

March 9, 2014

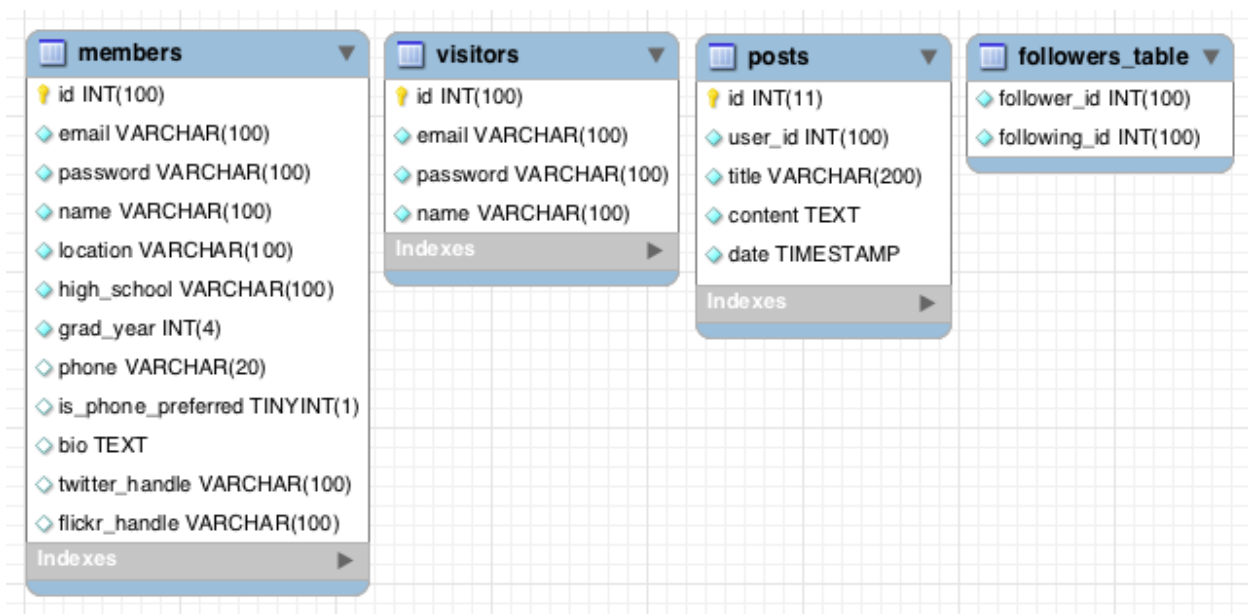


Fig. 1 - updated database

## Database Changes

With regards to the database design (Fig.1, above), I added two new fields, “twitter\_handle” and “flickr\_handle” to the members table in order to store members’ social media usernames. I also added a unique “id” attribute to posts, so they can be edited or deleted more easily in the future (not yet implemented).

## Front-end Changes

On the front end, changes needed to be made to allow tweets and posts to be displayed together, and separately, on each user’s page. In order to do this, I display the last five tweets for the user and all the posts for the user, with the newest items first. Any user looking at this page has the ability to toggle showing/hiding either tweets or posts from the feed by clicking two large toggle buttons on the top of the feed, which hide/show the posts using JQuery (see dblackst/js/main.js). The News Feed page for visitors also has this feature, however, that page only retrieves the last three tweets of all the users being followed, in order to make the length of the page a bit more manageable.

Flickr thumbnails are also now displayed on the user’s page in their own content container box. I chose not to mix them in with tweets and posts because Flickr is not used as often as

Twitter, and they would also take up a huge amount of space in the news feed on bigger monitors, compared to Twitter and posts, making the page very long, and other content seem less significant.

Another small change I implemented is an “edit” button on the user page if the user is viewing their own page, which lets the user edit their information.

## PHP Design Changes

To support users’ social network accounts, I first had to allow users to connect their Twitter and Flickr account names to their account on my website. I added two more optional fields for members to enter their account names on the sign up (“sign\_up\_member.php”) and account editing (“edit\_user\_info.php”) pages.

For displaying Flickr images, I first made a function (defined in includes/flickr\_config.php) to retrieve the user’s Flickr ID using their screen name, by calling Flickr’s “flickr.people.findByUsername” REST method. I then use this ID and retrieve their 10 most recent photos, and add them to a section on the user’s page.

Next, I had to retrieve tweets and integrate them with members’ existing posts on their page (“user.php”). They would ideally be sorted by date, with newest updates displayed first. Because of this, I needed to have posts and tweets in a common format, so I created an array called “\$feedContent” to hold both tweets and posts.

I then retrieve the five latest tweets using the Codebird PHP plugin, using a function called “get\_user\_tweets” (defined in dblackst/includes/twitter\_config.php) and add them to \$feedContent, in a linked array format. Then, I retrieve all the user’s posts, format them in a linked array the same way as the tweets, and append those to \$feedContent as well. Finally, I sort all the tweets and posts by date and print them all in order.

I also had to integrate posts and tweets on the News Feed page for visitors. I start by querying for all the member that the visitor follows. Then, I follow a similar process for integrating tweets and posts on each member’s page. For each member the user follows, I check for tweets and posts, sort them by date, and print them in order.

## New Features

- allow members to connect Flickr username to their account
- allow members to connect Twitter username to their account

- display 10 most recent Flickr photos on the member's page
- display 5 most recent tweets on member's page
- toggle showing or hiding tweets and posts on a user's page with JQuery
- show posts and 3 most recent tweets integrated on visitor's News Feed
- links to member's Flickr and Twitter accounts from their page

### **To-Do List**

- pagination of news feeds, posts, tweets, and flickr photos
- allow users to delete/edit posts
- allow users to edit password
- add a password confirmation box when registering a new account
- add support for links and photos in tweets
- allow users to format posts
- improve error checking and handling
- improve high-schools page aesthetics
- improve sign-up UX - too many fields at once
- prepare all SQL queries in one include file
- show some recent tweets, posts, and Flickr photos on homepage
- add support for profile picture upload
- combine sign up forms for visitors and members