Final Project

- See front page for deadline information, which has been updated.

Overview

For this project you work alone to design a university database. You will track student enrollment by class and department. The database will require an authenticated login.

Design Requirements

- Entity Relationship diagram
  - Designed in Yed
  - Include the following features:
  - Entities
  - Relationships
  - 1:1 Relationship Notation (Arrows)
  - Total Participation Notation (Bold lines)
- SQLite database
  - Create a SQL database including
  - All relations and fields
  - Proper designation of constraints such as:
    - Primary keys
    - Unique fields
    - Foreign keys
    - Non-null fields
  - Include sample data as designated below.

Data Description

It should include the following information. All fields are required, unless otherwise noted.

- Departments
  - Name
- Students
  - Name
  - Phone Number
  - Admission Date

    - Birthdate
    - Student ID (Unique)
    - Gender (Optional)
- Classes
    - Starting Year
    - Class (Freshman, Junior, Senior)
    - Room Number (Optional)
- System Users
    - Username
    - Password

Sample Data

Include the following sample data:

- All of Abaarso's current departments
- Three classes
- At least four students in each class
- At least seven students in Software Engineering
- AT least seven students in International Relations & Development
- At least two system users

Access Application Scenarios

You should support the following scenarios:

- Login
- Data View
- Updating
- Data Creation
- Data Deletion
- Search
- Queries/Reports
    - Show all students in a particular department
    - Show all students in a particular class
    - Show one student's detailed information

The following screens:

- Login
- Home

- Create/Delete
- Search/Update
- Queries/Reports

Grading

Overview of Marks

Component	Marks
ER Diagram in Yed	6%
SQLite Database	10%
Access Tables/Data	8%
Access Forms	8%
Access Queries/Reports	8%
Total Marks	40%

Rubric

- Entity Relationship Diagram
  - Proper Notation
  - Entities, Relationships
  - Including any 1:1 relationships
  - Total Participation
- SQL Database Design
  - Correct relations and fields
  - Correct integrity constraints (primary keys, foreign keys, unique, etc.)
  - Test Data
- Access Database Application
  - Schemas/Instance (Is the table design accurate? Do you have sample data?)
  - Forms (Do you have all forms working?)
  - Queries/Reports