Account(UserName, Password, OnlineState)

Profile(Username, Email, Telephone, ImageLink, Visibility, NickName)

Message(MessageID, Message, TimeStamp)

Group(GroupName, FounderName, Description, ImageLink)

isContact(This\_UserName, Contact\_UserName)

sendRequest(From\_UserName, To\_ UserName)

SendingSinge(Account\_UserName, Message\_ID)

SendingGroup(Account\_UserName, Message\_ID,Group\_Name)

MemberOf(Account\_UserName,Group\_Name)

Profile [Username] ⊆ Account[UserName]

isContact[This\_UserName] ⊆ Account[UserName]

isContact[Contact\_UserName] ⊆ Account[UserName]

sendRequest [From\_UserName] ⊆ Account[UserName]

sendRequest [To\_ UserName] ⊆ Account[UserName]

Group [FounderName] ⊆ Account[UserName]

SendingSinge[Account\_UserName] ⊆ Account[UserName]

SendingSinge[Message\_ID] ⊆ Message[MessageID]

SendingGroup[Account\_UserName] ⊆ Account[UserName]

SendingGroup[Message\_ID] ⊆ Message[MessageID]

SendingGroup[Group\_Name] ⊆ Group [GroupName]

MemberOf[Account\_UserName] ⊆ Account[UserName]

MemberOf[Group\_Name] ⊆ Group [GroupName]