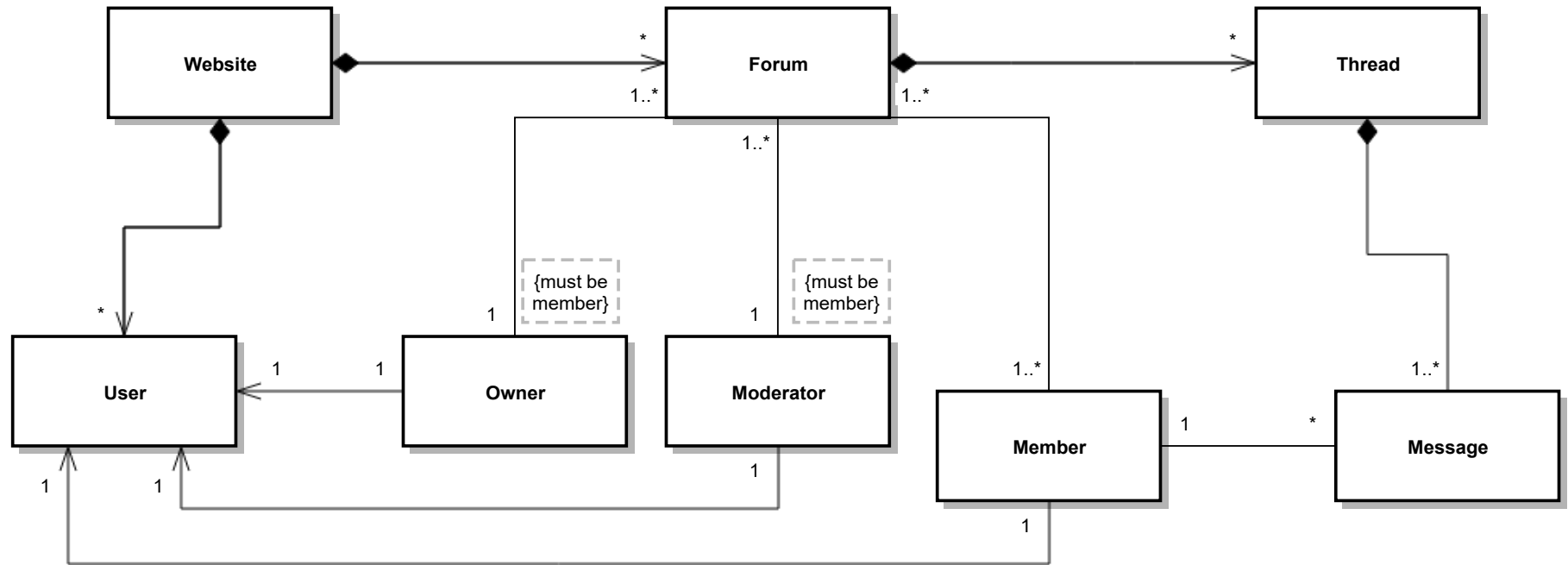


Group Members: Jessie George & Karl Xu

Group Number: 59



Website
+ registerUser(username: String, password: String): void

User
- username: String - password: String - invitedForumNames: List<String>
+ createForum(forumName: String): void + getUsername(): String + getPassword(): String + respondToInvite(forumName: String, response: boolean): void + addInvitedForumName(forumName: String): void

Forum
- forumName: String
+ joinForum(username: String): void + leaveForum(username: String): void + isMember(username: String): boolean + getForumName(): String + filterByAuthor(author: String): List<Message> + filterByThread(threadName: String): List<Message> + filterByDate(fromDate: String, toDate: String): List<Message> + sortByAuthor(author: String): List<Message> + sortByThread(threadName: String): List<Message> + sortByDate(fromDate: String, toDate: String): List<Message>

Thread
- threadName: String
+ getThreadName(): String + getNumMessages(): int

Message
- author: String - date: String - threadName: String - parent: Message - text: String
+ getAuthor(): String + getDate(): String + getThread(): String + postMessage(): void

Member
- invitedForumNames: List<String>
+ respondToInvite(forumName: String, response: boolean): void + addInvitedForumName(forumName: String): void

Owner
+ inviteToJoin(username: String, forumName: String): boolean + inviteToModerate(username: String, forumName: String): boolean + inviteToOwn(username: String, forumName: String): boolean + deleteForum(forumName: String): boolean

Moderator
+ approveMessage(message: Message, approval: boolean): void + resign(forumName: String): boolean

Data Structures	Classes
List<Forum> forums;	Website
List<User> users;	Website
List<Member> members; //has at least one element, which is owner	Forum
Moderator moderator; //must be member	Forum
Owner owner; //must be member	Forum
List<Thread> threads;	Forum
List<Message> messages;	Thread
List<Forum> forums;	Member
User user;	Member
List<Message> messages;	Member
List<Forum> forums;	Moderator
User user;	Moderator
List<Forum> forums;	Owner
User user;	Owner