## **ERD: BUET Medical Center Management**

## **Doctor-Patient-Medicine Module**

BUET Medical center has many doctors and patients. Doctors are identified by doctor id and described by name, address, mobile number and specialization. Among the doctors, one is appointed as in-charge of the medical center for a certain period. A patient has an Id, name, date of birth, address. A patient may be a student, teacher or employee. Each student, teacher or employee has an id assigned by BUET. These ids are used as patient id. For each student, the current level, term and CGPA are needed to store. The information that are needed for teacher to store are designation, highest qualification and salary. The information that are needed for employee to store are designation, training and salary. A doctor gives prescriptions to many patients in a date. A patient can get prescription from many doctors in different dates. A prescription contains one or more medicines. Each medicine has an id, trade name, manufacturer name, date of production and date of expiry.

## **Doctor-Patient-Services Module**

BUET Medical center has many doctors, nurses and employees. Among the doctors, one is appointed as Chief Medical Officer (CMO). After the retirement, another doctor is appointed as CMO. Doctors, nurses and employees are identified by doctor id, nurses id and employees id given by BUET authority. Doctors, nurses and the employees have the common information as name, address and mobile. Doctors and nurses have the common information as on call day. Doctors have specialization, nurses have training and employees have overtime hours.

Everyday many students, teachers and other employees visit the medical center for different health services. All teachers, students and other employees of BUET are given IDs (Teacher Id, student Id, employee Id) by BUET and common information are name, address and mobile. You have to record which doctor has prescribed which service to whom. There are many services available in the medical center. Each service has an id, service name and cost. All services are free for the students. Some services are free for 3<sup>rd</sup> and 4<sup>th</sup> class employees. Prescription service is free for all. No other services are free for officers and teachers. You have to prepare bills for the services offered to the employees and teachers on monthly basis.