

ER Description

The central entity in our E-R model is the Users Entity, containing a user's ID, name, phone, email, username and password. The User Entity has 5 relationships: Contacts, which link users to other users, Author, which links a user to the personal messages they have posted, MessageReaction, linking users to messages they have liked or disliked, OwnsChat, denoting a User as a Chat Admin, and ChatMembers, linking users to all chats they are a part of. In turn, the ChatGroup Entity, containing only the Chat Id and name, is linked to every Message posted through the HasMessages relationship. The Message entity has an ID as a primary key, a timestamp, message text field, and is linked to a User author, the Chat the message was posted to, and to whatever message it may be a reply to through the replied relationship. Lastly, we have the Hashtag entity, linked solely to the Message entity through the Message Hashtag relationship. The Hashtag entity contains the text of the given hashtag and a count value which is updated every time a new message is posted with that hashtag.