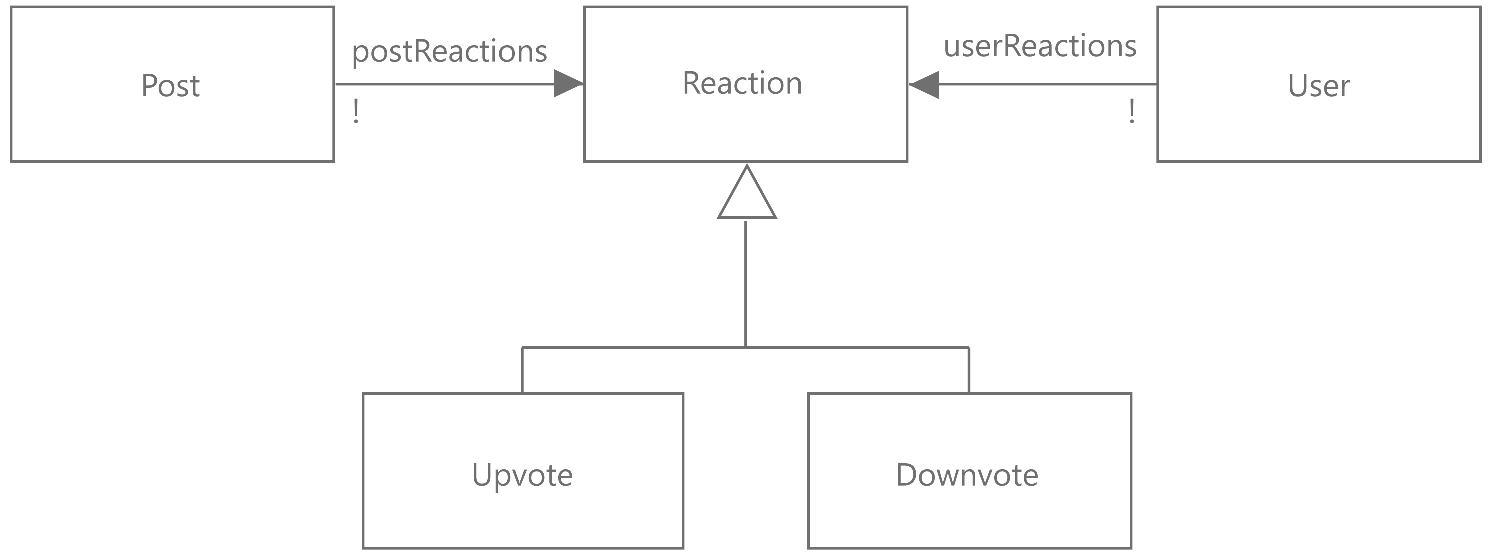
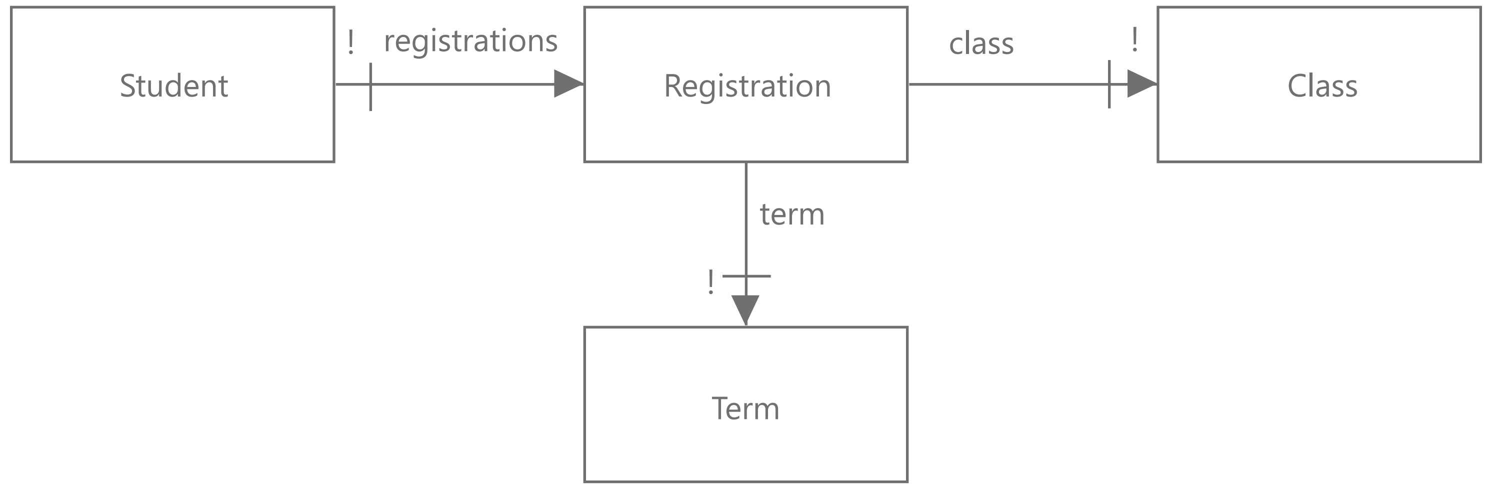
1. Upvoting. Users can like or dislike posts or some other kind of item; a user's liking of an item is only registered once.



Constraints:
all p: Post, u: User | lone p.postReactions & u.userReactions

Decisions:
Assumed that user may like, dislike, or not vote on a post (like and dislike are two separate actions, not just a toggle)

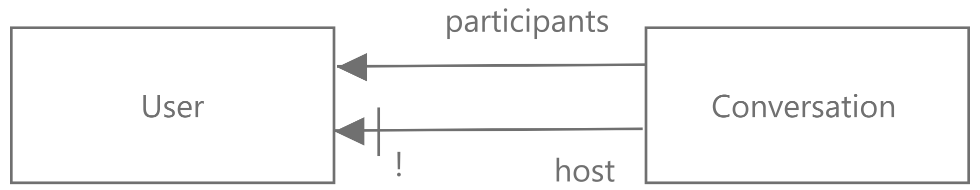
2. Class registration. Students register for classes, and can add and drop them; the system can provide users with lists of students registered in current classes or in classes from previous terms. There is no record of a student having registered for a class that they subsequently dropped.



Constraints:
all s: Student | all disj r1, r2: s.registrations | not (r1.term = r2.term and r1.class = r2.class)

Decisions:
Assumed that students may add an unlimited number of registrations, and there may be an unlimited number of registrations for a class (e.g. if still in add/drop period)

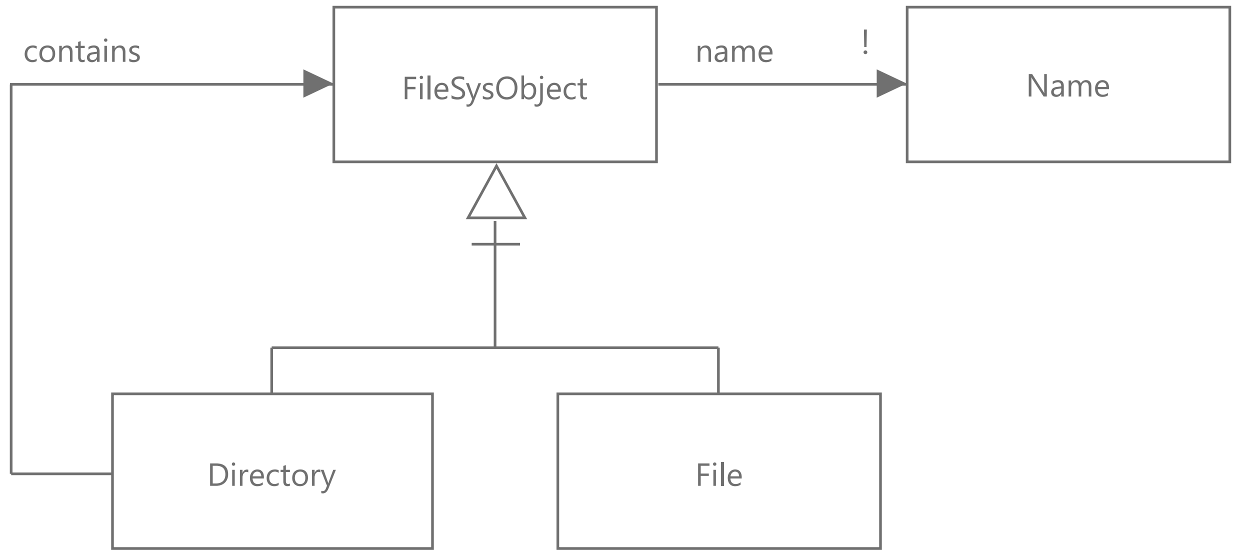
3. Video conversation. A user can call multiple other users for a conversation. A user can leave in the middle of the call, but the call ends if the user who initiated the call drops out.



Constraints:
all c: Conversation | not c.host in c.participants

Decisions:
Assumed that users are able to host or join more than one conversation at the same time

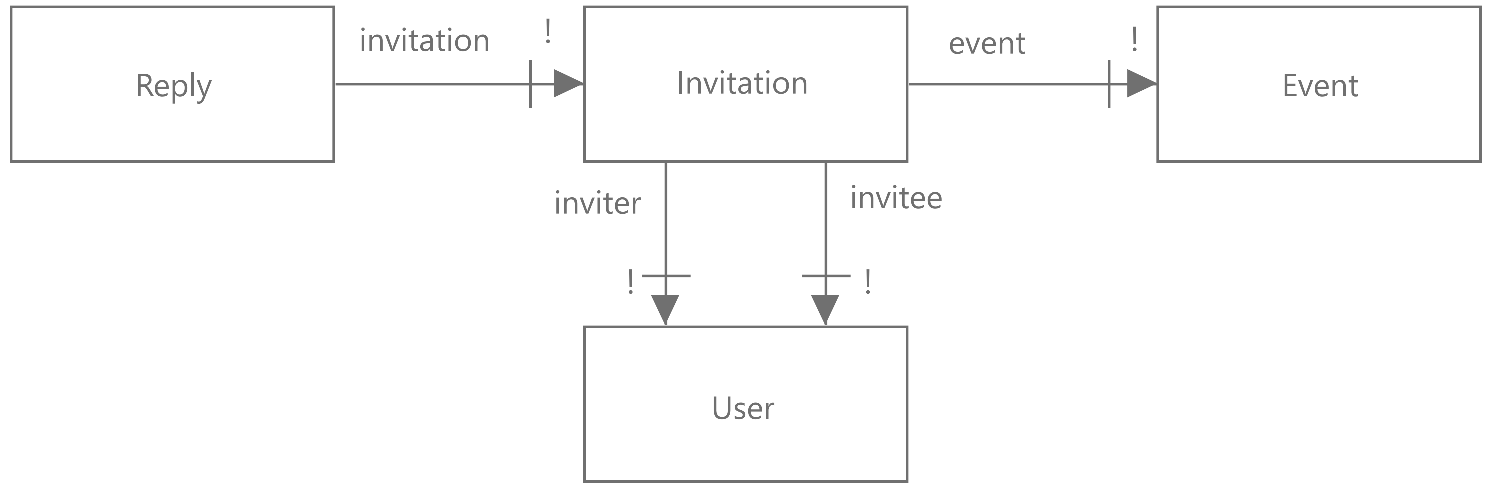
4. Directory. Files are organized into directories as in Unix. Files and directories have names that are unique within their directory, and a file or directory can belong to multiple directories.



Constraints:
all d: Directory | all disj o1, o2: d.contains | o1.name != o2.name
no o: FileSysObject | o in o.^contains
all disj o1, o2: Objs | o1 in *o2.contains

Decisions:
Assumed that all objects except for the top-level directory must be in at least one directory.
Assumed that every object must have a name, and objects may share a name if they are not in the same directory

5. Event invitation. A user can invite other users to an event, and can track the replies.



Constraints:
all i: Invitation | i.inviter != i.invitee

Decisions:
Assumed that a "reply" is a response to an invite, not a response to an event
Assumed that a user can create multiple invites for the same event
Assumed that a user can reply to an invite multiple times