Alexandria University
Faculty of Engineering
Specialized Scientific Programs
Fall 2015

Computer and Communications
Program 7th term
CC471, Database Systems
Final Project

Database Final Project
Social Network Website

Problem Statement

It is required to develop a social networking web based application that involves the use of the internet to connect users with their friends, family and acquaintances.

Social media websites are not necessarily about meeting new people online, although this does happen. Instead, they are primarily about connecting with friends, family and acquaintances you already have in real life.

The most well-known social media sites are Facebook, Twitter and Google+.

You can share photos, information and news through social networking web sites.

Getting Started

It seems a bit complex when you're getting started but once you get used to it you'll find it easier to implement.

The project should be implemented in the following six stages:-

Stage I: Entity-Relationship diagram

Design an entity relationship diagram for the social network database and enter the design using a data-modeling tool such as Diagram.

Stage II: Signup/ login /logout/ profile edit

You should implement those features. Each user profile must have the following fields.

- First name *
- Last name *
- Password *
- Email *
- Phone number
- Gender *
- Birthdate *
- Profile picture: there is a default photo for each gender.
- Hometown
- Marital status: Single, Engaged or Married.
- About me

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Notes:

    a. Any user should have default profile picture depends on his/her gender. If user haven't uploaded his/her profile. or removed it from edit profile.

    b. Password must be encrypted in DB.

    c. Login should be done with email and password.

    d. All profile info should be public except Birthdate and About me.

    e. Public means → all users can see. private means → friends only.

Stage III: Browsing Friends and Send or Accept Friend requests:

User should be able to add someone to his/her friend list. By sending friendship request to a buddy, and this buddy should view the friendship requests that he/she has got in a place with the number of friend requests.

Notes:

    a. It's not required to have real time notification.

    b. The friend requests number should be viewed in all screens. With a link to page having list of friend requests to accept/ reject them.

    c. Each user have a button **"Friends"** that will navigate to friends' page and will list all friends for logged in user. Friends' names will be hyperlinked so clicking on any friend's name will navigate to his profile.

Stage IV: Posting data:

Users can make posts that should be shown in their profile:-

Each post has the following fields:-

- Caption
- Image
- Posted time
- Is public
- Poster name

Notes:

    a. When user changed his profile, picture a new private post should be added with caption "User A changed their profile picture".

    b. Public means that all users can see. Private means friends only.

Stage V: Home and Profile screen

User should view posts in his home screen form:

a. Public posts by all users.
b. Private posts by friends.

Notes:

a. When you browse someone's profile you should see Data depending on your relationship with him or her.

Stage VI: Advanced Search

Users can search through a screen in the following fields:

a. Full email
b. First ,last names
c. Full phone number
d. Hometown
e. Part of caption from all posts he have posted before

Bonus

a. User can make likes on posts using like button. Also he should know for each post if he have posted like before or not, also can view how have liked every post.
b. Real time notification when someone added you or like your post.
c. Support Emotions.

Submission

1. You should submit the source code and initial set of data into your database if we don't provide you with one.
2. You should submit a report which contains ER diagram drawn by any modeling tool, Relational model with correct mapping, DDL, pseudo code for the design and model of the website and division of labor among team members.

Policies

- You should work in group of four.
- Deadline will be **Saturday 26th December 2015**(It may be extended according to final exams timetable)
- If 2 or more copies are discovered, all copies will lose all the marks of year work. Hence, it is better to deliver nothing than delivering a copy.
- No late submission is allowed.