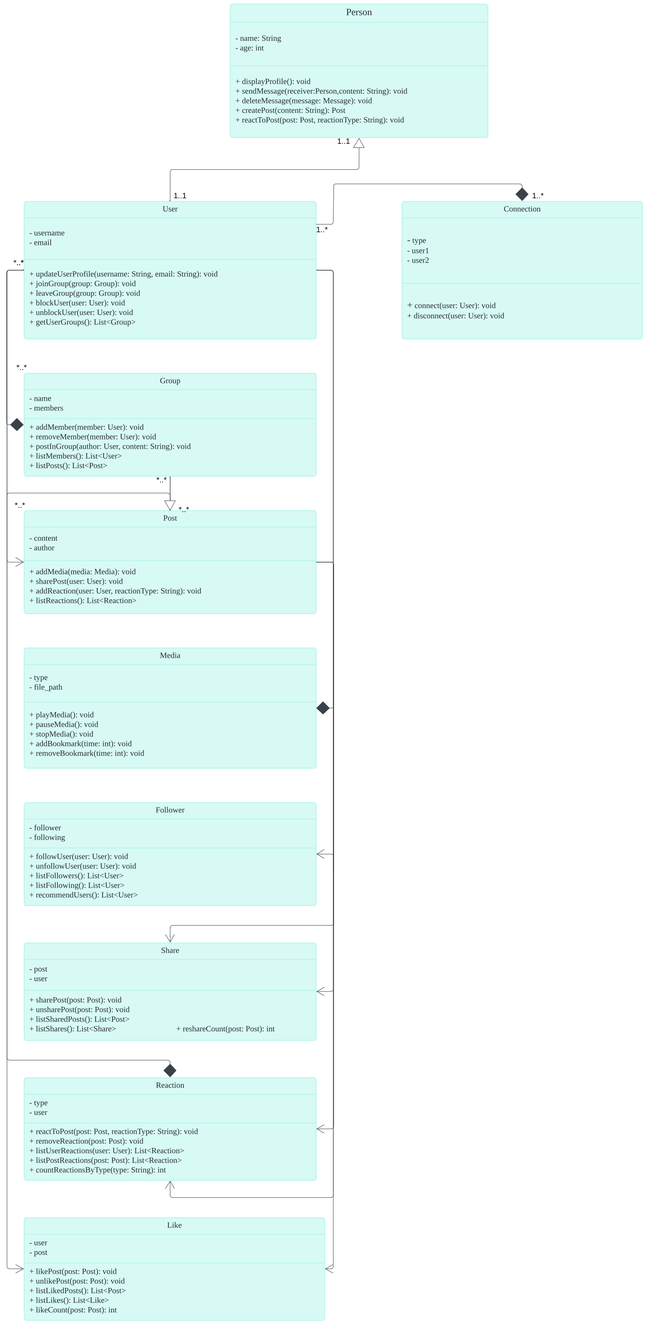
WORK GROUP PROJECT FOR EVERGREEN DYNAMICS(GROUP 25)

PROJECT 1 :

A) *Title: Social Network App Class Hierarchy*



This hierarchy effectively models the relationships and interactions within a social network application, allowing users to connect, form groups, share posts, react to content, and engage with each other.

B) *EXPLANATION :*

S/No.	Concept A	Concept B	Relationship	Explanation
1	Person	User	Inheritance	A User is a specific type of Person within the context of a social network application. By utilizing inheritance, the User class inherits common attributes and behaviors from the Person class, such as name and age, while also adding additional attributes specific to a user account, such as username and email. This relationship allows for code reuse and promotes consistency in the representation of individuals within the application.
2	User	Connection	Composition	A User may have one or more Connections with other users within the social network. This composition relationship implies that a user owns or is composed of connection objects, and it signifies the close association between a user and their connections. The User class manages the creation, maintenance, and interaction with these connections, facilitating social interactions and networking activities within the application.
3	User	Group	Composition	A User may belong to one or more Groups within the social network application. This composition relationship denotes that a user owns or is composed of group objects, allowing users to participate in various communities or interest groups. The User class manages the association with groups, enabling users to join, leave, and interact within these groups as part of their social networking experience.
4	User	Post	Association	A User may create one or more Posts within the social network. This association relationship signifies that a user is associated with posts they create or interact with, without direct ownership or composition. Users can create, share, and interact with posts, contributing to content creation and engagement within the application.
5	post	Media	Composition	A Post may contain one or more Media objects, such as images or videos, as part of its content. This composition relationship indicates that a post owns or is composed of media objects, allowing for the embedding of multimedia content within posts. The Post class manages the inclusion and presentation of media content, enriching the user experience and enhancing the visual appeal of posts.
6	User	Follower	Associasion	A User may have zero or more Followers who follow them within the social network. This association relationship represents the follower-following relationship between users, indicating that users can follow or be followed by other users to receive updates and engage with their content. The User class manages the follower-following interactions, fostering social connections and facilitating content discovery within the application.
7	User	Share	Associasion	A User may share one or more Posts with other users within the social network. This association relationship signifies the act of sharing content between users, enabling users to distribute and disseminate posts to their connections or specific recipients. The User class manages the sharing functionality, allowing users to share posts and engage in content sharing activities within the application.
8	post	Reaction	Associasion	A Post may receive one or more Reactions from users within the social network. This association relationship represents the user reactions, such as likes or comments, directed towards posts, indicating user engagement and interaction with content. The Post class manages the receipt and processing of reactions, facilitating user feedback and engagement metrics within the application.
9	user	Like	Associasion	A User may like one or more Posts within the social network. This association relationship signifies the act of expressing approval or appreciation for posts, enabling users to indicate their preferences and sentiments towards content. The User class manages the liking functionality, allowing users to like posts and contribute to content engagement within the application.
10	Group	Post	Associasion	A Group may contain one or more Posts created by its members within the social network application. This association relationship signifies that groups are associated with the posts shared within them, allowing members to contribute and interact with group-specific content. The Group class manages the collection and presentation of posts within the group context, facilitating group discussions and content sharing activities.
11	Post	Reaction	Composition	A Post may contain one or more Reaction objects representing user reactions to the post. This composition relationship indicates that a post owns or is composed of reactions, allowing users to express their feelings or opinions towards the post content. The Post class manages the collection and display of reactions associated with the post, enhancing user engagement and interaction within the application.
12	Post	Share	Associasion	A Post may be shared by one or more users within the social network application. This association relationship signifies the act of sharing a post with other users, enabling the dissemination of content across the network. The Post class manages the shared post instances and tracks the users who share them, facilitating content distribution and visibility within the application.
13	Reaction	User	Associasion	A Reaction may be associated with one or more users who express their feelings towards a post within the social network application. This association relationship indicates the users who react to specific posts, enabling user-centric analysis of post engagement and sentiment. The Reaction class manages the association with users and tracks user reactions towards posts, contributing to engagement metrics and user feedback analysis within the application.
14	Like	User	Associasion	A Like may be associated with one or more users who express their approval or appreciation towards a post within the social network application. This association relationship signifies the users who like specific posts, enabling user-centric analysis of post popularity and user preferences. The Like class manages the association with users and tracks user likes towards posts, facilitating content engagement metrics and user feedback analysis within the application.

This table provides a structured explanation of the choices made in defining the hierarchy, highlighting the relationships between various concepts and their roles within the social network application. Each relationship serves a distinct purpose in modeling the interactions and behaviors of users and content within the application domain.