

UE20CS352 – OOAD with Java
Lab Assignment – 3

- A. Prepare an Activity diagram with Object flows and Swim-lanes for the Process Connect Request system use case (from Login -> Search Profile -> sending request till the request is accepted or rejected) in the Social Network application described below.
- B. Prepare State Diagrams for the Connect Request object and the User Profile object.

For the problem domain given below, the Classes that can be considered of importance are:

User Profile, Connect Request, Connect Groups, Posts, Posts Sharing Info

Consider appropriate objects for the Object Flow in activity diagram and for the State Modelling.

1. A Social Network application, DiscoNet, has features like User Profiles, Connections, Connect Groups, Posts
2. A User can login and search for a contact by name or email and send Connect Request to them.
3. The Contact, who receives the connect request, can either accept or reject the connect request. When the connect request is accepted, the requestor is notified of the new connection and Connection count is incremented by one for both the receiver and requestor.
 - In case the receiver rejects the request, the requestor is not notified of the status.
 - The system has to keep track of the pending and rejected requests, so that user should not be able to send multiple requests.
4. The requestor and receiver can then add the connected profile to an existing or new Connection Group (like Friend (default), Colleague, Acquaintance, etc.)
5. The Posts a User creates can be shared with all connections, or to one or more Connection Groups.
6. When a User registers on the application, a **New** profile is created. When the user, creates a new post or sends a connection request, the profile is made **Active**. When the user deactivates the profile, the profile is marked as **Inactive** and all posts created by that profile and corresponding posts sharing info are made inactive. The user can activate a inactive profile at a later date, subsequently all the related objects should also be made active. A user can choose to change their profile to **Deleted**, wherein all related objects should be deleted and only the profile is retained. The connection count for a deleted profile should be reset to 0. The connection count for all connected profiles should be decremented.