



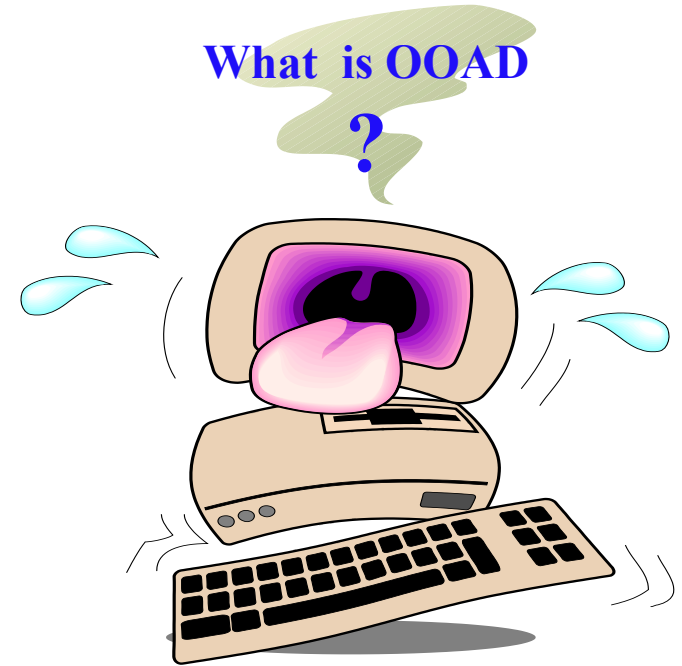
University of
Choice

www.mmust.ac.ke

ISO 9001:2008 CERTIFIED

OBJECT ORIENTED ANALYSIS & DESIGN

MMUST
Kelvin K. Omieno



A Beginning

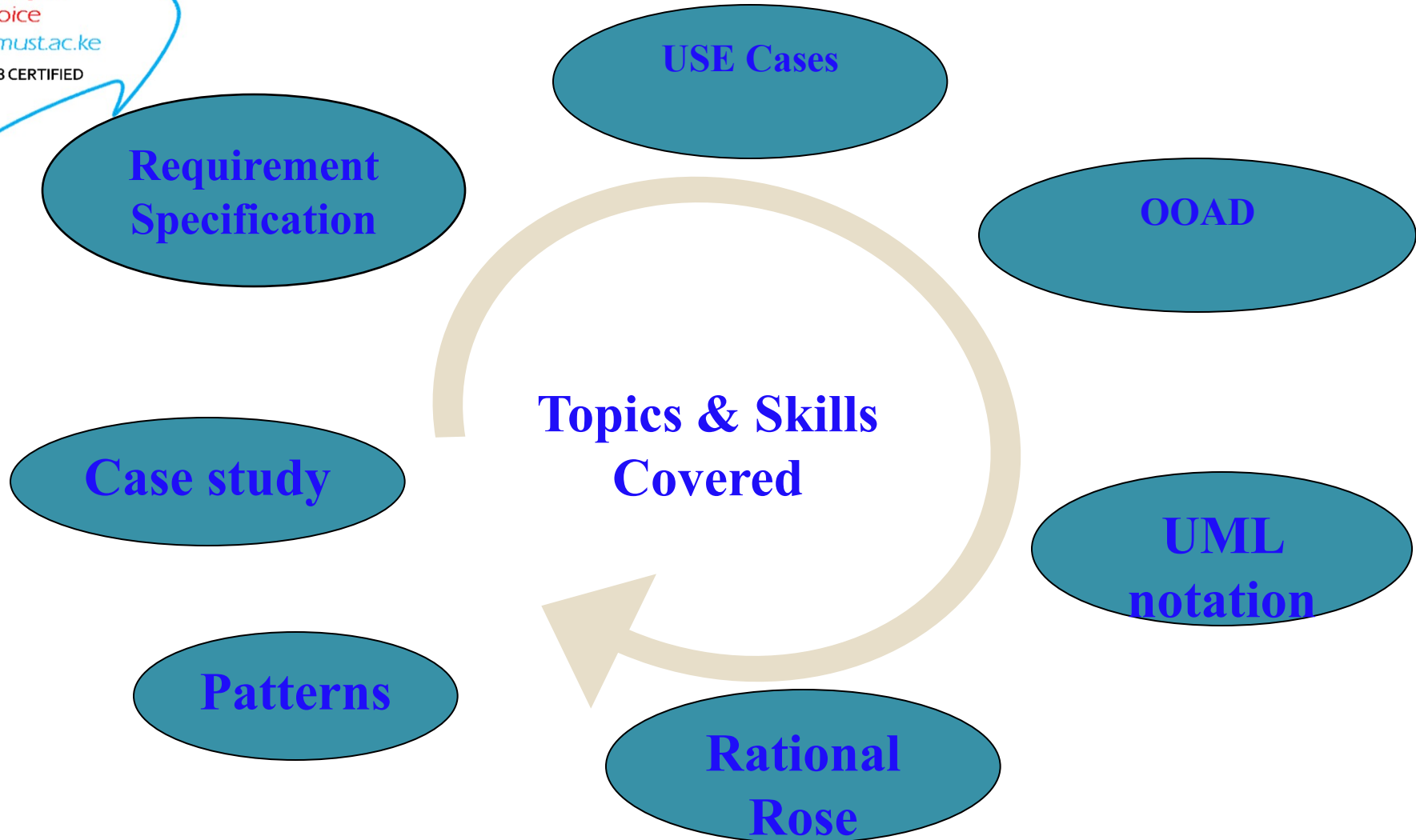


University of
Choice

www.mmust.ac.ke

ISO 9001:2008 CERTIFIED

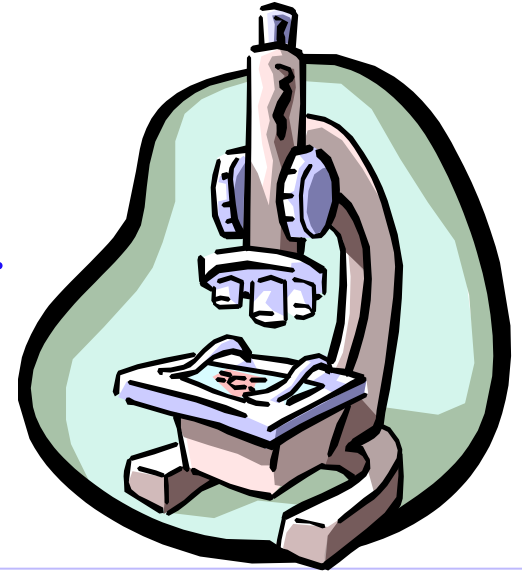
Topics and skills covered:



Introduction to OOAD

OBJECTIVE :

- Compare and contrast analysis and design.
- Define object-oriented analysis and design



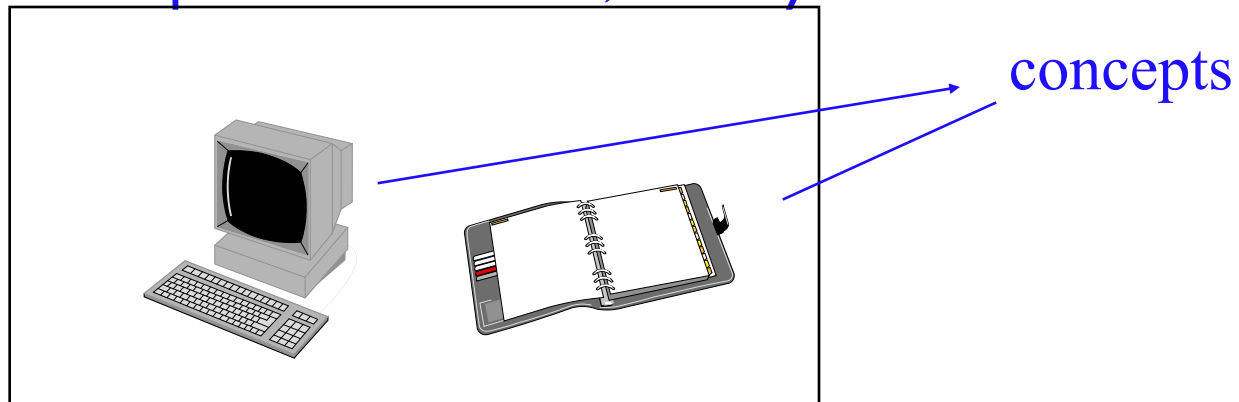
What is Object-Oriented Analysis and Design?

The essence of object – oriented analysis and design is to emphasize considering a problem domain and provide logical solution from the perspective of objects (things, concepts, or entities)

Object Oriented Analysis

- Emphasis on finding and describing the objects –or concepts – in the problem domain.
- “OOA is requirement analysis activity”





Ex: In the case of the library information system, some of the concepts include Book, Library and rack



Object Oriented Design

- Emphasis on defining logical software objects (**Class**) that will ultimately be implemented in an object oriented programming language.

Eg: in the library system, a Book software object may have title attribute and a print method

Book Software object
 name
 book_no
 issue()
 locate()

Analysis V/s Design?

Analysis

- Arrive at description of the problem
- Arrive at requirements
- What the problem is about and what a system must do.
- Analysis emphasizes and investigation of the problem rather than how a solution is desired.

Design

- Arrive at detailed descriptions of the logical solution
- how the logical solution fulfills requirements and constraints.
- Ultimately, designs can be implemented in software and hardware.

Summary

The essence of object – oriented analysis and design is to emphasize considering a problem domain and provide logical solution from the perspective of objects (things, concepts, or entities).

Important Development Cycle Phases and Their Intent:

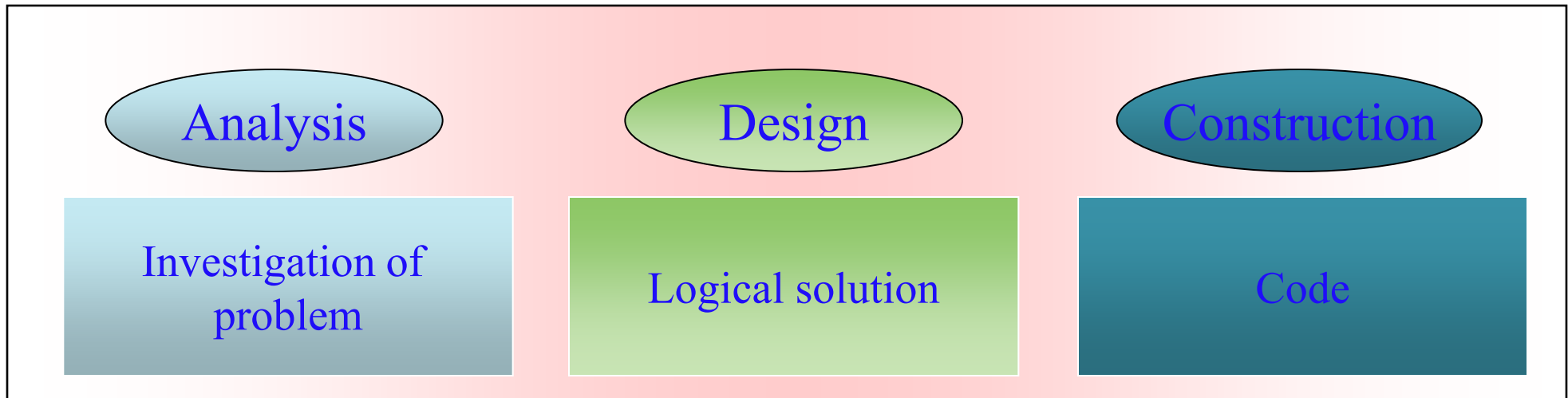


Fig: Meaning of development activities