Concept of Operations

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Project 1: Group Matching App

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The Current System

Meetup is a similar application. It's a "platform for finding and building local communities. People use Meetup to meet new people, learn new things, find support, get out of their comfort zones, and pursue their passions, together" (meetup.com/about). Facebook is also an application accomplishing similar goals to myMeet. Facebook Groups are "a place for group communication, letting people share their common interests and express their opinions. Groups let people come together around a common cause, issue, or activity to organize, express objectives, discuss issues, post photos, and share related content" (facebook.com/groups).

The Proposed System: Motivation

Users may want to use a simpler social media platform that does not collect or sell their personal data, trends, or likeness. myMeet is much simpler than other apps currently available and will not reveal user information to third parties. Simpler software may be easier to use for those who are unfamiliar with how to use current social media. By storing less information than other applications, myMeet may also be less expensive to store and maintain. Other applications like Facebook and Tinder may not be within the scope of those who look to use myMeet.

The Proposed System: Users and Modes of Operation

For most operations, there will only be one class of user. Users will have the following fields: username, password, first name, last name, security question, security answer, groups, interests, friends, profile picture, as well as a message board. Within groups, some users (group administrators) will have elevated privileges to manage their group and group's events.

myMeet will contain three main modes of operation: users, groups, and events. In users, individual users will be able to connect with other users that have similar interests. Users will be able to direct message other users they connect with, as well as "friend" those other users. In groups, users will be able to either create or find and join groups that revolve around their interests. Users will be able to send messages to a group text chat and create or join group events. In events, users will be able to join events centered around their interests, create individual events, and see uploaded pictures from events they have attended.

The Proposed System: Operational Scenarios

The primary use for the user mode of operations is to connect with other users. For example, myMeet may suggest a list of profiles of users that have similar interests to one's own interests. One would then be able to view those profiles, and message the user and/or send a friend request to that user.

The goal of group operations is for users to find and join groups, and then be able to message other users in the group, as well as create events. Group operations would contain some aspects of user and event operations. For example, like with user operations, myMeet may suggest a list of groups that have similar interests to one's own interests. One would then be able to view the group and join it and send messages to the group's chatroom. One could also view individual profiles of group members and perform user operations. Events would be able to be created, joined, and viewed like in event operations. Alternatively, one could create their own group, and administrate it themselves or promote group users to administrate it. Administration would include: editing or deleting events, removing or promoting users, and changing the group name and picture.

In event operations, users should be able to find and join events, as well as view event information and pictures from those events if they have joined them. For example, one can find an event before it begins and register for it. They then can view information and pictures for that event. Alternatively, one can create an event and provide the name, location, time, and date for it, and allow users to join it.

Predatory users need to be considered when building social media platforms. All users will have access to a block function that will block and mute users the function is used on. In addition, group and event administrators will have the ability to review and remove pictures flagged by users. In any case, malicious action has the ability to be arrested by users, whether it be by blocking malicious users, removing malicious users from groups and events, and removing inappropriate pictures from event pages.

The Proposed System: Operational Features

Must Have:

- Users
    - Create, manage, delete

    - Profile: interests
    - Message
- Groups
    - Create, manage, delete
    - Join
    - Administrate (kick)
- Events
    - Create, manage, delete
    - Join
    - Host pictures
- Database

Would Like to Have:

- Users
    - Block/mute
    - Profile: picture, groups, friends
- Groups
    - Chatroom
    - Interests
- Events
    - Flag pictures

The Proposed System: Analysis

myMeet will be written in Java, most likely using Eclipse and Maven to manage it. GitHub will be used to host the project repository. The app will be developed as a Java app, and hosted on a web server. JavaScript will be used intermittently on the hosted web application. MySQL may be used for database management of users, groups, and events.

Learning will be needed to become familiar with Maven, Git, Swing, and MySQL. One limitation of hosting a Java app is that we will not be able to have hyperlinks for individual users, groups, or events. An internet connection will be needed to connect to the database. myMeet is not intended for use in hostile or volatile environments, or where meeting others may result in injury or death. myMeet is not intended for use by those under 18.

Java is a versatile language, and most of our goals may be accomplished using Java; our only limitation is the skills of the developers. Unfortunately, Java will consume a lot of memory. C++ and Python may have also been used. C++ is a more efficient language, and Python is great for web interaction, but Java is the chosen language of the developers. Limitations will be present in the web hosting the application, as it would not be natively built as a website. The current selection is the best possible, as the developers can accomplish more in the given time frame in Java than if they were to spend time learning and applying other methods.