

## 04 Use Cases in UML

Example:

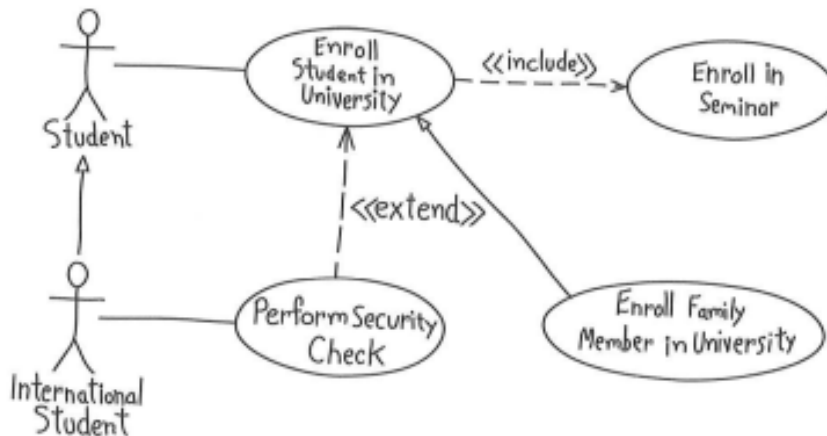


Figure 16. Enrolling students in a university.

Actors / Users:

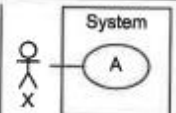

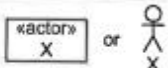

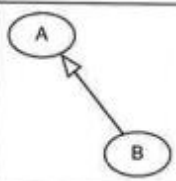
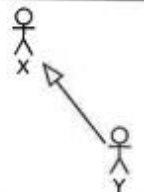
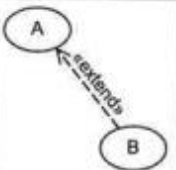
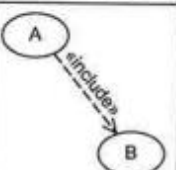
Show the actors of the system as figures.

Use “include” for use cases that follow logically within a use case

Use “extends” for special cases. In the above example, international students have a special use case. When they enroll, there is a security check.

Note that your system might have different types of actors (ie. the general user and an administrator, for example). In the above example the International Student is a special kind of user.

Notations:

Name	Notation	Description
System		Boundaries between the system and the users of the system
Use case		Unit of functionality of the system
Actor		Role of the users of the system
Association		X participates in the execution of A
Generalization (use case)		B inherits all properties and the entire behavior of A
Generalization (actor)		Y inherits from X; Y participates in all use cases in which X participates
Extend relationship		B extends A: optional incorporation of use case B into use case A
Include relationship		A includes B: required incorporation of use case B into use case A

**Table 3.3**  
 Notation elements for the use case diagram