

Department of Computer Science and Engineering, Anna University, Chennai

CS6106 – Database Management Systems

Sem/Batch: IV/Q, March 08, 2022

Lab - Schedule

Exp. No	Date	Experiments
1	08.03.2022	Study and Exploration of Entity Relationship Model using Dia Tool
2	15.03.2022	Study and Implementation of DDL and DML Commands
3	22.03.2022	Constraints, Synonyms Sequence
4	29.03.2022	Functions
5	05.04.2022	Operators
6	09.04.2022	Joins
7	12.04.2022	Cursors and Indexing (Group By and Order By)
8	19.04.2022	Sub Queries and Views
9	26.04.2022	TCL Commands
10	07.05.2022	PL/SQL
11	10.05.2022	Triggers
12	17.05.2022	Transactions
Mini Project		
13	24.05.2022	Problem Identification
14	31.05.2022	50% Implementation and Draft Document Submission
15	07.06.2022	Full Project Demo and Document Submission

Evaluation of Each Lab Session

Observation - 5 marks

Execution - 15 marks

Spot - 5 marks

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Week 1 – Study and Exploration of Entity Relationship Model using Dia Tool

Observation (5)

1. Explain Entity Relationship Diagram and draw its associated symbols and notations.
2. What is an Entity? Explain its types.
3. Explain attributes with its types.
4. Describe keys with its types.
5. Draw an ERD for Library Management System.

Execution (15)

1. Draw an Entity Relationship Diagram for *Library Management System*.
2. Draw an Entity Relationship Diagram for the given scenario *Hospital Management System*

Aim: XYZ hospital is a multi specialty hospital that includes a number of departments, rooms, doctors, nurses, compounders, and other staff working in the hospital. Patients having different kinds of ailments come to the hospital and get checkup done from the concerned doctors. If required they are admitted in the hospital and discharged after treatment.

The aim of this case study is to design and develop a database for the hospital to maintain the records of various departments, rooms, and doctors in the hospital. It also maintains records of the regular patients, patients admitted in the hospital, the check up of patients done by the doctors, the patients that have been operated, and patients discharged from the hospital.

Description: In hospital, there are many departments like Orthopedic, Pathology, Emergency, Dental, Gynecology, Anesthetics, I.C.U., Blood Bank, Operation Theater, Laboratory, M.R.I., Neurology, Cardiology, Cancer Department, Corpse, etc. There is an OPD where patients come and get a card (that is, entry card of the patient) for check up from the concerned doctor. After making entry in the card, they go to the concerned doctor's room and the doctor checks up their ailments. According to the ailments, the doctor either prescribes medicine or admits the patient in the concerned department. The patient may choose either private or general room according to his/her need. But before getting admission in the hospital, the patient has to fulfill certain formalities of the hospital like room charges, etc. After the treatment is completed, the doctor discharges the patient. Before discharging from the hospital, the patient again has to complete certain formalities of the hospital like balance charges, test charges, operation charges (if any), blood charges, doctors' charges, etc.

Next we talk about the doctors of the hospital. There are two types of the doctors in the hospital, namely, *regular doctors* and *call on doctors*. Regular doctors are those doctors who come to the hospital daily. Calls on doctors are those doctors who are called by the hospital if the concerned doctor is not available.