

User
- name: String - email: String - password: String
+ User() + getters()

Post
- ID: int - content: String - authorName: String
+ Post() + getters()

Comment
- ID: int - content: String - authorName: String
+ Comment() + getters()

Group
- ID: int - name: String
+ Group() + getters()

UserService
- userService: UserService
- UserService() + getInstance(): UserService + createAccount(email: String, name: String, password: String): void + deleteAccount(User): void + logUserIn(email: String, password: String): User + followUser(follower: User, followee: User): void + unfollowUser(follower: User, followee: User): void + getUserFollowers(user: User): User[ ] + deleteUser(user: User): void

PostService
- postService: PostService
- PostService() + getInstance(): PostService + createPost(content: String, author: User, group: Group): Post + getUserFeed(user: User): Post[ ] + getGroupPosts(Group): Post[ ] + likePost(post: Post): void + getUserPosts(user: User): Post[ ] + getPostLikes(post: Post): int

CommentService
- commentService: CommentService
- CommentService() + getInstance(): CommentService + addComment(content: String, post: Post, author: User): Comment + getPostComments(post: Post): Comment[ ] + deleteComment(comment Comment): void

GroupService
- groupService: GroupService
- GroupService() + getInstance(): GroupService + createGroup(admin: User, groupName: String): Group + joinGroup(user: User, group: Group): void + leaveGroup(user: User, group: Group): void + getGroupMembers(group: Group): User[ ] + deleteGroup(group: Group): void

SearchService
- searchService: SearchService
- searchService() + getInstance(): SearchService + searchUser(userSearch: String): User[ ] + searchPost(postSearch: String): Post[ ] + searchGroup(groupSreach): Group[ ]

UserDAO
+ UserDAO() + createUser(email: String, name: String, password: String): bool + getUserByEmail(email: String): User + getUsersSearchByName(name: String): User[] + followUser(followerEmail: String, followeeEmail: String): bool + unfollowUser(followerEmail: String, followeeEmail: String): bool + deleteUserByEmail(email: String): bool + getUserFollowersByEmail(email: String): User[ ] + getUserFollowingByEmail(email: String): User[ ]

PostDAO
+ PostDAO() + createPost(content: String, authorEmail: String, groupID: int): Post +getPostById(id: int): Post + getUserPosts(userEmail: String): Post[ ] + getGroupPosts(groupID: String): Post[ ] + addPostLike(postID: int, userEmail: String): bool + sharePost(userEmail: String, postID: int): bool + getPostLikesById(postId: id): User[ ] + deletePostById(id: int): bool

CommentDAO
+ CommentDAO() + createComment(postID: int, comment: String): Comment + getCommentById(id: int): Comment + getCommentsByPostID(postID: int): Comment[ ] + deleteCommentById(id: int): bool

GroupDAO
+ GroupDAO + createGroup(groupID: int, adminEmail: String): Group + getGroupById(id: int): Group + deleteGroupById(id: int): bool + addMember(groupID: int, userEmail: String): bool + removeMember(groupID: int, userEmail: String): bool + getGroupSearchByName(groupName: String): Groups[ ] + getGroupMembers(groupID: int): User[ ]