

CISC3500

DB Term Team Project ¹

Building upon and complementing the materials covered in the class, students are assigned to do a team term project.

Project Description

A company called WITS Inc is manufacturing bots used inside many web applications. It follows the following business rules:

- a. A bot type information should be recorded once it is created.
- b. A bot developer information shall be recorded.
- c. One developer can create many bots while one bot is created by only one developer.
- d. A client is recorded when the client acquires a bot in service. The bot acquired is one of the types on the bot type table.
- e. Once a bot is adopted by a client. The client is termed as a master with respect to the bot. Master and bot are bounded. The bot will be given a nickname and its service start date and end date are recorded.
- f. To be clear, one bot type can generate many bots with different names put into service.
- g. A client can acquire many bots.
- h. A social media application that allows its users (masters) to use bots is recorded, name and its bot url as location are recorded. A user can register many bots. The users' names are the same as masters but can have different names. For example, M1 can be used by the WITS company to identify its client while U1 can be used as a user in one social media application. M1 and U1 are the same.
- i. There are many social media applications, some of them allow bots to be used, some not.

With these business rules, students are asked to use MYSQL workbench (or any other tools) to design an ER diagram. With the ER Diagram, students can create tables using the so called forward engineering process. Once tables are created, students can enter data to tables. Each table shall have at least 10 entries (so to make meaningful queries).

Once the database is in place, students are asked to make the following queries.

1. list bot type information sorted by its birthdate (creation date).
2. give the count of bots under each type created.
3. list those who adopt bots ordered by its service start date, and nickname.
4. list social media applications names who allow bots to be used, ordered by the number of bots in its platform.
5. find out bot developers who are working in Dobbe Ferry in NY state.

The WITS Inc is thinking to expand its business and would like to have more features incorporated into its database. Students are asked to make modification and addition to the existing business model. It is open ended scenario to db design.

¹ Please do not distribute content of the project beyond this class. Use it for the project purpose only.

Requirements and submissions

I. Form a team

The project is team based. Ideal number for a team is two to three. Team assignments are done in zoom in the order of student preference and zoom breakout. The rest of students who are not in the class will be done manually by the instructor.

II. work on project

Each team makes its plan to do the project that includes building ER model, populating it, entering data and making queries. Data is generated synthetically (artificial) at will by students in this project.

III. screenshots are captured. They should include 1) ER diagram, 2) each table with data, 3) results from queries.

IV. Generate ONE word document that includes 1) title page with team member information, 2) paste all the screen captures, 3) one page of description about the project that emphasizes on modification and addition to the business model.

V. Use mysql dump to get the project image.

VI Submit the word doc and the dump file (or zip them as one.)