

cis20.2-spring2008-sklar, term project task 3: database component

instructions.

- In this assignment, you will design and implement the databases for your term project.
- This assignment is worth 25 points, or 25% of your term grade.
- It will be discussed in class on APRIL 7 and your work should be submitted by email (*sklar@sci.brooklyn.cuny.edu*) by APRIL 13.

3a. design database architecture

(5 pts)

Design at least two databases for your project.

One will be some kind of user database, that contains user login information (like user name and password) and any profile information you might want to keep about your users. This database will be administered by the admin user to your system, although you may allow users to update their profiles.

The second database will be where you store the data specific to your application, such as the inventory for a shopping site or the content to a game.

You need to define the *database schema*, i.e., table definitions, for each of these databases. Document your design (i.e., write down the names of the tables and the definition of the fields in each table—name and datatype).

SUBMIT this database design document.

3b. design database queries

(5 pts)

Think about the way in which you will use the databases. Make a list of the types of queries you will need, i.e., what information you will need to look up.

Write down these queries, i.e., SQL SELECT statements that you will need. Note that you may decide to revise your database table definitions based on the queries you will need to make.

SUBMIT these queries.

3c. create databases

(5 pts)

In your MYSQL account on the class server, create your data tables.

SUBMIT a record from MySQL showing:

```
mysql> show tables;
mysql> describe <YOUR-USER-TABLE>
mysql> describe <YOUR-OTHER-TABLES>...
```

3d and 3e. build and test database queries

(5 + 5 = pts)

Write a MySQL script file and use it to test your queries from the MySQL interactive prompt.

Then implement the queries as part of your system, probably using PHP but maybe using something else.

SUBMIT your MySQL script file, so that I can try running it.