

OVERVIEW

Our project is to design a weblog hosting site, also known as a “blog”. Our blog, known as “TOPZ BLOGS” will be able to store user accounts and allow them to create blog pages. The main homepage will have login and register buttons and will display featured blogs. Each featured blog will have its most recent entry shown, but users can click into the blog to show every entry in that blog. Logged in users will be able to add, remove, or edit entries and blogs. Below, we describe the components, site, and database structures in detail.

ROLES:

HTML + related python/flask

Manfred: Project Manager, HTML designer

- HTML for web pages

Connor Oh: HTML related methods

- Utilize Jinja/Flask
- Login methods
- Make methods to display/format user page, blogs, entries

SQLITE + related python methods

Winston:

- Adding/Remove/Editing blog entries
- Sends entry to database, request entries

Jackson:

- Formatting Databases
- Organizing data
- Methods to properly store data

COMPONENTS

Html/Jinja/Flask:

Flask will host the site while Html and Jinja will receive all the user inputs and pass them along to be used by the python methods, and will also show all information on the site that is passed to them through the python code. Some example methods related to the webpages are:

- `@app.route("/")`
- `@app.route("/login")`
- `@app.route("/register")`
- `@app.route("/search")`
- `@app.route("/{user}")`
- `@app.route("/{user}/{blog}")`
- `@app.route("/{user}/{blog}/{entry}")`

Python:

This will be the intermediary between the front end HTML and the back end SQLite databases. There will be methods to handle transferring input from users, as well as returning necessary stored information in the databases. Some of the methods include:

- `login(username, password)`: logs user into their account
- `register(username, password)`: adds user data into database
- `checkUserInfo(username, password)`: returns boolean
- `addBlog(userID, blogTitle)`: adds new blog
- `addEntry(userID, blogID, entryTitle, entryContents)`: adds new entry
- `editEntry(userID, blogID, entryID)`: edits entry
- `displayBlogs(userID)`: displays all blogs for a user
- `displayEntries(blogID)`: displays all entries within a blog
- `displayRecentEntries()`: displays recent entries

SQLite Databases (explained in database layout):

- Users DB: stores the user ids, usernames, and passwords.
- Blogs DB: stores the user ids, blog ids, and blog names.
- Entries DB: stores the user ids, blog ids, entry ids, and the actual entry in text.

SITE

Each page of the site will contain a header with multiple functions. Users will be able to search for other users, blogs, and entries. The header will have two versions: logged in or logged out. The logged out version will have a register and login button, while the logged in version will have a settings and log out button. The user will also be able to return to the home page.

When a user enters the home page (“website.com/ “), the website will automatically check the user’s cookies for their account credentials. If their account exists, we will log them in. Otherwise, the user will proceed to the usual home page. The logged-in page version of the home page will have a link to the user’s own blogs.

Logged Out:

Home	TOPZ BLOGZ	Register
Search _____		Login

Welcome!

Recent Entries:

Day in my Life	Anna-Marie
How to Install a Lightbulb	Joseph Mother
Blog Rulez	TOPZ Moderator #3

Logged In:

Home	TOPZ BLOGZ	Settings
Search _____		Log Out

Welcome Manfred!

My Blogs

Recent Entries:

Day in my Life	Anna-Marie
How to Install a Lightbulb	Joseph Mother
Blog Rulez	TOPZ Moderator #3

The home page will have recent entries of all users. The user, regardless of being logged in or out, will be able to click on recent entries and view other users’ blogs and entries.

The login page (“website.com/login”) will have two fields for username and password. After verifying the user’s credentials, it will log them into their account and return them to the page they were previously on. The register page (“website.com/register”) will create a new account for a user and return them to the page they were previously on.

The settings page will allow users to change their usernames and passwords, provided that they can verify their old usernames and passwords.

The search bar will lead to a new page (“website.com/search?keyword”), where it will display items related to the searched keyword. The user can switch between what the keyword searches for. They are able to look at users, blogs, and entries related to that keyword.

Searching in User tab:

Home TOPZ BLOGZ Register
Search _____ Login

Search: day in the life

[User](#) | [Blog](#) | [Entry](#)

No users found

Searching in Entry tab:

Home TOPZ BLOGZ Register
Search _____ Login

Search: day in the life

[User](#) | [Blog](#) | [Entry](#)

Day in the life of Anna-Marie	Anna-Marie
Day in the life of Bob	Bob Bob Bob

Each user will have their own page to display their blogs (“website.com/user”). The blogs will be listed in chronological order, with the most recently created blog on the top. The creator may add or remove blogs. Users are able to click into each blog to view the related entries.

Home TOPZ BLOGZ Settings
Search _____ Log Out

Anna-Marie	Add Remove
Movie Reviews	
DIY Makeup tutorials	
Daily Journal	
My Foist Blog	

Each blog will also have its own page (“website.com/user/blog”). The title of the blog will be on the top of the page with the authors name. The blog page will display all of the entries in chronological order, with the most recently created entry on the top. The creator may add new entries, remove entries, or edit the name of the blog. Users are able to click into each entry to view the content of the entry.

[Home](#)[Settings](#)

TOPZ BLOGZ

Log Out

Movie Reviews

Anna-Marie

Add

Remove

Edit

Joker!

I ordered a Stuber!

movie review 1: IT

Each entry will have its own page (“website.com/user/blog/entry”). The title of the entry will be at the top, along with the associated blog and user. The page will display the content of the entry. The creator will be able to delete or edit the entry.

[Home](#)[Settings](#)

TOPZ BLOGZ

Log Out

Joker!

Movie Reviews | Anna-Marie

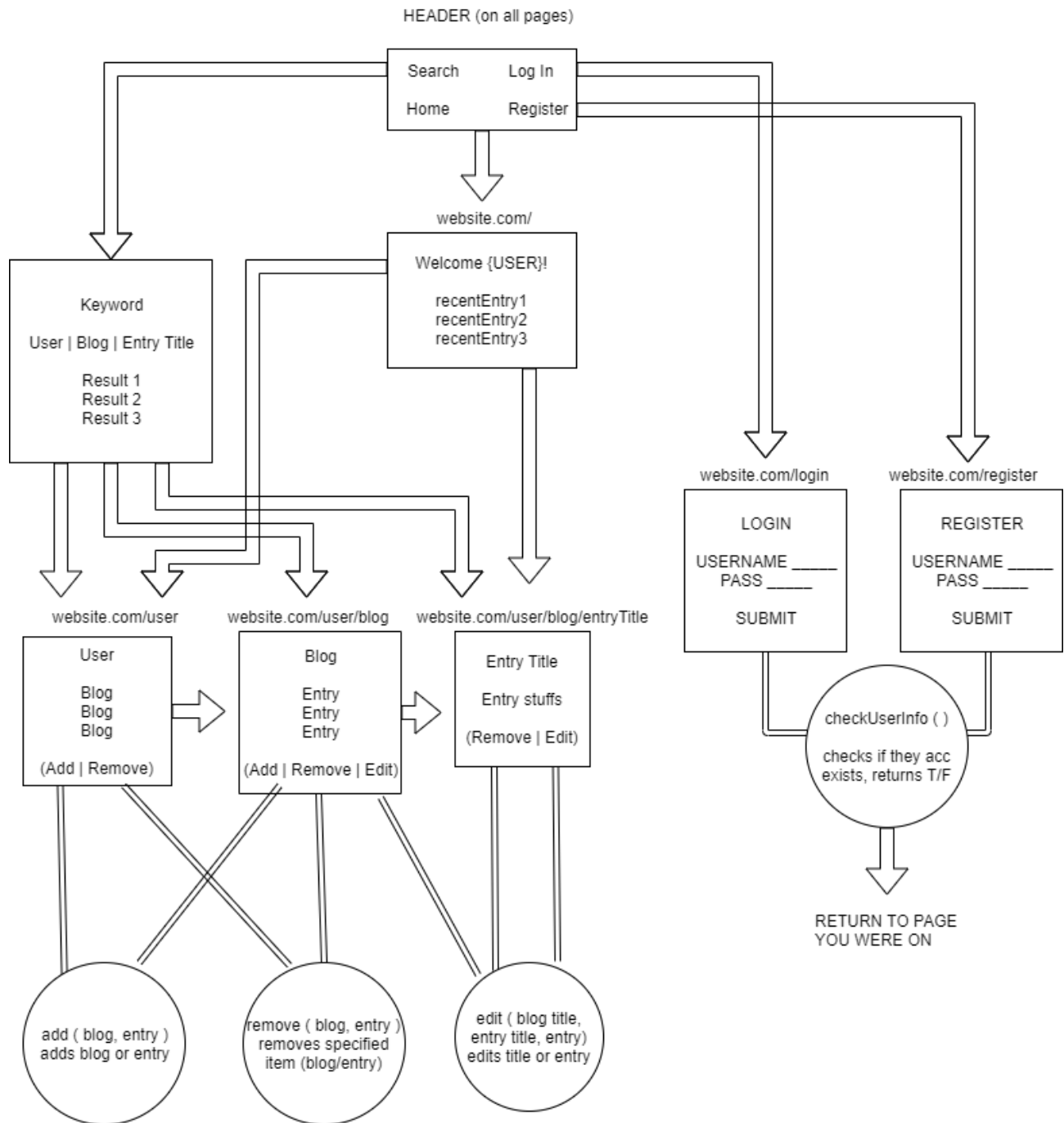
Edit

Remove

The Joker was a good movie.
I liked Joaquin Phoenix. The
end was cool.

Overall Site map:

The square boxes represent web pages that the user will see, while the circles are some of the basic methods that will run in the background.



DATABASE LAYOUT

DATABASES:

Users:

Each user will be assigned a unique id when they register and will have their username and password stored inside the database.

ID: (PRIMARY KEY)	Username: (TEXT)	Password (TEXT)
1	“jackson”	“blahblah”
2	“winston”	“flqflejkl”
3	“myUser”	“myPass”
4	“hello”	“world”
5	“coolguy99”	“blahblah”
...

Blogs:

Each blog will also be assigned an ID. The blog ID will keep track of how many blogs a user has created. It will only be related to that specific user. All blog IDs will start at 1 and increase as the user creates more blogs.

USER ID: (INT PRIMARY KEY)	BLOG ID: (INT)	BLOG NAME: (TEXT)
1	1	“Jackson’s life”
1	2	“My name is Jackson”
2	1	“Trending Fashion”
1	3	“My favorite songs”
...

Entries:

Similar to the blog ID, each new entry will be assigned an entry ID. The entry ID will keep track of how many entries the user has created in that specific blog. It will start at 1 and increase as the user adds more entries to the blog.

USER ID: (INT PRIMARY KEY	BLOG ID: (INT)	ENTRY # (INT)	ENTRY (TEXT)
1	1	1	"Day 1 - I sad"
1	1	2	"Day 2 - happy time!"
2	1	1	"black boots..."
1	1	3	"Day 3 - angry hulk >:("
1	2	1	"I eat eggs every day"
2	1	2	"Green hats"