

Sequence Diagrams

sequence of interactions take place during a particular use case or use case instance

object & actors - top - dotted line drawn vertically from interactions between
↳ annotated arrows

Interaction Perspective

interactions,
- system-environment
- components of the system

Use Case Diagram

Actor (perform role in system)

primary - module
secondary - lessens
off stage - users

use case

System

relationships

extend (optional)
include (compulsory)

requirement elicitation

External Perspective

environment

Context Model Diagrams

operational context
outside the system boundaries.

Activity Diagram

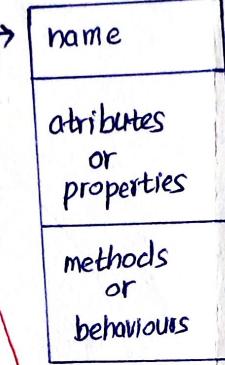
sequence of activities

Structural Perspective

structure

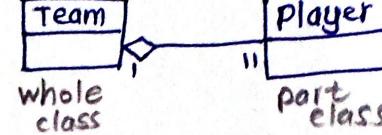
Class Diagrams

Shape of a class



Aggregation models

whole class



Composition models

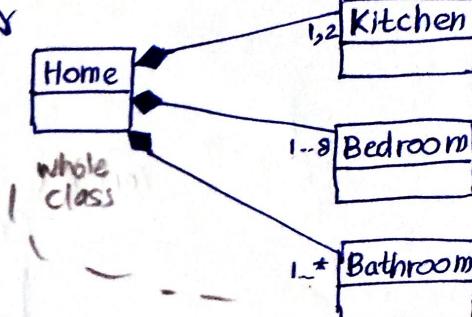
dynamic behaviour

Behavioural Perspective (data, events)

Data Driven Modeling

processing input data and generating an associated output

Activity diagram (Structured design methods ↳ SDFD)



Event Driven Modeling

how a system responds to external and internal events

State Diagrams/State Machine Model/State Chart Diagram

SYSTEM MODELING

Models

Existing System Models

requirement engineering
what existing system does

strengths & weaknesses

Planned System Models

requirement engineering
explain proposed require.
discuss design proposals

- The process of developing abstract models of a system.
- Different view or perspective
- UML
- Understand the functionalities of the system
- Used to communicate with the customer

(01) Computation Independent Model (CIM)

Flowchart, SRS
= domain models

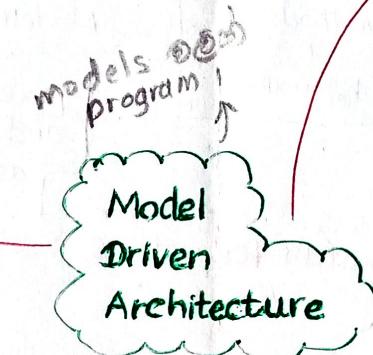
(02) Platform independent Model (PIM)

UML models

3 types of models

(03) Platform Specific Models (PSM)

adding platform specific details.



is possible

Model Driven Engineering (MDE)

models are the principal outputs rather than programs

Pros

higher level of abstraction
(system තුළ තෙවෙන හෝ සිංල තෙවෙන)
generating codes automatically

Cons

not necessarily right for implementation
(optimize කළ තුළ තෙවෙන හෝ සිංල තෙවෙන)
cost of developing translators for new platforms.

