

Princess Nora Bint Abdulrahman University
College of computer and information
sciences
Networks department

Graduation Project 1 Plan

Prepared by Dr. Samia Chelloug
E-mail: samia_chelloug@yahoo.fr

Graduation project plan

- 1. Literature review*
- 2. Requirements analysis*

Literature review

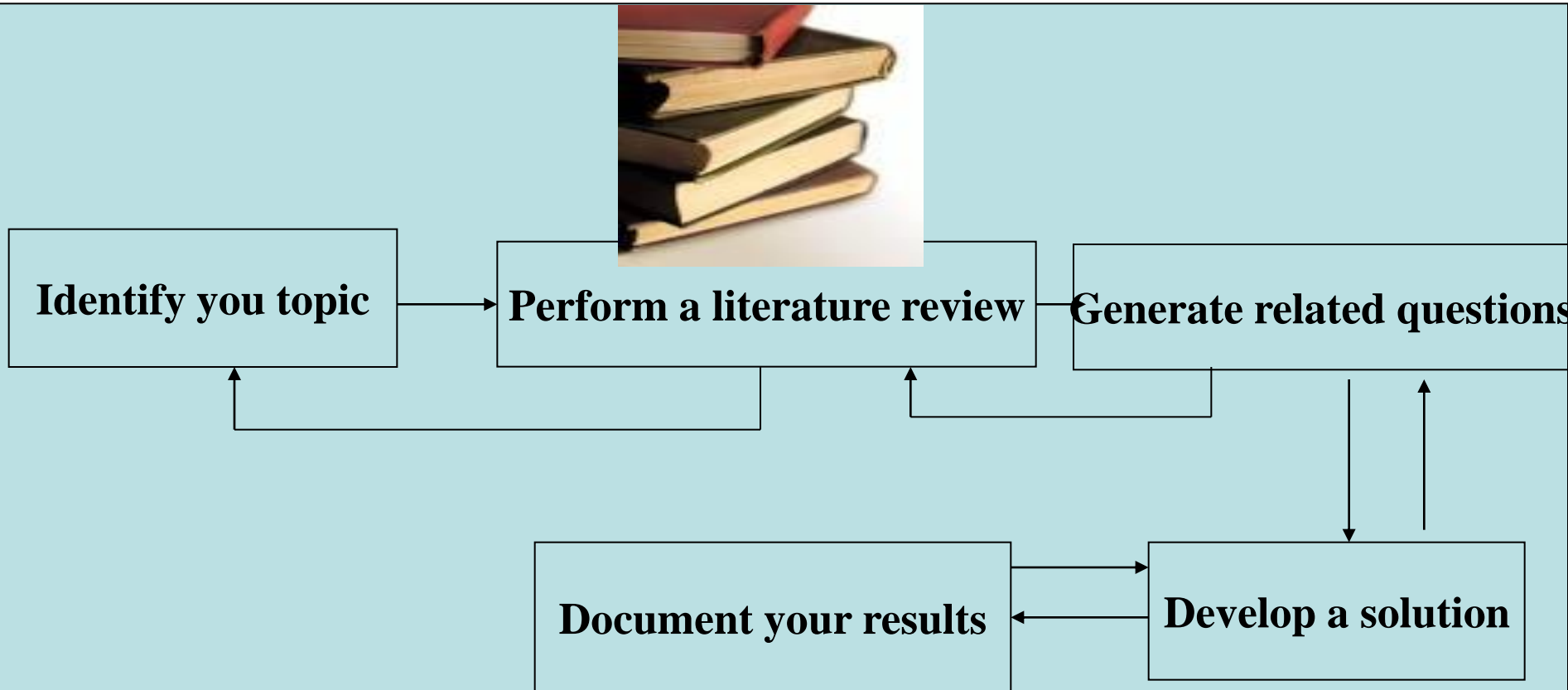
Definition:

Literature review is a systematic method for identifying, evaluating and interpreting the work produced by researchers, scholars, and practitioners in a chosen field.

(Fink, 1998)

Literature review

- Literature review is not just one distinct step in a research task. It is both a step and an iterative feedback loop.



Literature review

- **Why review the literature?**
 - ✓ Without it you will not acquire an understanding of your topic.
 - ✓ To demonstrate a knowledge of the existing body of research in a particular topic area.
 - ✓ Determine what has already been written on a topic.
 - ✓ Identify previous approaches.
 - ✓ Identify central issues in the field.
 - ✓ Identify important issues still unresolved.

Literature review

- Define what you want to know; « I am looking for literature that focus on cryptography algorithms for wireless ad hoc networks ». **Keywords: cryptography, ad hoc.**
- Finding sources:
 - ✓ Our sources should be related to our investigation. They need to be a good academic standard.
 - ✓ Google is not (usually) the answer.
 - ✓ You need to think about the type of the source: academic journals, books, IEEE papers, websites, ...
 - ✓ Who is the author ? What is the date?

Literature review

- **Google scholar:**

<http://scholar.google.com/>

- ✓ Provides a simple way to search for scholarly literature (literature written by researchers who are experts in their field).
- ✓ You can find peer-reviewed papers (before an article is accepted for publication, it is reviewed by several experts who suggest possible changes, and recommend to the editor of the journal whether or not to publish the article).

Literature review

- Keep a bibliographic trail: track titles, authors, page number, library call number (LCN) , international standard book numbers (ISBN), international standard serial numbers (ISSN).
- Compare the articles by evaluating the similarities and differences among them.
- Summarize the obtained information into a coherent literature review section for your document.

IEEE NUMBER

Preparation of Papers for IEEE TRANSACTIONS and JOURNALS (May 2007)

First A. Author, Second B. Author, Jr., and Third C. Author, Member, IEEE

Abstract—These instructions give you guidelines for preparing papers for IEEE TRANSACTIONS and JOURNALS. Use this document as a template if you are using Microsoft *Word* 6.0 or later. Otherwise, use this document as an instruction set. The electronic file of your paper will be formatted further at IEEE. Define all symbols used in the abstract. Do not cite references in the abstract. Do not delete the blank line immediately above the abstract; it sets the footnote at the bottom of this column.

Index Terms—About four key words or phrases in alphabetical order, separated by commas. For a list of suggested keywords, send a blank e-mail to keywords@ieee.org or visit http://www.ieee.org/organizations/pubs/ani_prod/keywrd98.txt

1. INTRODUCTION

THIS document is a template for Microsoft *Word* versions 6.0 or later. If you are reading a paper or PDF version of this document, please download the electronic file, TRANS-JOUR.DOC, from the IEEE Web site at <http://www.ieee.org/web/publications/authors/transjnl/index.html> so you can use it to prepare your manuscript. If you would prefer to use LATEX, download IEEE's LATEX style and sample files from the same Web page. Use these LATEX files for formatting, but please follow the instructions in TRANS-JOUR.DOC or TRANS-JOUR.PDF.

.....

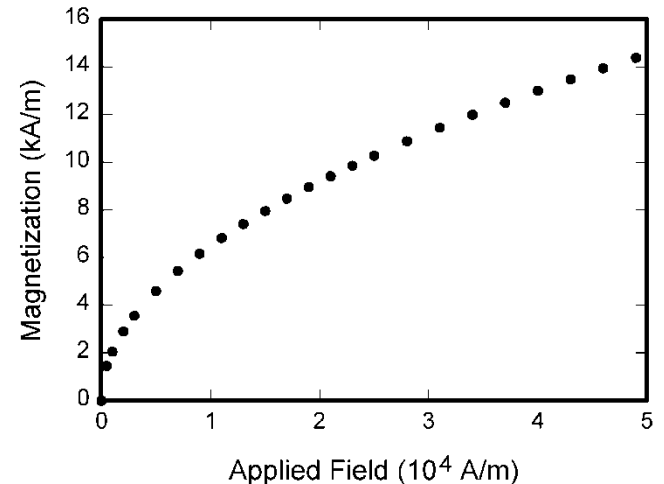


Fig. 1. Magnetization as a function of applied field. Note that "Fig." is abbreviated. There is a period after the figure number, followed by two spaces. It is good practice to explain the significance of the figure in the caption.

Literature review

- **What make a good literature review?**
 - ✓ Clearly delimits the subject matter to be reviewed.
 - ✓ Cover all important relevant literature.
 - ✓ Is up-to-date.
 - ✓ Provides an insightful analysis of the ideas and conclusions.
 - ✓ Identifies gaps in the literature.

Requirements analysis

- ✓ A requirement is a condition or a capability that must be possessed by a system.
- ✓ Requirements serve as a ‘contract’ between customers and developers.
- ✓ What is the result of requirement analysis?
 - A complete specification of what the proposed system should do.
- ✓ Features of a system used to fulfill the purpose of that system.

Requirements analysis

Functional requirements

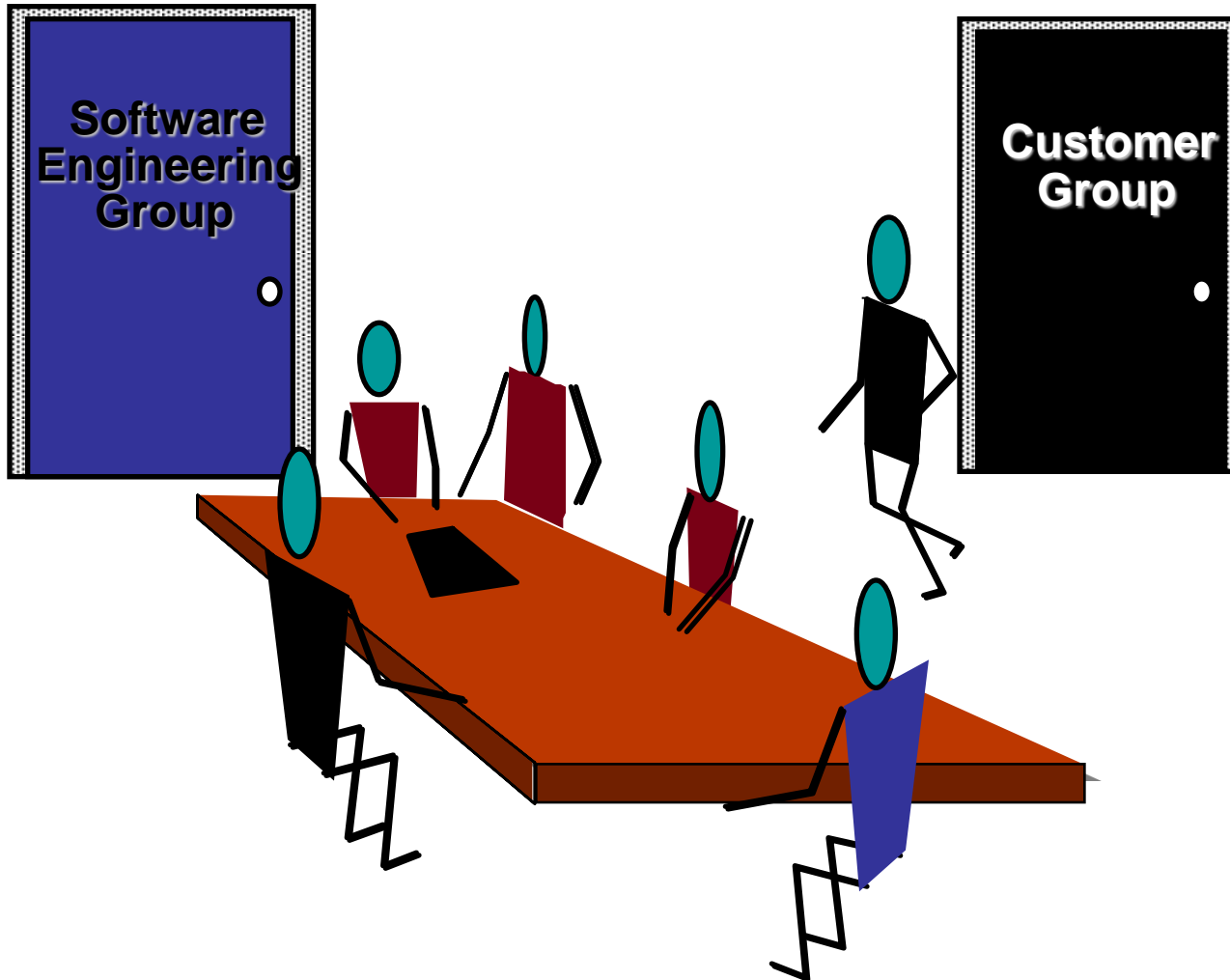
- Describe the processing (functions to be supported) by the new system.
- Describe the inputs of the system.
- Describe the outputs of the systems.
- Describe data that must be managed.

Nonfunctional requirements

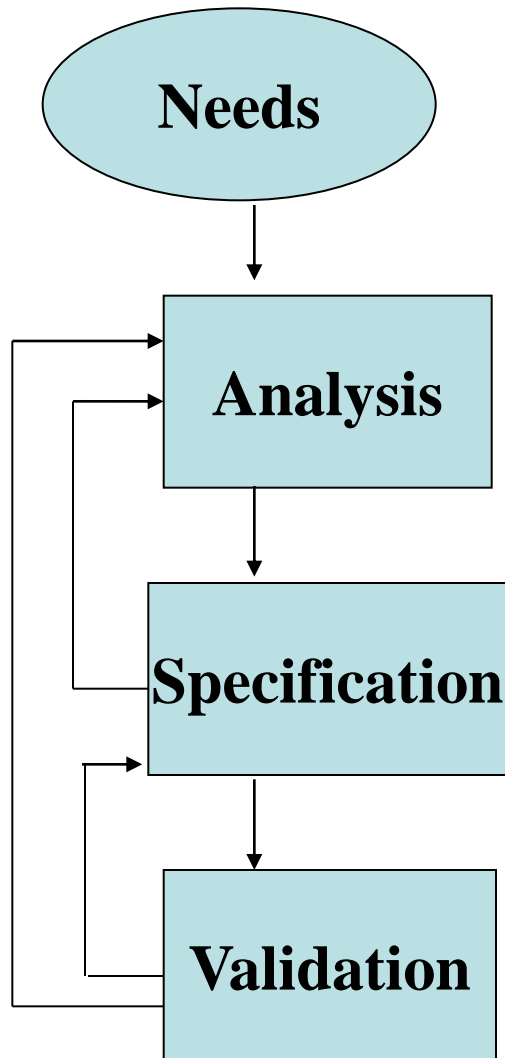
- Describe how well the system supports the functional requirements.
- The description may include : performance criteria, reliability, security, ...

Requirements analysis

Requirements Gathering:



Requirements analysis



- Requirements understanding is hard.
 - Analysis: the aim is to understand the needs.
 - It involves interviewing clients and users and also studying the current system.
 - Determine where the stated requirements are unclear, incomplete, ambiguous, or contradictory
- Specification: requirements might be documented in various forms.
- Validation: possible errors.

Thank you for your attention