University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 1

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Group Number: 42

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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

2.
a. The domain of interest for this database is social media.

b. We are modelling the data of accounts that can post content and interact with other users. This demonstrates the methods in which users build a reputation online.

3.
a. This database allows the company to easily trace an account, post, group or chat message for security purposes. In addition, through topic and badge sections, the company can analyze users' behaviors, such as users' preferences of ads and topics, and later upgrade features and services accordingly. The company can also implement and monitor ads for sponsors on the platform.

b. The database stores information related to accounts, posts, chats, topics, sponsors, groups and badges. Users can make posts, join groups and chat with others using this platform. Additionally, they can view feeds. Users can also earn badges after viewing ads created by sponsors or high amounts of interaction with the platform such as creating many posts. Topics can be associated with posts so that more people with the same interest get the opportunity to view them.

4.
a. Our project will use PHP and Oracle from the CPSC department.
b. We don't expect to use applications other than the two listed.

ER Diagram

Posts entity with attributes: username, id, time, text, visibility

has relationship between Posts and Groups

Groups entity with attributes: timeCreated, name

Chats entity with attribute: name

has relationship between Chats and Messages

Messages entity with attributes: senderName, receiverName, text, time

Constraints:
Total
Disjoint

ISA (Posts) → Content, Feeds

relates relationship between Posts and Topics

Topics entity with attributes: numberOfPost, name

creates relationship (Topics)

joins relationship between Groups and Users

has relationship between Chats and Users

Users entity with attributes: username, password

creates relationship (Content, Users)

receives relationship (Feeds)

receives relationship (Ads, Users)

gets relationship (Users, Badges)

Ads entity with attributes: description, title, cost

offers relationship between Ads and Badges

Badges entity with attributes: name, description

creates relationship (Ads, Sponsors)

Sponsors entity with attributes: id, name, password