Write Up

Demo Site: http://demoblog.netne.net/

Existing Account: email - admin@myblog.com | password - password

Note: While the github code uses the PHP password_hash function, the demo blog

uses SHA1 for password hashing because the webhost is using PHP 5.2.

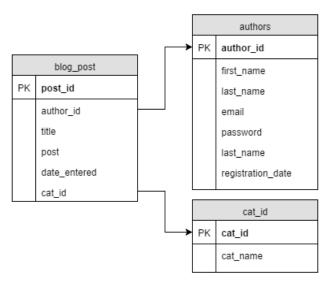
Site Structure

```
src/
| index.php // Landing Page
+ config
       | config.php // configuration file
       | mysql_connect.php // Add USER/PASS here
       | db_setup.php // Add USER/PASS here
       create table.php
+ helpers
       | utils.php // utility helper functions
       + ckeditor // rich text editor for blog posts
+ view
       + common
              | header.php // standard header
              | footer.php // standard footer
       | home.php // view posts
       | login.php
       | logout.php
       | register.php
       | categories.php // manage categories
       | edit_post.php
       | delete_post.php
       | add_post.php
+ static
       + img // images
       + css // css files
       + js // JavaScript files
       + dist // Bootstrap files
```

For First Time Users

- 1. Transfer all files to your root folder.
- 2. If you have full access to your SQL server, you can navigate to db_setup.php which will help you set up the necessary database and tables.
- 3. Otherwise, create your own database then use SQL queries from create_table.php to make the required tables for the blog.
- 4. Lastly, add your database log in details to the mysql_connect.php file.
- 5. Your site should now be fully functional.

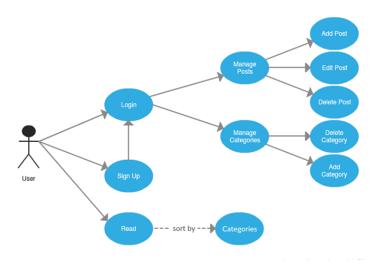
Database Schema



Three tables are used for this blog.

The *authors* table is used to store information about each user who signs up through the site. The *categories* table stores the categories created. The *blog_post* table stores information about blog posts.

Use Cases



Non logged-in users can read the blog via the home page, and choose which category of posts they want to read.

Anyone who visits the blog can sign up. After logging in, all users can manage posts and categories (there is no administrator account).

Accomplishments

For this assignment, most of my time was spent learning and using PHP code to get the backend of the site working. The design elements were mostly cobbled together using the Bootstrap framework, so I actually didn't touch much CSS and I didn't use any Javascript at all.

For the mid-assignment submission, I was mostly focused on getting the basic posting functionality up (adding, editing, deleting posts) and used a cookie for user authentication (now changed to using sessions for security purposes). I was able to get this done using only one MySQL table (blog_posts).

After that, when I wanted to include multiple authors and categories, I realised that I actually knew nothing about SQL. I had to go back and learn about setting up multiple tables and foreign keys before I was able to add in the extra functionality.

If I had to improve on the functionality of the site, I would add an administrator, and an admin interface to allow for approving of authors. I might also consider allowing authors to only control (edit/delete) their own posts. More options could also be provided for viewing posts (choose which year/month posts are from).

One of the main problems I found when editing my code after the mid-assignment was that there was a lot of repeated code which should have been abstracted. I also didn't pay enough attention to error-handling for SQL queries so any error with the database would actually be displayed to anyone using the site. This also resulted in many ugly nested if loops whenever I used an SQL query.

If I had to do this assignment again, I would probably try to do it using a PHP framework, which I believe could make my code much cleaner.

Looking at the website itself, I feel quite proud of myself for being able to get the site up and running. But looking at the messy code, I realise I still have a long way to go...