

ER Diagram for Messaging System

Group Name: **Super Five**

Group Members:

1. Rahman, Sheikh Talha Jubayer (19-41468-3)
2. Shifat, Mahabub Hasan (19-41460-3)
3. Khanom, Afrida (19-41444-3)
4. Asha, Nahida Akther (19-41190-2)
5. Mim, Syeda Maherunnasha (19-41446-3)

Case: In a Messaging System, a user may or may not have friendship with other users. One user can have zero to many friendships. User is identified by user id. System also stores user name, user date of birth, phone number, age and address. User's age is driven by user's date of birth. User can have multiple phone number. Users' address is composed of city, area and street. Street is also composed of road number and road name. One friendship is created by exactly two users. Friendship is identified by friendship id which contain users id. One friendship has friendship type like family, close and only friend. System also store the friendship starting date. One user can be member of zero to many groups. One group is identified by group id. One group is created by more than two members. Group has name and group type like entertainments, study and work. System also store group opening date. Group and friendship both may have zero to many messages. User can send zero to many messages to friendships and groups. System stores sending date when a user send a message. One message can be sent by exactly one user to friendship or group. One message belongs to exactly one friendship or group. One message is identified by message id which is made of friendship id or group id. Message has the text and sender id which is the user id who send this message.

ER Diagram:

