Outline of the database

Title: Hospital Management System

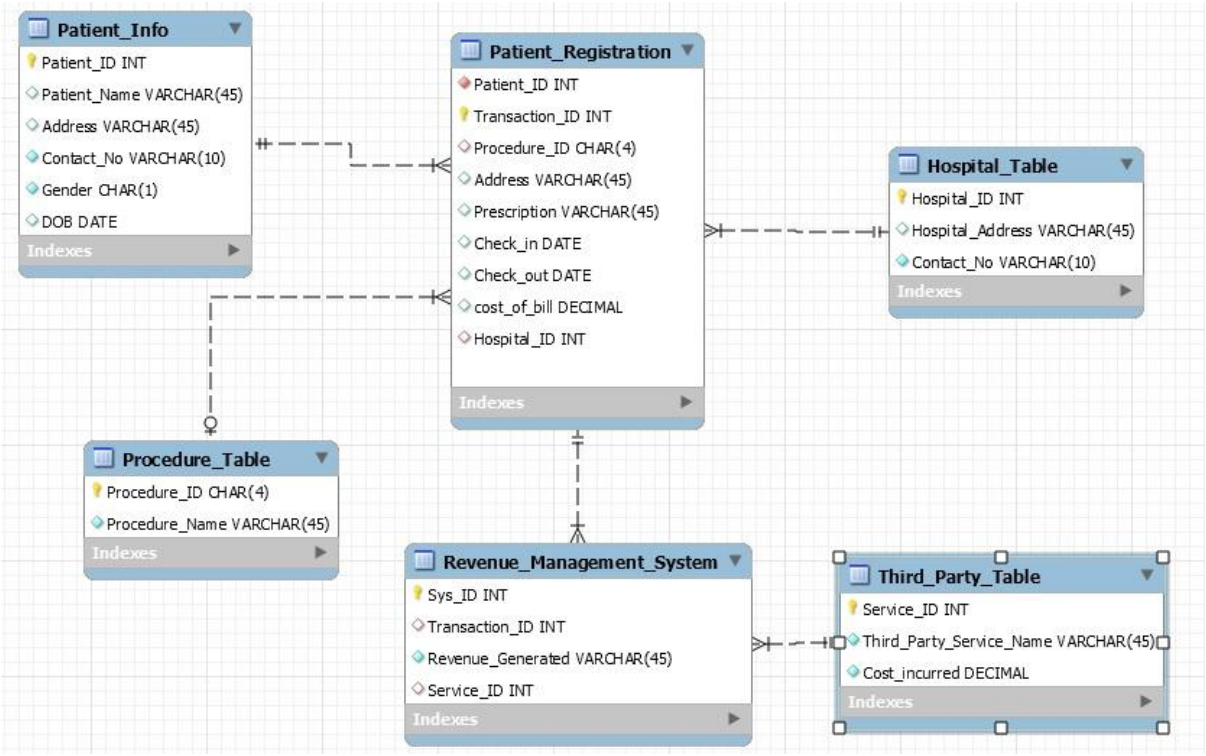
Abstract: We know that every database plays a very important part in the operations of any hospital. In this project we have focussed on maintaining centralized database for a group of hospitals. These databases are created from administrative point of view and can be used to save information specific to each patient and hospital as well as transactions that take place on day to day basis. We have created a web-application using HTML, AJAX, JavaScript and PHP to set up a GUI for administrative use.

Database Structure: There are mainly 2 fact tables- one for Patient Registration and other for Revenue Recording. Both of them have the grain as Transaction ID. Other than that, we have dimensional tables like Patient table (for customer's details), Hospital table (for details of branch of hospital, location and other special functions available), Third party table (for details of third party services available), and Procedures Table (for procedures available with all the hospitals).

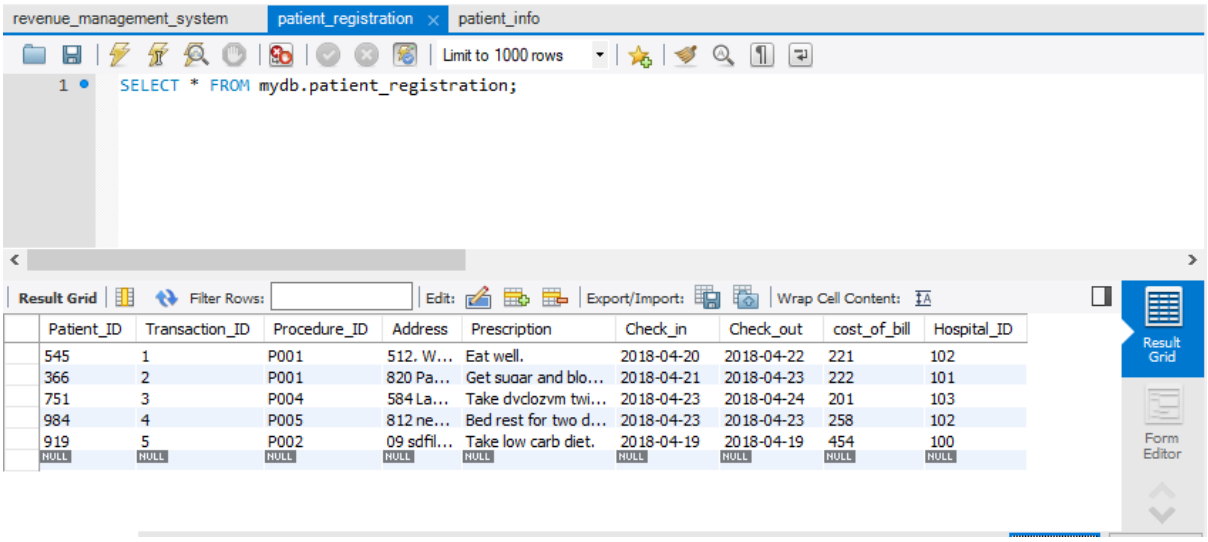
Core Functionalities: Following are some of the core functionalities involved:-

1. Dealing with personal information of patients: We can save data of new patients in Patient_info table. Also, we can update and delete an existing user.
2. Dealing with registration of patient: A new patient or a patient who has already visited the hospital may visit the hospital for a follow up or new appointment. We can register such visits in Patient_registration table with the help of Transaction_ID for the visit, Patient_ID for the patient visiting and the hospital branch in which the patient is visiting. We can also edit these transactions in case we need to correct the check-in and check-out times.
3. Recording the revenue generated: Whenever a transaction is generated on visiting patient a corresponding transaction is generated in Revenue Management database that saves billing information and any cost incurred whenever a branch requests for third-party services.

Primary Database table

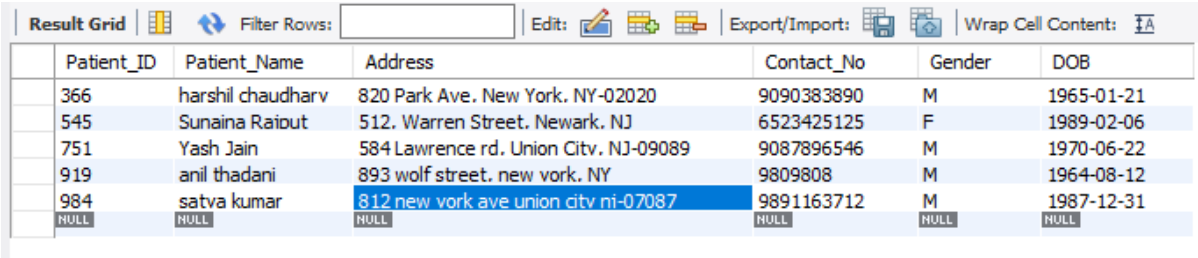


In above picture, Patient_Registration is our main fact table. Following are some of the entries made in this table:-



Patient_ID	Transaction_ID	Procedure_ID	Address	Prescription	Check_in	Check_out	cost_of_bill	Hospital_ID
545	1	P001	512. W...	Eat well.	2018-04-20	2018-04-22	221	102
366	2	P001	820 Pa...	Get sugar and blo...	2018-04-21	2018-04-23	222	101
751	3	P004	584 La...	Take dvclozvm twi...	2018-04-23	2018-04-24	201	103
984	4	P005	812 ne...	Bed rest for two d...	2018-04-23	2018-04-23	258	102
919	5	P002	09 sdfil...	Take low carb diet.	2018-04-19	2018-04-19	454	100
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Also, following are some of the entries made in the Patient_info and Hospital_table tables:-



Patient_ID	Patient_Name	Address	Contact_No	Gender	DOB
366	harshil chaudharv	820 Park Ave. New York. NY-02020	9090383890	M	1965-01-21
545	Sunaina Rajput	512. Warren Street. Newark. NJ	6523425125	F	1989-02-06
751	Yash Jain	584 Lawrence rd. Union City. NJ-09089	9087896546	M	1970-06-22
919	anil thadani	893 wolf street. new york. NY	9809808	M	1964-08-12
984	satva kumar	812 new york ave union city nj-07087	9891163712	M	1987-12-31
NULL	NULL	NULL	NULL	NULL	NULL

Please note that in order to run the project one should have PHP, MySQL and Tomcat Servers installed in there system.