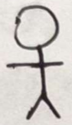
CSE 317
class no. 07

Use Case Model / Diagram

Focus on what a system can do.
In other words, what users can do within a system.

Consists of three components/symbols :

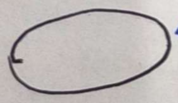
1. Actor :  actual users

→ divided into two types :

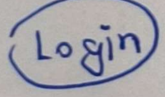
1. Primary : who actually takes benefit from the system.

not usually shown

2. Supporting : who helps to keep the system running.

2. Usecase :  oval shape

→ shows the requirements of the system.
→ task/ functions an user can perform using the system.



look!
an use case

③ Behavioral Relationships:

→ Shows the interactions between, ~~the~~ ~~actor~~ ~~& 1) use~~

① actor – use case

② use case – use case

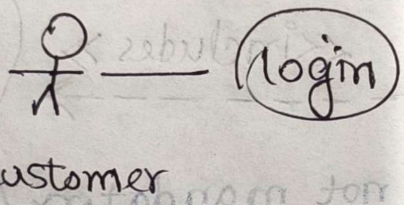
③ actor — actor

→ 4 types of relationships

① ~~Communities~~ Communicates

— Connection between actor– use case.

Ex:



Symbol: '———'

② Includes ↙ mandatory

— Relationship between use-case – use-ca

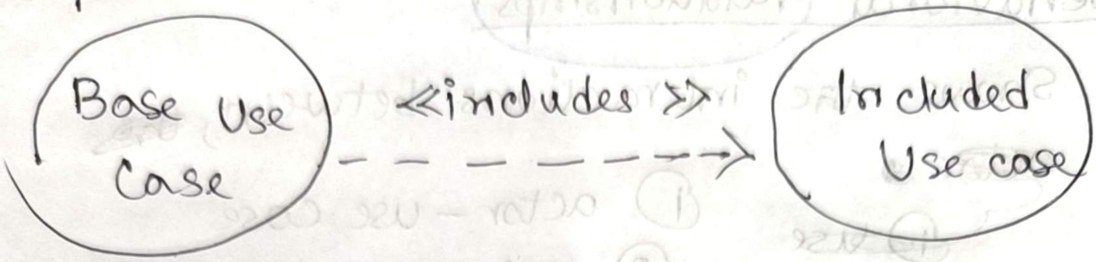
— One usecase always includes another usecase as part of its behavior.

— One is base and the other is included use case.

— The included use case must happen every ti as the base use case.

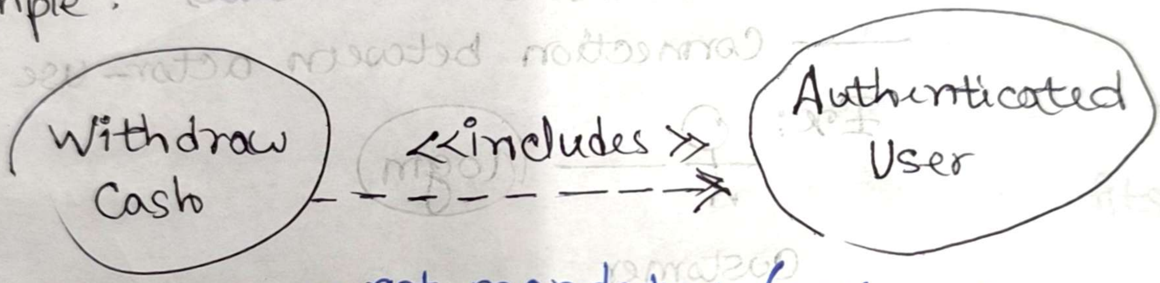
Symbol: <<includes>> - - - - - ->

Example :



Always directed from base to included use case.

Example :



not mandatory/optional

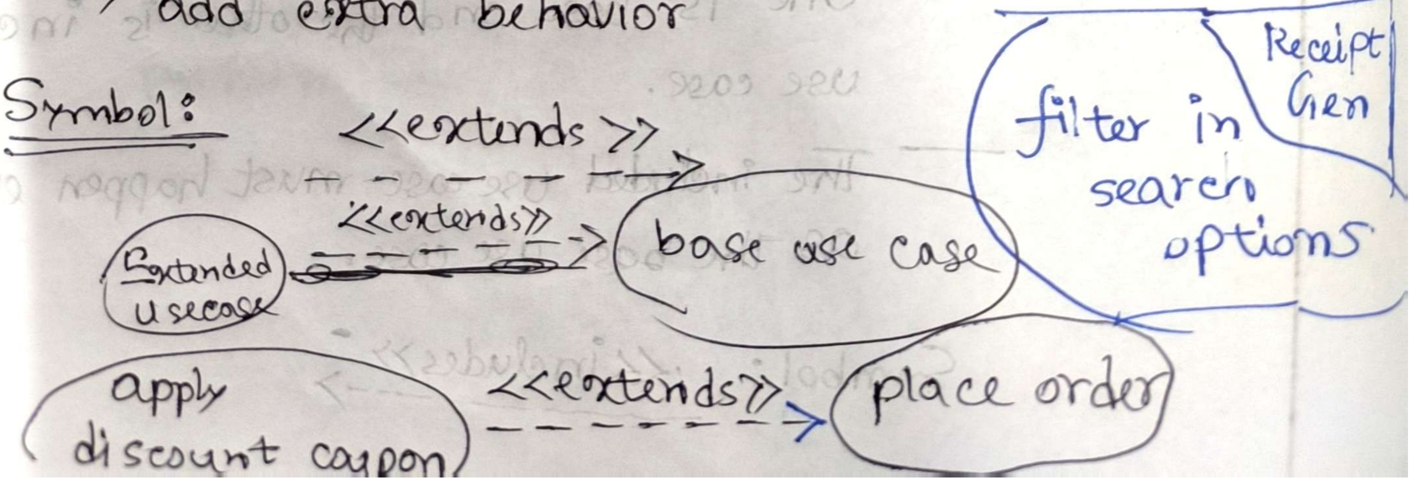
3 ~~Excdu~~ Extends

→ One use case optionally extends another use case under certain conditions.

→ happens only sometimes

→ add extra behavior

Symbol:



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Use-case Diagram/Model

④ Generalizes ↙ OOP → { Inheritance / Topic এর মতো } ? (No code / Only lines)

→ It shows that a specialized thing inherits from general thing.

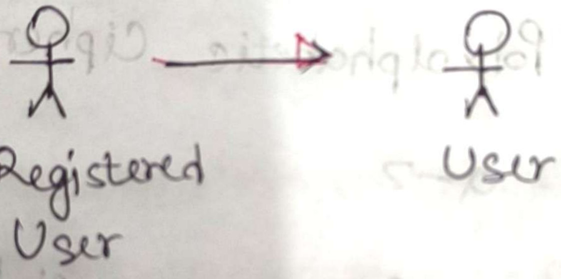
→ The relationship can be between,

① use case to use case

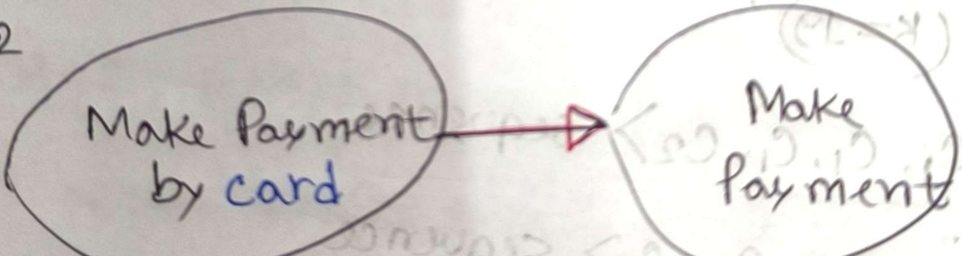
② actor to actor !

Specialized ——▷ General

Ex. 1

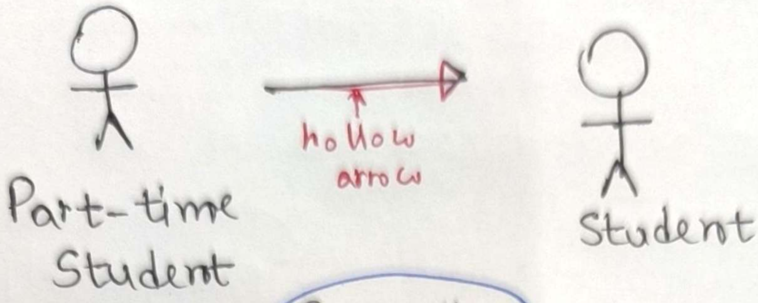


Ex. 2

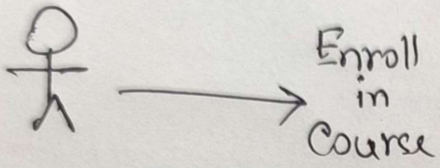


→ all payment methods follow the same basic steps but each has specific details.

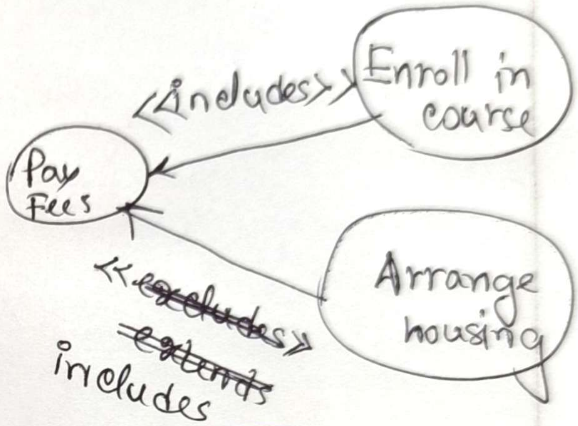
Ex. 3



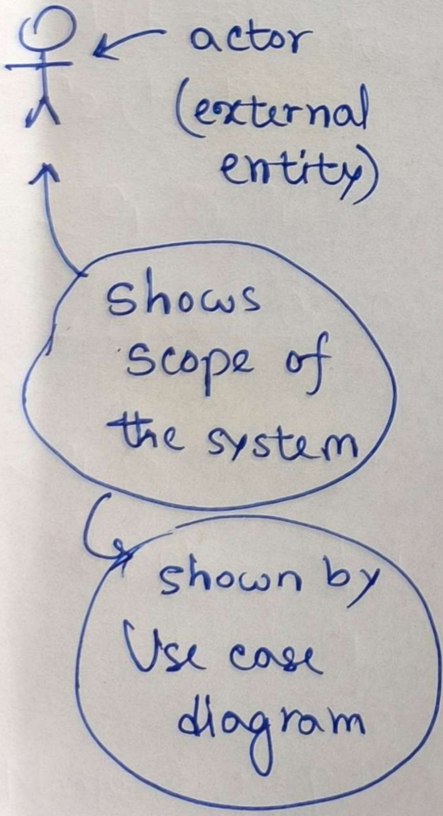
Generalizes

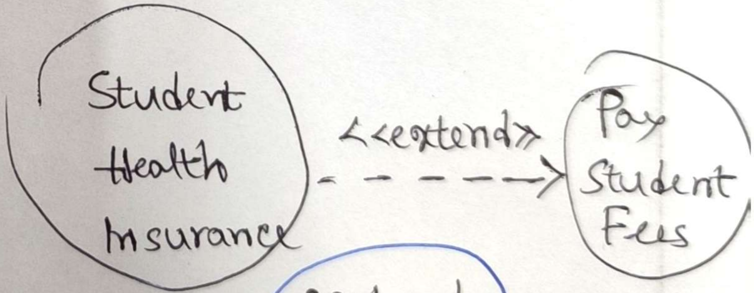


Communicates



includes





extends

Actors ~~bad~~ বাইরে
Usecase ভেতরে (within a boundary line)