Guidelines for the Final Project

Teams: This is an independent project. If you prefer to work in a group, that is totally fine too. Just let me know. Coordinating group activity would be up to you since this is an online class. If you choose to work in a group, each person in the group will have to account for what they did in the project so keep track.

Late assignments will not be accepted.

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I Project Title, Project Summary

Please email me the following:
1. Project Title
2. Project Description *(a couple of paragraphs describing your project title in more detail)*
3. Group Members – If you choose to work in a group please email me the names of all group members *(note: You cannot have more than 3 people)*

II ER Diagram

Conceptual Design:

Use the Entity-Relationship Model for the conceptual description of your database. Your diagram should depict entities, relationships, multiplicity, etc. Please submit the ER Diagram in addition to a few paragraphs explaining it.

*Note: You should have at least 4 tables.*

III Relational Schema and Normalization

1. Derive a relational database schema based on your ER diagram where each relation schema has the form:

   \[ \text{Relation-name(attr1, attr2, ..., attrn)} \]

   You should indicate both primary and foreign keys (but you will only implement the primary keys later).

2. Please provide a one sentence description of each table stating its purpose.
3. Normalization – please modify your tables (if necessary) to normalize them. List your new tables (if they changed) and provide a discussion as to the methods used to achieve these normal forms, and reasons for any denormalization.

**IV Database Implementation**

Implement the approved design for the database system using your Database Management System.

**V Web Application**

Create a simple webpage to connect to your database. The application can allow users to insert/retrieve/etc. from your database.

Please submit the following via the dropbox:

1) Screenshots of any tables/rows/views in the database.
2) Copy of the SQL statements which created / inserted them.
3) Modified Project Summary – A couple of pages describing the project.
4) PHP file.
5) The URL for your webpage.
6) If you were working in a group, each person should individually email me a one page document stating exactly the parts of the project s/he contributed to so that you can be graded separately. In addition please note the work that your other teammates have done.

**VI Virtual Presentation**

While we will not have an actual presentation, please submit the URL to the D2L discussion board so your classmate’s can see what you have done. Attach a screenshot of the tables you created, views, and a description. Furthermore, you are required to comment on 3 of your classmate’s threads.

**Sample topic ideas (Feel free to choose your own!):**

1. Matchmaking Database - Database of friends – match them up by interests, age, etc.
4. Library DB - Search collections, check status, checkout,
5. Job postings DB - Openings, contacts, references, requirements, ...