

# Anforderungsanalyse für einen Instant Messenger

**Gruppenmitglieder:** Thomas Acker  
Marco Dung  
Christoph Krämer  
Ying Li

## 1.

**Entity:** Account  
**Relations:** ---  
**Attributes:** UserName  
Password  
OnlineState  
**Constraints:** UserName: Length  $\geq 6$  and  $\leq 20$   
Password: Length  $\geq 6$  and  $\leq 20$ , at least one number  
OnlineState: Only „Online“, „Offline“, „busy“, „do not disturb“ possible

## 2.

**Entity:** Profile  
**Relations:** A „Profile“ is an extension of an „Account“  
**Attributes:** UserName  
EMail  
Telephone  
ImageLink  
NickName  
Visible  
**Constraints:** EMail: contains an „@“ in it  
Telephone: only numbers divided by a „/“  
PictureLink: contains a hyperlink to an image  
Nickname: Length  $\leq 20$   
Visible: only „true“ or „false“ possible

## 3.

**Entity:** Contacts  
**Relations:** Accounts, which requested the contact request  
**Attributes:** UserName1  
UserName2  
**Constraints:** ---

## 4.

**Entity:** ContactRequest  
**Relations:** „Accounts“ can link with each other through a request  
**Attributes:** UserName1

UserName2  
Status  
**Constraints:** Status: possible is „open“, „accepted“, „declined“

5.

**Entity:** Group  
**Relations:** Contacts can be organized in a group  
**Attributes:** GroupName  
FounderName  
Description  
ImageLink  
**Constraints:** GroupName: Length <= 20  
FounderName: should be a valid and existing user name  
Description: ---  
ImageLink: a hyperlink to an image

6.

**Entity:** GroupMember  
**Relations:** The members of a group are invited contacts of the group founder  
**Attributes:** GroupName  
Member  
**Constraints:** GroupName: an existing group name  
Member: a valid and existing user name

7.

**Entity:** SingleMessage  
**Relations:** A Message sent by one contact to a different contact  
**Attributes:** Sender  
Receiver  
Message  
TimeStamp  
**Constraints:** Sender: User name  
Receiver: User name  
Message: ---  
TimeStamp: Only a date and time allowed

8.

**Entity:** GroupMessage  
**Relations:** A Message sent by one contact to a group  
**Attributes:** Sender  
ReceiverGroup  
Message  
TimeStamp  
**Constraints:** Sender: User name  
ReceiverGroup: Group name

Message: ---

TimeStamp: Only a date and time allowed