https://www.youtube.com/watch?v=2G7lr_7qqkc
- Some general formatting shortcuts: https://www.youtube.com/watch?v=Ss2lPz7m0GY

Referencing LaTeX in Word

1. Install BibTeX for Word: http://www.ee.ic.ac.uk/hp/staff/dmb/perl/index.html
   It only works on PC and not MAC. The website also provides a wiki on how to use the plugin and the offered reference styles
2. Install a reference manager, which will store your citation details in BibTeX format. I used JabRef and did not run into issues so far.

What You Get (Example):

```
This is a test reference [1]. Now I would like to add another reference here [2].
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[1] Vonne Polanen and Marco Davare. Sensorimotor memory biases weight perception during object
lifting. Frontiers in Human Neuroscience, 9, 12 2015. doi: 10.3389/fnhum.2015.00700.
[2] Bernhard Treutwein and Hans Strasburger. Fitting the psychometric function. Perception &
Psychophysics, 61: 87–106, 1999.
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Wording / Phrases

Need some inspiration for fancy phrases? Academic Phrasebank

Recommended Reading

APA Publication Manual [Book in Uni Library | PDF]: Ebook with a collection of sample structures, descriptions of what needs to go where in your thesis and much more...

- Thesis Structure
- Grammar
- Writing Style
- Footnotes

The Elements of Style

Handy Dandy Writing tips (as generically as it gets but still super helpful!):

1. sentence length: should not exceed 20words

2. consistency:
   2.1 core terms: write yourself a list with core terms that you use, then stick to those throughout your whole thesis. Yes, it feels redundant sometimes, but it often helps the reader when you do not use several terms for the same stuff, e.g. always use "interface" and not "system", "surface", "App" ; use "participants" and not also "people", "humans", "users" etc.
   2.2 visuals: use the same size, colour, font, structure of captions etc. throughout the whole thesis
3. no filler words: Fillers are words that add no meaning to a sentence and merely "fill the space". Often, we write as we speak (which is not scientific). To give you some examples of common fillers: "maybe", "also", "actually", "perhaps". To read up more on how to replace fillers: [Filler Words](#)
4. no evaluations: do not write "this is interesting" / "this is valuable" / "we need to think about" without giving a concrete reason as to _why_ and for _whom_ it is interesting/valuable or without giving a source (if someone else says it is important for HCI to think about this and you cite this, it is okay). Or just rewrite it completely so that your personal opinion is not included.
5. stay as specific as possible: try not to generalise, assume that your readers know about this topic or that they are forced to read the source by themselves. E.g: instead of writing "There are several ways of evaluating those [Schmidt et al, 2021]" write: "Schmidt et al. [Schmidt et al, 2021] found several ways of evaluating, such as measuring brain activity, skin conductance and pupil dilation."
6. broad to detailed: each chapter and each paragraph within the chapter should be structured from introducing broader topics then giving more details. E.g.: many related works use questionnaires as evaluation method --> this is done because... --> the ones most often used are a, b and c --> a measures the following, b does something else and c is used for this.
7. abbreviations: the first time you mention a term (in your introduction) that you want to abbreviate, you need to write it as follows: e.g. Virtual Reality (VR). Afterwards, only use the abbreviation (here: VR).
8. paragraph length: each paragraph MUST contain at least two sentences. Each chapter needs to have at least one paragraph, also the "big" chapters!
   E.g.: 2. Related Works
   [sentence 1] This chapter will summarise the core findings towards xxx. [sentence 2] It is structured in title_a, title_b and title_c.
   2.1 title_a [only now we can start with the actual sub-chapter]

   - "Use the active voice."
   - "Revise and rewrite."

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