



GE106

Introduction to Engineering Design

College of Engineering

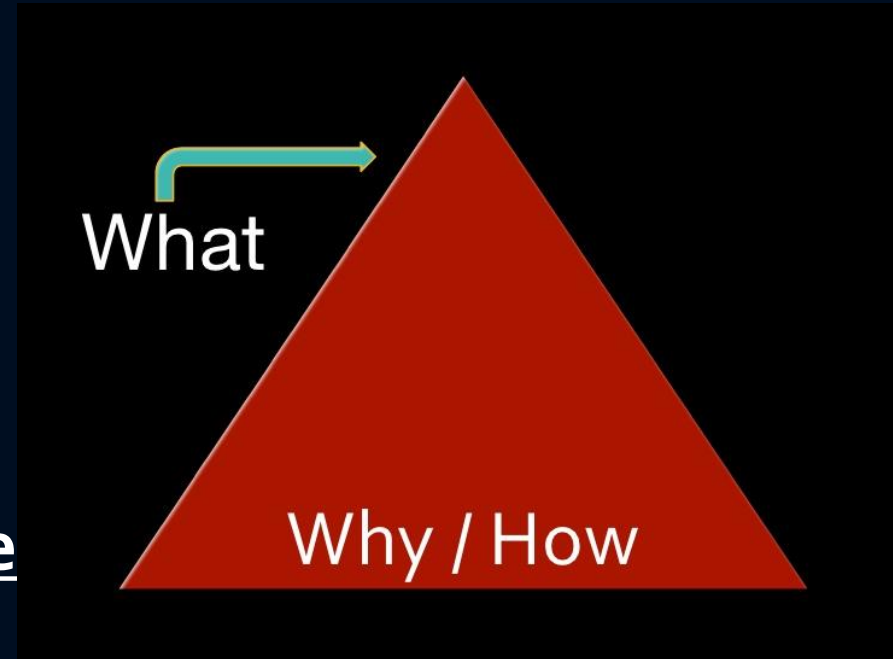
King Saud University

Studio 3. *Tips for Writing Reports*

FALL 2022

What is a good report?

- Meets the audience's needs
- Well organised
- Readable
- Answers the questions:
 - What is the purpose of the document?
 - What is to be achieved?



Final Report Layout*

Front Matter

Title Page

Abstract

Table of Contents

List of Figures

List of Tables

Body

- Introduction
- Need Analysis: Problem statement, Objectives, Criteria, and Constraints
- Morphological Analysis
- Design Concept Generation
- Design Evaluation/Selection
- Detailed Design

End

- Conclusions/ Recommendations
- References
- Appendices

Title

- The title is more important than most people think.
- Choose a title using as few words as possible (less than 10) to clearly describe the content
- It is also a good idea to read through your title and think about how it might be interpreted
- The title page should contain the following: course name, project title, the authors' full names and ID numbers, the name of the instructor, the date of submission



Abstract (Problem Definition)

- The abstract is the second level at which a potential reader can filter out reports that s/he is or is not interested in reading
- The abstract is generally limited to 150 words (or so). It must be a self-contained description of the report
- It includes a short summary of the design problem and the most important results and conclusions of the project



Conclusions, Summary and Recommendations

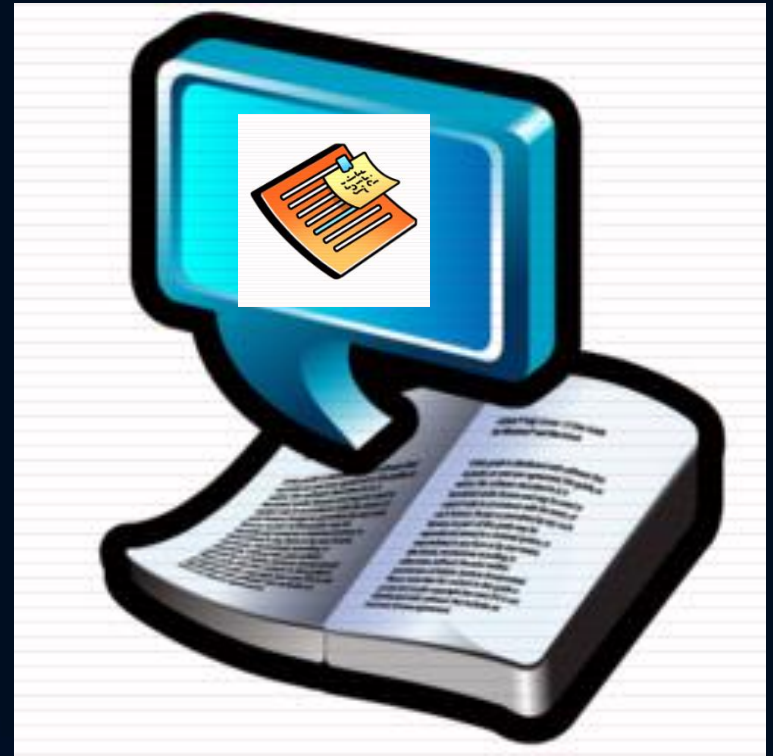
- Summarize what has been done
- Highlight the features of the design
- Are there any limitations in your design?
- What are the implications of your findings?
- Recommend a follow-up study for any remaining problems

SO WHAT DOES
IT ALL MEAN



Referencing

- Always cite sources within the report
- Use a unified system of referencing*
- Be careful of web sources
- Plagiarism** = cheating
= penalty
- DO NOT copy-and-paste
- Give list of references according to a standard style



Some Citation Standards

Books

[1] B. Klaus and P. Horn, **Robot Vision**. Cambridge, MA: MIT Press, 1986.

Handbooks

[7] **Motorola Semiconductor Data Manual**, Motorola Semiconductor Products Inc., Phoenix, AZ, 1989.

Reports

[4] P. Diament and W. L. Lupatkin, “V-line surface-wave radiation and scanning,” Dept. Elect. Eng., New York, Sci. Rep. 85, Aug. 1991.

Journals

[3] W. Rafferty, “Ground antennas in NASA’s deep space telecommunications,” Proc. IEEE vol. 82, pp. 636-640, May 1994.

Standards

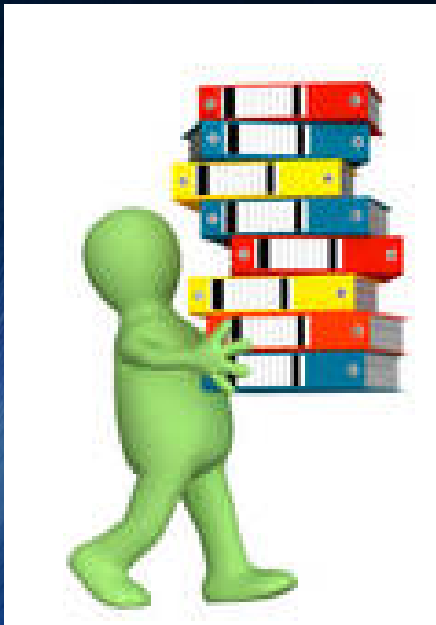
[2] Letter Symbols for Quantities, ANSI Standard Y10.5-1968.

Patents

[1] J. P. Wilkinson, “Nonlinear resonant circuit devices,” U.S. Patent 3 624 125, July 16, 1990.

Appendices

- Things that are related to the project, but not contained in the main components
- Examples are:



- Computer codes
- Lengthy specifications
- Supporting tables or other material

Figure/Table Captions



- All necessary figures/tables must be included within the main components
- ALWAYS include a figure/table caption and number
- If the figure (or table) is not yours, put the reference number at the end of the caption
- Give the source of data (e.g., data from [5])
- The caption of the figure is centered below the figure
- The caption of the table is centered above the table

Document Formatting

- Leave one-inch margins all around
- Use 1.5 spacing between lines
- Title of Report in Initial Capital Letters: (16 points, Boldface)
- Sections titles are 14 points, flush left, and boldfaced. Use initial capitals
- The text should all be with font size 12pt (Times New Roman is recommended)



Important Notes

- Use a predefined style when writing a report to allow for easy modification without the need of renumbering or reformatting
- No title should be directly followed by “bullets” or independent sentences”; a paragraph must be used first
- The writer should include all the information required for the reader to understand the details without the need to ask questions.



Important Notes (contn'd)

- A paragraph must contain at least three sentences
- Every reference listed at the end of your report needs to be cited in your text.
- Every figure and table must be mentioned in the text. You should not have a figure that just appears out of nowhere.
- Numbers less than ten should be written in letters (use "three" not "3")



Important Notes (contn'd)

- Always use complete sentences, except for a figure or table caption.
- Do not use contractions; use it is (not it's) and cannot (not can't) ; similarly, do not use haven't, doesn't, wouldn't, etc.
- The semicolon is used to separate two **sentences** that are closely related. If you use a semicolon, look at the expressions on each side.



Checklist (Before Submission)

Check The following points before submitting your report:

- ✓ The cover page has all the required information
- ✓ The report has all the necessary components
- ✓ The entire document is proofread*
- ✓ The document is checked for spelling errors
- ✓ The document is checked for grammar and there are no sentence fragments or run-on sentences in the text.



Checklist (contn'd)

- ✓ There are no contractions (do a global search for the apostrophe and make sure it occurs only in possessives).*
- ✓ You used paragraphs with more than three sentences
- ✓ All of the references that are given at the end of the report are explicitly cited within the report
- ✓ All of the figures and tables are mentioned within the text.

