University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 1

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Group Number: 28

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Project Description

The project is a forum-style website with the purpose of communication between like-minded individuals about various topics. The application domain is multi-purpose social media, social interaction, and news collections, where users will interact with each other through post-comment and comment-comment relationships. For example, if a user sees an important news story, they can make a post containing at least one of text, video, image, or link to share and discuss the news with others on the platform.

The more a member uses the application, the greater amount of influence they gain within the application. When a member likes, dislikes, or comments on other posts/comments, they gain 1 influence point (IP). When members with high IP interact with user content, they have a greater influence on the perception of said content. At the time of account creation, a user starts with 1 IP.

The influence an individual has on user content is calculated by: 1 * user IP / average user IP. This calculation is done at the time of interaction, and is not retroactively increased or decreased.

The overall “perception” of a post will be calculated using this formula: (number of likes)/total interactions. Each interaction will be weighted using the influence formula described above.

Each post will also have a level of engagement. This means how many people are viewing the post (the post’s popularity). This value is based on both the number of views per hour a post gets, as well as the overall number of views. As the views of a post approach the maximum number of users, it is already seen by most of the users, and is thus less relevant, and will have a lower engagement. However, a post with a relatively low number of views, but very high views per hour is likely highly relevant, and will thus have a higher engagement level.

Users of the application can have one of three roles: guest, member, administrator.
All users are considered “visitors” of the website. However, guests constitute individuals that are not logged into the website. Members are users that have created an account and are logged in, and administrators are special users given all permissions that members are, in addition to certain unique features.

Database Specifications

Using the database, guests can only view the posts/comments, they can log into the website without an actual account and be assigned a unique visitor ID for their Ip address.
Members can view and post content, edit or delete their own content, and also like or dislike viewed content, they log in using their email and password.

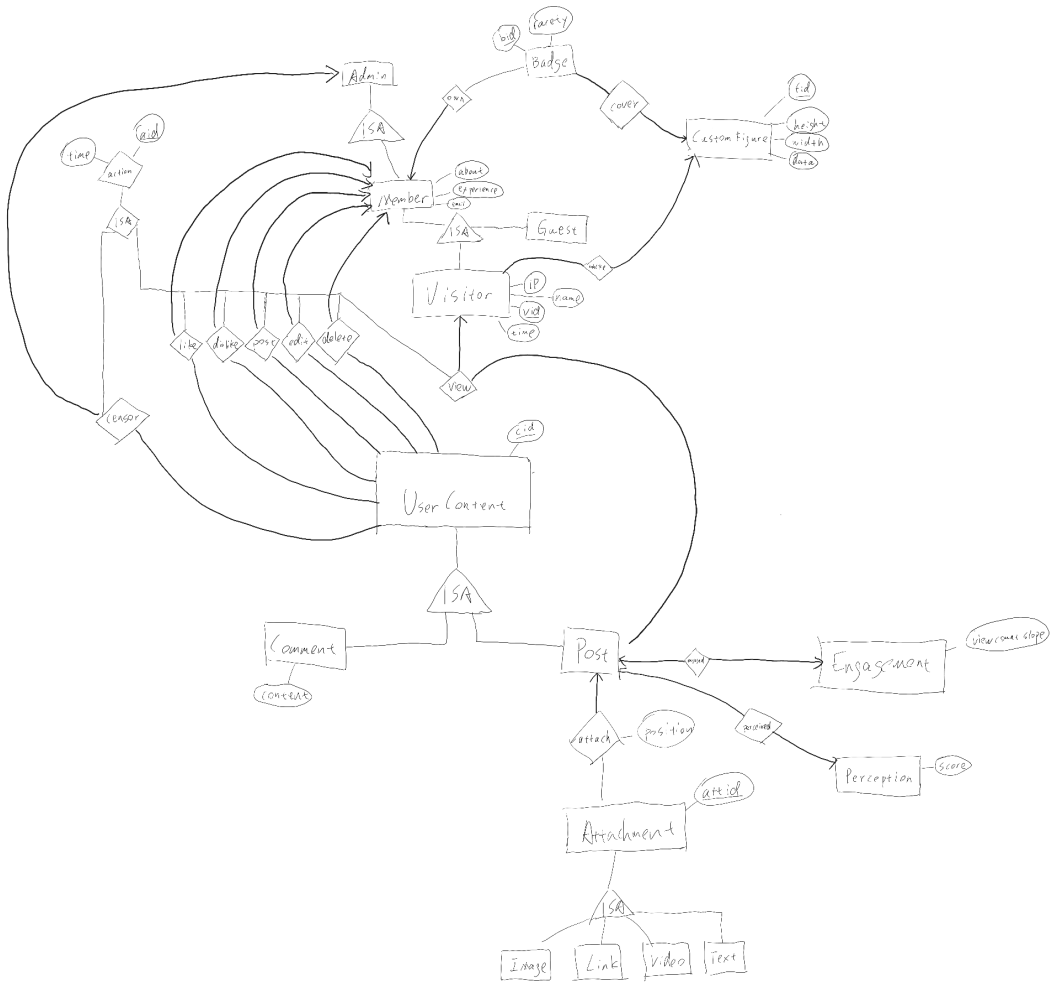
Administrators have all member privileges, in addition they can access users' viewed posts, upvote and downvote history, and delete posts or comments.

Application Platform

Frontend: Angular Cli
Api/routing: Express JS
Server: Node.JS
Database: SQLite
Hosting: Linode

The application's frontend will be built using Angular CLI. The backend will be developed using Node.JS with routing capabilities done by Express. For the database itself, we will use SQLite to build it.

ER Diagram



Link to the full res diagram