

HOSPITAL MANAGEMENT SYSTEM

DATA WAREHOUSING (ITCS 6163) UNIVERSITY OF NORTH CAROLINA, CHARLOTTE

Introduction:

In real world in order to run a Hospital successfully, the management should be able to coordinate between three entities and then analyze what type of medical services are in demand and they can even make use of patient data to analyze various other things. The three entities above mentioned are

1. Doctors
2. Nurses and
3. Pharmacy

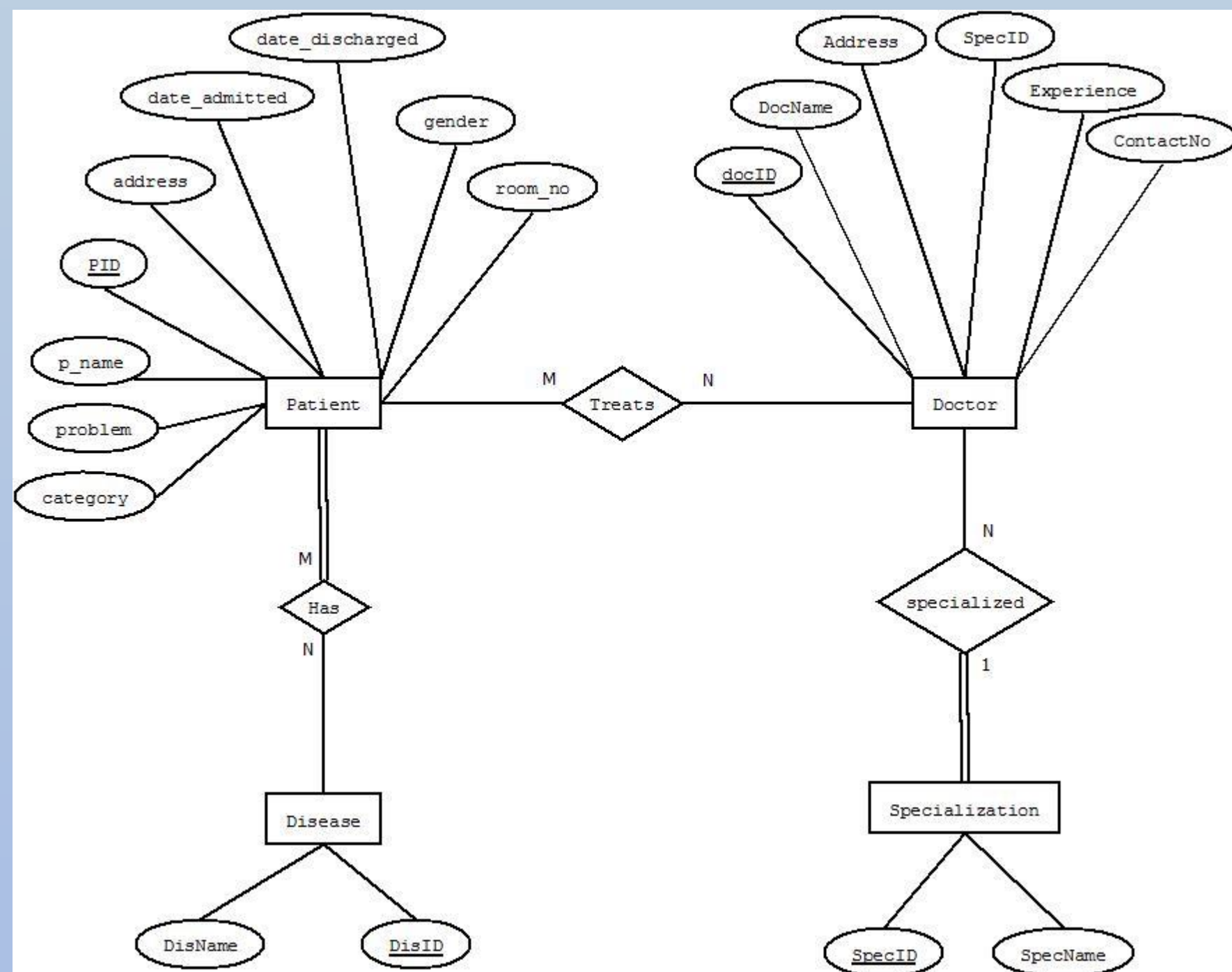
Objective:

In this project, we have implemented the above mentioned three entities initially as separate databases in order to get a deeper understanding of how each entity works as an independent organization. Later we merged these three databases of different entities into one using MYSQL , so that any higher level management of the hospital organization can retrieve the information they need in order to make the business decisions.

Doctors' Module:

This module consists of patients who are treated by doctors based on the type of disease they are affected and specialization of the doctor.

ER Diagram:

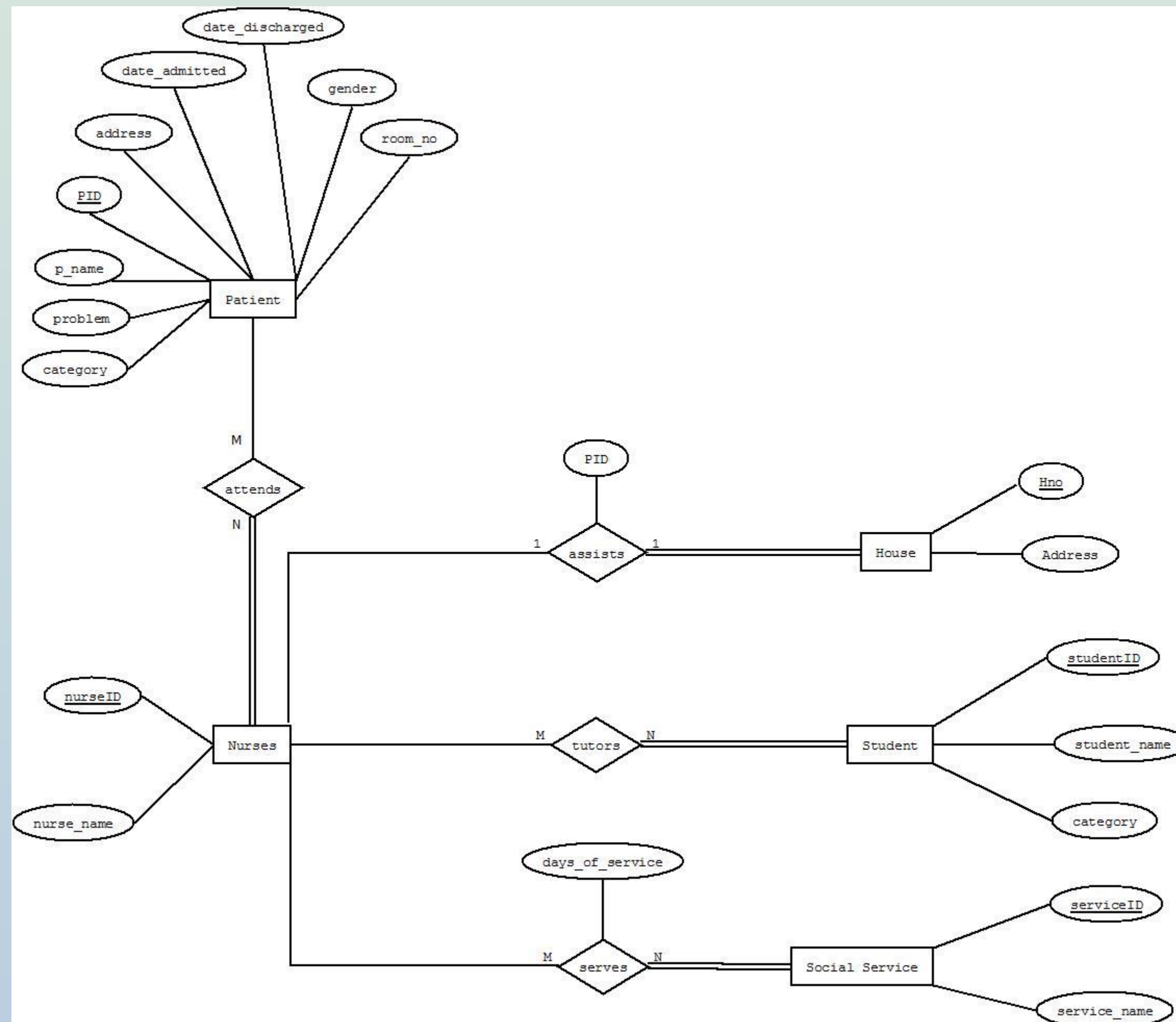


Nurses Module:

This module consists of various functionalities or services being offered by the nurses:

1. They provide assistance to patients in the hospital.
2. They provide tutoring to the students.
3. They participate in the social activities.
4. They provide medical facilities to the patients at their doorstep.

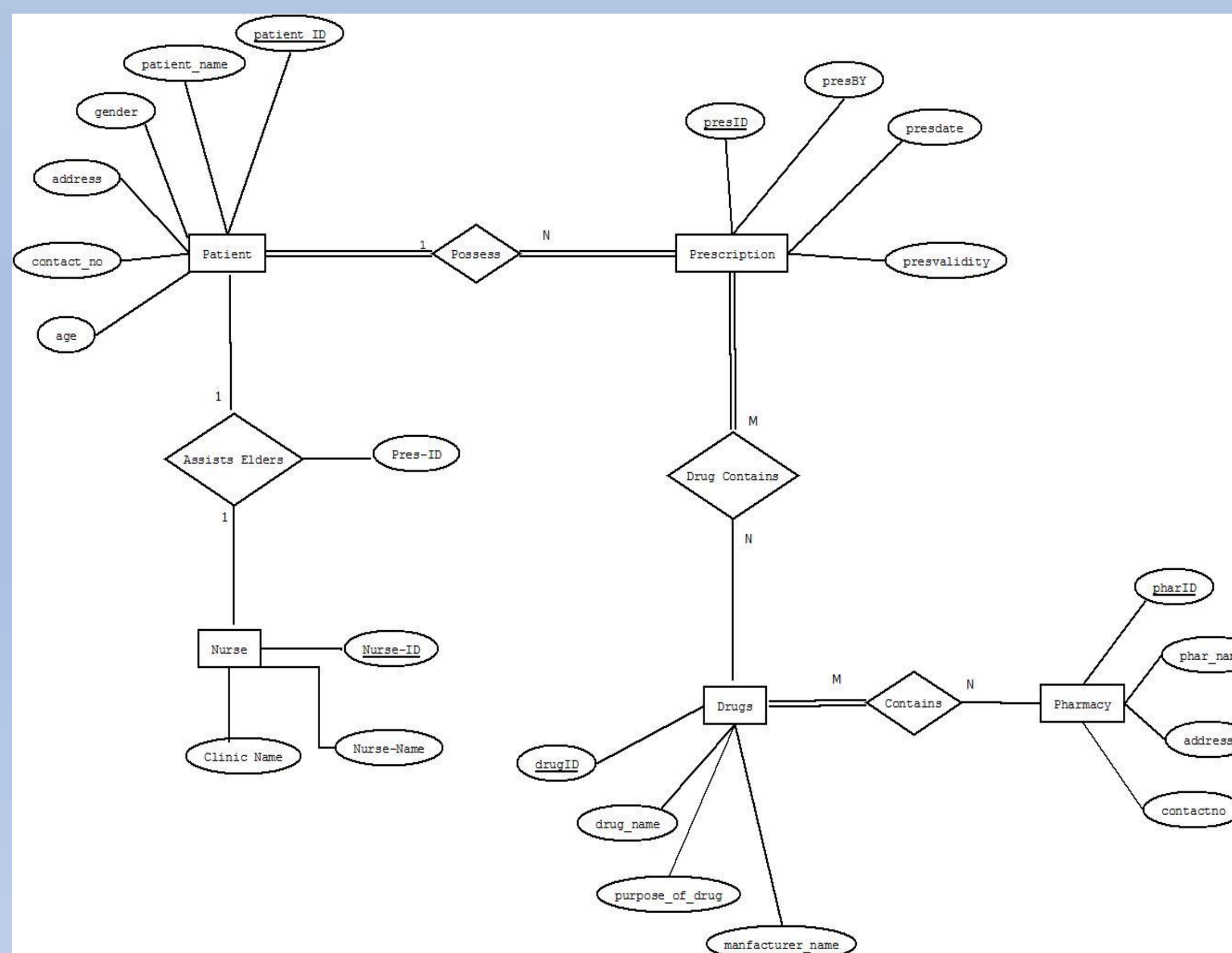
ER Diagram:



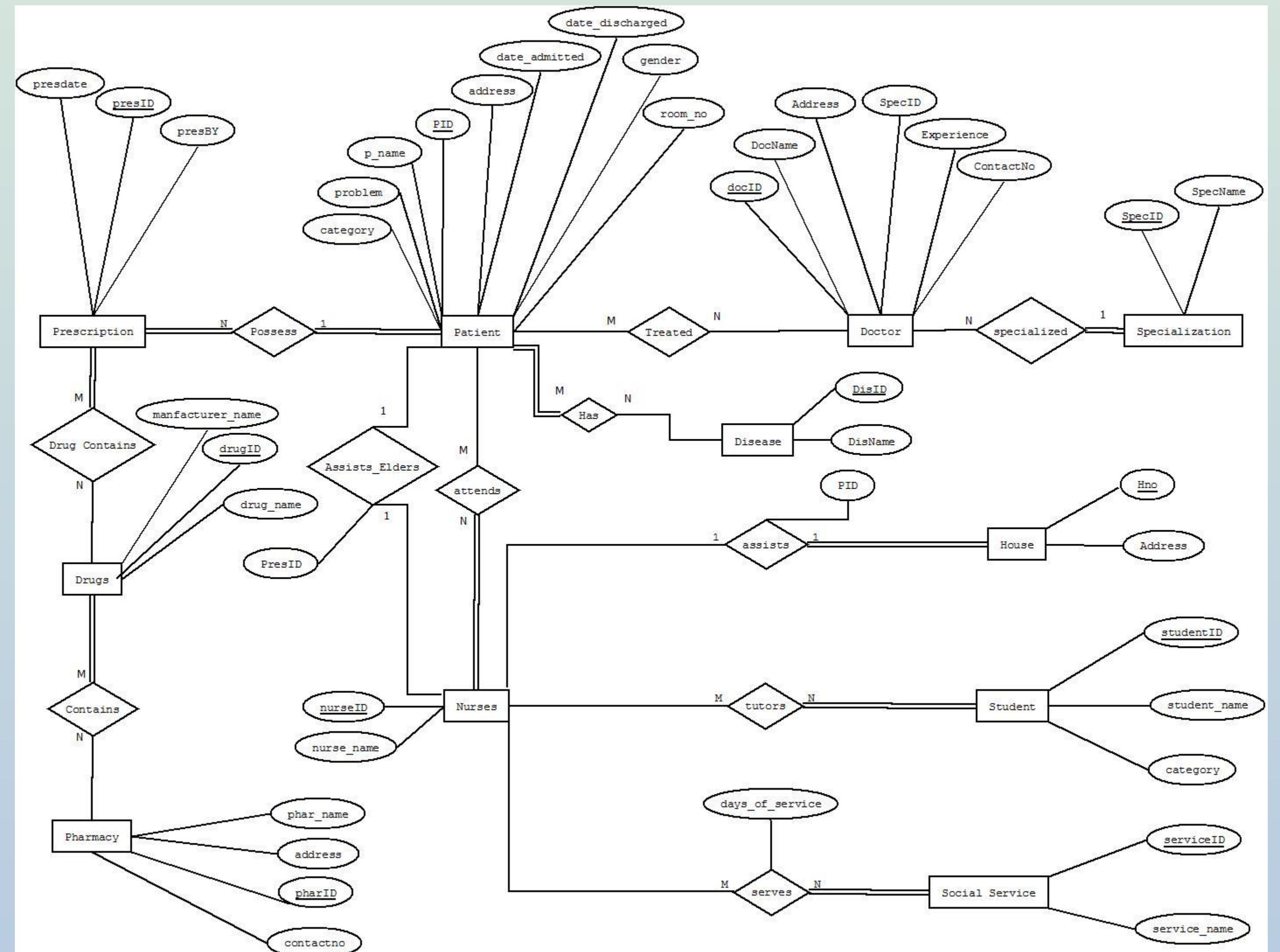
Pharmacy Module:

This module provides the medicine to the patients treated by the doctor based on the prescription provided to them. They can give the medicines to the patients or they can give medicines to the nurses on behalf of the elderly patients who are being treated at their houses.

ER Diagram:



Combined ER diagram of three modules:



Snowflake schema:

In this project we have used the snow flake schema to implement the data warehouse.

a snowflake schema is a logical arrangement of tables in a multidimensional database such that the entity relationship diagram resembles a snowflake shape. The snowflake schema is represented by centralized fact tables which are connected to multiple dimensions.

