# Written Responses

- **2a**. Provide information of your computing innovation and computational artifact.
  - How Discord sends message data over the internet to the other person.
  - The intended function for my computational idea was to explain how message data transfers online.
  - My computational idea was to teach people how data gets across the internet, because many people don't know how it does.
- **2b**. When message data gets across the internet you obviously need wifi to do so. Secondly, that data goes through the servers of the company who made the app, it first converts the information to readable data to the servers then recomplies it to the human language then it gets sent from there to the intended person.
- **2c**. One beneficial idea that this has had is the ability to talk to people from around the entire world in a few seconds. One bad idea that this has bad is the ability to bully people online without getting caught so easily by people.
- **2d**. Using specific details, describe:
  - The data that the innovation uses is text data and when in the servers binary.
  - The innovation uses input from messages to messages talk to to each other. The output is when the message is received by the other person. Text data gets converted when in servers.
  - The data concern that can behold is that the company can see your messages that your sending.

#### 2e.

## <u>How Discord Stores Billions of Messages</u>

https://blog.discordapp.com/how-discord-stores-billions-of-messages-7fa6ec7ee4c7

The page states," Arguably, one of the best databases for iterating quickly is MongoDB. Everything on Discord was stored in a single MongoDB replica set and this was intentional, but we also planned everything for easy migration to a new database." This means that discord uses a server to make messages send through.

10101709910308136. "How Discord Stores Billions of Messages." Discord Blog. 14 Jan. 2017. Discord Blog. 04 Apr. 2019

<a href="https://blog.discordapp.com/how-discord-stores-billions-of-messages-7fa6ec7ee4c7">https://blog.discordapp.com/how-discord-stores-billions-of-messages-7fa6ec7ee4c7</a>.

#### How Information Travels on the Internet

### https://computer.howstuffworks.com/ip-convergence2.htm

The page states," The information contained in the wrapper tells computers what kind of data is in the packet, how it fits together with other data, where the data came from and the data's final destination." This is saying that the information is being sent in different type of data other than plain text.

Strickland, Jonathan. "How IP Convergence Works." HowStuffWorks. 08 Mar. 2010. HowStuffWorks. 04 Apr. 2019

<a href="https://computer.howstuffworks.com/ip-convergence2.htm">https://computer.howstuffworks.com/ip-convergence2.htm</a>.

### Instant Messaging Wiki

## https://en.wikipedia.org/wiki/Instant\_messaging

The page states,"Short messages are typically transmitted between two parties, when each user chooses to complete a thought and select "send". Some IM applications can use push technology to provide real-time text, which transmits messages character by character, as they are composed. More advanced instant messaging can add file transfer, clickable hyperlinks, Voice over IP, or video chat." This is helped me with my artifact by saying most modern day media like Discord use Instant Messaging in there systems.

"Instant messaging." Wikipedia. 28 Mar. 2019. Wikimedia Foundation. 04 Apr. 2019 <a href="https://en.wikipedia.org/wiki/Instant\_messaging">https://en.wikipedia.org/wiki/Instant\_messaging</a>.