

Writing The Literature Review

Chapter 2



**THE MORE YOU KNOW ABOUT
YOUR TOPIC,
THE MORE EFFECTIVELY YOU
CAN TACKLE THE PROBLEM**

**It all starts with Literature
Review**

Literature Review (LR)

- LR is the building block (or the basis) you use to build your research or develop your system on.

For you:

- LR provides insight and ideas
- Guides you on how to handle and progress in your project

For your readers:

- LR provides the connection between previous work done and where you fit in
- Guide them to understand your thinking and the choices you made

Outcome of LR

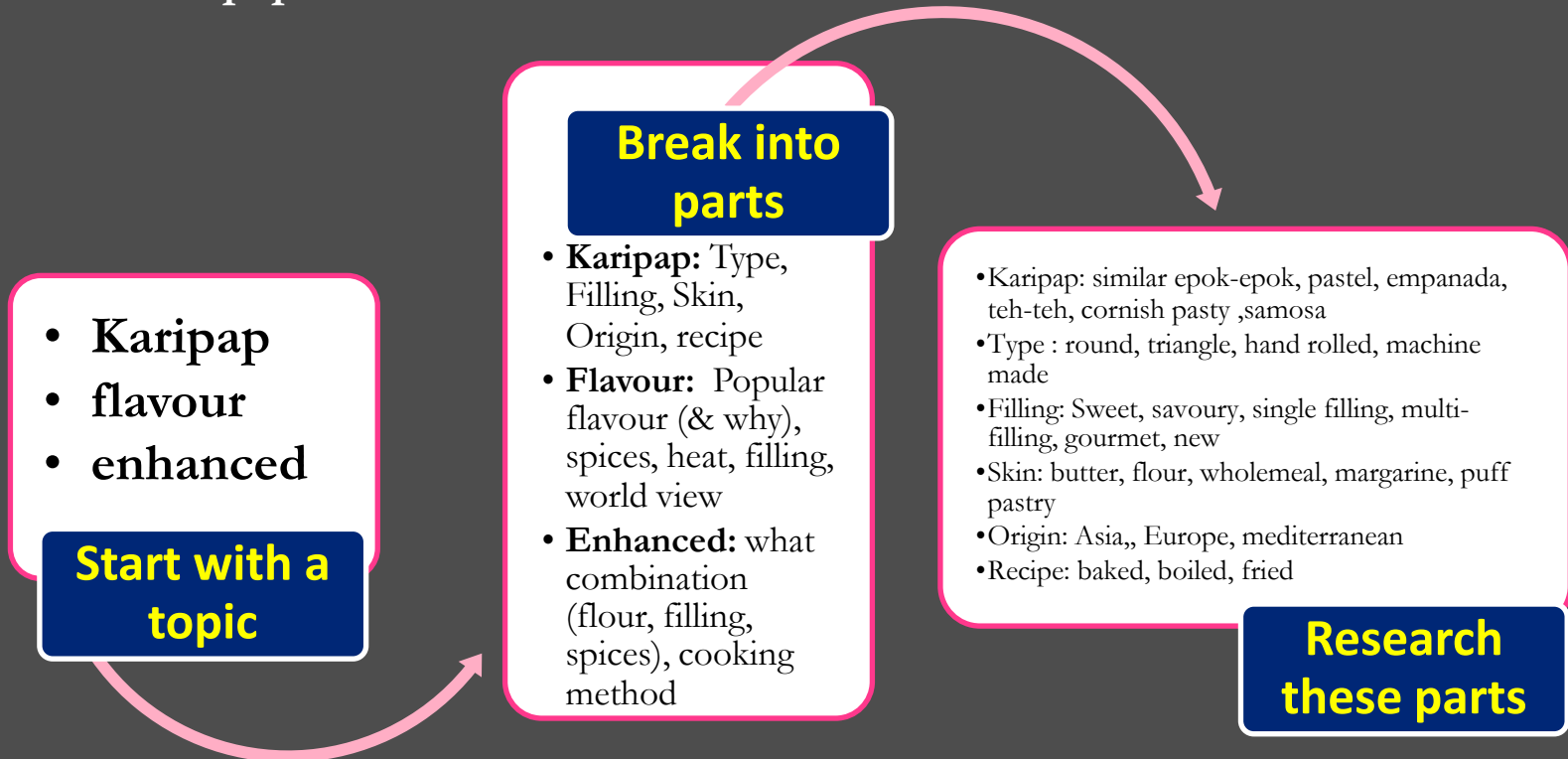
- Evidence of familiarity with the broad area of the selected topic
- Classification of areas of study
- Identify trend, direction, and research issues
- Evidence of not repeating what others have done
- To guide in formulating the statement of problem
- To guide in selection of tools, techniques, methodology

How to start LR?



Example:

Enhanced Karipap flavour



How to start LR?

Project: Class attendance system using RFID (CASUR)

Start with a topic

Class attendance in FC

Break into parts

Class attendance everywhere else (take at least 3 example)

RFID

RFID Implanting

Technology to : Store data

Technology to : Search data

Research these parts

Class attendance (in FC, everywhere else): how its done, what do they use, who use, make comparison

RFID: what type, active/passive, how to read, how to make tag info,

Store data: how to get and store data from RFID, how and where to store data (dbase, tables,etc)

Search data: what algo to use, how to present result

Where to find these info for LR?

System Development

- The organization current practice
- **Other similar systems currently used → web, site visit**
- Technology → journal & conference papers, white papers, articles, product catalog, books, theses
- **User requirement and preference → survey, interview, observation**

Research

- Domain → web, site visit
- Technology, algorithm → journal & conference papers, white papers, articles, books, thesis
- **Research requirement → survey, interview, observation**

** Have a selection of different resources.

** You can do your own little experiment to prove a point.

System Development Based Project	Research Based Project
<p>Chapter 2 : Literature Review</p> <p>2.1 Introduction</p> <p>2.2 Inter-organisation Case Study (if any)</p> <ul style="list-style-type: none"> To identify user requirements <p>2.3 Current system analysis (e.g.: product/prototype/software/tools)</p> <ul style="list-style-type: none"> Characteristics of the system <p>2.4 Compare between existing systems</p> <ul style="list-style-type: none"> Ensure strength and weakness between systems <p>2.5 Literature review on technology used</p> <p>2.6 Chapter summary</p>	<p>Chapter 2: Literature Review</p> <p>2.1 Introduction to case study</p> <p>2.2 Problem formulation</p> <ul style="list-style-type: none"> Study of domain from general to specific Related studies A description of the identified problem Study of theory/algorithm/method that can contribute towards solving the problem. Justification of chosen theory/algorithm/method Every sub-topic within the domain must have a review <p>2.3 Suggestions to solve identified problems</p> <p>2.4 Chapter summary</p>

A little change : find within

This is the guideline for the chapter.

Read the description carefully to understand.

This chapter gives the reader a **peek into your thinking process** → must be explored deeply and written well.

Show your understanding of what you are doing.

Deconstructing CH2 : Sys_Dev

2.1 Introduction →
intro to the chapter,
what could be
expected in it

2.2 Inter-organization Case Study (if any)
→ To identify user requirements , to
understand flow and even source of
problem(s)

2.3 Current system analysis

→ Review currently available systems or prototype
→ Find the characteristics of the system (+ve and -ve)

2.4 Compare between existing systems

→ Ensure strength and weakness between systems

2.5 Literature review on technology used

→ Database, Servers, Android, etc.

LR Overview: System Development

Project: Class attendance system using RFID (CASUR)

- **2.1 Introduction - welcome to the chapter**
- **2.2 FC, UTM**
 - 2.2.1 FC the organization, class structure, etc
 - 2.2.2 FC current class attendance system
- **2.3 Currently similar and existing class attendance**
 - 2.3.1 U. of Sheffield, UK Attendance system
 - 2.3.2 Kent Coders Inc., US Employee sign-in system
 - 2.3.3 S.M.K Jinjang Students and Staff attendance system using RFID
 - 2.3.4 comparison between existing systems (must have table & don't forget to put your proposed system in it too)
- **2.4 RFID**
 - 2.4.1 RFID types
 - 2.4.1.1 RFID tags, readers and writers,
 - 2.4.4.2 Embedded
 - 2.4.2 RFID process
- **2.5 Technology used (why use, how it works)**
 - 2.5.1 Database: MySql – why use this?
 - 2.5.2 web server
- **2.6 Chapter summary – in this chapter we discussed.....**

Deconstructing CH2 : Research

2.1 Introduction → intro to the chapter, what could be expected in it

2.2 Introduction to case study or domain → intro to the case study or domain and the issues

2.3 Current method/algo analysis

→ Review currently used and available methods or algorithms (that can contribute towards solving the problem)

→ Find the characteristics : the workings, +ve and -ve

2.4 Comparison between methods or algorithms

→ Compare between these with what you are proposing

→ How does yours stand out? Why is yours the better solution to the problem?

2.5 Suggestions to solve identified problems → Your suggestions

2.5 Review on technology used (if any) → Usually used in experiment development

LR Overview: Research

Project: Effectiveness of RFID in checkout systems

- **2.1 Introduction - welcome to the chapter**
- **2.2 Current Checkout systems and problems**
- **2.3 RFID**
 - 2.3.1 RFID system component and cost
 - 2.3.1.1 Tags, readers, middleware, Server
 - 2.3.2 Active Tag
 - 2.3.3 Passive tag
 - 2.3.4 factors affecting RFID performance
- **2.4 Differences between RFID and barcode in retail**
- **2.5 Current RFID Systems** (*although this could be your algos*)
 - 2.5.1 Metro Group Company
 - 2.5.2 Exxon Mobil “SpeedPass”
 - 2.5.3 MasterCard “PayPass”
- **2.6 Shopping checkout system using RFID**
- **2.7 Chapter summary – in this chapter we discussed.....**

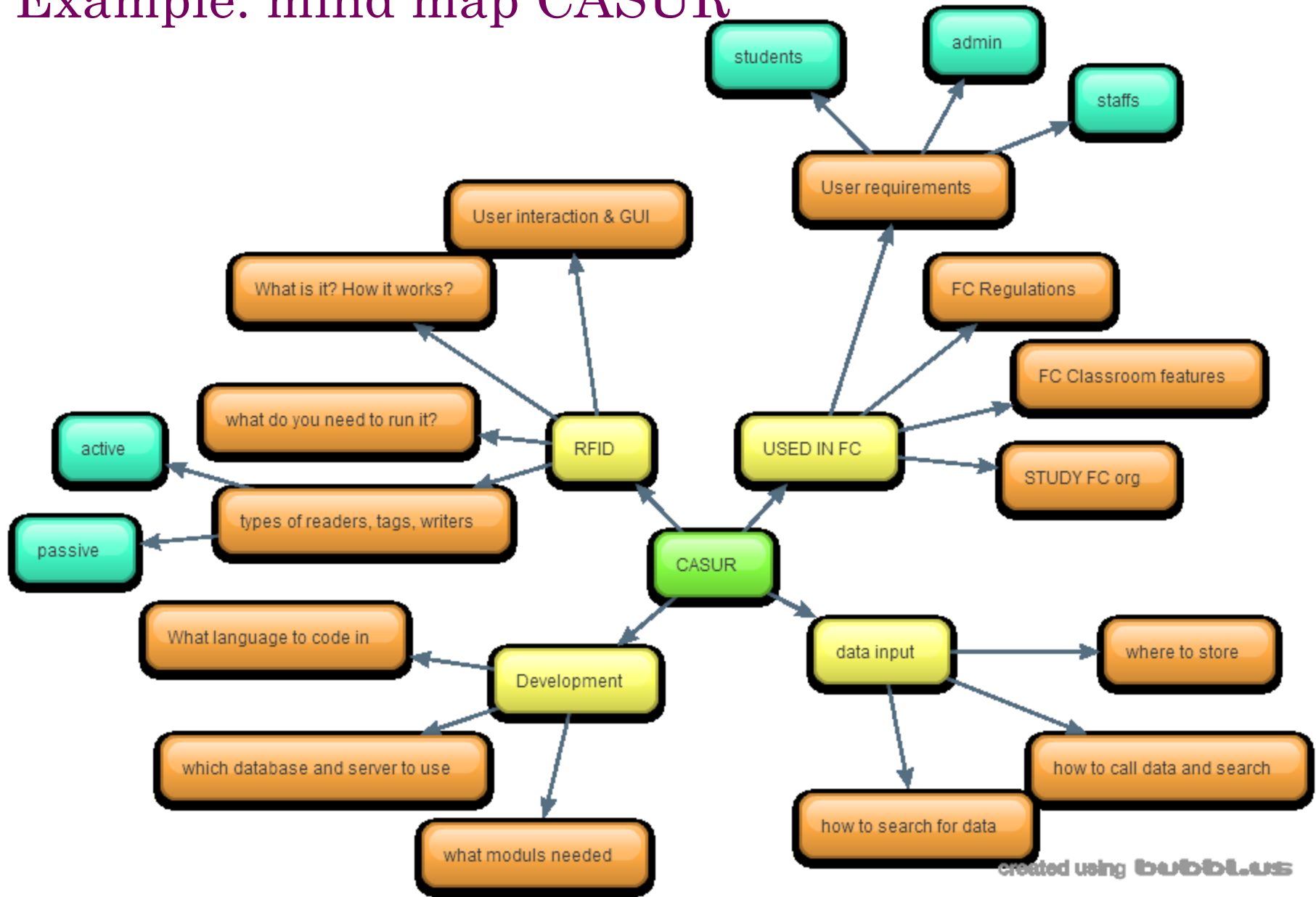
Some notes on LR

- Research projects are fluid → not all are the same → so tweak where necessary
 - With SV guidance
- Start broad and end specific
- Read, understand then write in your own words → **say NO to Plagiarism**
 - Reminder: direct translation is plagiarism
 - Cite diligently

Homework

- Start your LR.
- Meet your SV and discuss your approach to it → have a 'mind map' of what should be in your LR
- Submit the following (online):
 - the mind map: what are your project elements?
 - the TOC of Chapter 2 : What is going into your PSM CH2

Example: mind map CASUR



End of class today

**ALL PROGRESS
TAKES PLACE
OUTSIDE THE
COMFORT ZONE**

Michael John Bobak

STAY
POSITIVE,
MOVE
FORWARD

