MASTER THESIS SUPPORT SESSIONS:

11/01/2022:

Create your thesis design:

- 1. Problem statement
- 2. Research question (main and sub-questions) answer a manageable research question well-grounded in the literature that can be answered with the data you are going to use
- 3. Ground your work in the existing literature (if you are planning to use (secondary) quantitative data: you must have seen it, done Exploratory Data Analysis (EDA) on it and be confident that the data is sufficient to answer your research question before continuing with the project)
- 4. Methodology (Methods, Data and Evaluation)
- 5. Project plan

Timeline:

- Submit Thesis Design by 18 February via Datanose
- Submit Final Thesis by 30 June via Datanose

Monthly reports via Canvas (mandatory):

- Data Collection and Preparation (Exploratory Data Analysis for secondary quantitative data) - 18 March
- Methodology and Experimental Setup 15 April
- Analysis and Results 20 May
- Discussion and Conclusion 15 June

You are evaluated on:

- 1. Quality of your research question
- 2. Related work
- 3. Data collection
- 4. Validity and plausibility methodology
- 5. Evaluation
- 6. Reflection

Thesis Design Structure

- Title, student, name, ID, email, supervisors with e-mails (and link to private GitHub repository for DS students)
- Introduction: defining the research problem/gap, context and stating the Research Question
- Related work: indicating how your work is grounded in the literature and how it builds upon state-of-the-art research
- Methodology: mentioning resources (data, algorithms, software, etc.), arguing for research method(s) you will use and describing how you will evaluate your results
- 5. Risk assessment: describing the risks and your plan B
- Project plan: describing a timeline Gantt chart or table with results per week (describe achievements instead of actions)

Goal setting:

- Bring your initial research question (or your rough topic)
- Write out 1 thing you are planning to do for your thesis design

Next time:

- Research Questions
- Writing Tools
- Literature Management

Have a look:

• Wieringa. 2009. Design science as nested problem solving.

Thesis Design structure:

- 1. Title, student name, ID, email, supervisors with emails, abstract
 - Add a link to the private Github repository for DS-related projects
- 2. Short introduction defining the problem, context and stating the Research Question
- 3. Literature review indicating how your work is grounded in the literature and builds upon the state-of-the-art research
- 4. Methodology
 - Resources where applicable (datasets, software, etc.)
 - Approach: choice/justification of research method(s) to answer the research question
 - Describe how you evaluate your results
- 5. Risk assessment
 - Describe the risks, and describe your plan B
- 6. Project plan
 - Timeline (Gantt chart with results per week)
 - NB: describe achievements, not actions. (e.g., instead of data preparation you write all data in XXX format, well-described, ready for analysis using YYY)