

DB Module



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School of InfoComm Technology

Activity

Databases

Day 1

Topics

- ▶ **Concept of Modelling**
- ▶ **Entity-Relationship Model**
 - ▼ **Entity**
 - ▼ **Attribute**

Case Scenario : NP40 Book Rental

- NP40 Book Rental – 2nd Hand books for rental
- 3 branches - each branch – a branch manager & few staff
- Staff – reports to a manager / supervisor
- Books classified into 3 categories:
 - Fiction, Non-fiction, Children.
- Each book title – info on authors, publishers.
- Each title – may have more than 1 copy for rental
- Must register as member to rent out books
- Information on the loan – must be captured.

Full details of case in Mel under Learning Materials

→ NP40 Book Rental System – Appendices (Latest)

→ Appendix C

We can represent the case pictorially

NP40 Book Rental System



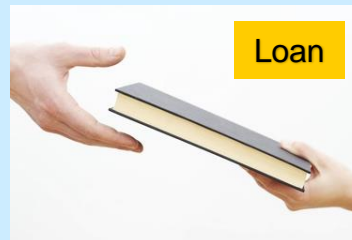
Works for



registers



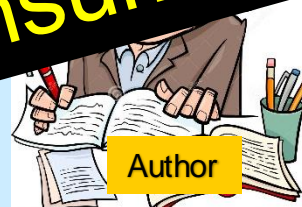
makes



Consists of



writes



Book



has

Tedious, time-consuming and cumbersome

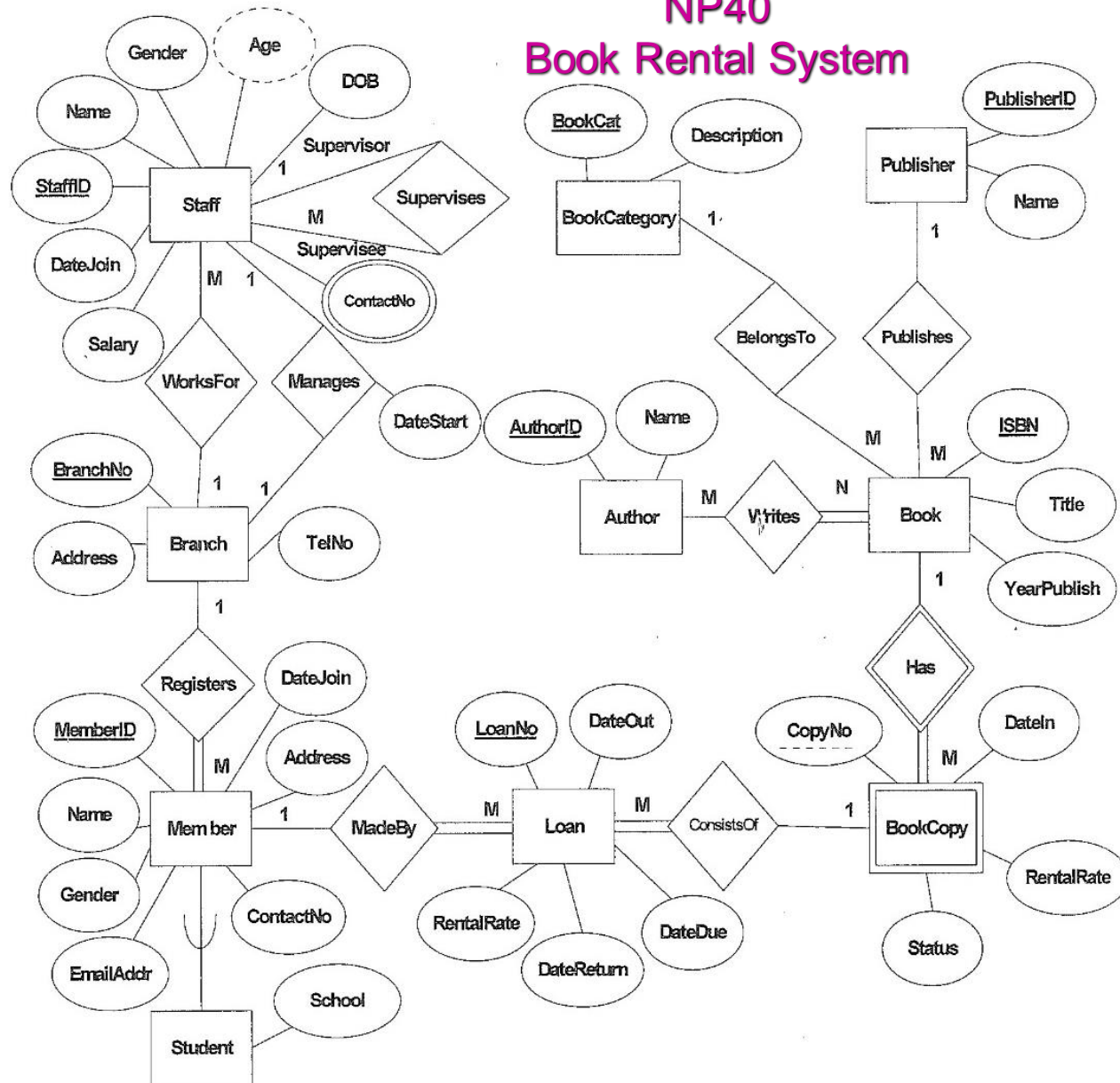
Case Scenario : NP40 Book Rental

An easier way is to represent it using a model.

You will learn how to do this in this module.

NP40

Book Rental System

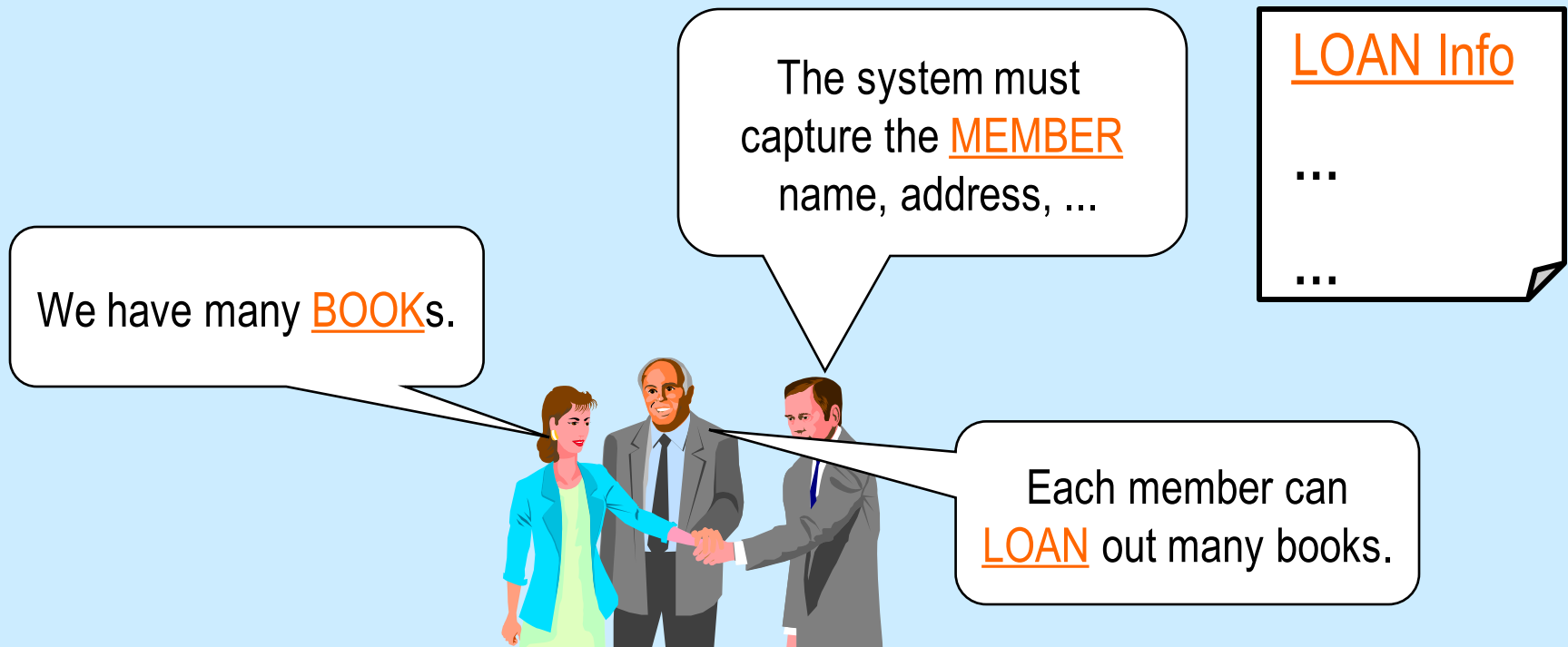




Entity

Entity

- ▶ Person, place, object, event or concept in the organisation or business area to be modelled.





Attribute

Attribute

- ▶ A property or characteristic of an entity that is of interest to the organisation or business area concerned.
 - ▼ Each entity has a set of attributes associated with it.
- ▶ An example:
 - ▼ SALESPERSON entity has attributes:
employee number, name, date of birth, sex ,...

Summary

- ▶ **Concept of Modelling**
- ▶ **Entity-Relationship Model**
 - ▼ **Entity**
 - ▼ **Attribute**