CSE355 Database Systems
Term Project

Step 1: Proposal ➔ Due: 23.10.2013. 17:00

- Determine a practical (applicable to real business) database project that you want to implement. Specify the scope of your project. Give a name to your project.
- You can study in groups. At most two members are allowed in a group.
- Submit a report (max 1 page A4) and take the approval of your lab instructor before beginning to study on your project.
  ♦ You may take the approval via office hours or e-mail.

Step 2: Requirement analysis / Conceptual database design ➔ Due: 10.11.2013. 23:59

- Submit a report (2-3 pages A4) that contains data and requirement analysis of your database.
  ♦ Attach the documents that you have collected from the company.
- Create a diagram (with E/R studio or a similar product) that shows the entities, attributes and relationships in your database using Entity-Relationship Model.
  ♦ The diagram should obey the rules of Entity-Relationship drawing conventions.
  ♦ Attach your ER diagram.

Step 3: Requirement analysis / Conceptual database design / Logical database design and mapping / Physical design and database implementation ➔ Due: 20.12.2013. 23:59

- Develop a Microsoft SQL Server 2008/2012 database with the following characteristics:
  ♦ The name of the database should be same as your project name in capital letter format.
  ♦ Create at least 6 tables in your database.
    ♦ Each table should be normalized to third normal form.
    ♦ Populate your data to an acceptable amount. (Each table should contain at least 10 records.)
    ♦ Use indices, uniques, identities, check constraints, defaults, computed columns and triggers where necessary. Be sure to have at least one from each.
    ♦ Use the most appropriate data types for the fields.
  ♦ Create at least 4 views in your database.
    ♦ Do not simply write “SELECT... FROM...WHERE...” statements.
  ♦ Create at least 1 trigger in your database.
  ♦ Create at least 4 stored procedures in your database.
    ♦ You may create them for insertions, updates, deletions or specific business rules.
    ♦ Try to do different jobs in each procedure.
- Submit a detailed report:
  ♦ Explain what your database project is about
    ♦ 1 paragraph or half of a page is enough
  ♦ Write about your data and requirements analysis
  ♦ If necessary, update the E/R diagram which you created in the previous step.
  ♦ Explain each table and indicate why you used:
    ♦ Columns, Data types used (and why, if needed)
    ♦ Primary key, Foreign keys, Relationships
    ♦ Constraints, Indices
  ♦ Explain Triggers and Stored procedures
  ♦ Explain Views

Step 4: Web interface ➔ Due: 27.12.2013. 23:59

- Create a user friendly web interface for your database.
- There will be a demo session for every project.
  ♦ Demo sessions will be arranged and announced later.

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