# Client Chat Application Documentation Roman Sereda

### Introduction

- Purpose

The Client Chat Application is a simple WPF (Windows Presentation Foundation) application that enables users to connect to a chat service, send and receive messages, and disconnect from the service. It demonstrates the use of Windows Communication Foundation (WCF) to implement a client-server chat interaction. One of its possible approaches is to be a chat in some online game.

- Prerequisites

To run the Client Chat Application, you need:

- Windows operating system.
- .NET Framework installed.
- IDE (for development and building).

## **Application Overview**

- Description

The Client Chat Application is a user-friendly chat interface that allows users to connect to a chat service and engage in real-time text conversations with other connected users. Users can send and receive messages, and the chat history is displayed in the application window.

- Features
- Connect to the chat service using a chosen username.
- Send messages to other users.
- Receive messages from other users.
- Disconnect from the chat service.
- Clear the chat display.
  - Technologies Used
- Windows Presentation Foundation (WPF) for the user interface.
- Windows Communication Foundation (WCF) for client-server communication.
- C# programming language for application logic.

#### **User Interface**

- Main Window

The main application window displays the chat user interface.

- Connect/Disconnect

The "Connect" button allows users to connect to the chat service using a chosen username. Once connected, the button changes to "Disconnect" to allow users to disconnect from the chat service.

- Chat Display

The chat display area shows the conversation history between users. Messages are displayed with timestamps.

- Message Input

The text box at the bottom of the window allows users to input messages to send to other users.

- Clear Chat Button

The "Clear Chat" button clears the chat display area, removing all messages.

## **Functionality**

- Connecting to the Chat Service
- Click the "Connect" button.
- Enter a desired username.
- If the username is available, you'll be connected and can start chatting.
  - Disconnecting from the Chat Service
- Click the "Disconnect" button.

- You'll be disconnected from the chat service.
  - Sending and Receiving Messages
- Type a message in the input text box.
- Press the "Enter" key to send the message.
- You'll receive messages from other connected users in the chat display area.
  - Clearing the Chat Display
- Click the "Clear Chat" button.
- The chat display area will be cleared of all messages.

## **Usage Instructions**

- Running the Application
- 1. Ensure you have the required prerequisites installed.
- 2. Run the ChatHost as an administrator from your computer.
- 3. Run the .xaml program to open an interactive app.
- 4. Run the .xaml program one more time to simulate another user.
- 5. Use your chat.