IT 323 Midterm Project
Client/Server programming using Sockets

Problem Specification

Create a project management application having the modules stated below:

A. Admin module functionalities
- Starting and stopping the server.
- Registering users (updating and setting users to inactive state).
- Creating a project and eventually assigning the project leader from the registered users.
- Viewing the list of projects. Filtering must also be applied on the list (*on-going* and *completed*).

B. Project leader module functionalities
- Viewing of the list of projects assigned to him/her both as leader and as member (filtering the list must be present).
- Assigning members of the project assigned to him/her as leader from the list of registered users.
- Updating the list of members.
- Setting the status of the project to *completed* once the project is already done.
  Note: the effect of this would disable the project from the viewpoint of the members.
- Uploading file/s for modification by the members.

C. Project member module functionalities
- Viewing of the list of projects assigned to him/her as member.
- Uploading file/s for modification by other members or by the leader.

Other Specifications

- All modules should have a login facility. For users other than the admin, part of the login credentials should be the IP address and port of the server.
- Uploaded files
  - Restricted to the project where the file was uploaded
  - Newly uploaded
    Creates a "node" which is named after the filename of the uploaded file.
    This node is expandable showing a sub-node showing the details: user who uploaded the file, date and time when the file was uploaded, and a brief description what the file is about.
  - Update of a previously uploaded file
    Should be placed as a sub-node with the details specified above.
    Sub-nodes must be shown with the most current as the first item.
- Chat facility
  - Every project should have a chat facility confined only to the users of the project.
  - Users must be notified of the "unseen" messages when the user has not opened a project.

Notes

- Each group must be comprised of 6 members maximum.
  - The details above are the basic requirements of the project. You are to provide additional functionalities such as (but not limited to): posting of announcements, calendar - schedule of tasks, private messaging of users, buzzing of a user, and conferencing (for 3 or more users).
- Rating of the project will be based on the following:
  - Completeness of the basic requirements – 50 pts.
  - Provision of additional functionalities – 15 pts.
  - Documentation – 15 pts.
    Project description, users' manual, and data design
  - Peer evaluation – 20 pts.
- Be creative in designing your user interfaces keeping "user-friendliness" in mind.

What to submit

- Flash Drive – 3 folders: **Source codes** (and resources), **Archived files** (executable *.rar), and **Documentation** o Hard copy of the documentation