# IS351-SYSTEM ANALYSIS

Use case diagram Description

### BRIEF USE CASE DESCRIPTION

[an often one-sentence description that provides a quick overview of a use case]

Use case	Description
Record patient data	Save the patient information as name, age, address,etc.
Change Appointment	When patient request to change the appointment
Reserve Appointment	Patient request to book an appointment, with the saving the data of appointment information as time of the appointment, doctor name.

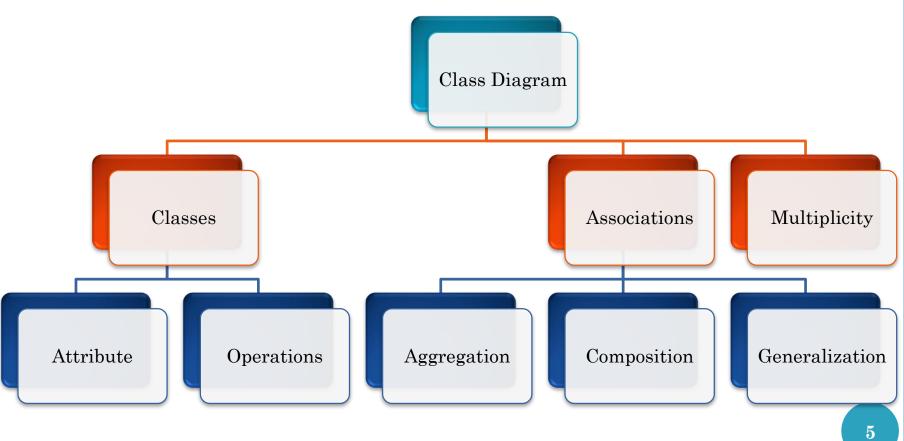
## USE CASE SCENARIOS

Name	Change Appointment
Actor	Patient
Entry Condition	<ul><li>1-Patient makes a call</li><li>2- Patient already has an appointment after 24 hours at least</li></ul>
Exit Condition	Patient Change appointment
Flow Of Events	1-patient inform system with the previous appointment 2-System cancel the patient appointment
Alternative Events	1-patient inform system with the previous appointment 2-Patient request change appointment time 3- system cancel the patient appointment 4-system start "Make an Appointment" use case

# IS351-SYSTEM ANALYSIS

Class Diagram- Noun technique

### CLASS DIAGRAM COMPONENTS



#### THE DOMAIN MODEL CLASS DIAGRAM

• A class diagram that only includes classes from the problem domain.

• Design class diagram vs domain model class diagram!!

### THE NOUN TECHNIQUE

- A technique to identify problem domain objects by finding and classifying the nouns in a dialog or description.
- a noun is a person, place, or thing.
- The analyst lists all nouns without thinking too much about them and without talking much to users.

- In a multi-clinic system a patient makes a call for an appointment reservation. Once the call is done, the system has to record all patient information such as patient name, address, and telephone number.
- During the notification with a patient, he/she should know all possible appointments in order to choose his/her desired appointment.
- The patient may cancel or change his/her appointment before 24 hours from his actual appointment.
- Two daily reports have to be prepared to each doctor, one of them is about patient report and the other is an appointment report.
- When a patient comes for examination, the doctor writes a prescription which includes all drugs the patient have to take, number of times and dose he has to take for each medicine. In the end, the doctor Prints the prescription to the patient before he leaves

### THE NOUN TECHNIQUE

- 1. list all the nouns that users mention when talking about the system
- 2. add to the list any additional nouns about the problem domain of the system.
- 3. Refine the noun list. Ask these questions about each noun:
  - Is it a unique thing the system needs to know about?
  - Is it inside the scope of the system I am working on?
  - Does the system need to remember more than one of these items?

#### Multi-Clinic System Case Study

- In a multi-clinic system a <u>patient</u> makes a call for an appointment reservation. Once the call is done, the system has to record all patient information such as <u>patient name</u>, <u>address</u>, and <u>telephone number</u>.
- During the notification with a patient, he/she should know all possible <u>appointments</u> in order to choose his/her desired appointment.
- The patient may <u>cancel</u> or <u>change</u> his/her appointment before 24 hours from his actual appointment.
- Two daily reports have to be prepared to each doctor, one of them is about patient report and the other is an appointment report.

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#### Multi-Clinic System Case Study

• When a patient comes for examination, the <u>doctor</u> writes a <u>prescription</u> which includes all <u>drugs</u> the patient have to take, number of times and dose he has to take for each medicine. In the end, the doctor <u>Prints the prescription</u> to the patient before he leaves.

### MCS CLASS DIAGRAM

