

## **ER Model**

### **Roles**

Users have two roles in the “User Follow/LastRead” relationship, they are “UserID” and “FollowID”. A user could be the follower or the followed.

(UserID, FollowID) is the super key of “User Follow/LastRead”.

Posts have two roles in the “Response” relationship, they are “PostID” and “ResponseID”. A post could be an initial post, or a follow-up response or reaction such as “thumbs up”.

(PostID, ResponseID) is the super key of “Response”.

### **Cardinality Constraints**

Each user could have 0 to infinite posts (0..\*), and the posts entity set has total participation in the “Initialize Post” relationship (1..1), since there will always be one and only one owner for one post.

Each topic could have 0 to infinite posts (0..\*) under it, and the posts entity set has total participation in the “Post Topic” relationship (1..\*), since there will always be at least one topic (up to infinite topics) for one post.

Users and Topics entities have a many-to-many cardinality constraint, each user could follow multiple topics (0..\*), each topic could have multiple users following (0..\*).

Users and Groups entities have a many-to-many cardinality constraint as well, each user could join multiple groups (0..\*), while each group could have multiple users (0..\*).