

Web Programming Coursework 1 - Report - Group 39

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1. New features

The features assigned to the group were features B and 2. Feature B requires changing the relationship between members of the social network, instead of a follower/following relationship the members should be allowed to become friends, a symmetrical relationship. Feature 2 requires the creation of a recommendation system, in which the web application should inform the user about which members of the social network are recommended to become friends with him/her.

- Feature B

As the relationship between Members in the social network is now symmetrical, the terms used to describe it were modified. After refactoring the web application, each Member has a list of friends, a many to many symmetrical relationship between Members and a list of friendship requests, a non-symmetrical many to many relationship between Members. This relationship represents the set of Members which the user has sent friendship requests to. These changes were made within the Member model.

The user has now the option of sending a friendship request to another member of the social network. This request can be accepted or rejected by the member who received it and, if not answered yet, can be canceled by the user who sent it. After a friendship request is accepted the member who sent it and the member who accepted it become friends, they begin to hold a symmetrical relationship, as stated before, this relationship can be undone by either one of the members who take part in it.

- Feature 2

In order to implement this feature a recommendation system was required. This system searches all members who are friends of the friends of the user and have no relationship with that user, whether it is a friendship relation or a friendship request sent either way. After retrieving all members who are friends of friends, following the conditions above, the set of members is ranked based on how many relationships the user and each member have in common. The member who shares more relationships with the user will be recommended first, the one who shares the second biggest amount of relationships will be recommended second, and so on.

2. Extra work

The social network application treated almost every request made by the user as a GET request, which in some cases wasn't quite right. For example, whenever the user began to follow another member a GET request was sent containing the username of the member that the user wanted to follow, then the view function would find the member which had that same username and the member was added to the list of members the user followed. As the GET method is a safe method it should never perform changes in the database. To fix that, all GET request that resulted in changes on the database were replaced by POST requests. The POST request that occur in the tabs "Members" and "Friends" are called using AJAX. Also, Bootstrap was added to the project to give it a slightly more professional look and in order to do that the project's templates were refactored and a few new templates were added.