

Autumn 2019, CS 508 Database Systems / CO 302 Database Management

Term Project

Assignment I:

1. Define the problem completely including any additional assumption, if necessary (the problem contain only a brief description)
2. Design an ER or EER (whichever is suitable) model for the problem mentioned against your roll numbers.
3. Covert the ER/EER model to a Relational model from this ER/EER model. Identify the Functional dependencies and specify the highest normal form for each relation schema.

Last Date of Submission: 01-11-2019

The final project report should contain (at least) the following:

- Introduction and Problem Definition
- ER/EER model
- Relational Model

Assignment II:

Develop a database application using PHP and Oracle/MySql for the problem assigned in Assignment I

Last Date of Submission: 22-11-2019

The final project report should contain (at least) the following:

- SQL commands used for creating the database
 - Description of different modules of the system
 - Snapshots of input/output forms and reports
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1. Library information system: Database should store information about books, journals, magazines etc., Their issue/receipt/reservation. It should be possible to search books by author, title, subject. Similarly journals should possible to search by subject area, publisher etc.
 2. Course Registration System for TU.

3. A database application to keep track of the passed out students of Tezpur University (Alumni).
4. A database application to keep information about a cricket match. Information should be stored in such a way that the full score card can be produced. Information of each individual player, i.e. total wicket/runs, average, total number of match played etc., should be updated after each ball.
5. A bank database to store information about its customers, accounts(savings a/c, current a/c...), loans(car loan, housing loan, ...), transaction made by customers for each loan(payments)/account(withdrawal, deposit).
6. Payroll system of a hypothetical organization
7. An information system for the students of B.Tech programmes of SoE of TU
8. An information system for the Post Graduate students of TU
9. An information system for the Under Graduate students of TU
10. An information system for the boarders of a hostel of TU
11. Hospital information system : Patients - indoor/outdoor, medicines/lab tests(including results) prescribed to patients, information if a patient if referred to other expert/hospital. Doctors - specialization, patients attended etc. Different wards/beds and patients allotted to them etc.
12. An information system for the employees of a hypothetical organization
13. An information system for faculty members of TU. The system stores the personal information like, name, address, date of birth, date of joining etc; academic information like - qualifications, publications, area of specialization, conferences/workshops attended, courses taught by him/her, other responsibilities/duties etc.
14. Extra-curricular activity information system of the students of TU
15. An information system to keep track of the students' project of and University/College.