



Three main entity sets can be seen here: User, Tweet (with a subset Post), Comment. A user can create a tweet, if posted then it has some extra attributes as seen in diagram and if it isn't posted then it is by default considered a draft. If there is a tweet then there must be a unique user that posted it.

A user has attributes as can be seen in the diagram.

A user can be either a follower or followee in relation to another user, or both for that matter. A user can like a post or view the likes on a post. Relationship “likes” has attribute number of likes. A user can also comment or view comments through relation action. A comment has attribute comment and is related to post through relation on-a meaning comment on-a post. There can be many comments on a post, but only one post for a comment. There must be a post in order for there to be a comment.

In summary, a user can post, comment, like or follow other users through the relationships creates, action, likes and follows respectively. Thus, all functionality has been accounted for in the diagram and we are ready to create the DB schema. Create tables are made for all relationships and entity sets. These are: Users, Tweets, Draft, Relationship, Creates, Comments, On_a, Action, and Like. Attributes concerning time have domain type time. Attributes likes content, username, password, display name are of domain type string. Attributes number of comments and number of likes are of domain type int. Attribute “editable” of drafts has domain type BOOLEAN and should be true as only drafts can be edited in our database. If “editable” ever becomes false, it means the draft is no longer a draft and is actually now a post or has been deleted. All remaining attributes or relations have type BOOLEAN as well. This is because a user is either doing or not doing what the relationship states. Thus, all functions have been addressed and we end up with 9 create table statements in total.