Requirements and Analysis Document for ShatApp

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1 Introduction

For years corporations have been using normal, ordinary, messaging applications in their day to day operations. This is not practical nor optimized for business flow. Basta_gruppens_LTD's messaging application takes care of those problems. The app makes it easy to communicate with other colleagues as well as starting multiple conversations for all your discussions and topics. All messages sent through the application will also be stored. Contacts can easily be searched and found in a visual hierarchy based on people's profession within the company. With companies being the applications main focus, the communication between colleagues will be seamless.

1.1 Definitions, acronyms, and abbreviations

ShatApp is the name of our application.
ShatApp in the UML: the Main class.
Conversation in the UML: a class that holds information relevant to the conversation.
User in the UML: the User class holds information about the user; such as: userId, name, profession etc.
Message in the UML: the Message class represents a message. It has a date, a sender, a conversation id, the contained message.
User information is the information that the User class holds. For example contacts, username, firstname, lastname etc.

2 Requirements

2.1 User Stories

2.1.1 Starting the program

Story Identifier: MSG001
Story Name: Starting the program
Description
As a user, I want to be able to start the program, so that I can use it.
Confirmation
Functional
Can I start the program?
Does a GUI show up upon starting the program?
Non-functional
Availability: Can I start the program at any time during the day?
Usability: Is it easy to start the program?

2.1.2 Sending messages

Story Identifier: MSG002
Story Name: Sending messages
Description
As a user I want to be able to type and send a message because I want to contact my colleagues without having to walk over to their desk.
Confirmation
Functional
Can I press a button to send the message?
Is there an input field for me to type the message into?
Does my sent message get saved somewhere?
Does the text in the input field get removed when you press send?
Can I use the enter key to send the message?
Can I press shift + enter to create a new line on my message?
Non-functional
Availability: Can I send messages at any time during the day?

2.1.3 Loading messages

Story Identifier: MSG003
Story Name: Loading messages
Description
As a user, I want to be able to load messages into the chat window to be able to see what has been sent.
Confirmation

Functional
Can i view the message(s) that have been sent?
Only messages from the given conversation are to be loaded, and all messages from the given conversation are to be loaded.
Non-functional
Availability: Can I view the messages that have been sent to me at any time during the day?

2.1.4 Create a conversation between two users

Story Identifier: MSG004
Story Name: Create a conversation between two users
Description
As a user, I want to be able to create a conversation so that I can send messages to my colleagues.
Confirmation
Functional
Can I press a button to initiate a new conversation with a user of my choice?

2.1.5 Viewing contacts

Story Identifier: GUI001
Story Name: Viewing contancts
Description
As a user I want to be able to see my contacts so that I know who I can contact.
Confirmation
Functional
Is there a dedicated place in the GUI for me to view my contacts?
Can I view only my own contacts?
Are my contacts loaded into the dedicated place in the application for contacts?
Non-functional
Security: can other users see my contacts?

2.1.6 Differentiating between Contacts and Conversations

Story Identifier: GUI002
Story Name: Differentiating between Contacts and Conversations
Description
As a user I want to be able to see my contacts and conversations separately in order to be able to distinguish between the two of them.
Confirmation
Functional

Is there a tab that lists conversations?
Is there a tab that lists Contacts?
Is it possible to switch between the tabs?
Non-functional
Response time: Do Conversations and Contacts load within a reasonable time?

2.1.7 Login

Story Identifier: GUI003
Story Name: Login
Description
As a user, I want to be able to log in to the application so that other users can identify me.
Confirmation
Functional
Is there a GUI for logging in?
Does entering the correct username and password allow the user to proceed to the application?
If the incorrect username and/or password is entered, is an error message displayed?
Non-functional
Security: Is it possible to guess a users login information based on the displayed error messages?

2.1.8 Change conversation name

Story Identifier: DATA001
Story Name: Change conversation name
Description
As a user I want to be able to change the name of a conversation because it's easier to tell the conversations apart.
Confirmation
Functional
Can I press a button that lets me change the name of conversation?
Can I press the conversation name, in order to change the name of the conversation?
Is there a limit on how long the conversation name can be?

2.1.9 Saving Conversations

Story Identifier: DATA002
Story Name: Saving Conversations
Description
As a User, I want my conversations to be saved, so that I can remember what has been written between me and my contacts.

Confirmation
Functional
Are my conversations saved when they are created?
If i close the program and then open it up again, can I see what messages have been sent and what conversations I am a part of?

2.1.10 Saving User information

Story Identifier: DATA003
Story Name: Saving User Information
Description
As a user, I want my information to be saved, so that I don't have to input it again every time i start the application.
Confirmation
Functional
Is my user information stored when it is manipulated?
If I close the program and then open it up again, is my user information the same as when I closed the porgram?

2.1.11 Create a conversation with a group of contacts

Story Identifier: MSG005
Story Name: Create a conversation with a group of contacts
Description
As a user, I want to be able to create a conversation group of multiple contacts so that I can keep in contact with a group of people at the same time.
Confirmation
Functional
Can I initiate a conversation with multiple people?

2.1.12 Log out

Story Identifier: GUI004
Story Name: Log out
Description
As a user, I want to be able to log out so that other people can log in on my system.
Confirmation
Functional
Is there a GUI for logging out?
If I log out, can someone else then log in?

2.1.13 Changing Status

Story Identifier: DATA004
Story Name: Changing Status
Description
As a user I want to be able to change my current status so that my colleagues can see
if I'm busy/in a meeting/active.
Confirmation
Functional
Is there a GUI for changing my status?
Can I change my status?
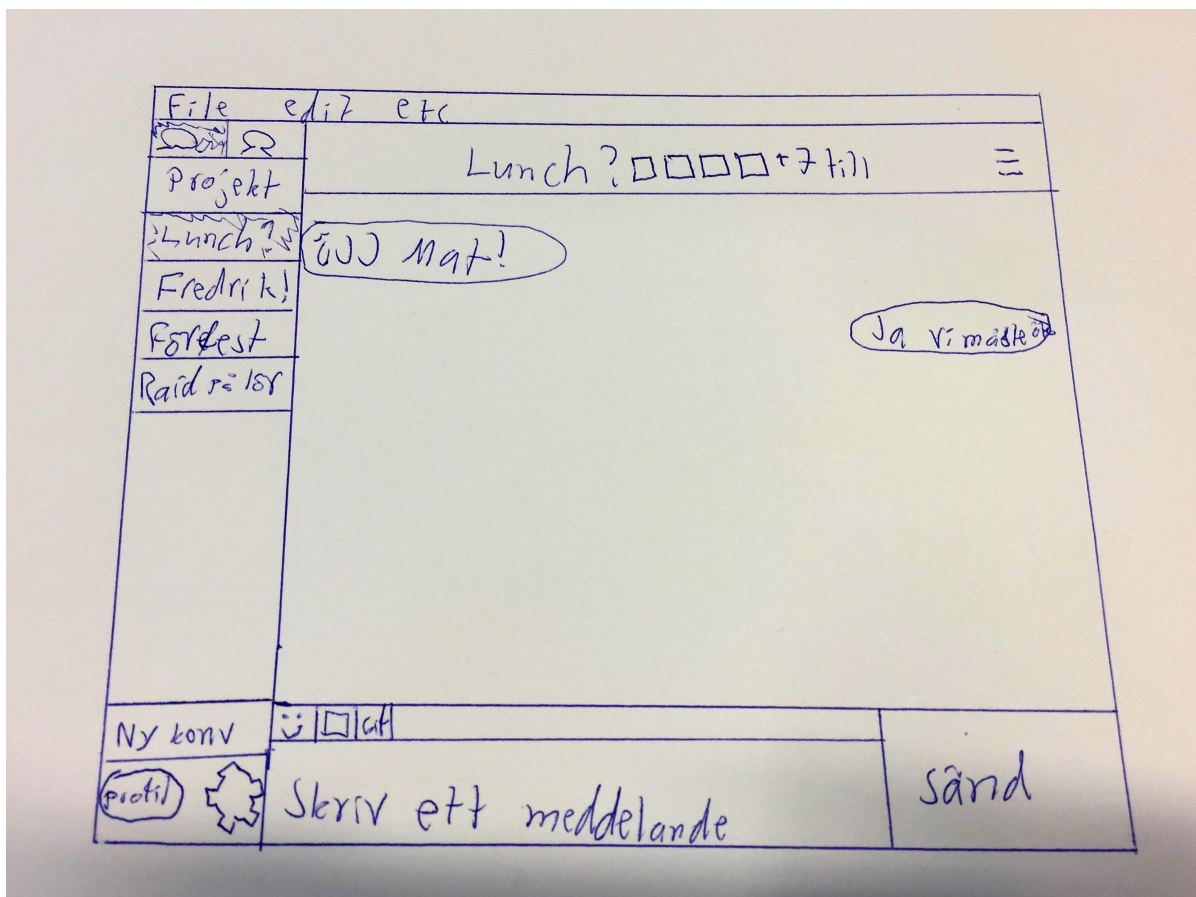Can other users see my status?

2.2 User interface

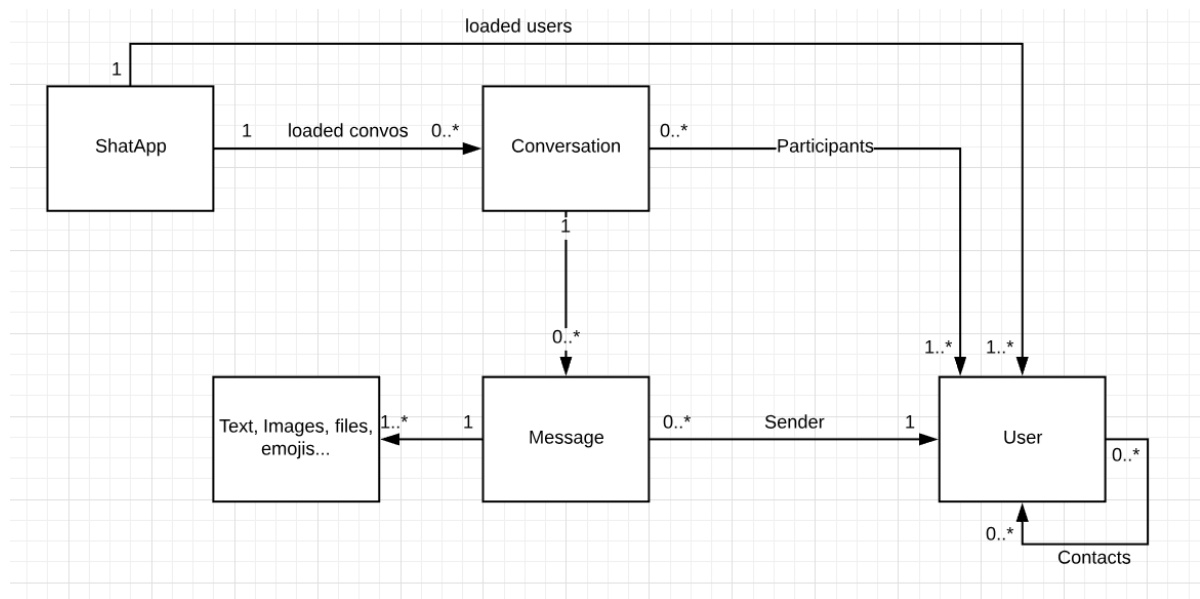Figure 1: A sketch of an early model

3 Domain model

Figure 2: Domain model

3.1 Class responsibilities

Explanation of responsibilities of classes in diagram.

- **ShatApp** ShatApp is the main model of the application. It contains the logic for how the application is going to function.

- **Conversation** A Conversation will keep and hold all the neccessary information required in a conversation. This includes, but is not limited to: participants, messages, conversation id.

- **User** The User-class contains information about a user; such as userId, age.

- **Message** Message class will keep message id, id of author.

4 References