

CMU - SCS  
15-415/15-615 Database Applications  
Spring 2013, C. Faloutsos  
Homework 7: Database Application  
Released: Tuesday, 03/26/2013  
**Partial** solutions for Phase 1

**Q1. Flow diagram**

See Figure 1.

**Q2. List of documents and document forms**

- D1 Registration form
  - login\_name
  - email
  - passwd
- D2 Login form
  - login\_name
  - passwd
- D3 Profile page
  - login\_name
  - email
  - List of:

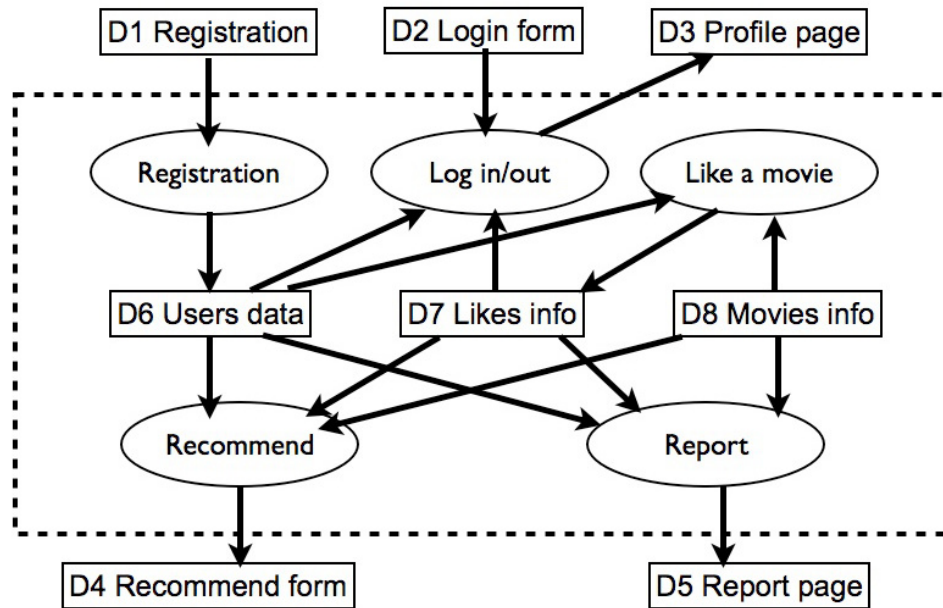


Figure 1: The flow diagram for this assignment is not unique. This is just one possible solution.

- mtitle (from Likes info)
- D4 Recommend form
  - login\_name
  - List of:
  - mtitle
- D5 Report page
  - Omitted from solutions
- D6 Users data
  - login\_name
  - email
  - passwd
- D7 Likes info
  - login\_name

- mtitle
- D8 Movies info
  - mtitle

### Q3. E-R diagram

See Figure 2.

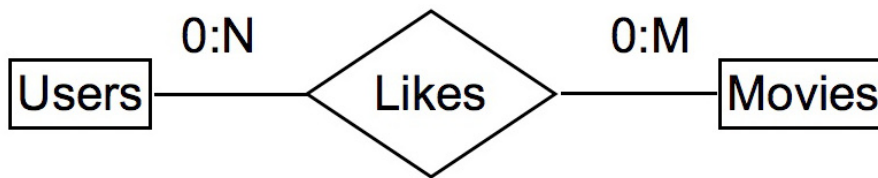


Figure 2: The E-R diagram for this assignment.

### Q4. Attributes

users(login\_name, email, passwd)  
 movies(mtitle)

### Q5. Remaining tasks omitted from solutions

### Q6. Testing

To automate part of the grading, we will use SQL scripts to test your database. We provide a sample test script which checks if your schema matches our scripts. Please make sure the following runs on your database and make the necessary changes to your schema (you could have more attributes and tables, however, make sure the basic schema is the same as ours):

`http://www.cs.cmu.edu/~christos/courses/dbms.S13/hws/HW7/test\_01.sql`

Please see the README\_test.01 file for instructions on how to run this script and what the expected output is:

`http://www.cs.cmu.edu/~christos/courses/dbms.S13/hws/HW7/README\_test\_01`