CSC 436 Assignment

Semester DB Project: Phase I

Overview

Your group will analyze suggestions and critiques, document specific revisions, address any identified weaknesses, and implement revisions of your database design. Through this process, you will enhance the quality and functionality of your project.

Part I: Review Feedback & Revisions

Carefully review the feedback provided during the Phase I presentations and peer reviews. Take note of any suggestions, critiques, or areas for improvement identified for your project.

1. Thoroughly document the specific revisions and improvements to be made to your group's project. Include explanations for each change, detailing why it was made and how it enhances the project.
    a. Aila wanted to add more elaboration on how the group would collect data for their database. Although the method of collecting data is very simple, she wanted to add more explanation on the steps and usage of the data as well.
2. Identify weaknesses or concerns raised in the feedback and explain how your group will address them. Prioritize revisions that will have the most significant impact on improving the overall quality and functionality of your project.
    a. Jonathan Added "Our ER diagram was missing a relationship that connected "Account holder" to "Account", so a (M-to-N) was added in order to strengthen our ER diagram." Jeena edited the ER diagram further so that the possibility of having joint accounts is possible with individuals with different user_IDs.

Work closely with your group members to discuss the feedback received and determine the best approach for making revisions.

Part II: Implementation Of Revisions

Implement the identified revisions and improvements into your project. Ensure that all changes are accurately reflected in your project materials. Your group must submit the following revised project materials based on the feedback you received:

3. Updated entity sets and their attributes with primary keys underlined.

4. Updated relationships and constraints.

    a. A constraint that this database will have is consistency. Because we cannot directly access bank accounts, the database is not automatically updated with real time transactions. This may lead to inaccurate data because the user might leave out casual transactions, or if they pay with cash it will be harder to confirm.

5. Updated E-R Diagram reflecting the changes made to the project structure.

    a. Added M to N in the diagram. For accounts to account holders to show that there are possibilities of a joint account holder. Removed user_Id from accounts in order for the joint account possibility to happen from multiplier user IDs, login on respective accounts, and made sure ownership between account and account holder is visible in the diamond.

6. Descriptions of the sources from which you intend to collect data for your database, possible high-level data modification operations, and the types of questions your stored data will be able to answer.

    a. The sole source that this database will collect information from is the user itself. The database acts as a personal log for the user's finances, and because we cannot directly access user banking information due to privacy concerns, we must rely on the user to import their own income and spending habits. They will have to access the database and write down each paycheck, credit card transaction, and bill payment. This is time consuming and may lead to inaccuracy, however, it is the only way that the users will be able to track their finances and have their data stored without directly using services like Plaid to access banking information.
    b. The stored data will be able to answer questions such as , "What is my spending to income ratio?", "How much progress do I have in paying off my credit card?" , "What category do I spend the most money on?", etc.

Submission

When you're finished, complete the following steps to submit your work:

☐ Export your document with responses as a **PDF file AND save** it **inside** your **documentation** folder. Refer to the following for documentation on how to do this:

- Google Docs (*File → Download → PDF Document*)
- Microsoft Word (*File → Save As / Export → PDF*)
- Pages (*File → Export To → PDF*)

- ☐ Export your updated **E-R diagram** as an **image file** and save it **inside** your **documentation** folder. Be sure your file is clearly named (i.e., **er_diagram.png**).

- ☐ Upload all your changes to GitHub.

  - ☐ **If you're using GitHub Desktop (GUI)**, complete the Uploading Changes (GitHub Desktop) section to upload your changes from your local device to GitHub.

  - ☐ **If you're using Git (CLI)**, complete the Uploading Changes (GitHub CLI) section to upload your changes from your local device to GitHub.

ONE group member must paste the URL of your GitHub repository in the provided textbox in Brightspace. Click the blue *Submit* button to successfully submit your work for this assignment.

Grading Rubric

You can refer to the **Semester DB Project: Phase I grading rubric** given in Brightspace for this assignment to find details on how your submission will be graded.