# INF 153 Final Paper

Discord

# **Project Group 17:**

Sarah Espinosa Fanny Guan Julia Hoang Shereen Jayme Jacqueline Nguyen Nazneen Peracha

## **Problem Statement**

Throughout the course of a quarter, our team has been studying the popular Computer-Supported Cooperative Work (CSCW) system, Discord. Discord is a free voice and text chat application that is commonly used by gamers. It reached 14 million daily active users by the end of 2017 (Citron). Discord claims to be easier to use than other communication applications such as Skype and Teamspeak. Upon first use, users have the option of either downloading the application onto their device or using the web-application on a compatible browser. Not only is there flexibility with how the application is launched, there are also a multitude of features that users can engage in. Said features range from managing roles in your own server to showing what game you are currently playing on your profile. Our main goal in this paper is to analyze why Discord triumphs as one of the prominent communication applications and if there is anything it can improve.

Discord is relevant to the CSCW community because it simultaneously allows for multi-person communication, coordination, and collaboration (especially during gameplay). The main communication features Discord has are instant messaging and voice call which can be used within a server or private chat. Private chats involve smaller groups and cannot be found without an invite link. Servers, on the other hand, have larger groups involved and can be moderated with anyone being allowed to manage the group. Although much of Discord's core features are evidently centered around communication, there are several features that keep both coordination and collaboration in mind. A feature that helps with collaboration is the screen sharing feature. In the case that one person is troubleshooting another person's computer, they will be able to guide them by directly looking at their computer screen. Regarding coordination, there are several different text and voice channels that can be made to either establish rules or separate different conversations. Because the possibilities are endless, Discord has become an extremely powerful CSCW application in just a few years.

Our study focused primarily on gamers' main uses for Discord and their opinions on the application's features and usability. In the case of gamers, communication software is an essential part of their gaming experience. Being able to seamlessly communicate with others while gaming has a huge impact on their overall performance and satisfaction levels. When playing games that require teamwork and coordination, any distraction or technical issues could hinder the gamer's performance. Voice chat is widely favored while gaming as it allows for better multitasking of communicating and playing the game. In a study on behavioral performance and visual attention in communication multitasking, researchers found that, "communicating with a confederate led to a 50% drop in visual pattern-matching performance in the IM condition and a 30% drop in the voice condition" (Wang et al.). The study showed that using text chat would cause competition for visual resources whereas using vocal communication would allocate the use of aural resources, leading to better performance of other visual tasks (Wang et al.). The research demonstrates that there is a solid difference in performance between using text chat and voice chat, showing the importance of a reliable mode of voice communication for gameplay. Discord not only provides a stable voice stream, it also provides control and customization options such as individual volume levels and muting of speakers and

separate voice channels for optimal communication. Our study will look into whether users' experiences supports the importance of voice chat for gamers.

While we know that the features of Discord are appealing to gamers, we came across the issue of how well users know about all the features and how to use them. There is the assumption built in Discord's user experience (UX) design that the user base has a higher level of technological skill. The abundance of customization and features of the application also lead to a steeper learning curve. Aside from Discord's brief onboarding information after a new install of the application, it is difficult to discover features while using the application. We explored the effectiveness of Discord's "informational scaffolding," its system of providing instruction on how to use the platform and an essential part of good UX design (Cardoso). In addition to providing instruction for first-time users, the issue of introducing newly added features to existing users as well as providing guidance outside the first-time onboarding is also examined. This information can provide insight into how Discord's informational scaffolding can affect users' desire to use the platform for cooperative communication.

Although Discord is mostly known among the gamer community, its tremendous growth has begun to also attract non-gamers to use their application. Examples of non-gaming Discord servers range from stock trading to music appreciation (Citron). With the addition of new user types, effective informational scaffolding is even more important to consider with the range of technical skill in the user base widening. However, the expansion does not stop with non-gamers. Despite the fact that Discord is primarily optimized for computer usage, a large amount of console gamers prefer using Discord due to its high sound quality and low latency (Citron). In the case of the Nintendo Switch, users are opting out of using Nintendo's chat service for Discord because of the lack of integration and need to download a separate mobile application. Given the rate Discord is expanding, the chances that they will integrate their software into future consoles is extremely high. As Discord continues to dominate the voice over Internet protocol (VoIP) industry among computer gamers, its growing popularity is attracting a multitude of users. That being said, it is imperative to understand more about Discord and what other CSCW applications can learn from it.

## Methods

#### **Interviews**

In order to progress our study on the Discord application, we conducted a series of interviews throughout the quarter. We prepared a general structured interview protocol that consisted of both closed and open questions to ask each interviewee. Each team member conducted two interviews, which totaled to 12 interview participants for this project. The demographic of our interviewees consisted of gamers in their early to mid-20s. Most interviewees were college students and some had a full time job. The main goal of conducting interviews was to obtain data and enhance our understanding of Discord users and their opinions of the system that observational data would not provide us. This allowed us to get a better sense of how Discord is part of CSCW and how to possibly improve the current system. Listed below are the questions we included in our structured interview protocol:

- 1. Do you play any games?
  - a.) If answered yes: Can you tell me a little bit about the kinds of games you play?
- 2. Would you consider yourself a "gamer"? Why or why not?
- 3. Do you prefer to play games solo or with others? (Friends, family, online, etc.)
  - a.) If answered with others: How do you communicate? (In real life, voice chat, video chat, IM, etc.)
- 4. Why do you think Discord is so popular among gamers?
- 5. Tell me a bit about how you use Discord.
- 6. When you use Discord, do you usually use it on your phone or computer?
- 7. Why did you start using Discord?
- 8. Which features do you typically use every time you use Discord?
- 9. Can you tell me more about the feature you use the most and why?
- 10. Do you prefer text channels, voice channels, or both? How come?
- 11. Do you own your own server? Why or why not?
- 12. How do you know the people you generally talk to on Discord?
- 13. Is there anything Discord can do better?
- 14. Is the ability to use Discord on your phone important to you?
- 15. What features do you like for occasions outside of communicating while gaming?

#### **Personal Experiences**

In addition to interviews, we also used data from our own personal experiences with Discord. Most team members have had their own experience with the Discord application. We wanted to gather as much information about Discord and its users as possible in order to make our research project more concrete. We compared the data we gathered from our structured interviews with team members' personal experiences and views about Discord to see if there were any similarities or differences, which led us to our findings.

# **Findings**

Through our analysis of Discord, we found information about the users who use it, the main use of the system, and the features that make users want to use Discord. In regards to who uses Discord, each interviewee in our study plays games and considers themselves a "gamer". Each one stated that they prefer to play with others rather than on their own. We also asked them how they communicated with each other when playing games and most of our interviewees stated that they usually use voice chat on Discord. Most interviewees prefer voice chat because it's faster and easier compared to typing. Participant 2 said, "I prefer voice channels because we don't have to type and we could just say what's on our minds right away. That comes in handy for competitive gameplay."

While most interviewees prefer voice chat, our interviews also showed that people use the text channels in order to have casual conversations with friends, family, and group members. Other interviewees stated that they use Discord to stay in contact with project groups for classes, however, the main use of Discord is the ability to use voice chat. Before Discord became popular, interviewees stated that they used to use other forms of voice communication, such as Skype or built in voice chats within console games, but they transitioned to Discord because

friends would recommend it due to the complete features it has, better interface, and better connection. Participant 8 said, "It's better than Skype. Skype lags out, has bad quality, and poorly designed UI application. I hate Skype." Most interviewees started using Discord because they were looking for an alternative to Skype that has a better interface and better connection for voice chat.

We can conclude from our data collection and analysis that Discord is mainly used in conjunction with gaming. When asked why Discord is so popular among gamers, Participant 4 said, "It has an easy to understand user interface. The call connection is generally pretty solid. They also listen to user feedback to fix or implement features that users want." Another reason why it's popular is because it provides a free and reliable platform for gamers to communicate with the people they are playing with. Most interviewees felt that Discord's competitors have lag issues that ruin the user experience. Participant 5 said, "The calls also don't lag unlike some of the other voice chat softwares I've used before... Other software/voice chats I've used had a problem if the host caller is lagging, then the call itself would be also laggy. We don't have that problem in Discord." Since voice chat is important for multiplayer games that requires planning and coordination, Discord's reliable service is highly favored in the gaming community.

Our data shows that Discord's functionality also makes it popular among users. First, Discord is lightweight and does not require much to run. It is a very fast and smooth system which eliminates the lag when talking to others. Secondly, other programs, such as Spotify and Twitch can be integrated within Discord in order to allow others to see what song they are listening to or notify others when they are live. Some of our interviewees also liked the fact that Discord is a cross platform system allowing its use on both desktop and mobile. For example, when asked if mobile was an important feature, Participant 12 said, "...I like the option for it, I can quickly send an IM to my friends while I'm out..." They are able to take Discord wherever they go and stay connected with friends at all times. The biggest reason people keep using Discord, however, is the abundant features and controls users have. Users are able to create their own communities, create multiple text and voice channels, and give people "roles' within their servers.

One issue noted was about Discord's Spotify Integration. Currently, the Spotify integration only allows the user to listen to their own music while using Discord. However, other users on that server cannot listen to what the user is listening to. Participant 5 said, "I want it to work so that the music will play for everyone in the channel."

# **Suggestions**

### **Possible Redesign**

One possible redesign of Discord is the addition of tutorials within the application. Discord currently does not have any available tutorials within the app, so the design and how to use the features can be confusing to newcomers. Based off of our own experiences and the interviews conducted, most users are taught to use the system by friends, especially ones that introduced them to Discord. Users could learn how to use Discord by searching for features in the Discord help center webpage, but this is not useful if a newcomer does not know what to search for in the first place.

Discord also has a change log that lets users know what updates have been made and what new features are available. It pops up whenever a user updates, but like any pop up, most users would close it without looking at the contents. These updates also do not come with instructions, causing some features to remain largely unused because users simply ignore the change log. To give users a chance to learn about new features, additional instructions should be added whenever a new update occurs. For example, Discord is capable of screen sharing, a recently added feature that is only available when a user starts a video call. A small set of instructions could pop up to make users aware of the feature. Currently, it is largely unknown by users due to the lack of instruction within the app.

Another feature that would be useful was suggested by one of the interviewees. Participant 2 stated, "I think they should implement a feature for you to set your online status on individual servers. For example, just being busy on one server so people don't try to contact you when you're doing something else on another server" (Participant 2). Users could set their status to being busy, available, not available, etc. This would allow Discord users to not be interrupted by others when they want to focus on what they are doing on another server. It would give users more control over what others see and give them more freedom for uninterrupted gaming.

#### **New Rules and Protocols**

Discord has many features that combat trolling and help users communicate better. Discord allows server admins to assign roles to members to define their permissions and what they have access to. Users can even lock others out of text and voice channels, control whether a user is allowed to read and send text messages, or mute certain people on voice channels. Because Discord gives users a large amount of control over what each member of a server can do, new rules and protocols for combating trolling are not necessary. All of the interviewees had no suggestions to offer about new rules and protocols.

## **Works Cited**

- Cardoso, Marina Cascaes. CHI EA '17 Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems, 11 May 2017, 263-267.
- Crecente, Brian. "Discord. 87M Users, Nintendo Switch Wishes and Dealing With Alt-Right." *Rolling Stone*, Rolling Stone, 7 Dec. 2017, www.rollingstone.com/glixel/news/discord-87m-users-switch-dreams-dealing-with-alt-right-w513598.
- Discord. Discord, discordapp.com. Accessed Spring 2018.
- Wang, Z., David, P., Srivastava, J., Powers, S., Brady, C., D'Angelo, J. and Moreland, J. Behavioral performance and visual attention in communication multitasking: A comparison between instant messaging and online voice chat. Computers in Human Behavior, 28(3), May 2012, 968-975.