T Proposal

The nature of complexity of information technology projects decides that teamwork is always inevitable. When taking courses in iSchool of Pitt, we are frequently asked to complete group projects. The quality of these projects is largely dependent on if one can have a group of classmates who have similar interest and specific expertise. However, since the scale of the class is too large to let students know every single person in the class, the traditional way of finding partners are subject to the disadvantage of low efficiency and difficulty of finding the best fit person for the right project.

Based on the fact stated above, herein we proposed to build a social networking system that can help with the grouping process of different courses. For team matching, during the registration procedure, information of users is collected including:

1. User profile (courses taken, interests, academic specialties, contact info)
2. Project idea (brief description, course, keywords, timeline, skill required)
3. Project profile (topic, brief introduction, course, keywords, timeline, skills required)

According to the collected information, the system can give suggestions recommendations to users including:

1. List of the users who would join a group or find partner(s), sorted from the best match to the least according to the analysis of interests and specialties, and their information
2. Projects/ideas that you may be interested and competent, and users who have already grouped with the projects/ideas

Registered users may also post threads on various topics and discuss on the website. It not only addresses the problem of looking for appropriate partner, but also provides a platform for better communication between students, especially those who share the same interest but doesn’t get a chance to acquaint each other before. Ideally, it may also support intercourse cooperation so that groups with relevant tasks can combine their projects to make a more well-established big project.

According to the requirements of this final project, one of the possible project ideas is to develop a Social Networking site providing an opportunity to harvest user information and contributions into new data sets that may represent new information. Our project well meets these requirements. Hence, we choose this topic as our final project. In addition, we are planning to add some interactive components that will make our project more interesting and attractive.

From the view of techniques involved in the project, at this point we expect to use html, css, xml, javascript, jsp, Java, SQL Server, and elementary concept and algorithm of machine learning. Our preliminary idea is to let the users to register, login and enter relevant personal information, then through a matching algorithm calculate an index of similarity with the user information that is already in the database, store it and list the best matches to the current user on the web page. Since we are only planning to use simple match method that we think we could handle, there might be matching that is inexact and inappropriate. If the project is proved to be promising after achieving the initial goal, we’d use more complex and accurate matching algorithm to make the project work better, and hopefully practically benefit students in our school.