CS460 – PA1 Part2

Khalid Almaimouni

Final schema:

```sql
drop database if exists photo_sharing_website;
create database if not exists photo_sharing_website;
use photo_sharing_website;

create table if not exists users(
    user_id varchar(255) not null primary key,
    first_name varchar(255) not null,
    last_name varchar(255) not null,
    email varchar(255) not null,
    date_of_birth date not null,
    hometown varchar(255) not null,
    gender varchar(255) not null,
    user_password varchar(255) not null,
    score int not null);

create table if not exists friends(
    user1 varchar(255) not null,
    user2 varchar(255) not null,
    accepted boolean not null);

create table if not exists albums(
    album_id int not null primary key auto_increment,
    owner_id varchar(255) not null,
    album_name varchar(255) not null,
    date_of_creation date not null);

create table if not exists photos(
    photo_id int not null auto_increment primary key,
    album_id int not null,
    caption varchar(255),
    photo longtext not null,
    score int not null);

create table if not exists tags(
    photo_described int not null,
    word varchar(255));

create table if not exists comments(
    comment_id int not null auto_increment primary key,
```

```sql
    comment_text varchar(255) not null,
    owner_id varchar(255) not null,
    photo_id int not null,
    date_posted date not null);

create table if not exists likes(
    liker_id varchar(255),
    liked_id varchar(255),
    liked_photo_id int,
    primary key(liker_id, liked_photo_id),
    album_id int
);


alter table friends add foreign key (user1) references users(user_id) on delete
cascade;
alter table friends add foreign key (user2) references users(user_id) on delete
cascade;
alter table albums add foreign key (owner_id) references users(user_id) on delete
cascade;
alter table photos add foreign key (album_id) references albums(album_id) on
delete cascade;
alter table tags add foreign key (photo_described) references photos(photo_id) on
delete cascade;
alter table comments add foreign key (owner_id) references users(user_id) on
delete cascade;
alter table comments add foreign key (photo_id) references photos(photo_id) on
delete cascade;
alter table likes add foreign key (liker_id) references users(user_id) on delete
cascade;
alter table likes add foreign key (liked_id) references users(user_id) on delete
cascade;
alter table likes add foreign key (liked_photo_id) references photos(photo_id) on
delete cascade;
alter table likes add foreign key (album_id) references albums(album_id) on
delete cascade;

insert into users(user_id, first_name, last_name, email, date_of_birth, hometown,
gender, user_password) values ("guest", "guest", "guest", "guest@guest.guest",
"2000-1-01" , "guest", "guest", "guest");
```

Additional assumptions and constraints:

1. "guest" is a special account for non-logged in users.
2. Shouldn't use ' or " in captions, comments, names... (any text field). Will cause mysql to show an error.
3. You can only add tags before uploading a photo
4. Unlimited number of tags per photo
5. Can only use one tag to search for a photo. Can't use multiple tags at once.
6. Photos are deleted when albums are deleted
7. Comments, tags, and likes are deleted when the associated photo is deleted
8. Albums, comments, and likes are deleted when an associated user is deleted. However, account deletion is not implemented.