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Photoshare Final Report

Photoshare was a fun application to build and allowed me to practically apply what I have learned about databases and mySQL in this course. I learned a lot about databases that I neglected to realize existed before, and my final schema is drastically different than what I had begun with. In particular, this project really enforced what I learned about data integrity and constraints and how everything is connected from the front-to-back ends of a database application. In addition, much of the time spent working on this project was debugging which further enforced the structure of the tables in a database and how to perform the proper query to put in and get out the data needed. Overall, this project I enjoyed working on this project and would like to further explore database and web development following its completion.

Note: Please run with google chrome for the best formatting results with CSS!

Schema (also in schema.sql file):
USE photoshare;

```
CREATE TABLE `album_id_name` (  
  `album_id` int(11) NOT NULL AUTO_INCREMENT,  
  `name` varchar(100) NOT NULL,  
  `user_id` int(11) NOT NULL,  
  `date_created` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  PRIMARY KEY (`album_id`)  
);
```

```
CREATE TABLE `users` (  
  `user_id` int(11) NOT NULL AUTO_INCREMENT,  
  `fname` varchar(40) DEFAULT NULL,  
  `lname` varchar(40) DEFAULT NULL,  
  `DoB` date DEFAULT NULL,  
  `prof_pic` longblob,  
  `email` varchar(50) DEFAULT NULL,  
  `password` varchar(15) DEFAULT NULL,
```

```
`gender` varchar(10) DEFAULT NULL,  
`bio` varchar(500) DEFAULT "",  
`hometown` varchar(85) DEFAULT NULL,  
PRIMARY KEY (`user_id`)  
);
```

```
CREATE TABLE `albums` (  
  `album_id` int(11) NOT NULL DEFAULT '0',  
  `name` varchar(100) DEFAULT NULL,  
  `user_id` int(11) DEFAULT NULL,  
  `photo_id` int(11) DEFAULT NULL,  
  `date_created` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  KEY `user_id` (`user_id`),  
  CONSTRAINT `albums_ibfk_1` FOREIGN KEY (`user_id`) REFERENCES `users`  
  (`user_id`)  
);
```

```
CREATE TABLE `photos` (  
  `photo_id` int(11) NOT NULL AUTO_INCREMENT,  
  `album_id` int(11) DEFAULT NULL,  
  `caption` varchar(250) DEFAULT "",  
  `user_id` int(11) DEFAULT NULL,  
  `imgdata` longblob,  
  `comment_id` int(11) DEFAULT NULL,  
  PRIMARY KEY (`photo_id`),  
  KEY `album_id` (`album_id`),  
  KEY `upid_idx` (`user_id`),  
  CONSTRAINT `photos_ibfk_2` FOREIGN KEY (`user_id`) REFERENCES `users`  
  (`user_id`)  
);
```

```
CREATE TABLE `comments` (  
  `comment_id` int(11) NOT NULL AUTO_INCREMENT,  
  `text` varchar(200) DEFAULT NULL,  
  `user_id` int(11) DEFAULT '0',  
  `photo_id` int(11) NOT NULL DEFAULT '0',  
  `date` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  PRIMARY KEY (`comment_id`),  
  KEY `user_id` (`user_id`)  
);
```

```
CREATE TABLE `friends` (  
  `user_id` int(11) NOT NULL DEFAULT '0',  
  `friend_id` int(11) DEFAULT '0'  
);
```

```
CREATE TABLE `tags` (  
  `word` varchar(200) NOT NULL,  
  `photo_id` int(11) DEFAULT NULL,  
  `user_id` int(11) DEFAULT NULL,  
  `tag_id` int(11) NOT NULL,  
  KEY `photo_id` (`photo_id`),  
  KEY `user_id` (`user_id`),  
  CONSTRAINT `tags_ibfk_2` FOREIGN KEY (`user_id`) REFERENCES `users` (`user_id`)  
);
```

```
CREATE TABLE `tag_id_word` (  
  `tag_id` int(11) NOT NULL AUTO_INCREMENT,  
  `word` varchar(200) NOT NULL,  
  `user_id` int(11) NOT NULL,  
  PRIMARY KEY (`tag_id`)  
);
```

```
CREATE TABLE `likes` (  
  `photo_id` int(11) DEFAULT '0',  
  `user_id` int(11) DEFAULT '0'  
);
```