

CAT 9 INFOCOMM

Group 9-06

POLI-VERSE

Tan Kwang Yik Tremaine 3P3 (21) [Leader]

Lee Kay Yong Branson 3A1 (15)

Wong Qi Yang 3P3 (27)

ABSTRACT

Profanities are commonly used by teenagers and adults, which are socially offensive and deemed unacceptable by many cultures. One would expect these kinds of behaviours to reduce, but it is the complete opposite. People resort to profanities as they keep up with the rapid progression of society. Offensive images may even be used. To reduce such cases from happening, we have come up with a project to cultivate respect and kindness in teenagers via a chat service. We can achieve this by placing a score system in chat which would vary according to the way one addresses the other party. People would want to be at the top, thus they would try their best to change to gain more points, which achieves our objective of reducing profanities used while chatting

1 INTRODUCTION

We are creating a chat interface which is capable of reducing the number of profanities used by teenagers and encouraging harmonious chatting online. The current issues of society as observed are that people are getting easily frustrated due to the improving society where high standards are set. It is common among teenagers that they use profanities and send offensive images in instant messaging apps. Bad remarks that are also passed online about others are also common. Our objective of this project is to ensure respect and kindness when people are chatting amongst themselves. We also aim to cultivate the values of not insulting others and encouraging them. We are targeting mostly 11 to 18-year-olds although our product is applicable for all ages.

2 THE STUDY & METHODOLOGY

Our project was formed as we had observed that many youths use vulgarities freely and easily. We find this disturbing as vulgarities should not be used at all. We also realised that vulgarities were most often used online, such as chatting platforms. Hence, we came up with an idea to solve the problem of vulgarities by creating a new platform for youths to chat on.

There are other chat services, but what makes ours stand out from them? Below are case studies of other chat services

(1) WhatsApp

WhatsApp offers group video and voice calling. WhatsApp Stickers are available to be used. WhatsApp has also introduced a new feature, WhatsApp payments, which allows people to transfer money between bank accounts or pay for things safely. WhatsApp introduced the picture-in-picture function, where people can view videos or pictures in a smaller screen on top of the WhatsApp background. There is also definitely a chat group function. People can be added to chat groups, where there can be admins to organize the group, and various side functions like allowing only admins to speak, chat muting, and chat pinning functions. WhatsApp also has a media visibility feature, which allows users to select which group of people, or even specific contacts, they want or do not want to be able to see their profile picture, their last seen date and time, and even their statuses. WhatsApp has helped curb the spread of fake news by adding a 'forwarded' sign above all forwarded messages, so people will know to take these forwarded messages with a pinch of salt. WhatsApp allows users to request account information, in which WhatsApp will send users a report approximately three days after users' request.

(2) Telegram

Telegram's basic functions are almost the same as WhatsApp, just like any chat service, but what is unique about Telegram is that you can create APIs for things like Reminder Bots, etc. In Telegram, the users' friends can be searched by their username. Telegram also allows for creating channels where one can broadcast messages to large audiences. Telegram has a feature known as the "Keep-Alive" Feature, where the app would run in the background to ensure that one receives notifications. Due to privacy reasons, users' last seen can be hidden from only specific people. Telegram also has a feature where one can lock a conversation, hence requiring a password every time someone enters the conversation. Telegram also has things like secret chats where you can set an amount of time when messages will self-destruct.

(3) Short Messaging Service (SMS)

Short Messaging Service (SMS) is the default messaging app that is present on everyone's phone. It is very basic, and has very little to no special functions. The standard functions are present: sending of pictures and videos, sending of text messages, and voice and video calls.

After analysing three most common products that are similar to our project, we have come to a conclusion that none of the messenger apps are emphasising on what our project aims to do, which is to allow people to understand one another better by using a safe, non-vulgarity app. Although they do not have the same aim as us, we are open to new features, so we might consider implementing text formatting functions as seen in WhatsApp and we might also implement secret chats as seen in Telegram. These apps are all based on Android or IOS and their method of identification is the user's phone number. However, in our windows desktop app, we are going to make users register and have usernames be the method of identification from user to user, making our project unique.

Some of our methods of collecting data would be our own observation of society and from reliable sources such as CNA, BBC, etc. We would also conduct our needs analysis in school to gather information since our target audience is mostly the students in our school right now. The development tool would be Java since we are making a windows desktop app. Another tool that we might need would be the "Inno Setup Compiler" to package our desktop app into a setup executable file for user convenience.

Timeline and Job distributions

The job of the project has been evenly distributed among our teammates. There are a few parts to our project. The coding of the chat, the sourcing of case studies to ensure our chat is original, the slides, and the written report. The job is evenly distributed between all group members, apart from the coding. Tremaine does most of the coding, while Branson works mostly on the presentations. Qi Yang does most of the data analysis after getting user feedback and needs analysis.

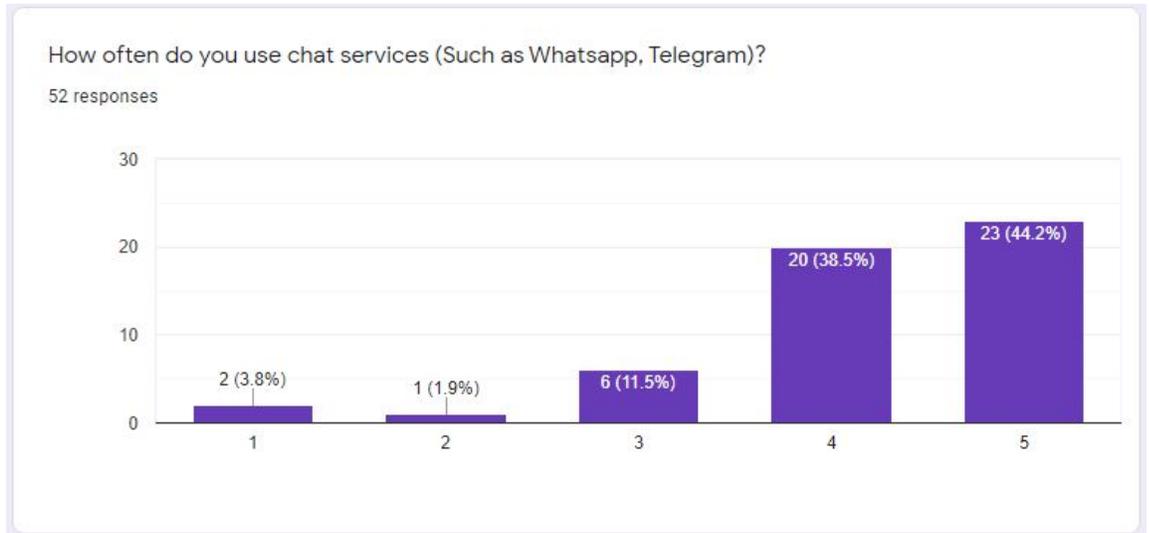
1. January & February
 - a. Form Group and Came up with the aim of project and target audience
2. March
 - a. Create Mock Design of Product and Aim to complete 40% of it
 - b. Complete at least 50% of Proposal Evaluation Slides
3. April
 - a. Complete Proposal Evaluation Slides
 - b. Aim to complete Mock Design
 - c. Start on product
 - d. Work on judges' comments
4. May
 - a. Complete 30% of prototype
5. June
 - a. Aim to complete 70% of prototype
 - b. Work on Written Report
6. July
 - a. Complete prototype
 - b. Carry out beta testing on prototype and obtain user feedback
 - c. Complete Written Report
 - d. Finish 50% of Final Evaluation Slides
7. August
 - a. Make Final Changes to Prototype According to User Feedback
 - b. Complete Final Evaluation Slides

Needs Analysis

Needs analysis survey was carried out in the beginning of the year and it was sent to 52 respondents between ages 11 and 18.

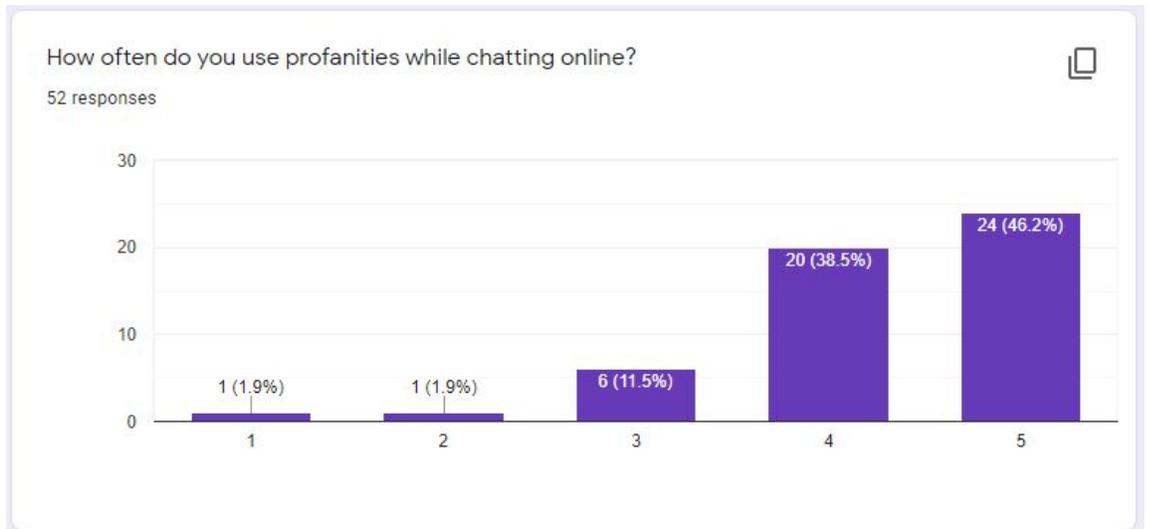
Questions:

1. How often do you use chat services (Such as Whatsapp, Telegram)?
 - a. Scale: 1 - 5, Very Rarely - Very Often



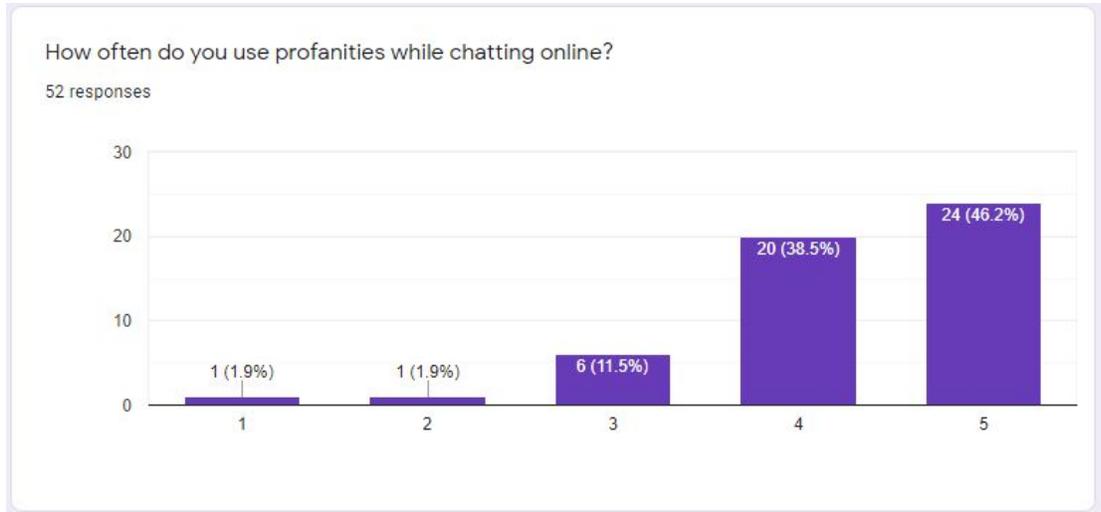
b.

2. How often do you use profanities while chatting online?
 - a. Scale: 1 - 5, Very Rarely - Very Often



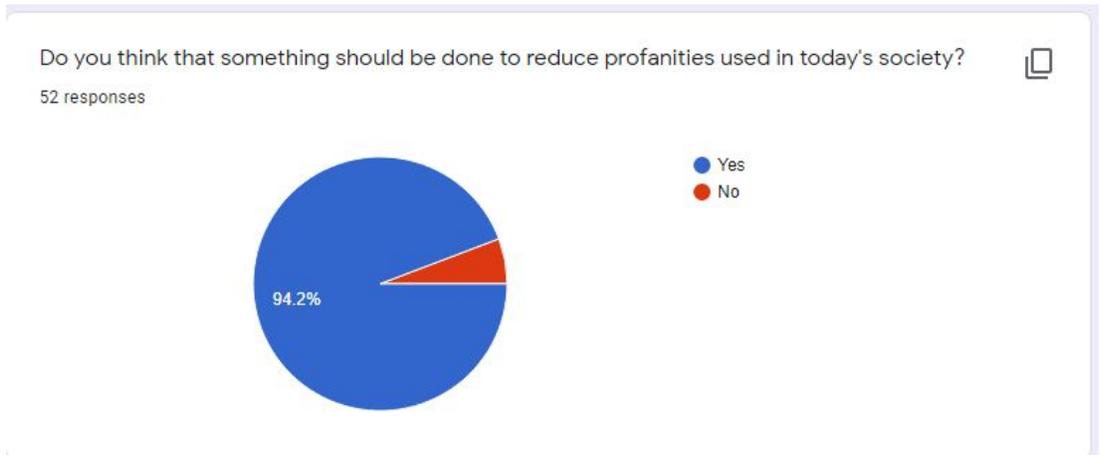
b.

3. How offended would you be if someone were to use profanities on you?
 - a. Scale: 1 - 5, Completely Unoffended - Very Offended



b.

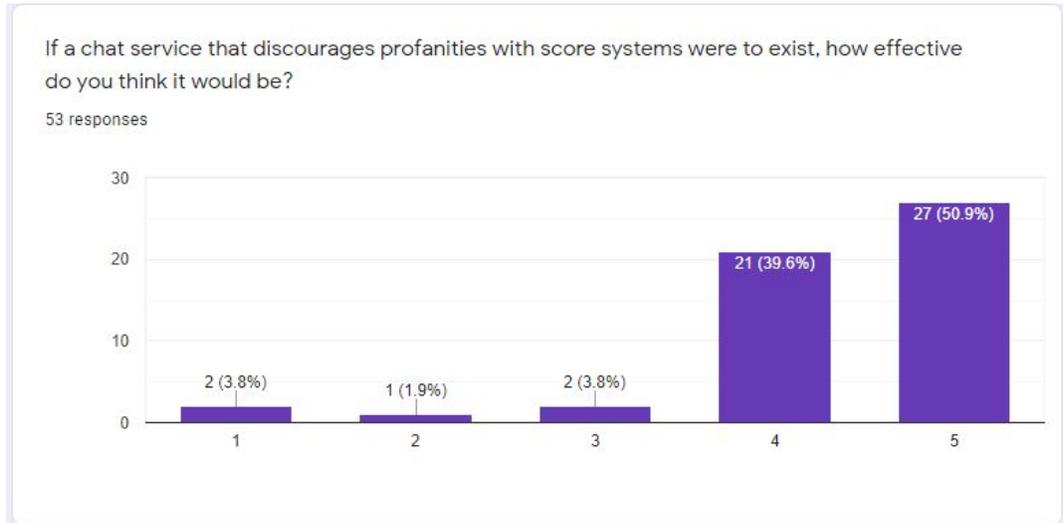
4. Do you think that something should be done to reduce profanities used in today's society?



a.

5. What do you think can be done to reduce profanities used online?
- "Banning Profanity Usage?"
 - "Profanity Detector?"
 - "Some kind of competition"
 - "Educating teenagers as they are mostly the ones using vulgar words"
 - "I think that if something could be added to a chat service that would convince us to use good language that would work, maybe incentives"
 - "Implementing profanity libraries in the chat services to ban them"
 - "i think if some sort of competition was introduced, that would convince people to stop using profanities"
 - "I think some sort of contest created would be good, and those who use bad language would be at the bottom of the leaderboard etc."

- i. "Constant reminders in online platforms to not use profanities and maybe profanity detector?"
6. If a chat service that discourages profanities with score systems were to exist, how effective do you think it would be?
- a. Scale: 1 - 5, Very Ineffective - Very Effective



- b.
7. Other Feedback:
- a. If you have a chat service that discourages using profanities people who use profanities wouldn't choose to use it.

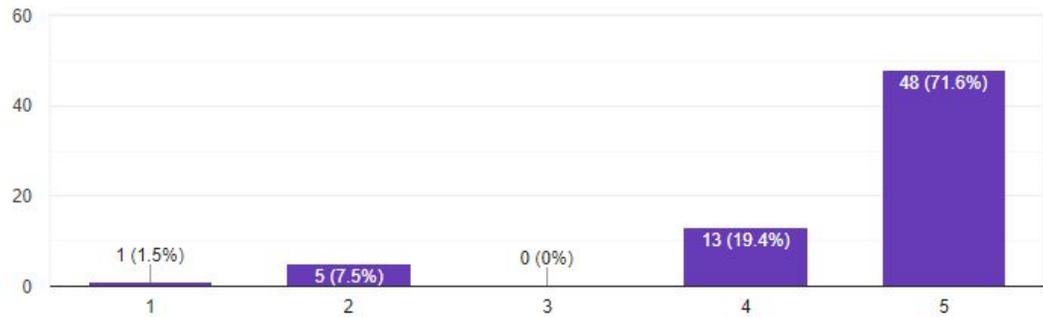
In conclusion, majority of the respondents use chat services such as Whatsapp and Telegram, so our product will most likely be used by a large number of people. About half the number of respondents admitted that they used a great number of profanities (5 out of 5 on a linear scale) in online platforms. Many also stated that they would be offended if someone were to use a profanity on them. When suggestions were asked for, we found multiple answers that relate to keywords such as "Profanity Library", "Competition", and some talked about educating the users using reminders etc.

User testing

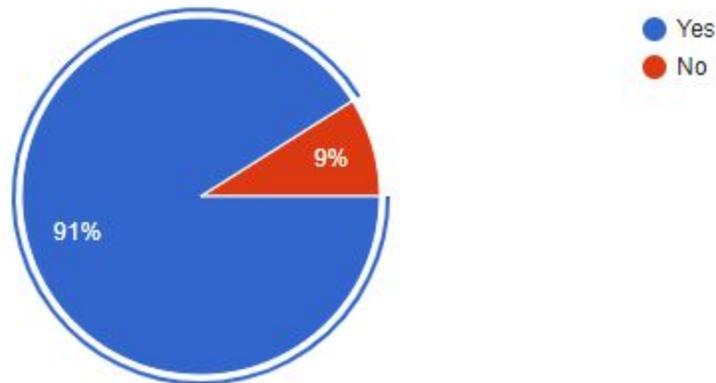
The desktop app was sent to many of our friends from our school and even other schools as long as the users are between ages 11 and 18. Surprisingly, we had 67 responds

Questions:

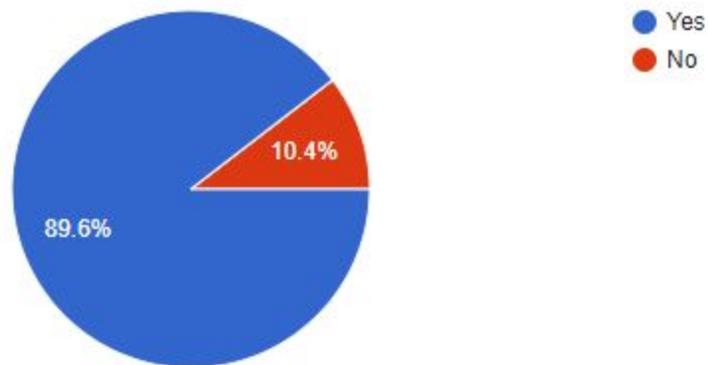
1. How effective is the Poli-Verse Chat Service in decreasing the use of profanities?
 - a. Scale: 1 - 5, Not Effective at all - Very Effective



- b.
2. Do you think that the Poli-Verse Chat Service is necessary?

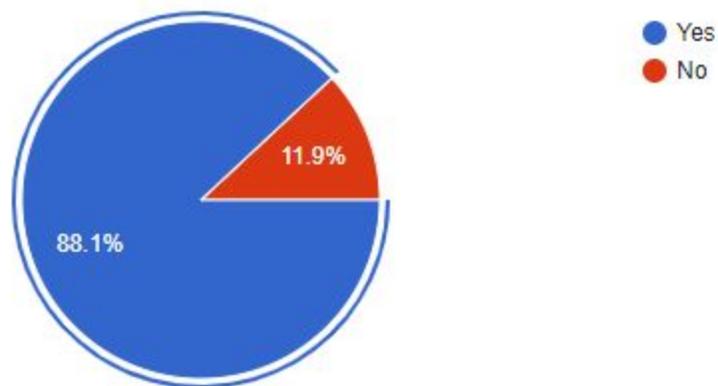


- a.
3. Do you think that the Poli-Verse Chat Service is more effective in decreasing the use of profanities than other chat services



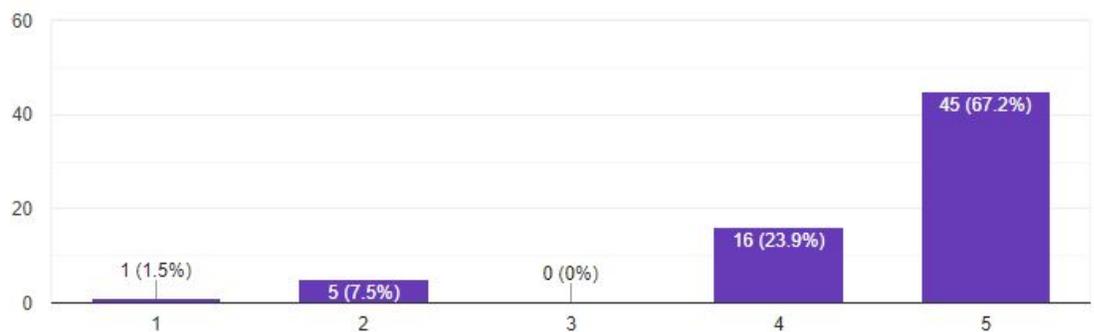
a.

4. Do you think that the Poli-Verse Chat Service is convenient to download and use?



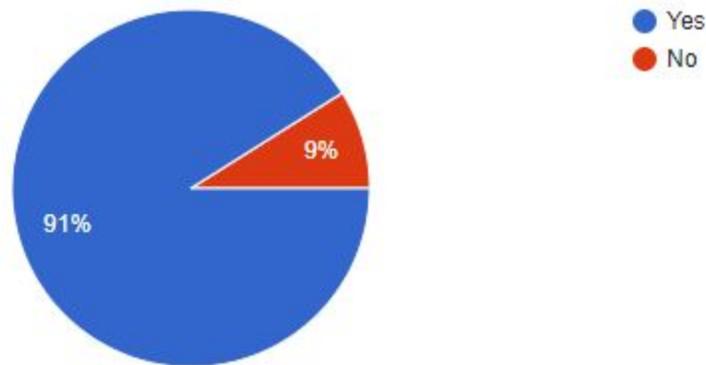
a.

5. How was your experience using the Poli-Verse Chat Service



a.

6. Would you recommend this chat service to your friends or family members?



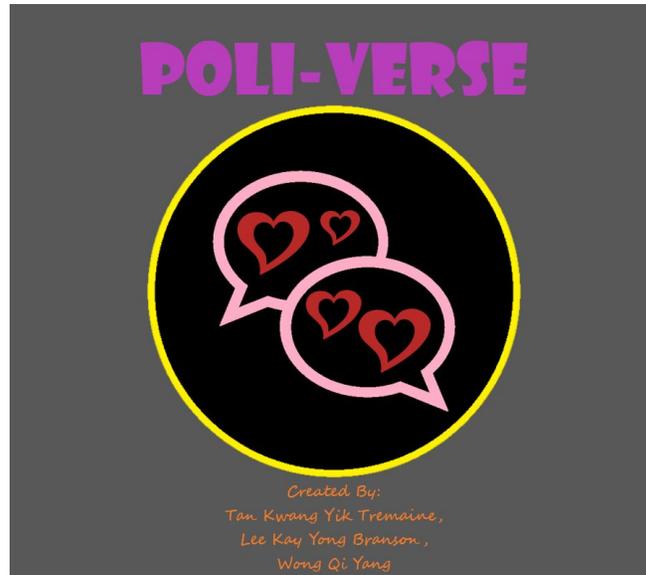
- a.
7. Which features do you most like in the Poli-Verse chat service?
 - a. "The profanity filter that censors messages with profanities completely"
 - b. "The profanity library which can detect most creative profanities"
 - c. "The score system only"
 - d. "The score system which really makes people compete"
 - e. "The system censors the whole message when there is a profanity present"
 8. Areas for Improvement
 - a. "background which can made to animated and more vibrant backgrounds"
 - b. "Maybe more graphics"
 - c. "too plain background make it more colourful"

Conclusion

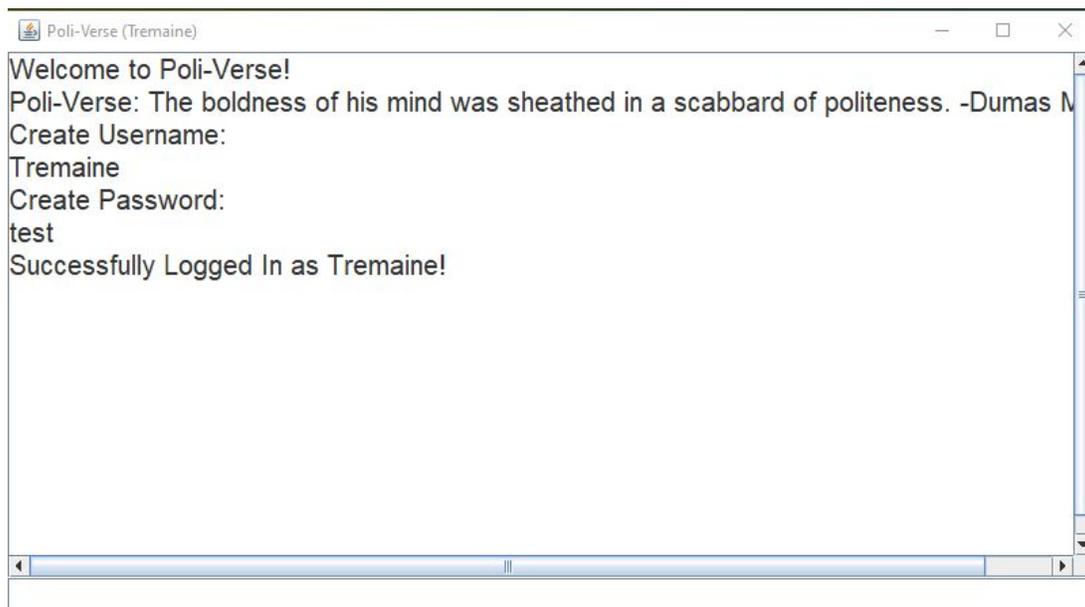
Majority of the respondents gave positive feedback regarding the chat service as a whole and would recommend it to others. Most of them also found it effective in solving the problem about profanities because of the good list that we are checking against, "which can detect most creative profanities". They also enjoyed the convenience of the lightweight app. We observed that the users really liked the score system, which is most likely because it allows people to compete such that there is at least something to fight for in the app rather than just a boring chat application. We also noticed that almost all respondents feedback that it lack graphics.

3 Outcomes, Analysis & Discussion

Features: Splash Screen

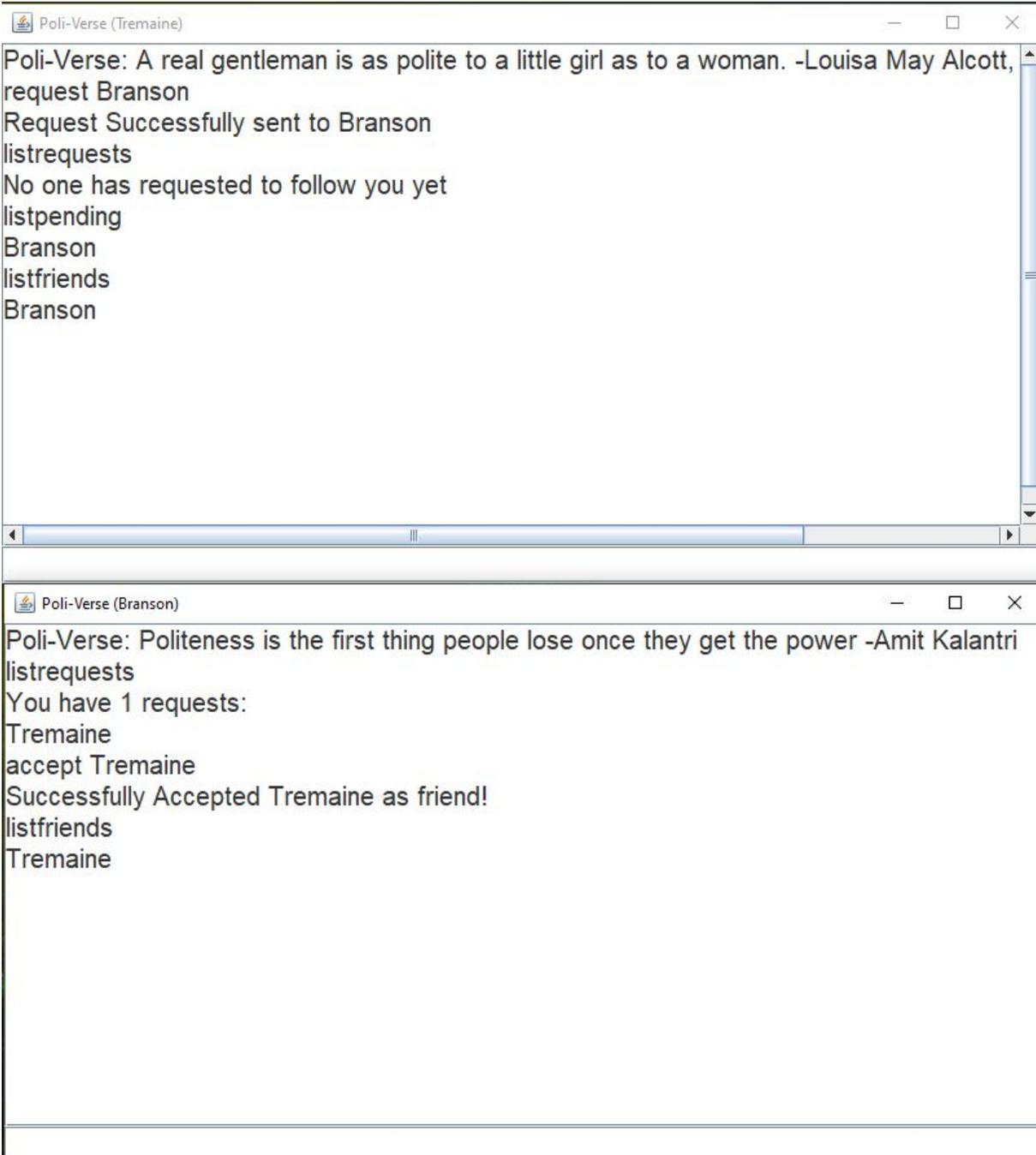


1. Randomly displays 1 out of 9 Quotes whenever screen is cleared to remind user to be polite
2. Resizable Screen to fit any windows device
3. Registration/Login

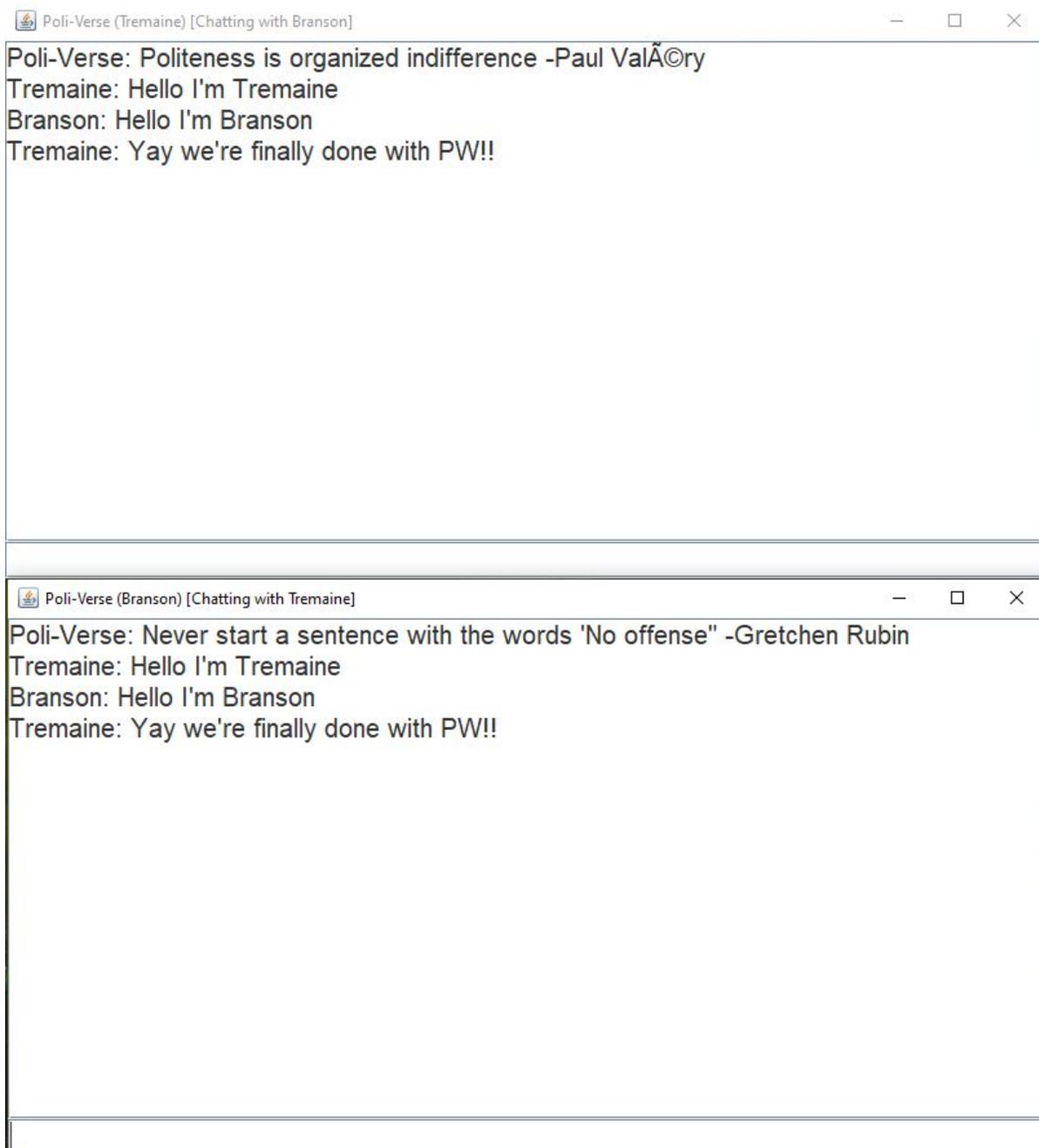


Features: Multi-User Functions

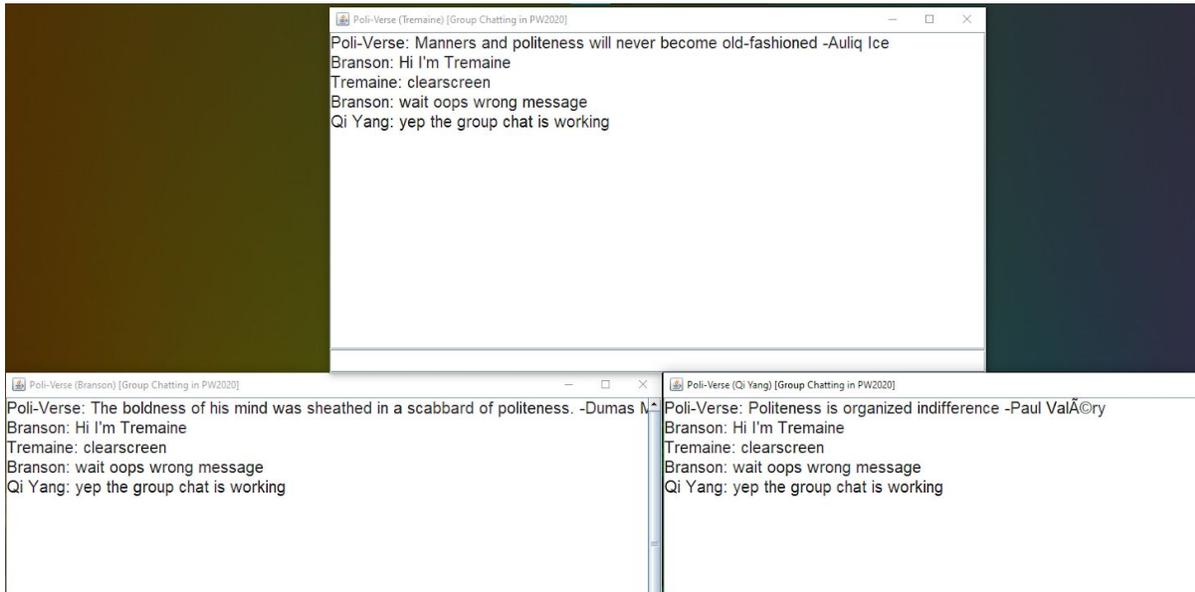
1. Shell-like Interface
2. Request and Accept System by username



Features: Private Chatting: Users type in the "chat" command

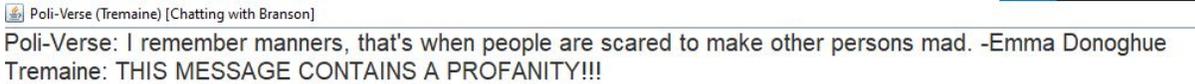


Features: Group-Chatting

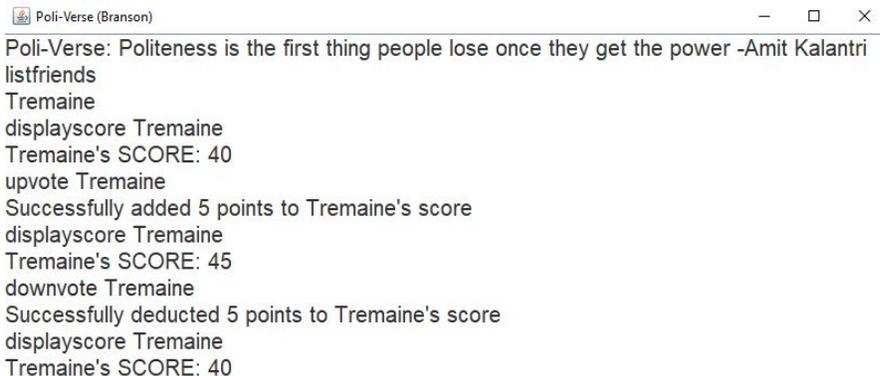


Features: Profanity Detection

Prints out "THIS MESSAGE CONTAINS A PROFANITY!!!"



Features: Score System



Server features: Not Visible to Client

Prints out people joining the server, but does not print messages as we respect the users' privacy:

```
C:\Users\trema\OneDrive\Documents\Java\POLI-VERSE\Poli-Verse Server>java -cp bin main.ServerMain
Poli-Verse Chat Server started | Date: 2020-08-11
Tremaine has joined
Branson has joined
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4 IMPLICATIONS AND RECOMMENDATIONS

We noted down the areas for improvement of this project after pilot testing and getting user feedback. Below are some of the areas for improvements

1. Graphical User Interface
2. Ability to Send Pictures
3. Maybe a leaderboard in the region according to score

5 CONCLUSION

Tan Kwang Yik Tremaine

I learnt, as a leader, that managing the group members is not an easy task as I am responsible for distributing work as fairly as possible to minimise arguments. During the PW Process, I also learnt that we should not be too ambitious. Furthermore, I learnt from our study that using profanities on online platforms are very prevalent.

Lee Kay Yong Branson

I learnt that we work effectively, and produce high quality of work. From this project, I have learnt that chat services play an important role in shaping the character of teens to ensure they are more polite in their language.

Wong Qi Yang

I learnt more advanced coding, the importance of teamwork and the need to finish my task on time. From this project, I've seen the significant problem of profanities used in today's society and that more action can be taken by others to resolve this issue.

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