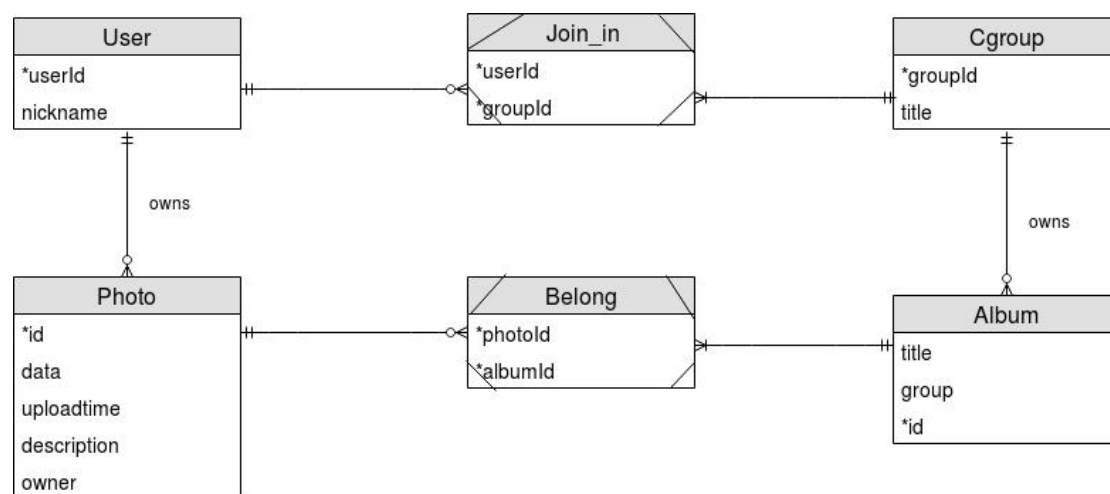Candidate number: 97431

Modelling exercise

Tencent QQ is a mobile application which enable the user to send the instant message. Each user has a unique Id and a nickname.

There are chat groups in this application, the user can choose to join in chatting groups or not. Each group has a unique Id and a title.

There could be albums in the chatting group, members of the chatting group can share photos in the chatting group and upload photos to group albums(an album could contain photos from different users). An album only belongs to exactly one group and a group can have many different albums.

The photo shared by users in the group has its description, data, uploading time and its owner information.

1. There is a function named group member which lists all the users' nickname who join in a specified group

SELECT User.nickname FROM User

JOIN Join_in ON User.userId = Join_in.userId

JOIN Cgroup ON Cgroup.groupId = Join_in.groupId

WHERE Cgroup.title = ?

2. Viewing all photos and photo descriptions that upload by a user in a specific album, the photo are showed according to the time order (from new to old)

SELECT Photo.data, Photo.description

FROM Photo JOIN Belong ON Photo.id = Belong.photoId JOIN Album ON Album.id = Belong.albumId JOIN User ON User.userId = Photo.owner

WHERE Album.title = ?   --the album name we specified

AND User.nickname = ?   --the users' nickname we specified

ORDER BY Photo.uploadtime DESC