

# Learn System Analysis And Design

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# 1 Usecase Modeling (FAST development framework)

One of the most important things in system development is finding **Requierments**.

- These Requierments should be categorized in good categories like *Essential Requierments* and *True Requierments*.
- These Requierments should be very clear and understandable.
- Then these Requierments are validable and measureable.



## **Drawback of using just other Models like process, data and object Models**

- Too Technical for not Technical people.
- Usecase Model is a base for Modeling process, data and object.

By the Usecase Model you can see all Requierments in a Tree sequence dependency.



**Usecase Model idea** Usecase Model come from Object Oriented in Technical subjects originally.



**Feasible system development** Every system development process in first step should be understandable, and then it should optimize. Other system development way that don't follow these rules works by something like pattern recognition and artificial intelligence.



**Usecase** A sequence of steps of one narrative in system for doing **one duty**.



**Usecase Diagram** A Graphic Diagram for interaction between system with users and other systems.



**Usecase Narrative** Complement(Complete Description) of Usecase Diagram.



## Drawing Usecase Diagram

1

Diagram parts Meaning:

- Usecase: oval
- Actor: stickman
- System/Subsystem: rectangle
- Connection: lines/vectors
- Extended Connection: dashed line with «extends»
- Extend Conditions: paper
- Include/Uses Connection: dashed line with «include»
- Depends on Connection: line with «depends on»
- Inheritance Connection: vector from Actor to Actor

Extension Usecase is optional or conditional. It have base Usecase.  
Include Connection have abstract Usecase that can reuse many times.  
Depends on Connection determine sequence of Usecase.  
Inheritance Connection have abstract Actor.

2

Determine Diagram parts:

1. Identify Actors.(User-Centered Design)
2. Identify Usecases.
3. Draw Usecase Diagram.
4. Write Usecase Narrative.