Description

The ER model diagram created above is used for Social Network project. The rectangles represents the entity sets and the diamonds represents the relationship sets between the entities. The straight line (—) represents "many" and the arrow line (—>) represents "one". Attributes are listed in each table and the primary key are underlined appropriately.

The project is designed for users to join groups and follow other users. Besides, users can create posts about some topics and they can attach images and links in their posts if they want. After posting, users can respond to the posts with a simple thumbs up/thumbs down or a response post. Moreover, users can subscribe the topics which they are interested in.

From the ER diagram, a user can join many groups as they want and a group can consist of many different users. Therefore, there is a "many-to-many" relationship between the Group and the User. Since one user can follow many other users and one user can be followed by many users, the relationship between the User and the Follow_User is "many-to-many". One user can post many posts but one post is only belong to one user, so the relationship between the User and the Post is "one-to-many". Also, one user can read as many posts as they want and one post can be read by many users. Therefore, the relationship between the User and the Read_Post is "many-to-many". Besides, one response post can only respond to one post but one post can be responded by many response posts. Therefore, the relationship between the Post and the Respond_Post is "many-to-one". Since one user can subscribe many topics and one topic can be subscribed by many users, the relationship between the User and the Topic is "many-to-many". Since one post can include many topics and one topic can be referred in many posts, the relationship between the Post and the Topic is "many-to-many". One topic can have many subtopics and one subtopic can belong to many topics, so the relationship between the Topic and the Sub_Topic is "many-to-many". Since one post can have many images or links but each link or image is belong to one specific post, the relationship between the Post and Post_Image/Post_Link is "one-to-many".