CSE 106 Project Proposal
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Group Name: DataFans

Overview:

This project, DataFans, is a program in which users are able to log into a website. There, they have a profile, and are able to search other users. Additionally, they are able to upload csv files. Then, they are able to generate graphs from the csv files. They are able to do this from their files or files from other users. Users can then post graphs generated from their files.

Login Page:

This page will have 2 text inputs and 2 buttons. The text inputs will be for username and password, and the buttons will be to login and make a new account. If the password does not match the password in the database (salted and hashed), they will be prompted back to the Login Page, but with the text "Username and Password do not match". This will happen even if the user imputed an account username that does not exist. If the user presses on the make new account button, they are prompted to enter a new username and a new password, then log in. This will create a new account. Otherwise, they can successfully log in.

Home Page:

This page will consist of multiple tabs, including: Files tab, Graphs Tab, Users tab, and Profile Tab. The Files tab will be the default. Each tab will be described later. Consistently, all Pages will have the option to log out, which leads to the login page, and swap between all tabs.

Files Page:

This is where the user can store their files that they uploaded to the website. The user is able to upload csv files as either public or private. Public files can be accessed by other users, and private files can be accessed only by the user that uploaded them. Additionally, the user is able to update, view, and delete files that they created. They can also change the permissions of the files uploaded. They are also able to view public files uploaded by other users

Graphs Page:

This is where the user can make, view, update, or delete graphs for their csv files. They are also able to make graphs for public files that other users have uploaded. Graphs, similarly to files, are able to be public or private. Private can only be accessed by the user that generated them and the owner or the files that the graph was based on, while public graphs can be accessed by all users. The creator of a graph can update the permissions of a graph at any time. Users are able to print graphs that they have access to as a pdf or png file.

Users Page:

This is where the user can search for other users and see their uploaded public files and graphs. The user can also like other graphs and comment on them.

Profile Page:

This is where the user can view their profile information and change their username or password. They can also update their permissions from this page as well.

Possible Relationship Schema: