University of Puerto Rico
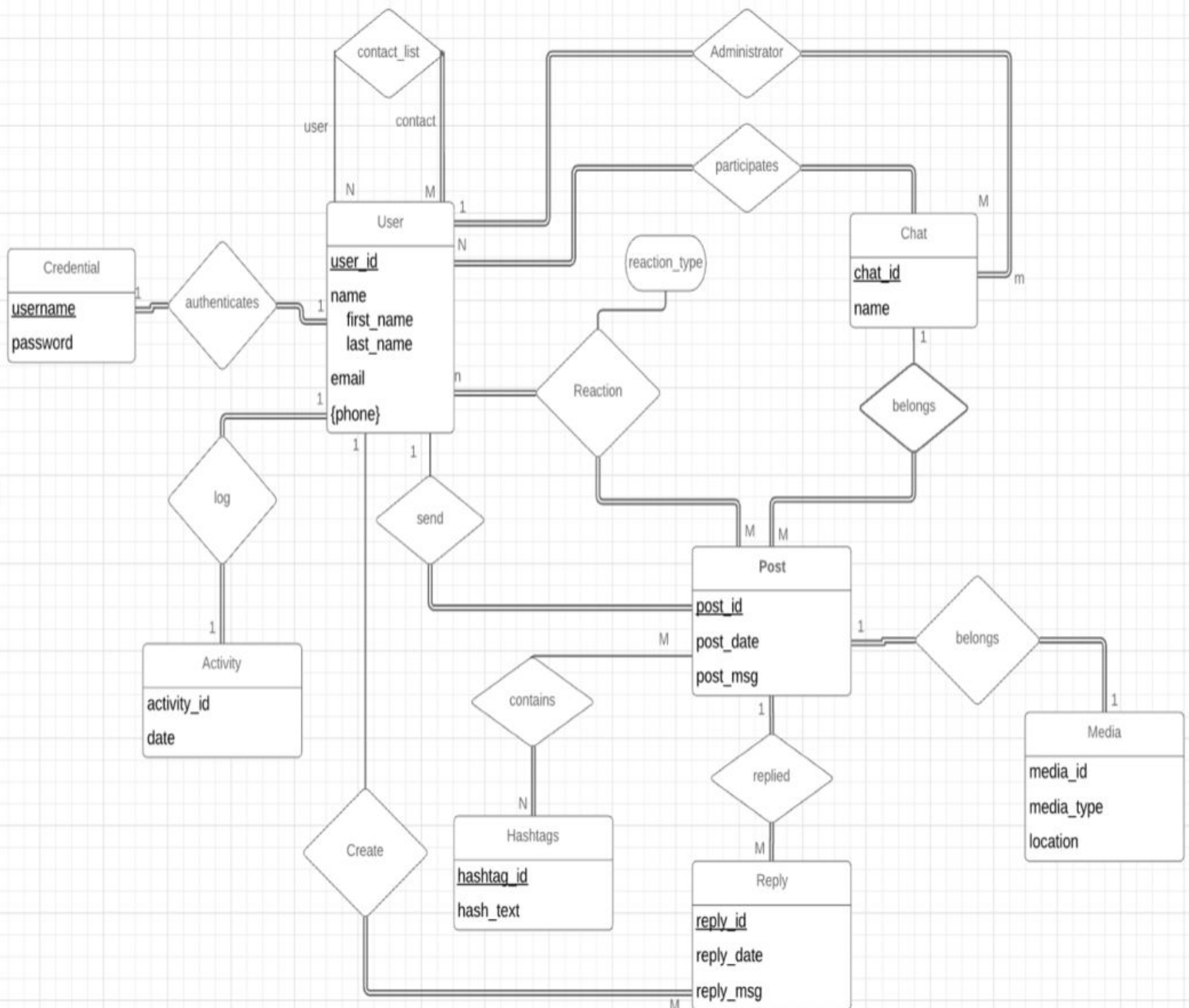Mayagüez Campus

Photo Messaging Application

Pictochat

Renier Velazco Santiago (801-12-9620)
Cristian F. Torres Collazo (802-13-8525)
Julian Cuevas Paniagua (802-14-1851)
ICOM 5016 Database Systems
Dr. Manuel Rodriguez

I. ER Diagram

DB Project - E-R Diagram

Julian Cuevas, Renier Velazco, Cristian Torres | February 25, 2019

II. Entity-Relationship and Schema

A. Entities:

1. Users - Users in the Pictochat application.
    a) Attributes:
        1. user_id: serial Primary Key
        2. first_name: varchar(20)
        3. last_name: varchar(20
        4. email: varchar(40)
        5. phone: varchar(20)

2. Credentials – Hold login credential for accessing Pictochat application.
    a) Attributes:
        1. username: varchar(30) Primary Key
        2. password: chkpass

3. Activity - Contains the necessary information to determine user activity.
    a) Attributes:
        1. activity_id: serial Primary Key
        2. date: varchar(20)

4. Chats - Contains the information related to a chat group.
    a) Attributes:
        1. chat_id: serial Primary Key
        2. name: varchar(20)

5. Post - Post sent in a chat.
    a) Attributes:
        1. post_id: serial Primary Key
        2. post_msg: varchar(1000)
        3. post_date: varchar(50)

6. Medias - Manages the images of the Chat Group.
    a) Attributes:
        1. media_id: serial Primary Key
        2. media_type: varchar(20)
        3. location: varchar(100)

7. Reply - Contains the replies of the message.
   a) Attributes:
      1. reply_id: serial Primary Key
      2. reply_msg: varchar(1000)
      3. reply_date: varchar(20)

8. Hashtags - Contains the hashtags of the messages.
   a) Attributes:
      1. hashtag_id: serial Primary Key
      2. hashtag_text: varchar(100)

Relations:
User Relations:
1) administrator
   a) Mapped to Chat. A user can be the administrator of a chat.
2) contact_list
   a) Mapped to User (self relation). A user is contact of another users.
3) participates
   a) Mapped to Chat. A user can participate in a differents group chats.
4) reaction
   a) A user is mapped to Posts. The users can create a differents types of reactions (Like, Dislike) to a post.
5) create
   a) A User is mapped to Reply. A user can create reply associate to a some Post.
Post Relations:
1) contains
   a. Mapped to Hashtag. The text on posts can contain Hashtags.
2) replied
   a. Mapped to Reply. A post can have replies.