Henry Wilt January 28<sup>th</sup>, 2022 Human Computer Interaction

## Mother of All Demos Discussion Questions

Doug Engelbart starts his talk with how his console is set up at his office. The biggest novel hardware interface he uses is a mouse, as Engelbart is cited as the creator of the computer mouse where there is a pointer on the screen, and you are using a physical object to move it around. As in the 60's, there were only terminals for computers to display output and no GUI used for most operating systems. As he goes through the first example, he shows a lot of tricks that one can use to save files, work on them, shortcuts, and more. I am not sure how far computers were along in file saving and reloading in the 60's but I have a feeling that Engelbart and his team may have put time into programming the software to have it happen faster and better. In the example, he shows a way to copy and paste words in a document and having them display in many different ways to the user as well. In his shopping list example, he shows a way to move ordered lists around and point at certain items and he can place them in a different spot in the list. This is similar to day's notes apps where you can easily move items around and place them into smaller item sub-lists. He shows how there are many different ways to move around the text editor. This software reminds me of a very early and rough version of vim or just a word processor or note app.

Something very clever, Engelbart and his team has done are hyperlinks. I didn't notice them for a while but once I did. It made me think about how quickly he is going from file to file and page to page in the demo. There must have been a great challenge to get that working all properly with it to correctly work every time, he clicks on one. It is also very interesting that in the 60's, computers were very basic and not much could be done on them. So, the people in the audience must have their minds blow away from what computers do nowadays; for example: hyperlinks, linking files, the mouse, text editors, a simple graphics interface. His team has also made a make-shift internet or the web with linking files together and having data be connected on the machines. When the presentation switches to Menlo Park with Don Andrews, it first shows off the mouse or pointer and how it works. Also, how they are getting Don Andrews to show it off, it is an early version of skype or zoom where they can talk over the internet with video and audio. The last device is a small compact but complex of technology of a 5-button keyboard. Where if you press on button then one letter will show up, if you press another button then another letter would show, and if you pressed a combination of keys or buttons then different letter will show up. This is not used anymore in the modern day but there is keyboard that is making its debut soon that is half mouse and half keyboard. It is called the CharaChorder, which has a very similar device to what the device Engelbart and his team are using.

With the "Mother of All Demos" presentation, Engelbart and his team talk about this goal to augment and use his machine as an augmentation system. I believe he wants to augment the human intellect and make our lives easier with computers. As we wouldn't have to remember all of humanities knowledge or rely on books or lose it with time as people die. It seems his mission was to get the knowledge and put it on machines that can be easily accessible by regular people in the time. This has come to be in our time, with how the internet has gotten so massive and full of data. There are so many websites that contain little bits of data but then there are websites like google

and Wikipedia that collect data that you sort and search through. I also believe that Engelbart would have saw virtual reality coming along with augmented reality. He would be looking to take humanity to the next step of knowledge keeping and learning.

What Engelbart means by "collective memory" is how the humanity all together makes up the whole knowledge base to easily solve problems of the day. The way that Engelbart and his team are helping to contribute to the collective memory of humanity is having information being easily accessible by anyone in the world by use of machines and computers. Along with the ease of use with a mouse and keyboard that is shown in the presentation. The significance of this is clever to where Engelbart has put forward a solution of how the basics of the internet has been organized and how computers will look like and what they are able to do.