Thesis structure

Each dot point hierarchy is a section of content / chapter and subchapters

* Title
* Academic Integrity stated
* Acknowledgements
* Abstract
* Contents
* List of Figures
* List of Tables
* Introduction
  + Background (HL)
    - Opening example to get the attention of the reader

*(brief example, maybe a quote from a story about a weird birth in greek mythology, e.g. Helen or Athena?)*

* + - Context

*The influence of greek mythology on modern civilisation.*  *Why should we care about this? E.g. explain existing mechanisms for reading genealogical information – indexes from books. But they do not show the flow of these relationships.*

* + Motivations (HL)
    - Existing graphs for greek myth genealogies + gaps in this area

*Research about existing methods of visualising greek myth relationships. None appropriately address unusual, contested, duplicated entities due to immortality).  
Why do we want to highlight these relationships?*

* + - Benefits of interactive digital platform over static image

*These are not yet available. Use this to explain the reasoning of why we want data cards – useful research tool. Much easier than index in a book.*

* + Contributions (HL)
    - Literature reviews on attempts to show unusual relationships graphically + gaps in this area

*e.g. paper on polygamy chordal graphs, or TimeNets. No one has done anything similar.*

* + In response to the gaps, PROVIDE RESEARCH QUESTION
  + Method and approach

*Extracting genealogical data from MANTO and importing them into website using Python. Website built in React.*

*Conduct user interviews to determine the effectiveness of the solution. Outline of the thesis*

*Do we need to show the code? How much of the code?*

* Overview of Greek mythology
  + What is a disputed relationship
  + What are the different types of unusual relationships

*Go through each one and explain, e.g. autochthony. Give examples of each. Provide images, e.g. Helen of Troy and Athena*

* + Why this is a problem
* Basic Principles (do I need this?)
  + *Do I need to explain what ReactJS is? I’m not using other frameworks.*
  + Explain the MANTO database and what it contains.
  + Explanation of DOMS? CANVAS?
  + Explanation of NodeGoat?
* Existing Framework Possibilities
  + Available data formats, pros & cons
    - *Data JSON*
    - *DOT Notation*
    - *GraphLib*
    - *GEDCOM*
  + Available graph rendering tools, pros & cons
    - *Ancestry.com*
    - *Roots*
    - *Legacy 9*
    - *GraphViz*
    - *DOT*
    - *DagreJS + D3*
    - *HTML canvas*
    - *OrgChart*
    - *Maybe show the prototypes I created out of some of these*
  + Available graph formats
    - *Force-directed*
    - *DAG*
    - *Hierarchical*
    - *Ancestor fan*
    - *Timeline*
    - *Radial tree*
    - *Dendrogram*

*Normally after this would be 3 chapters:*

1. *Backend development*
2. *Frontend development*
3. *Case study*

*HOW TO FIT IN THE FOLLOWING PARTS (should there be a chapter on each?)*

* First attempt
  + Graph
    - Created prototype 1 (D3 hiearchical DAG with DagreJS) – can interact with, can’t modify style of graph
    - Created prototype 2 (HTML canvas with JSON objects) – can modify style of graph, cannot interact with it
    - Drew up some styles of graphs that we could use – mention why no lines straight through middle of node; only around
  + Developed datacards according to Greta’s specifications
  + Drew up an interaction diagram to show how we interact with the different relationships
  + Realised we need a better idea of what people actually want. Created a website full of different kinds of graphs.
* User interview round 1 (process and questions, participants, motivations, results)
  + Highly-qualitative
  + Purpose was to find what types had the most potential, what stood out as important
  + Results:
    - Wanted how-to page and legend
    - Data cards interesting, wormholes
    - Graphs useful as long as they’re interactive
* Second attempt
  + Graph
    - Created prototype 3 using KonvaJS.
    - Made changes according to some of the user interview results
    - What changes we decided not to adopt
      * E.g. other kinds of graphs like DAG and timelines are better suited to other kinds of info, not genealogical. Like episodic and strength of connections.
      * E.g. other texts woulod make it more useful
      * See Greta’s comments on user interview round 1 feedback page
  + Discussed the different kinds of relationships, and the best way to represent them as to not cause confusion
    - List the different kinds of relationships, and explain the reasoning behind each design choice
* User interview round 2 (process and questions, participants, motivations, results)
  + Determine effectiveness of updated graph
  + Determine the effectiveness of the different unusual connections
  + What was the consensus?
* Conclusion
  + Future Work
* Appendix/Appendices
* Bibliography
* Use it to explore the possibilities of displaying other kinds of relationships due to unusual genealogies in modern day, e.g. polyamory, artificial insemination, adoptions. Particularly since most genealogical graphing systems can’t deal with those.