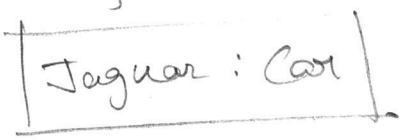
①

Encapsulation is a method by which Abraction is achieved

<<stereotype>>
cannot be instantiated but only implemented

Pre-defined Stereotype
<<interface>>
<<boundary>>
<<control>>
<<entity>>
<<super Interface>> e.g. Universal Remote
User-defined.

Object : Class



subsystem is more or less same as component

↓ Design

↓ Implementation

Relationship

Structural (permanent/long term)

Non-Structural (temporary/transient)

- - - → dotted line
Dependency as in C++ or Java

continuous line

Association — "Bi" directional
"uni" →

Aggregation — whole ◇ part
whole object talks to a part object
Can have a part called type.

Composition — whole ◆ part
e.g. process thread
Existence of part is dependent on whole

laptop → Projector
Computer ◇ Keyboard
projector ◆ lens (session temp)

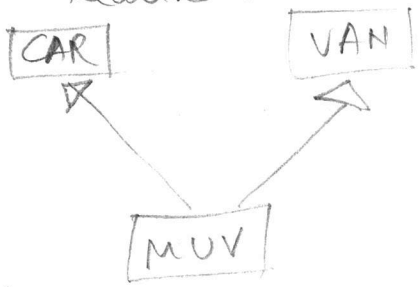
Generalization

"single"

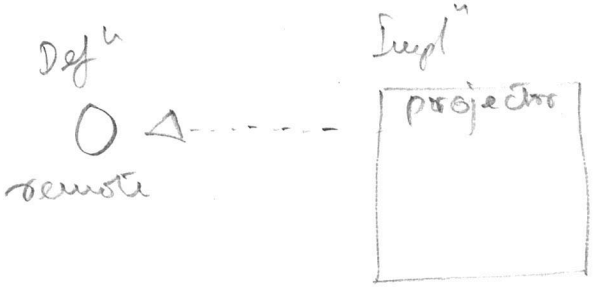
Inheritance

"multiple Inheritance"

Realization

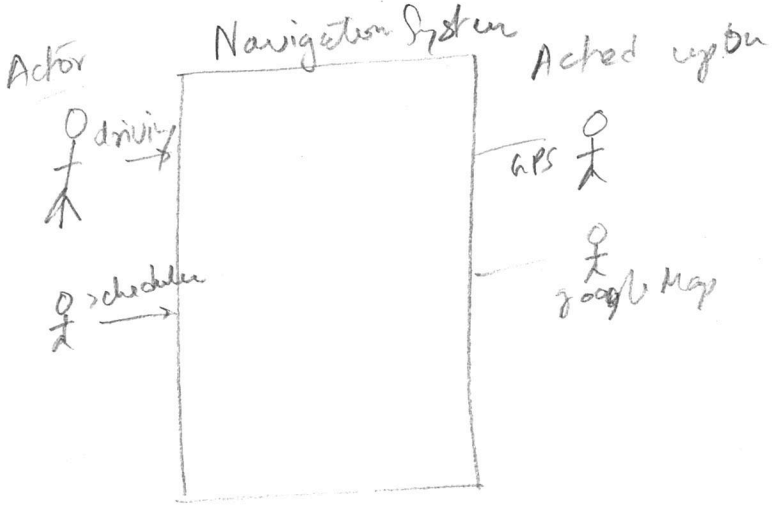


SUV has all properties of car + something more



Actor

Usecase



③ ~~Design~~ Analysis & Technique

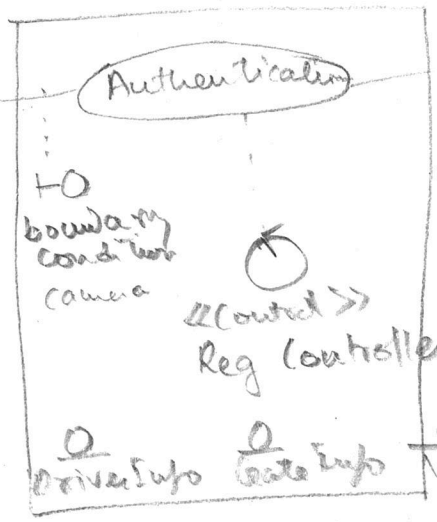
boundary condition (interfaces)

controllers

Entity (data to work on)

Gate

(a) Identify the Actors and the use case



There will be one controller per use case

entities don't talk to boundary. They talk only to control

(b) Class Diagram for Authentication Use case

<<boundary>>
sensor

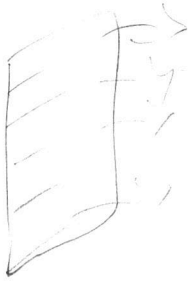
<<Control>>
controller

<<entity>>
License Info.

<<entity>>

Multiplicity

(c) Sequence ~~flow~~ diagram



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