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This is the general outline of a master thesis with me. From this template structure and chronology, specific deviations are of course necessary, and will be discussed for each topic and master student bilaterally.

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Timeline of working on a master thesis

1. Scoping

Initially, master students are reading selected papers, exploring related literature, and orienting themselves in a wider topic.

The outcome of this phase is the basis for the Introduction and Motivation Chapter 1; and the starting point for the related work section.

2. Literature Review and Technical Exploration

Master students do a systematic scoping literature review. In parallel, technical exploration of the technology to be investigated should start so that the master students become familiar with it. Literature review will lead to new ideas for interesting technology to develop and study; and technical exploration will lead to a better understanding of the technology base.

3. Research Question and Methodology Development

Reading literature, and knowing technology: What is an interesting research question? This part is crucial. The research question needs to be agreed with the supervisor.

The research question and methodology development go hand in hand, as both need to fit together.

A good methodology includes

- what is the research method?
- any materials needed (e.g., what is the intervention going to look like, plus implementing it; task design for user studies, etc.)

- who are you going to recruit? (for user studies)
- data collection (which data will be collected)
- data analysis (how will data be analysed)
- any prior hypotheses? even for exploratory research, typically there are some pre-conceptions on what one might see in the data. sometimes multiple outcomes are plausible (it's research because we don't really know...) but then arguments for different outcomes should be laid out.

4. Empirical Work - Mostly: User Study

If the preparatory work until here has been done well, now is the time to “just” do the work - this is still work-intensive, but will be relatively straightforward if literature, RQs, and methodology are well done.

5. Results and Interpretation

Firstly, data is analysed as pre-defined in the methodology section. Often, additional, exploratory analyses will be interesting.

Once the results are there, interpretation starts. Interpretation means connecting the results of the empirical work with literature.

6. Writing the Thesis

See below.

Written master thesis

The structure of the written thesis aligns somewhat with the chronology given above. However, the thesis isn't a chronology - so all parts of the thesis need to be revised in the end, so that the thesis is a coherent whole.

Structure, style and writing process:

https://docs.google.com/presentation/d/1Se94HhfFz8RK9PVTptb9ZYFaJmoMFUAc/edit?usp=drive_link&ouid=118415182624123729421&rtpof=true&sd=true

Blueprint structure in short (excerpted from the above link):

Abstract: Briefly give the full picture (include 1-2 sentences that cover all below sections)

1. **Introduction:** What is the overarching topic and research objective? Why and for whom is this interesting?
2. **Related work:** What is already known in this field? What are different research directions, and which is interesting for this thesis?
3. **Research Questions:** Which concrete research questions are asked and answered in this master thesis?
4. **OPTIONAL: Artefact** - in some research, an artefact developed by the researchers

plays a crucial role (e.g., an app, a specific algorithm). Then it can make sense to dedicate a special section to this artefact, explaining how it works and the design rationale.

5. **Methodology:** How are the research questions answered? Typical sections
 1. *Study participants (for user studies) and recruitment - note that an ethics approval may be necessary.*
 2. *Materials - any materials used in the study. Could be questionnaires, interview guidelines, artefacts that constitute an intervention, specific measurement devices,*
 3. Data collection
 4. Data analysis
6. **Results** – be as objective as possible in reporting results. Give your readers the possibility to form their own interpretation of results.
7. **Discussion** - the discussion should interpret results in light of prior research
8. **Conclusion** – summarize; re-iterate the main results and interpretation, highlight the contribution – what is new, surprising about your work? What statements can your readers take from your work (and cite your work for)?

References: Use a consistent citation style, and use the best possible works as your references.