Saad Bhuiyan, William Cao, Ethan Chen, Peihua Huang (Team SPEW) SoftDev1 pd2 P #00: Da Art of Storytellin' 2019-10-21

Team: SPEW

Project Name: SPEWING BLOGS

Work division:

Project Manager: William Cao

Frontend: Ethan Chen Database: Saad Bhuiyan Backend: Peihua Huang

Component Relationship

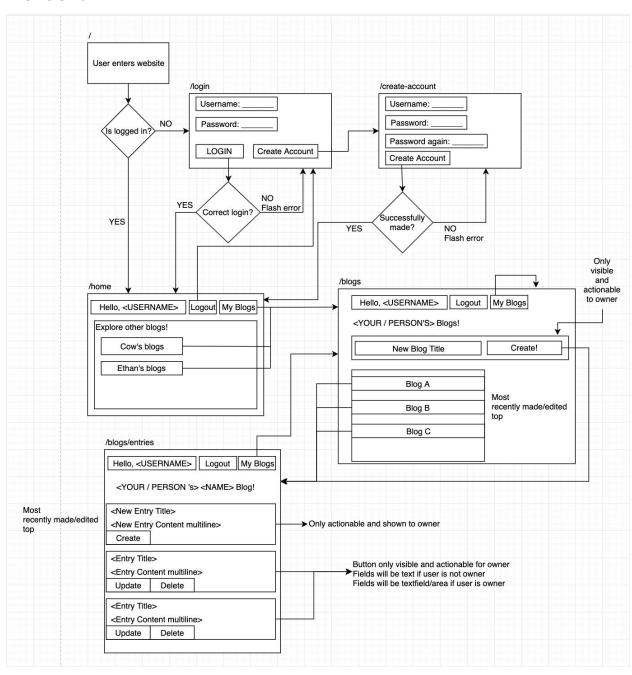
FRONT END (client) BACKEND (server) **AUTHORIZATION** sends login info checks session LOGIN DATABASE CHECK CREATE ACCOUNT if valid, add session; else, flash error valid/invalid remove session DATABASE LOGOUT CHECK redirect to login BLOG VIEW AND CREATION gets if exists. request list of all users' blogs VIEW ALL USERS' DATABASE CHECK BLOGS gives view w/o <user>'s blogs gets all of <user>'s blogs gets if exists. VIEW <USER> DATABASE CHECK BLOGS adds create blog field list of all if <user> under own page& returns view <user> blogs check if duplicate sterilize input; modify if valid can send a blog title only if owner of blog CREATE DATABASE CHECK BLOG valid/invalid if valid, redirect to entries; else, flash error ENTRY VIEW AND CREATION get if exists get entries DATABASE VIEW ENTRY CHECK gives list gives view checks no dup title, escape shortcuts, user = owner; modify if valid sends title, entry content DATABASE **NEW ENTRY** CHECK if valid, returns new view; else, flash error valid/invalid

Backend (Flask)

- /
- Function checks if there is a current session open
 - If there is (meaning user is logged in), redirect to /directory
 - Else, redirect to /login
- /login
 - Load login.html template
 - If username and password is entered, check with database to see if it matches.
 - If it does, add a session (store username and id) and redirect to /directory
 - Else, flash error message
 - If create account button is clicked, redirect to /create-account
- /create-account
 - Load create account html template
 - If username not in database, add username, password, and id to database (meaning account was created successfully) and redirect to /blog/<id>
 - Else if bad username (check single quotes, username already exists, passwords don't match), flash error message
- /home
 - Get username from session and display on top of html page
 - Get and display list of usernames (excluding the logged in user)
 - If user clicks on one of the usernames, make a GET request to redirect to /blogs with that GET request
 - Logout button: if pressed, pop session and redirect to /login
 - My Blog button: redirect to /blogs viewing currently logged in user blog
- /blogs
 - Loads html template with all the blog titles of the user that is currently logged in, if there is no GET request.
 - Else, display the blogs of the user in GET request.
 - Check with session to see if user logged in matches the owner of the blogs.
 - If yes, show create! Button and textbox for user to create a new blog
 - If blog title is not found in the database, add the new blog to the database, give it an id, and redirect to /blog/<user id>/<blog id>
 - Else, if duplicate blog, flash error
 - Logout button: if pressed, pop session and go back to /login
 - My Blog button: if pressed and user is not in their own blog, redirect to user's blog
- /blogs/entries
 - Get the list of entries for the blog returned from GET request in time order (based on last edit time) from the database and display it in chronological order (most recent first).
 - Check with session to see if user logged in is the owner of the blog

- If yes, show create, edit, update, cancel and delete button and the choice to input a new entry title and entry content.
 - Create button: If entry title is not a duplicate, add the entry to database. Display the new entry above the most recent entry.
 - If entry title is a duplicate: flash error.
 - Edit button: If pressed, text in the entry all gets put in a text box where user can edit.
 - Update button: If pressed, the entry text in database is replaced with the new text, timestamp is updated, and entry is now displayed at the top.
 - Cancel button: If pressed, the text box disappears and the entry is reverted to the version stored in database.
 - Delete button: Entry title and entry is deleted from the database and thus removed from website.
- Logout button: if pressed, pop session and go back to /login
- My Blog button: redirect to /blogs displaying the blogs of the current user

Front end:



Backend (Database)



Three tables in the database: users, blogs, entries with relevant information in each, as shown in the schema above.

One Python file will contain all the functions that interact with the database. All the other files that need to interact with the database will import the file. Examples of necessary functions include:

verifyLogin() takes login credentials and checks the database users table to verify that the login credentials are correct.

addLogin() adds new login credentials to the database users table.

createBlog() adds a new blog to the database blog table with the

blog author id being the user id.

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updateEntry() update the content of an entry.

^{*} Inputs for each function will be decided on as deemed necessary during development.