

Relational Model:

Entities:

PageOwner(ID, description, Privacy, pageID)

User (ID, username, birthday, email, password)

(ID ref PageOwner)

Group(ID, groupName, creatorID)

(ID ref PageOwner, creatorID ref User)

Event(ID, eventName, date, location, plannerID)

(ID ref PageOwner, plannerID ref User)

Post (postID, postDate, message, pagePostedOn, posterID, originalPost)

(pagePostedOn ref PageOwner(pageID), posterID ref User, originalPost ref Post)

Comment(commentID, datePosted, message, commentedPost, posterID, originalCommentID)

(postID ref PageOwner(pageID), posterID ref User, originalCommentID ref Comment)

Tag(TagName)

PrivateMessage (pmID, message, senderID, receiverID, dateSent, dateRead)

(senderID ref User, receiverID ref User)

Relationships:

Friends(UserAID, UserBID, sinceWhen)

(UserAID ref User, UserBID ref User)

Contains(postID, tagName)

(postID ref Post, tagName ref Tag)

MemberOf(UserID, GroupID)

(UserID ref User, GroupID ref Group)

Administers(UserID, GroupID)

(UserID ref User, GroupID ref Group)

GoingTo(UserID, EventID)

(UserID ref User, EventID ref Event)

Likes(UserID, PostID)

(UserID ref User, PostID ref Post)