Object Modelling Technique (OMT)

- Object-oriented software development methodology was proposed by James Rumbaugh et.al.

- To analyse, design and implementation of a information system

OMT Phases

Four Phases of OMT

- Analysis

- System Design

- Object Design

- Implementation

Analysis

- Problem statement
- Build models of the problem domain
- It includes elicitation, analysis and specification

System Design

- Overall architecture of the system
- The system is organized as a set of sub systems

Object Design

- It builds a object model based on the analysis model
- Data structures and algorithms to implement each class
- Refinement of design

Implementation

- Translation of object design into particular programming language

Three Models of OMT

The **functional model**, represented in UML with use case diagrams, describes the functionality of the system from the user's point of view.

The **object model**, represented in UML with class diagrams, describes the structure of the system in terms of objects, attributes, associations, and operations.

The **dynamic model**, represented in UML with interaction diagrams, state machine diagrams, and activity diagrams, describes the internal behavior of the system.
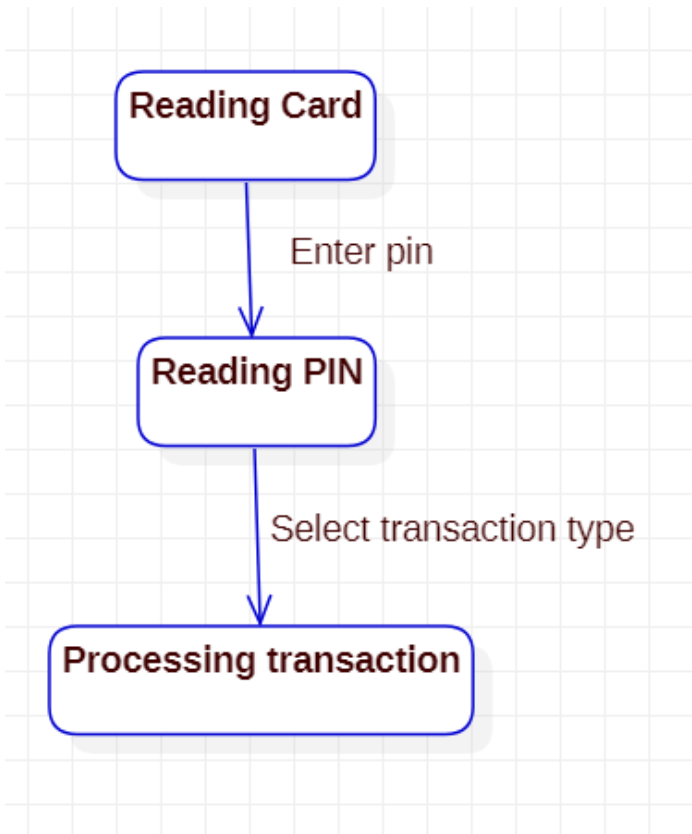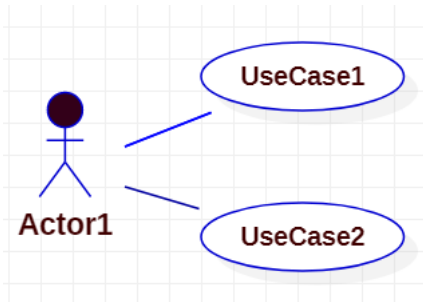
Object Modelling Technique

→ **Object Model**

→ **Dynamic Model**
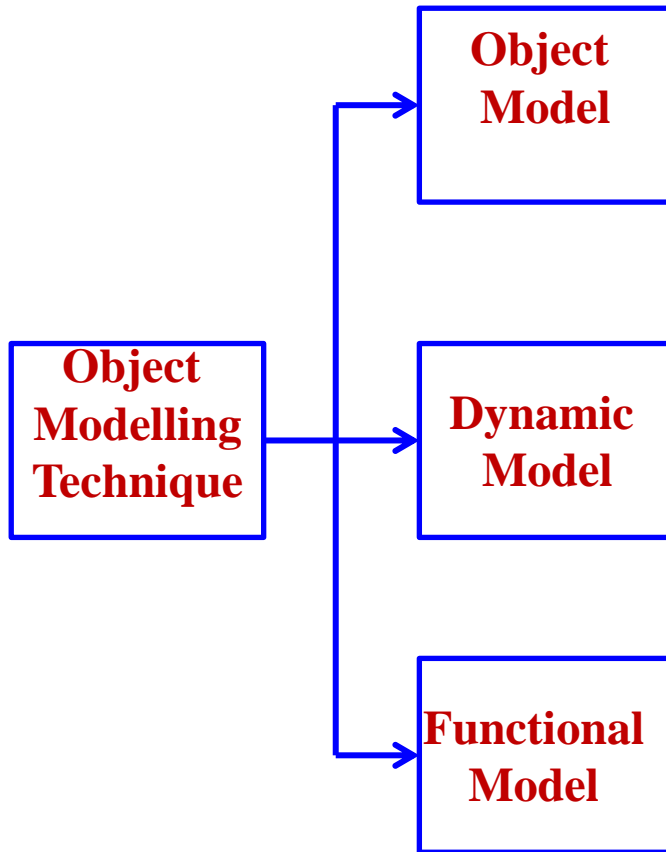
→ **Functional Model**

Object Model

Class Diagram
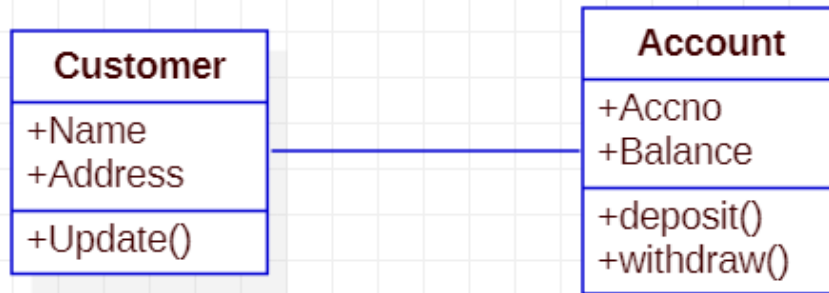
Dynamic Model

State Diagram

Functional Model

Use Case Diagram

Data Flow Diagram