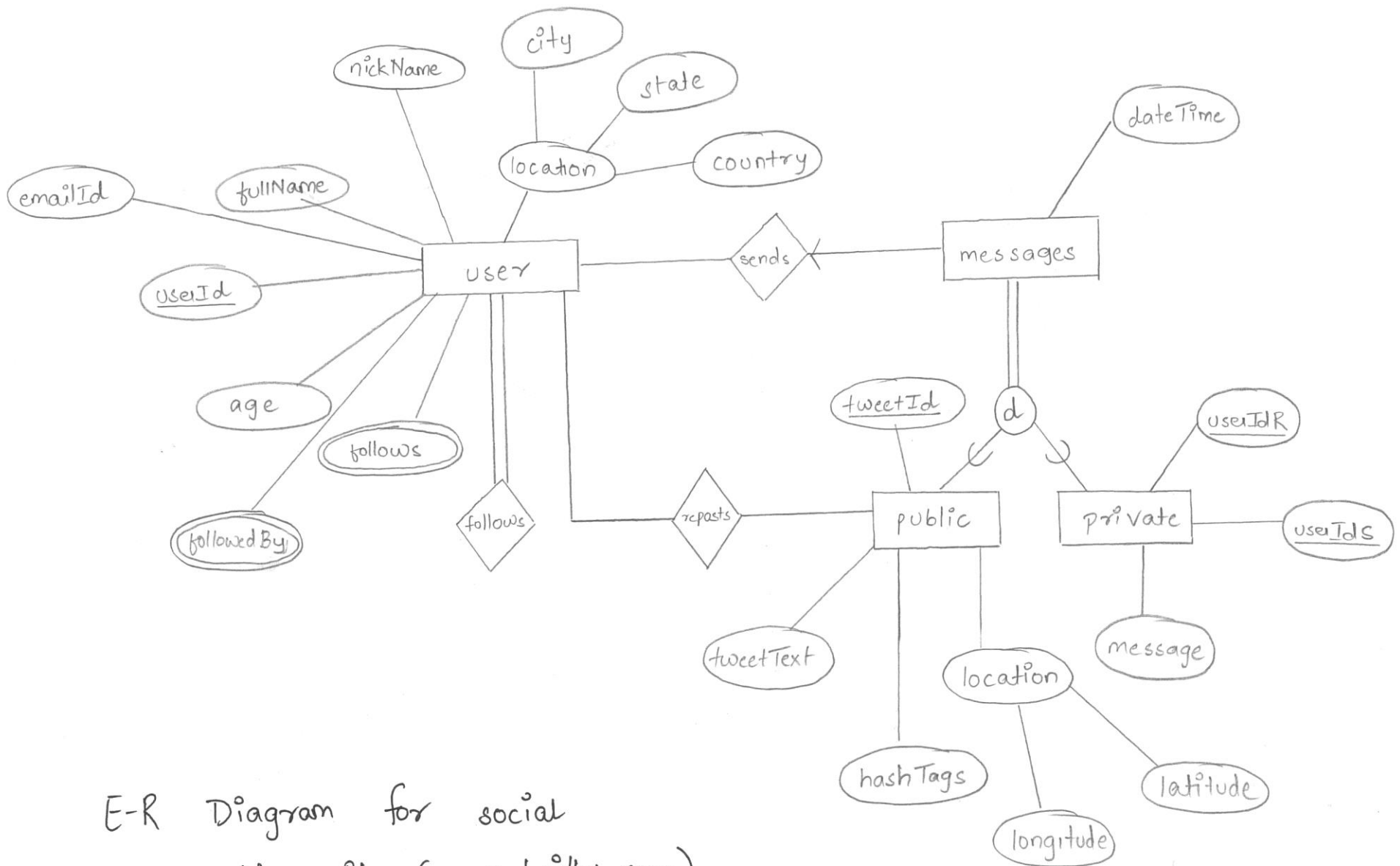


Homework 1 - Part 1



E-R Diagram for social
networking site (www.twitter.com)

1. user (userId, fullName, nickName, emailId, age, city, state, country)

userId is the primary key.

location is a composite key comprising city, state, country
fullName, nickName, emailId, age are simple, stored, single-valued attributes

followedBy, follows are multivalued attributes and are thus, specified using two different tables.

2. user - followedBy (userId, followedBy)

userId is a foreign key referencing user

userId and followedBy together make the primary key

3. user - follows (userId, follows)

userId is a foreign key referencing user

userId and follows together make the primary key.

4. public - messages (tweetId, ^{userId}tweetText, longitude, latitude, hashtags, dateTime)

table constraint - hashtags must start with '#' followed by tag
userId is a foreign key referencing user.
tweetId is the primary key

tweetText, hashtags, dateTime are simple, single-valued, stored attributes

location is a composite attribute comprising longitude, latitude

5. private - messages (userIdR, userIdS, dateTime, message)

userIdS is a foreign key referencing user(userId)

userIdR, userIdS, dateTime together are the primary key.

message is simple, single-valued, stored attribute

6. reposts (userId, tweetId)

userId is a foreign key referencing user.

tweetId is a foreign key referencing public - messages

userId, tweetId together are the primary key.