

Re-SEP3 Group 1 Project Description Chat Application

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Appendices (including Group Contract)



1. Background Description

Online messaging or chatting is essentially the act of sending messages over the Internet to another person, who is using the same application as the person sending the message. This type of messaging is essentially the exchange of typed-in messages requiring one site as the repository for the messages (or "chat site") and a group of users who take part from anywhere on the Internet. (Contributor, T.T., 2005. What is chatting? - Definition from WhatIs.com.)

Due to the widespread amount of users utilizing the Internet, numerous such services, such as sites and applications, have emerged. Those services range from simple to complicated, for example, some allow users to send just plain text, while others offer the option for users to send pictures and videos, as well as voice messages.

However, irrespective of the complexity of said services. Understandably, users are concerned that what they're sending is being seen by someone other than the intended recipient. Unencrypted messages and storage of chat histories on public servers and apps (J., 2020. *The Privacy Problems with Mobile Messaging Apps*) are some of the vulnerabilities that rightly concern users about the functionality of these apps and their roles in protecting the privacy of their customers.

Given the importance of security in messaging services, and the failure of certain services to ensure the encryption and privacy of their customers, many have begun to lose their trust to the traditional options and look for something that will. In fact, messaging apps that provide end-to-end encryption and ensure their consumer's privacy are very highly in demand as of late. (Nicas, J., Isaac, M. and Frenkel, S., 2021. *Millions Flock to Telegram and Signal as Fears Grow Over Big Tech*).

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2. Problem Statement

People are increasingly looking for simpler, and more secure, chat applications with which to stay in touch and communicate with their friends. The following questions are therefore formulated:

- 1. What data is required to create users?
- 2. What type of messages can be sent?
- 3. How many user types are needed?

3. Definition of purpose

The <u>purpose</u> is to provide a simple messaging service that allows users to send messages between each other, while also attempting to ensure the privacy of its users.

4. Delimitation

- 1. We will not add complex degrees of security and encryption
- 2. We will not provide unnecessary complexity



5. Methodology

The project will be made using the scrum framework and unified process as our main methodology. Scrum is utilized in supporting increasingly complex errands where advanced thinking and frequent deliveries of the product are expected. Due to frequent deliveries there is a lot of feedback given from the customer which is being used to evaluate working progress and current stage of the product which is used to satisfy client needs.

Most likely Scrum sprints are between one month and two weeks long, but in our case, it will be 3 days. There are going to be daily scrum meetings to discuss what each of the team members have to achieve until the last scrum daily meeting, what has to be accomplished until the next daily meeting and what are the obstacles that prevent them from completing particular assignments. At the start of each sprint, the team has to select User stories that are going to be done during the sprint. The User stories will be selected from the product backlog with the highest priority. The scrum process will be tracked by Ytrack which is a Jetbrain product.

For the implementation we will use version control – GitHub. It is used to control and store the software which can be implemented and edified by multiple people at the same time and all made changes can be tracked and restored to desired point for data storage, Microsoft SQL server will be used.



6. Time schedule

Total work time: 480 hours

Work time per group member: 240 hours

Project period starting date - 5th of July

Project description - 10th of July

project analysis and design - 15 of July

Implementation starting date - 20th of July

proof of content - 5th of August

Correcting and finishing - 9th of August

Deadline - 13th of August

7. Risk assessment

Risks	Likelihood	Severity	Product of	Risk mitigation e.g.	Identifiers	Responsible
	Scale: 1-5	Scale: 1-5	likelihood	Preventive- &		
	5 = high	5 = high	and	Responsive actions		
	risk	risk	severity			
Unauthorized	2	5	7	Enhance Security	Unauthorize	Dimitrios
Access to the				Measures	d User in	Antoniou
system					the System	
Unable to	3	4	7	Better	System	Marwan
effectively use				implementation of	does not	Summakieh
the system				the critical methods	properly	
					respond	



Sources of Information

Contributor, T.T., 2005. *What is chatting? - Definition from WhatIs.com*. [online] WhatIs.com. Available at: https://whatis.techtarget.com/definition/chatting [Accessed 22 Jul. 2021].

J., 2020. *The Privacy Problems with Mobile Messaging Apps*. [online] McAfee Blogs. Available at:

https://www.mcafee.com/blogs/consumer/mobile-and-iot-security/viber-app-sends-data-unencrypted [Accessed 26 Jul. 2021].

Nicas, J., Isaac, M. and Frenkel, S., 2021. *Millions Flock to Telegram and Signal as Fears Grow Over Big Tech*. [online] The New York Times. Available at: https://www.nytimes.com/2021/01/13/technology/telegram-signal-apps-big-tech.html [Accessed 26 Jul. 2021].