Software Requirements Specification

Project Name: Chat Application

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Introduction:

- This document is the requirements document of a chat application project. Purpose and Scope, Users and Stakeholders, Use cases, and functional and non-functional requirements.

Purpose and Scope:

- The Purpose of the chat application is to allow users to be able to chat with each other, like a normal chat application. The users will be able to chat with each other, most likely only from user to user. The chat application will be written in ASP .NET Core.

- For the Scope of the project, the project will be tested as the program is being developed. A database for the users registered will be developed and tested, a menu will be developed and tested, a user/server interface will be developed and tested.

Target Audience:

- The target audience is any person who wants to use a chat application.

Product Overview:

- The functionality of the chat application is to give the ability to chat with whoever is online on the application. The users and stakeholders will be a small group, use cases will be what is available to the user, and the functional/non-functional requirements will be covered.

Users and Stakeholders:

This section will deal with users and stakeholders. The users will be using the chat application and stakeholders will develop, maintain, and test the chat application.

Use cases:

These are use cases for the user of this application. The server has access to all of these cases as well.

1. **Main Menu:**
   - When the user runs the chat application, then he/she can see the main menu, which will welcome them. At the main menu, the user will have the choice to register or login to our application.

2. **Register/Login/Logout:**
   - The user must register in order to login, the user must login in order to use our service, and must be able to logout if the user wants to logout.

3. **Online menu:**
   - After the user is logged in, the user can choose to send a message only if another user is online and be able to logout when the user wants to, which will be logged out by hitting the logout button.

4. **Message:**
   - When the user wants to message another user, then he/she has to click on the name of another user, and they both can chat with each other. (if both are online)

5. **Chat Modification:**
   - When the user wants to see the chat history, the user will be able to see it and the user can also clear the chat or change the content of it.

Functional Requirements:

1. Register:
- This aspect will ask the user for the name, username, password, etc... It will check if the username has been taken or not and will close if the username is not taken and will go back to the main login menu.

2. Login:
- This aspect will ask for the username and password. The error will occur if required fields are not filled or the username doesn't exist, or the password doesn't match. If the username and password match, you will be logged into the system and you can use our service.

3. Online Menu:
- This function will give the information about current online users so that the user can know who is online right now and accordingly, the user can chat with other online users.

4. Send a message:
- This aspect will give the user to send a message to whoever they want to and is online right now.

5. Chat modification:
- This aspect will give functionality to modify the chats like changing the content of it or delete it.

6. Logout:
- This aspect will give the option to logout of the chat application and will go back to the login menu.

Nonfunctional Requirements:

- These are the nonfunctional requirements of this application. This is basically the section that deals with the quality of our application rather than the functionalities of the application.

1. **User Friendly**
- This application will be user friendly and have a good interface for the user to use it.