**Things to look up**

1) Matching the definitions to the vocabulary words

1. L

2. I

3. N

4. H

5. F

6. G

7. D

8. A

9. K

10. B

11. C

12. M

13. E

14. J

2) Knowledge and experience with the 3 DBMS’s

I know the names of the databases. But, I never really had a chance to work on any of the databases. This is the first ever course and class I am taking in a DBMS.

**Practices**

1) Using spreadsheets for home budget

I personally prefer a spreadsheet for keeping home budgets. Home budget is a matter of small scale work, and it does not need help of the such big DBMS’s. Instead DBMS’s are meant for managing large scale inventories and stocks for small, medium and large scale businesses. Complex and complicated calculations and designs are not of a big focal points in home budgets. To top that, spreadsheets are more user friendly and a family member can easily work on a spreadsheet with a quick mentoring.

Here are a few reasons to justify my choice,

1) Spreadsheets are easy to work with and they are portable as I can email my spreadsheets to work on multiple computers as needed without having to install a database in each of the computers that I want to use.

2) Even a novice user can easily start working on a spreadsheet with a quick mentoring .

3) No need for complex designs.

4) Can be created in a quick turn around instead for a couple of weeks to put up a DB design .

3) Attributes for a DVD Entity

1. DVD name/title
2. DVD release date
3. DVD rights
4. DVD copyright holder
5. DVD movie length
6. DVD rating
7. DVD language
8. DVD subtitle information
9. DVD barcode information
10. DVD genre

10) Instructor’s Grade Book

a) Advantages of a database over the spreadsheets

1. Database would help him to keep track of the students year wise and course wise. so that he need not search on the excel sheets which will improve on his quick turn around time.**(Efficiency)**
2. In this case he is the only user of the database, so it would be easier for him to look up on the database instead of a number of spreadsheets.(**Ease of use)**
3. **Data redundancy**
4. **Data integrity**

b) Major topics for the database

1. Student name
2. Student year
3. Student semester
4. Student course
5. Student grade
6. Student attendance

c) Statement of Work

History

An instructor from a university has been keeping all his student’s records in different spreadsheets for different courses and years. Whenever the school administration needs some information about the students academics or a particular student asking for a recommendation, instructor has to go through numerous spreadsheets to search and track the student and copy paste his report to the administration or write up recommendation after looking at different reports of the student. This system continues to work, but there are certain concerns with this system like, the time consumed to search the spreadsheets, possibility of redundant data, and sometimes inaccurate data.

To counter all the difficulties it was suggested to design and develop a database with a nice front end application to input the data to significantly improve speed in searching the student records, and to generate faster reports.

Scope

The instructor’s grading database will track the student’s academic standings. It will keep track of the individual student’s course, semester, his homework, assignments, averages, attendance, grades and all associated informations in relation to his academics.

Constraints

This is only a database and will not have any front end application interface, also the database is a private to the instructor and will not be fetching or updating information to the school’s database.

Objectives

* To efficiently be able to input the student information
* To be able to pull out the student information quickly
* To be able to generate the student report with minimal inputs

Tasks and Timline

1. Gathering data

Interviews, questionnaires and observations - 1 week

Deliverable - List of interviews, observations and questionnaire text

1. Analyzing data

Business rules and preliminary data modelling based on the data gathered - 2 weeks

Deliverable - Business rules and its entities and attributes

1. Normalization

Normalized data model completions task - 1 week

Deliverable - Entity relationship diagram

1. Building the physical database

Data model will be translated to RDBMS and tables will be created - 1 week

Deliverable - Database schema

1. Testing and Security

Testing will be done using sample data and business rules security will also be tested - 3 weeks

Deliverable - Test result documentation

1. Database completion and installation

Completing final changes and sample data removal will be taken care. Database will be installed on the server. Server access testing and connections will be ensured. - 2 weeks

Deliverable - Working Database

Total time from beginning to end of the project - 10 Weeks.