## **Project Description**

A social media platform that allows users to create groups and interact with each other through posts. The platform supports user-defined tags for posts, filtering options based on tags, and roles for group members. The roles include admin, moderator, user, and custom roles for decoration. The platform also supports creating polls that allow users to vote on single or multiple-choice questions. The project is developed using the WPF framework and the MVVM design pattern.

## Requirements

An user should have access to a window displaying all of the groups he is a member of. That window allows the user to switch between groups, create a new group, join an existing one or leave a group. When pressing the create group button a group with default values is created and the users focus is brought to the group settings page in order to customize the group. When pressing the join group button the user is prompted to enter the group code and if the code is valid a request to join the group is generated. If the groups is Public setting is set to true the request is automatically accepted, otherwise the request is

pending until an admin or an moderator accepts it; this can be done from the group settings page.

The group tab will display the group banner, icon and name at the top of the page. When viewing the feed the rest of the page will be split in two columns, the left column will display the group feed and the right column will display two boxes, one on top of the other. The first box will display a search tab that allows the feed to be filtered based on tags. The filter is case insensitive and the search performs partial matching, meaning that if given a list of tags it is enough for the post to contain only one of them. The second box will display the group members, the user can click on a member to view a preview of his profile and a series of buttons that allow the user to interact with the member, ban, unban, timeout, untimeout, assign role, remove role, remove from group. When viewing the group settings the tab will be split in two columns, the first column showing the group settings and allowing the user to change them and the second column showing the requests made to join the group. The user can approve or reject the requests. The group settings contain: group name, description, icon (from a predefined selection), banner (from a predefined selection), isPublic (defines whether or not a request

is automatically accepted), maxPostsPerHour (defines how many posts an user can make every hour), canCreatePosts (defines whether or not an user can make posts by default). Group ownership can not be transfered and multiple users can not be owners of the same group.

The available roles will be as follows: - User: can create posts if enabled, can create polls if enabled, can vote on polls, can share the group code - **Moderator**: can create posts, can share the group code, can timeout, untimeout users, can assign roles, can remove roles, can remove users, can approve or reject requests, can delete posts, can pin posts, can create polls, can vote on polls, can modify group settings; can not demote other moderators/admins, create other moderators/admins. - Admin: can create posts, can share the group code, can timeout, untimeout users, can assign roles, can remove roles, can remove users, can approve or reject requests, can delete posts, can pin posts, can create polls, can vote on polls, can modify group settings - Custom Roles: can create posts if enabled, can create polls if enabled, can vote on polls, can share the group code, can make the group post be role specific allowing only other users with the same role or the moderator/admin role to view it and

the group post will have a distinct color chosen at random, can make the poll be role specific allowing only other users with the same role or the moderator/admin role to view it and the poll will have a distinct color chosen at random - **Special Mention**: the user that creates the group is automatically assigned the admin role and he can not be demoted

Polls are suported in the multi-choice and single-choice variants. A poll contains a description and a list of options which can be votted on. There are several settings for the poll allowing the user to make it live (results are shown in real time), multiple-choice or single-choice, anonymous (the usernames are not shown in the results), results are visible (allows hiding the results from everyone), end time (set an end time on which the results are shown and voting is closed). A poll can be pinned to the top of the feed.