

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 and conversations can easily be searched for and created at the users demand. 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 contactants

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?

Non-functional

Data integrity: Is the saved information valid and consistent over it's lifetime?

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?

Non-functional

Data integrity: Is the saved information valid and consistent over it's lifetime?

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?

2.1.14 View amount of participants in a conversation

Story Identifier: MSG006

Story Name: View amount of participants in a conversation

Description

As a user I want to be able to view the amount of participants in a conversation so that I can see how many people I'm sending messages to.

Confirmation**Functional**

Can i see the amount of participants?

2.1.15 Choose profile picture

Story Identifier: DATA005

Story Name: Choose profile picture

Description

As a user, I want to be able to choose a profile picture so that people can easily identify me

Confirmation**Functional**

Are there standardized pictures to choose from?

Can I choose a profile picture?

Can I change my profile picture?

Non-functional

Usability: Is it possible to use different formats of pictures?

Data integrity: Is the saved picture valid and consistent over it's lifetime?

2.1.16 Edit user info

Story Identifier: DATA006

Story Name: Edit user info

Description

As a user, I want to be able to edit my user information and profile picture so that colleagues can recognize my account

Confirmation

Functional

Can I view my user info?

Can I update my user info?

Is my updated info saved?

Non-functional

Data integrity: Is the saved user information valid and consistent over it's lifetime?

2.1.17 Remove users from conversation

Story Identifier: CONV001

Story Name: Remove users from conversation

Description

As a user, I want to be able to remove people from a conversation, so that they no longer have access to the conversation.

Confirmation

Functional

Is there a place where I can see the participants of a conversation?

Is there an option to remove participants of the conversation?

Can the removed user access the conversation?

2.1.18 Add users to a conversation

Story Identifier: CONV002

Story Name: Add users to a conversation

Description

As a user, I want to be able to add other users to a already existing conversation, so I don't have to create a new conversation with my desired participants.

Confirmation

Functional

Is there a place where I can see who is not a participant of the conversation?

Is there an option to add those users to the conversation?
Can the added participant see the conversation?

2.1.19 Send message with 'enter'-button

Story Identifier: MSG007

Story Name: Send message with 'enter'-button

Description

As a user I want to be able to hit the enter button to send my message so I don't have to use my mouse everytime I want to send a message

Confirmation

Functional

Is the text in the message box sent when the 'enter'-button is pressed?

2.1.20 Search function

Story Identifier: GUI005

Story Name: Search function

Description

As a user I want to be able to search for a contact so that I can initiate communication with a desired contact without have to look through my entire contact list

Confirmation

Functional

Is there a searchbox where I can search for my conversations and contacts?

Can I easily see the search results?

Can I interact with the results of the search?

2.1.21 Search for either conversation or contact

Story Identifier: GUI006

Story Name: Search function

Description

As a user I want to be able to search for either the name of the conversation or the names of the participant/s of the conversation, because I might forget what I named the conversation but remember with whom I talked to

Confirmation

Functional

Can I use the searchbox for this function?

Does the search function look at both contact names and conversation names?

2.1.22 Manager mode

Story Identifier: MNG001

Story Name: Manager mode

Description

As a Manager, I want to create accounts for my employees, so that they can access the chatt application

Confirmation

Functional

Can I create accounts if I am a manager?

Non-functional Security: Can I enter manager mode if I am not a manager?

2.2 User interface

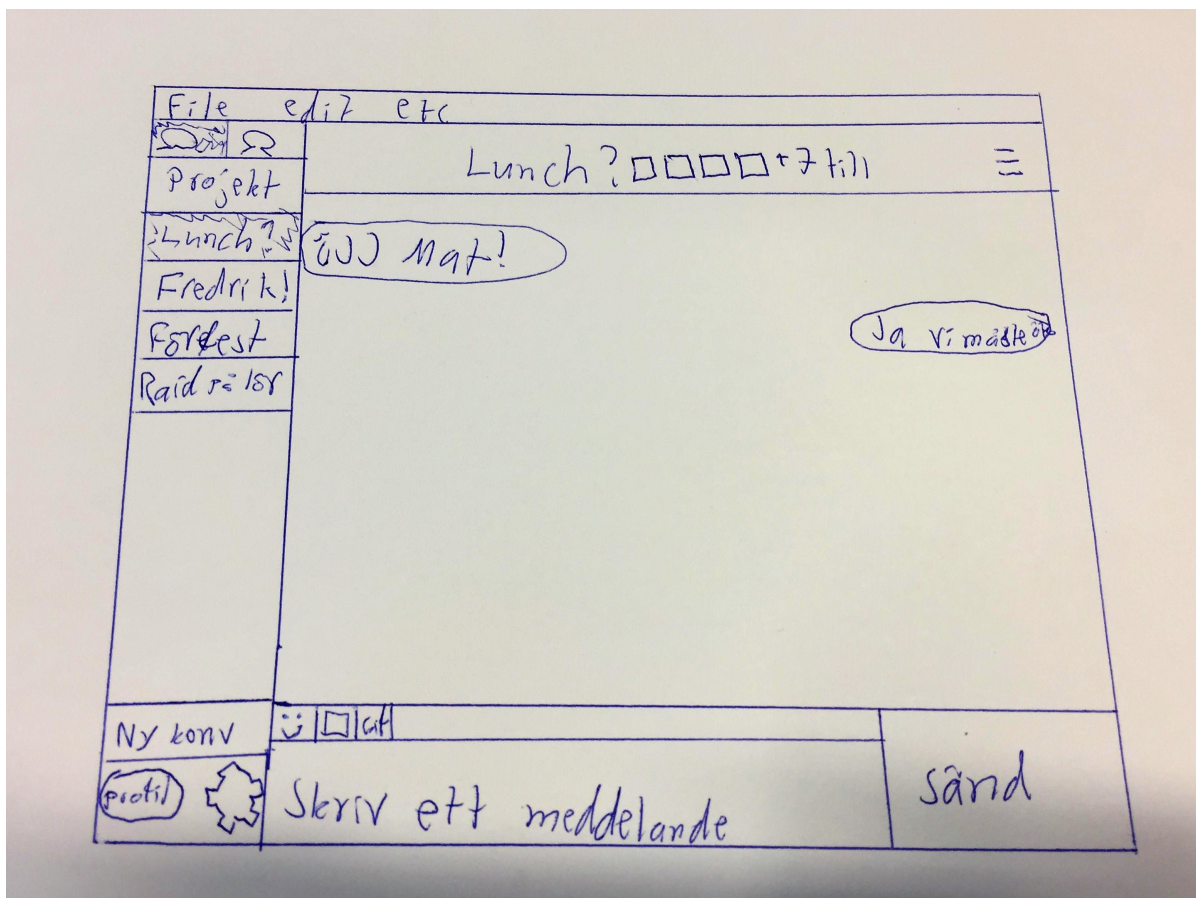


Figure 1: An early sketch of the GUI

3 Domain model

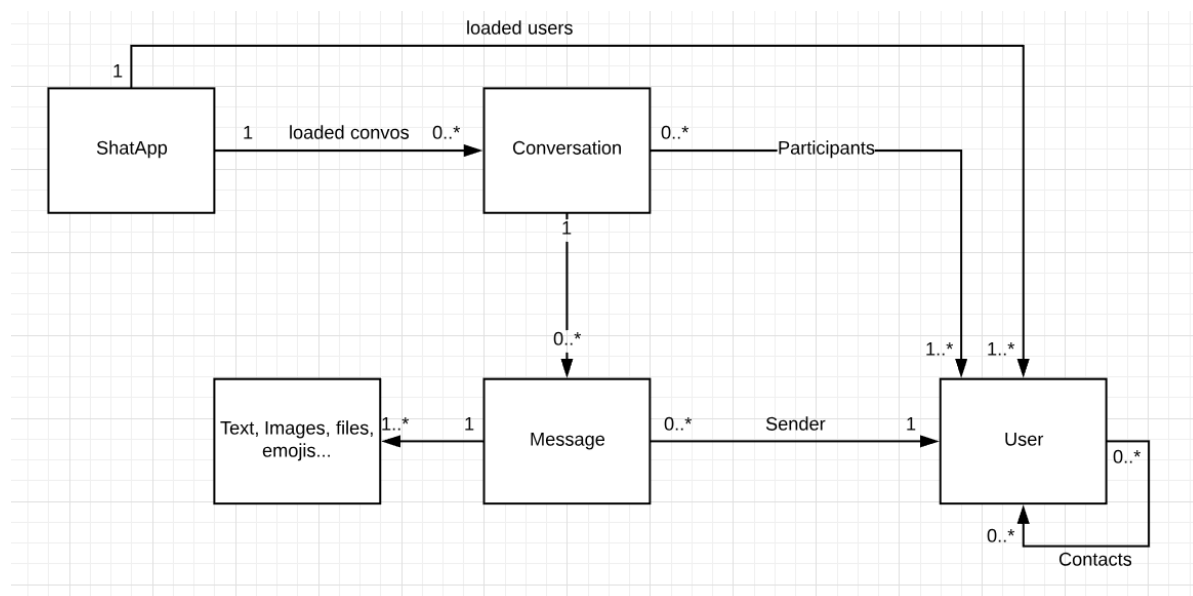


Figure 2: Domain model

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 necessary 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** The Message class will keep message id, id of author.

4 References