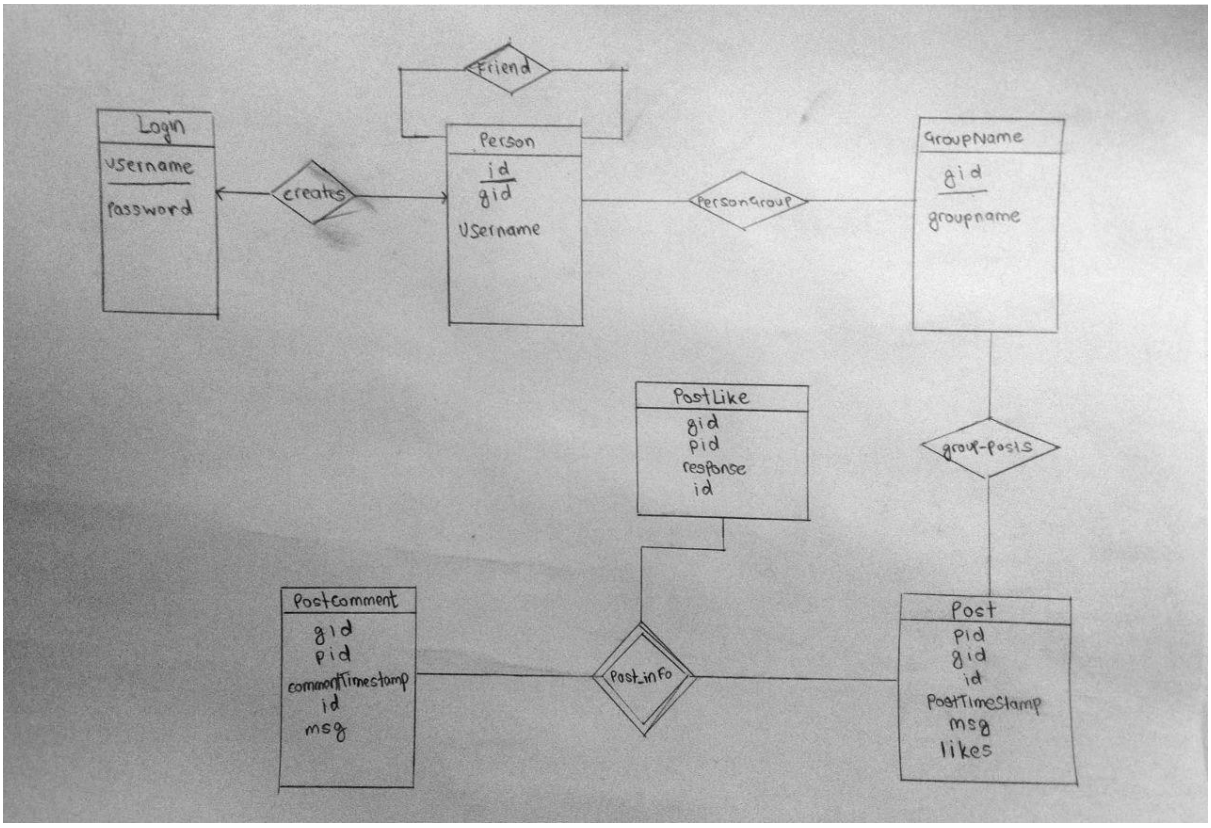
Deliverable 1 (ER Model):



For our ER Model, We have defined 6 entities:

1. Login
2. Person
3. GroupName
4. Post
5. PostComment
6. PostLike

Login and Person Entities

The Login entity defines a user's username and their password with the primary key being the username. Using the Login entity, we create a Person who has the attributes id, gid, and username. The ID represents a unique userID generated for each user, and they have a username associated with it based on the Login Entity. This is a one-to-one relationship.

Group Entity

Each person can be associated with many groups and a group can have several people and they are related by a relationship entity called **PersonGroup** which defines the groups a user is part of. This is a many-to-many relationship.

In our front-end, groups are represented by topics. However, throughout the project, both terms are used interchangeably. For each group that we have, it will have a gid, and a

groupName associated with it. And, each group can have several posts but a singular post can only be associated with one group. This is a one-to-many relationship.

Post Entity
For each post we have, gid which represents the group the post belongs to, a pid which defines the id of the post that was made, an id which is the user who created the post, a postTimeStamp which tell us when the post was created, a msg, which is the actual content of the post, and likes, which is the number of likes the post has.

PostLike and PostComment Entities
Finally, we have a relationship entity between a post and its likes and comments, called **Post_info.** A PostComment has gid of the group the post is a part of, pid of the post the comment associated to, a commentTimeStamp of when the comment was added, the id of the user adding this comment, and msg, which contains the actual comment. PostLike has the same information as a PostComment, without the timestamp and the message. However, it has a response instead which can either be a LIKE, LOVE, or SAD. These two entities are weak entities as they do not provide a primary key.

Data

We took the following dataset from Kaggle:
https://www.kaggle.com/mchirico/cheltenham-s-facebook-group

The above data is based on information present in certain Facebook groups which we modified to suit the functionality of our social media platform. Friends were converted into followers, groups were converted into topics that users can follow.

There are approximately 8000 users, and 20,000 posts currently present in the database. The converted data can be found in the 'v9malhot_s6bhatna\mysql' folder and the raw data from the source dataset can be found in 'v9malhot_s6bhatna\mysql\unprocessed_data' Much of the data was changed and modified to fit our ER Model.

Social Media Platform
Additional info regarding the design/usage instructions of our application can be found in 'design.pdf'

Our social media platform called Rinstagram has certain unique attributes. It is designed to work as a hybrid between Reddit and Instagram.

Each user can follow topics that they wish to see posts on. These topics are created by users. A user can also follow other users without their permission (this is an intended feature similar to Reddit). A user cannot see who they are being followed by and as such all their posts are technically public.

All topics are public and can be followed by any user. A user can create a post under a topic as long as they are following that topic. A user can find new users to follow by looking at posts in a topic that they are following.