Background

The customer, RedRiver, has seen a need for an easy-to-use and secure application for smartphones and tablets which facilitates text and image chat between two or more users, as well as live video calls.

RedRiver is a company that works in providing consulting in the .NET-framework and C#. They offer their customers help with web development, system development and project management in web and system development projects.

Problem description

RedRiver wants a simple and secure chat application that is able to be used for example as an internal communication solution by their customers.

The problem they see with today's chat applications is that they are overly complicated and affect people with little or no prior experience of IT in the way that they are not able to use them for communication. A solution would be a chat application targeted towards these people, with a self-explanatory and accessible user interface, so that they too can make use of text and image chat as well as live video calls to communicate internally in the organisation or with family and friends.

Additionally, the introduction of data laws such as GDPR place stringent requirements on data contractors and processors regarding data handling, storage, erasure and general consent. Against this background our customer has requested an application which combats the perceived usability shortcomings of the current generation of chat applications and takes into account the forthcoming data requirements.

User/target group

The application is aimed at RedRiver's customers in the public sector and larger corporations that have a need for a communication application with high requirements on security and accessibility. The application is primarily intended to be used as an internal communication solution for RedRiver's customers. Users who have little prior experience of dealing with computers or mobile devices should be able to use the application without problems.

Market

Given RedRiver's security and accessibility requirements, the application should be suitable for internal communication in the public sector and larger corporations. The application should, for example, be able to be used within the medical sector for secure communication between doctor and patient. Security critical sectors are therefore included in the target market segments.

Base features

1. The application should work on smartphones and tablets.
2. The GUI should be easy to understand and use (designed according to WCAG 2.1, level AA).
3. Users should be able to create chat rooms to send text messages and images to each other. Users should also be able to make video calls to each other.
4. Users should be able to add other users as friends.
5. The entire system (i.e. client, server, storage and data transmission between these elements) should be secure. The system should be stable and resistant to virus and malignant code attacks.

Similar/competing systems

There are a number of similar chat applications. The primary competing systems are Skype and Google Hangouts, but applications such as Discord, Slack and Twitch also incorporate many of the features requested by the client. An analysis of these systems can be found in 2.1 Analysis of competing systems (https://github.com/jimmybengtsson/grupp03-redriver/wiki/2.1-Analysis-of-competing-systems).