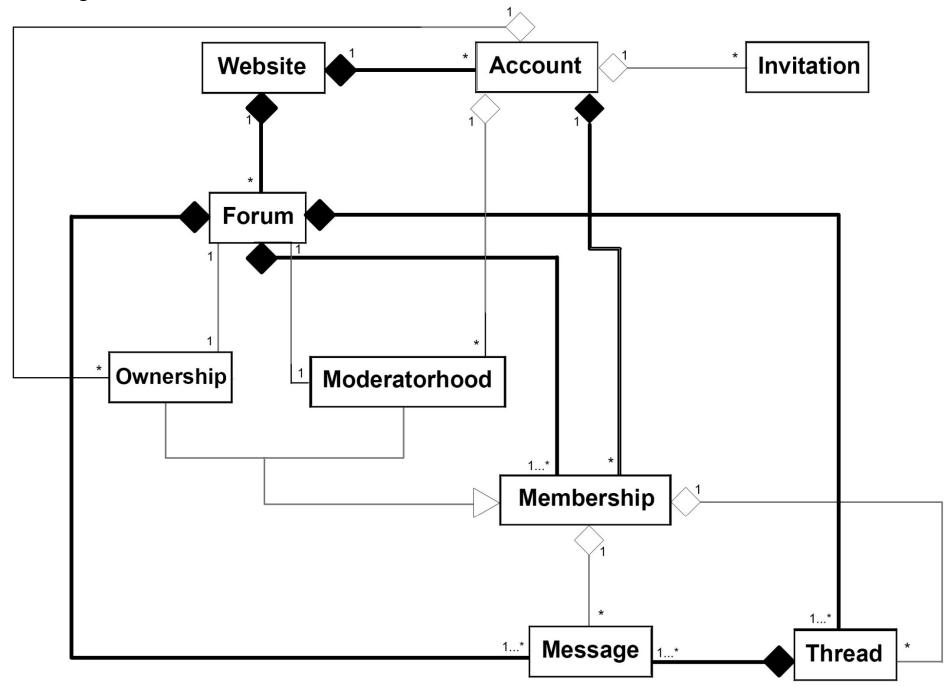
### **UML Diagram**



### Website

-title: String -address: String

+setTitle(s: String): void +getTitle(): String

+setAddress(s: String): void

+getAddress(): String

# **Account**

-name: String-email: String

+newForum(first: Message,name: String): Forum

+joinForum(f: Forum): void +leaveForum(f: Forum): void +readInvitations(): void

+acceptInvitation(i: Invitation): void +denvInvitation(i: Invitation): void

+invite(name: String,info: Forum,owner: boolean): void

+getMemberships(): ArrayList<Membership>

### modpackage

# **Moderatorhood**

+infor: Forum

-readUnmoderatedMessages() void

-approve(Message i): void
-deny(m: Message): void

### modpackage

# **Thread**

+title: String

~unconfirmed: ArrayList<Message> +confirmed: <ArrayList<Message>

+setTitle(t: String): void

+getTitle(): String

#### forumpackage

### **Forum**

-title: String

+getTitle(): String

### forumpackage

# **Ownership**

+infor: Forum

-deleteForum(): void

# Membership

+infor: Forum

+postMessage(p: Message,t: Thread): void

+readForum(): void

+readForum(p: Predicate<Message>): void +readForum(c: Comparator<Message>): void

+readForum(p: Predicate<Message>,c: Comparator<Message>): void

# Message

+text: String

+date: String

+time: String

+editText(t: String): void

+getText(): String +getDate(): String

+getTime(): String

## Invitation

-infor: Forum -pos: boolean

+getPos(): String +getForum(): Forum

### **Data Structures**

Class	Data Structure
Website	Hashtable <string, forum=""> forums;</string,>
Website	ArrayList <account> accounts;</account>
Forum	ArrayList <membership> memberships;</membership>
Forum	Hashtable <string, thread=""> thread;</string,>
Forum	ArrayList <message> messages;</message>
Account	ArrayList <moderatorhood> moderatorhood;</moderatorhood>
Account	ArrayList <ownership> ownerships;</ownership>
Account	ArrayList <membership> memberships;</membership>
Account	ArrayList <invitation> invitations;</invitation>
Membership	ArrayList <message> messages;</message>
Membership	ArrayList <thread> threads;</thread>
Thread	ArrayList <message> messages;</message>