

Dissertation Final Report & Presentation Sides

#### Agenda

1<sup>st</sup> Part - Development Based - Dissertation Structure

2<sup>nd</sup> Part - Investigative & Research Based – Dissertation Structure

3<sup>rd</sup> Part - Presentation Slides Structure

## Deadlines

Coursowork	Description	Weight	Deadline	Feedback	
Coursework				Formative	Summative
CW1	Proposal & Ethical Form	10%	28 <sup>th</sup> February 2025	LW1–6	LW7-10
CW2	Thesis & Presentation	70+20 = 90%	11 <sup>th</sup> April 2025	LW7-12	mid-May
Resits	Resits	100% **capped at 40%		mid-August	
Deferrals	Deferrals	90%			
Publication of Results			16 <sup>st</sup> June 2025		

#### Deliverables of CW2

#### Final Report

- Submit in PDFFormat
- Built using LaTeX
- ≈ 8000 words
- StructureDiscussed in this session

#### VIVA Video

- Submit in mp4 Format
- 15 20 mins
- Structure
   Discussed in this session

## Data/Code (Auxiliary Files)

- Submit as ZIP file
- Contains all additional file
- Code, Data
   (from survey,
   dataset, other
   open source)

Deadline: Friday, 11th April 2025 at 23:59 (UK Time)

## Development Based -Dissertation Structure

"Preambles" of Report

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Analysis & Design

Chapter 4: Implementation & Testing

Chapter 5: Evaluation

Chapter 6: Conclusion & Future Works

"Closing" of Report

#### Word Count Guidelines

Chapter	Title	<b>Word Count</b>
0	Abstract	500
1	Introduction	1,000
2	Literature Review	2,500
3	Analysis & Design	800
4	Implementation & Testing	1,000
5	Evaluation	1,500
6	Conclusion	700
Total	Thesis	8,000

Note: every thesis is different and can deviate from this. Every thesis should aim to write around 8,000 words.

#### Preambles of Report

#### Cover Page:

Includes title, student name, Supervisor's Name, institutional affiliation, and declaration.

#### Abstract:

A concise summary of the entire report/work, highlighting the main findings and contributions.

#### Acknowledgement (Optional):

Thanks to those who supported or contributed to the work! e.g., Parents, siblings, supervisor, ghost writer, etc...

#### Table of Contents:

An organized listing of the report's chapters and sections.

#### Table of Figures:

List and page numbers of all figures within the report.

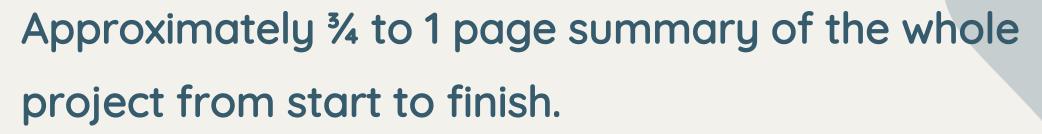
#### List of Tables:

List and page numbers of all tables within the report.

#### List of Acronyms:

Definitions of abbreviations and acronyms used throughout the report.





Include a description of (follow same flow):

- the area being addressed
- the problem identified & to be solved
- what does the literature say
- how the problem was addressed (Your Solution / Research)
- how the project was evaluated and what conclusions could be drawn from the work.
   (include key stats/figures from evaluation)

You should work on the abstract last as this is the summary of what was achieved throughout the project. i.e., key information from all chapters provided as a summary.

Avoid nebulous statements e.g. the final chapter discuss how to progress in the future

### CHAPTER 1: INTRODUCTION

- 1.1 Background of Study
- 1.2 Problem Statement
- 1.3 Purpose of Project (optional)
- 1.4 Aims & Objectives
- 1.5 Research Questions
- 1.6 Project Contributions
- 1.7 Deliverables
- 1.8 Resources (hardware, software, research)
- 1.9 Summary of Chapters

## CHAPTER 2 -LITERATURE REVIEW

- Each project with its own unique flow
- Do implement the feedback provided by your supervisor
- Also remove parts that are no longer relevant to your project since implementation is compete

# CHAPTER 3: ANALYSIS AND DESIGN

- This chapter as well is a little flexible, since each project will have its own flow, so this one is similar to your Coursework 2 Report
- Implement the feedback provided by your supervisor

- Development Methodology
- Functional and Non-Functional Requirements
- UML Diagrams
- Other Diagrams
- Database Design
- Architecture Diagram
- Wireframes and UI Designs

## CHPATER 4: IMPLEMENTATION AND TESTING

#### Can also be broken to Chapter 4 & 5

(Depending on length of the chapter)

#### 4.1 Implementation

can have small intro to the section and discuss what's next in it

- Key Features
- Project Folder Structure (Description)
- Code Explanation (Documentation)
  - Each important script can have its sub-section.
     You can give snippets of code and explain its use/task
- Challenges encountered

Rationalising the Development process.

You are relying on knowledge explained in Literature Review and the methodology chosen in Research Methodology.

This part of the chapter is mainly about discussing the development journey, the features done (scripts responsible for it), the hurdles/challenges you faced, what was adapted/changed from initial idea, what has been improved, describe what the solution does. You can consider adding diagrams where it fits. E.g., flowcharts, process or logic flow of system.

#### 4.2 Testing

- Testing Procedures: Methods and criteria used for testing the validity and reliability of the findings
- Functional Testing
- Unit Testing
- Performance Testing
- Black box Testing
- Heuristics/HCI (for projects where UI is important)
- Any other Framework applied

## CHAPTER 5: EVALUATION

## 5.1 Purpose of "Chosen Methodology(ies)"

- Discuss why the chosen method was preferred.
- What had you sought to find out? (Research Questions)

#### 5.3 Results Analysis

- present and discuss the results be it positive or negative. (normally in tabular format)
- possibly also compare them to existing works (to see if it was successful, and to what extent)
- highlight any key statistic or finding you found

#### 5.2 Evaluation Method

- outline the procedure followed,
- any considerations to be made
- assess the methodology as well (review backed mainly by literature).
- how does the methodology or experiment answer/leads you to the research questions – very important to evaluate this as well.

## 5.4 Reflection on the Outcome

- interpret what was the overall outcome (the bigger scope).
- Suggestions on steps that could be taken to improve results/outcome.
- overall discussion on recommendations for improved results. your experience.

## CHAPTER 6: CONCLUSION ANDFUTURE WORK

What we generally look for:

- Conclusions with critical reflection on problems defined
- Show critical analysis, reflect on how things could have been done to improve results.

#### 6.1 Project Analysis

- Give overall verdict on the project and analyse the journey
- Concise summary of the research findings.
- Final thoughts and conclusions drawn from the research.

#### 6.2 Limitations of Project

#### 6.3 Future Work

- Suggestions for future research and possible avenues
- What other points/techniques could be considered if had more time

"Preambles" of Report\*\*

Chapter 1. Introduction\*\*

Chapter 2. Literature Review\*\*

Chapter 3. Research Methodology

Chapter 4. Analysis

Chapter 5. Research Results

Chapter 6. Conclusion and Future Work\*\*

"Closing" of Report\*\*

Investigative & Research Based

Dissertation
Structure

(\*\*same structure as development based)

#### Word Count Guidelines

Chapter	Title	Word Count
0	Abstract	500
1	Introduction	1,100
2	Literature Review	2,500
3	Research Methodology	800
4	Analysis	1,300
5	Research Results	1,100
6	Conclusion	700
Total	Thesis	8,000

Note: every thesis is different and can deviate from this. Every thesis should aim to write around 8,000 words.

## CHAPTER 3: RESEARCH

## METHODOLOGY

#### 3.1 Research Design

e.g., is it quantitative, qualitative, mixed-methods

What was analysed

What is the project trying to solve/find

The key search criteria you used to search for papers

The main research repositories you got the papers from

Discuss why the chosen method was preferred. what you sought to find out.

#### 3.2 Research Methodology

Describe the methodology you used to perform the analysis

#### 3.3 Result Analysis Method

Describe in detail the procedure you followed, e.g., surveys, interviews, case studies, experiments, simulation

Enumerate and Describe: what and how did you analyse the data/results

#### 3.4 Limitations

Note: provide references throughout to justify key decisions and analysis

- Points to consider and include:
  - Experimental Framework
  - Research Approach Selection
     (Quantitative or Qualitative) (Theoretical
     or Practical Research)
  - Optionally can look at a hypothesis
  - Identification of Variables and Measures
  - Sample Size and Sampling Methodology (ensure good representation of the population)
  - Methods of Data Collection (surveys, interviews, observations, experiments, etc)
  - Analysis Techniques
  - Ethical Considerations

- This chapter as well is a little flexible, since each project will have its own flow
- Implement the feedback provided by your supervisor

### CHPATER 4: ANALYSIS

Describes the analysis procedure and how they answer research questions/hypothesis.

You are relying on knowledge explained in Literature Review and the methodology chosen in Research Metal. This is a step-by-step process Rationalise the Research Design

#### 4.1 Data Cleaning & Preparation

Clean the data by checking for missing values, inconsistencies, and outliers. Code your categorical variables and prepare your data for analysis using statistical software like SPSS or R.

#### 4.2 Analysis Techniques

Elaborate on the analysis techniques. Explain why it has been chosen and how it has been used. Ensure that we can replicate the analysis, and same results will be obtained.

#### 4.3 Result Analysis Method

Describe in detail the procedure you followed, e.g., surveys, interviews, case studies, experiments, simulation.

Enumerate and Describe: what and how did you analyse the data/results

#### 4.3 Limitations

What are the current limitations you have identified that might halt further progress.

## CHPATER 5: RESEARCH RESULTS Again, this is just an idea of we should be included, each project.

Again, this is just an idea of what ideas should be included, each project will have its own flow.

#### 5.1 Discussion and Interpretation of Findings

Analyse everything in detail, point by point. Using key statistics, and relate findings to aims, objectives, problem statement.

You would have tables here to describe most of the findings Perform a Comparison of findings with existing literature

#### 5.2 Analysis of the Research Questions

What had you sought to find out? (Research Questions)
List the research questions and explain how they were solved/answered
Do same for your hypothesis. This should be in-depth

#### 5.3 Summary of Findings & Key Contributions

Interpret what was the outcome. what could be done to improve results. other suggestions for improved results. your experience.

## CHAPITAR 6: CONGLUSION ANDFUTURE VIORIC

What we look for generally:

- Conclusions with critical reflection on problems defined
- Show critical analysis, reflect on how things could have been done to improve results.

#### Additional notes:

In the conclusion you should be critical and reflective on both the work that you managed to come up with as well as the process to do so.

This chapter tends to be much shorter than the Discussion. It is not a 'summary' of your research, but needs to be 'conclusions' as to the main points that have emerged and what they mean for your field.

Carefully revisit the aim and objectives of your project, and include a discussion for future work.

## "Closing" of Report

- References
- Appendix
  - A.1 Include any additional supporting content which might break flow of report
  - B. Evaluation
    - B.1 Approval Letter To Conduct Data
       Collection
    - B.2 Survey Invitation Letter/Paragraph
    - B.3 Questionnaire
    - B.4 Any Additional Graphs Related to Survey
  - C.1 User Guide/Manual
  - D.1 Signed Meeting Log

Try to structure it logically

# Presentation Slides Structure

### VIVASLIDES

#### 1. Cover Slide

Include your Name, Student number and Project title.

#### 2. Background

Present a short overview of the topic being studied.

#### 3. Problem Description

Address clearly the problem that you are intending to solve.

#### 4. Existing Solutions/Research

Here you can give a comparative table like in Chapter 2 Literature Review. Or compare and discuss other existing products/solutions you investigated.

#### For Development Projects:

 Follow the presentation with a demonstration of your project (screenshare with voiceover) – you are graded for that!

#### For Research Projects:

Make sure to provide as much information and details as possible in the presentation (you may also screenshare with voiceover for any relevant simulation or result) – you are graded for that!

#### 5. Proposed Solution/Analysis

Present all the features of your proposed artefact and how it is going to solve the problem that you have identified.

#### 6. Evaluation/Results

How you evaluated your proposed solution and present the results (including key stats).

#### 7. Conclusion

You can include a brief concluding slide at the end.

#### 8. References

List of all references in-text cited in the slides.

## Thank you!

Any questions?