



# Document Preparation And Tools

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**October 2024**

## In this lecture...

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- Structuring your dissertation
- Tools
  - LaTeX
- Top 10 ways to annoy your reader



# Structuring your Dissertation

- How does your reader know the work you've done?
- Why should your markers do the work for you?
- Who stands to benefit from a higher mark?

**If you've done the work, you should get the mark!**

- You need as much time at the end as possible.
- You will forget important details if you don't write them down.
- You may be able to get feedback early enough to use it.

**Yesterday if not sooner!**

# The Dissertation

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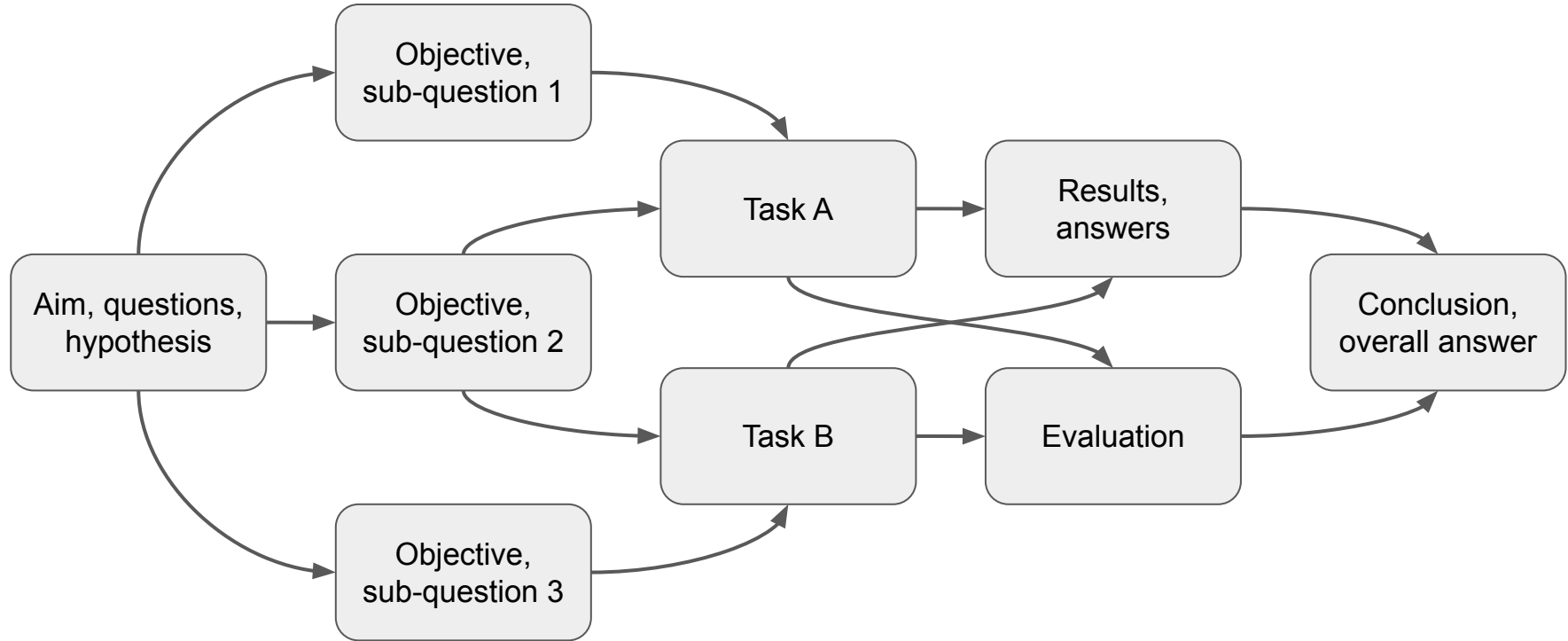
- The dissertation is what we **mark**.
- The dissertation is the **evidence** of what you did.
- It is **not a narrative** of your work, it shows how your mind **tackled** the project.
- The dissertation shows:
  - **Understanding**
  - **Logical and critical thinking**

# Dissertation Structure

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- Structure shows the **logic** of your project. It is an alternative to a chronological narrative.
- Structure shows what the parts of your dissertation are **meant to be doing**.
- Structure helps you to **know what to write**.
- Structure is essential for the reader to see **what they are getting!**

# Dissertation Structure





Your dissertation should have:

- A big question, **aim**, or hypothesis;
- Several **objectives**, sub-questions or sub-hypotheses which combine to answer the big question;
- Several **tasks** which combine to provide answers for the sub-questions;
- An **evaluation** to show the reader your tasks do work;
- A collection of **results** and/or answers, built up by executing the tasks;
- A final answer or set of **conclusions** based on the results and answering the big question.

- You may change your aim and your objectives depending on how things work out.
- But you should always have a clear idea what your aim and objectives are meant to be.
- You should always know which tasks are addressing which objectives (this will usually not be a one-to-one relationship).
- Your final answer must address your main question.

- The structure of a project is usually a forking/joining graph of activities.
- The physical constraints of text (it is sequential and linear) make it very difficult to show the actual project structure.
- Thus we put sign posts into the text.
- **At the start** of each chapter say:
  - What it contains and aims to show
  - What earlier parts of the document have fed into it
- **At the end** of each chapter say:
  - What the reader was intended to get from it
  - Which sections it feeds into later

- Get hold of some **good examples** of past dissertations (ask your supervisor, check the library).
- Plot your structures:
  - Produce a version of the **diagram for your project**.
  - Produce a proposed chapter and section breakdown (**table of contents**).
  - Start laying out the chapter/section main points.
- Discuss what you have produced with your **supervisor**.

# When Writing

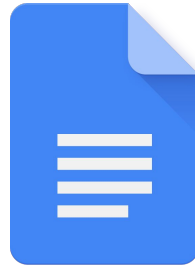
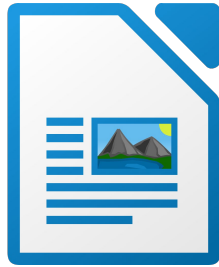
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- Write **simple, clear English**. Avoid long and confusing sentences.
- Don't hesitate to **ask for feedback**. And **make time** for it.
- Take time to **check/review your document** (content and format).

**Remember your reader,  
make the job easy for them!**



# Tools



L<sup>A</sup>T<sub>E</sub>X

Menu

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Ab Review

Share

Layout

> acm\_format

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> setup

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[Find out more about the file outline](#)

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Recompile

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# Top 10 ways to annoy your reader

by Dr Stefano Padilla

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## 1 Introduction

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## C Document Preparation

### C.1 Declaration

The following declaration statement should be included in both the first deliverable and the final dissertation.

#### DECLARATION

I, *your name* confirm that this work submitted for assessment is my own and is expressed in my own words. Any uses made within it of the works of other authors in any form (e.g., ideas, equations, figures, text, tables, programs) are properly acknowledged at any point of their use. A list of the references employed is included.

Signed: *your signature*

Date: *date of submission*

### C.2 Formatting

- Typed, **single sided**, double spaced, point size 11, 1-inch margins on A4 sheets. Excerpts of code or pseudo-code, captions and the like should be single spaced.
- Pages should be numbered, as should chapters and sections within chapters.
- Chapters should start on a new page.

## 2. Difficult to read

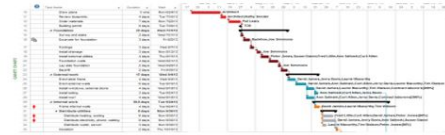
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# 3. Rushed conclusions

## 7. Conclusions

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## 5b. Too much consistency

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# 6. No glue text (signposting)

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**It is important to note that the software development cycle is something that we cover in this course.**

## 6. No glue text (signposting)

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**It is important to note that the software development cycle is something that we cover in this course.**

**The course covers the software development cycle**

# 7. Code/images not explained

## 3. Implementation

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```
int main()
{
    if (!glfwInit()) {
        cout << "Could not initialise GLFW...";
        return 0;
    }

    glfwSetErrorCallback(errorCallbackGLFW); // Setup a function to catch and display all GLFW errors.

    hintsGLFW(); // Setup glfw with various hints.

    // Start a window using GLFW
    string title = "My OpenGL Application";
    const GLFWvidmode * mode = glfwGetVideoMode(glfwGetPrimaryMonitor());
    windowWidth = mode->width; windowHeight = mode->height;
    window = glfwCreateWindow(windowWidth, windowHeight, title.c_str(), glfwGetPrimaryMonitor(), NULL);
    //window = glfwCreateWindow(windowWidth, windowHeight, title.c_str(), NULL, NULL);
    if (!window) {
        cout << "Could not initialise GLFW...";
        context creation failed
        return 0;
    }

    glfwMakeContextCurrent(window); // making the OpenGL context current

    // Start GLSL (note: always initialise GLSL after creating your window context.)
    glfwGetOpenGLSL = GL_TRUE;
    forcing newest debug callback (glfwDebugMessageCallback)
    GLSL error id = glfwGetSL()
    if (GLSL_OK != GLFW_OK) {
        cout << "Could not initialise GLSL...";
        return 0;
    }

    debugGL(); // Setup callback to catch OpenGL errors.

    // Setup all the message loop callbacks.
    glfwSetFramebufferSizeCallback(window, onFramebufferSizeCallback); // Set callback for resize
    glfwSetKeyCallback(window, onKeyCallback); // Set callback for keys
    glfwSetMouseButtonCallback(window, onMouseButtonCallback); // Set callback for mouse click
```

```
move glfwSetCursorPosCallback(window, onMouseMoveCallback); // Set callback for mouse wheel.
glfwSetScrollCallback(window, onMouseWheelCallback); // Set callback for mouse wheel.

//glfwSetInputMode(window, GLFW_CURSOR, GLFW_CURSOR_NORMAL); // Set mouse cursor.
glfwSetInputMode(window, GLFW_CURSOR, GLFW_CURSOR_DISABLED); // Set mouse cursor FPS.

glfwSetWindowRefreshCallback(window, onWindowRefreshCallback); // Setup some render variables.
glfwSetWindowCloseCallback(window, onWindowCloseCallback); // Setup all necessary information for startup (aka. load texture, shaders, models, etc.).

do {
    the window is closed // run until

    double currentTime = glfwGetTime(); // retrieve timestamp
    deltaTime = currentTime - lastTime; // Calculate delta time
    lastTime = currentTime; // Save for next frame

    calculations.
    glfwPollEvents(); // poll callbacks
    update(currentTime); // update (physics, animation, structures, etc)
    render(currentTime); // call render function.
    glfwSwapBuffers(window); // swap buffers (avoid flickering and tearing)

    running &= (glfwGetKey(window, GLFW_KEY_ESCAPE) != GLFW_RELEASE); // exit if escape key pressed
    running &= (glfwWindowShouldClose(window) != GL_TRUE);
} while (running);

endProgram(); // Close and clean everything up...

cout << "Press any key to continue...\n";
cin.ignore(); cin.get(); // delay closing console to read debugging errors.

return 0;

void errorCallbackGLFW(int error, const char* description) {
    cout << "Error: GLFW: " << description << "\n";
}

void hintsGLFW() {
    glfwWindowHint(GLFW_OPENGL_DEBUG_CONTEXT, GL_TRUE); // Create context in debug mode - for debug message callback
    glfwWindowHint(GLFW_CONTEXT_VERSION_MAJOR, 4);
    glfwWindowHint(GLFW_CONTEXT_VERSION_MINOR, 3);
}

void endProgram() {
    glfwMakeContextCurrent(window); // destroys window handler
    glfwTerminate(); // destroys all windows and releases resources.

    delete[] texture; // tidy heap memory
}
```

### 3.1 Sub Heading

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## 8. Unnecessary images

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## 9. Missing or rushed sections

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### 5. Implementation

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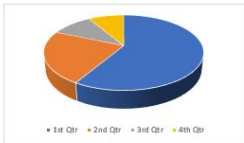


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### 6. Conclusions

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## 9. Missing or rushed sections

8.1 Deliverable 1: Research Report

What should it contain? At least the following sections:

*Front Matter*

- 8.2 Dissertation

What should it contain? At least the following sections:

*Front Matter*

6

*Main Body*

- Title page: including the following details.
  - Title of your project.
  - Your full name.
  - Your supervisors' names.
  - The caption "Final Year Dissertation".
  - The degree programme for which you are studying.
- Declaration: confirming that the dissertation is your own work (see Appendix C.1).
- Abstract: a short description of the project and the main conclusions – probably between two and three hundred words.
- Table of Contents: giving the main chapter and section titles and the pages on which they start.

*Main Body*

- Introduction: summarising objectives, problems solved to achieve the objectives, methods, results, achievements and limits, and sketching the organisation of the dissertation.
- Background: discussing related work found in the technical literature and its relevance to your project.
- A central part in several sections, describing the work carried out as part of the dissertation.
- Testing and performance assessment reporting on performance evaluation and any experimental work carried out.
- Conclusions: summarising:
  - the main achievements of your work, in relation to the initial objectives as well as similar work by others;
  - the main limitations of your work;
  - possible extensions and future work.

*Back Matter*

- References: listing complete details of all the documents cited in the text.
- Bibliography: listing documents related to your work but not cited in the text (if applicable).
- Appendices: consult with your supervisor on what to include in the appendices.

D Deliverable 1 Marking Rubric		
Criteria	Level of Achievement	Marks
Abstract, Aims, Objectives, Project Literature	• Are these clearly expressed, testable, and	0 to 10

E Dissertation Supervisor Marking Rubric		
Criteria	Level of Achievement	Marks
Technical Quality	• Is the topic meaningful?	0 to 20

F Dissertation 2 <sup>nd</sup> /3 <sup>rd</sup> Reader Marking Rubric		
Criteria	Level of Achievement	Marks
Rationale and Objectives	<ul style="list-style-type: none"> <li>Is the topic meaningful, complex and challenging?</li> <li>Are the objectives and aims clearly stated?</li> <li>Are the main areas of investigation for the project identified?</li> <li>Has the student provided ideas and approaches of original thinking?</li> </ul>	0 to 20
Review and Methodology	<ul style="list-style-type: none"> <li>Is there evidence of sufficient background reading?</li> <li>Is there evidence of a clear understanding of the project area/research topic?</li> <li>Is the literature study up to date and critically evaluated?</li> <li>How pertinent is the background/referenced material?</li> <li>Has the student used appropriate tools/software?</li> <li>Have the appropriate design methodologies been employed?</li> </ul>	0 to 20
Results and Evaluation	• Are the results presented clearly in a logical	0 to 20

# 10. Lack of polish

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## 5. Implementation

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### 5.2 Sub Heading

## 6. Evaluation

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# Conclusion



- Think about the **logic of your project**:  
Aim, Objectives, Tasks, Evaluation, Results, Conclusion.
- **Structure your dissertation** to reflect that logic.
- Give your dissertation a **consistent format** and **clear content**.

**Remember your reader,  
make the job easy for them!**