

# CS 3110: MS0: Charter

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## 1 Logistics

We plan on meeting regularly on Tuesdays, Thursdays, and Saturdays. 5:00-6:00 pm Tuesdays, 6:45-7:45 pm Thursdays, and 1:00-3:00 pm Saturdays.

## 2 Introduction

A customizable OCaml XMPP CLI Messaging Client that emphasizes going beyond ordinary text interactions by also engaging users in small social activities.

## 3 Summary

We intend to build a terminal based messenger client using the ANSI terminal OCaml package and the XMPP protocol. There will be a central server to which users send requests to join a certain chat room, message a certain person, be paired with a random person or even talk to an AI/Bot! They will then be able to send formatted text messages to the room/person. Some other extended features are detailed in the list below. A key innovative feature of our messenger application is that users have the ability to socialize with each other not only through text but also by playing small games with each other like Tic-Tac-Toe or Rock-Paper-Scissors. There will also be some customizable aspects to our messenger client, such as keybindings.

### 3.1 Key Features

- Talk to an AI/Bot or a random person or direct message or join a chat room- When a user comes online, they have four options. They can choose to talk to a bot that responds to messages by picking from a stored list of responses. They can also choose to be paired up with a random person who is online or directly message another user. They can also join a chat room from a list of available chat rooms that are topic-based or interest-based to have a group chat.
- Support sending files- Users can send files to one another.
- Text formatting- In the ANSI Terminal, users can format their text, add background/foreground color, underline words, etc.
- Read indicator- When a user has received and read a message, the sender will be able to see a small symbol or text message that indicates that their message has been read.
- Customizable Keybindings - To send last used message, Switch chats, See Favorites Default Vi-like or Emacs like configurations.
- Small Games - Support small interactive games between users within the application, i.e. Tic-Tac-Toe, Rock-Paper-Scissors