Russel Davis Mr. Ettlin APCSP 11 March 2019

## Snapchat Explore Task:

2a. Provide information on your computing innovation and computational artifact. Name the computing innovation that is represented by your computational artifact. Describe the computing innovation intended purpose and function. Describe how your computational artifact illustrates, represents or explains the computing innovation intended purpose, its function or its effect. (Approximately 100 words)

The computing innovation that I described in my computational artifact is Snapchat, an application for Apple and Android phones. Snapchat allows users to send one another photos via the app for a short period of time allowing the recipient to view this photo once. It is a social media platform designed around the central idea of sending and receiving pictures taken on the app itself. My computational artifact displays the app on the app store as well as the its icon and a breakdown of the functionality of the app's camera.

2b. Describe your development process, explicitly identifying the computing tools and techniques you used to create your artifact. Your description must be detailed enough so that a person unfamiliar with those tools and techniques will understand your process. (Approximately 100 words)

In creating this computational artifact I used google drive to create a google "drawing." In this I used a snapchat logo with a yellow background to create theme of the artifact. The image in the top left is snapchat in the app store and the bottom left image is an image of the app's icon. The bottom left image displays the functionality of the camera in the application. The top right image displays the notifications page where users can view the images sent to them.

## 2c. Explain at least one beneficial effect and at least one harmful effect the computing innovation has had, or has the potential to have, on society, economy, or culture. (Approximately 250 words)

Snapchat is a very controversial app amongst teenagers are parents alike, receiving blame for negative habits in teens. However, this computing innovation has had a beneficial effect on society; allowing people around the world connect and communicate in fun and creative ways [4]. Snapchat allows users to customize their photos with emojis, drawings, text, and fun filters making a variety of options open to every user with countless variabilities in ways to edit your photos. This form of connection has even brought together companies and customers, allowing companies to effortlessly update their customers on their products or innovations. This creates a healthy relationship between producer and consumer.

A negative effect snapchat has been observed to have on society is addiction to the app [3]. Many criticize Snapchat because it has millions of teens hooked. Snapchat implements features such as streaks and stories which must be maintained or checked every 24 hours, after which a streak will disappear if inactive and the story will disappear forever. These features have teens coming back to the app every single day to maintain the streak of sending their friends pictures everyday for however long. Snapchat makes teens further addicted to their phones, impacting their daily lives.

2d. Using specific details, describe: The data your innovation uses. How the innovation consumes (as input), produces (as output), and/or transforms data. At least one data storage concern, data privacy concern, or data security concern directly related to the computing innovation. (Approximately 250 words)

When receiving a photo from another user, the Snapchat app receives the photo along with lots of metadata. This data includes information on when the picture was taken, where the picture was taken and what device took the picture [2]. Snapchat also records when it was received, when it was opened as well as the information on any "stickers," emojis, text or drawings are placed on the picture by the sender [1]. When sending a snapchat, the app uses its own camera on the app receiving data from the lense of the camera on the smartphone. The previously mentioned metadata is all recorded along with the picture and are sent to snapchat servers before finally reaching the user on the receiving end.

Snapchat has had security breaches in the past, resulting in the stealing of 4.6 million users' information. For many users this includes their cell phone number, their email, their password, and, for some, their debit card because of payment feature called 'snapcash' [1]. This was due to a hard-coded encryption key used by all snapchat users. This has been abused by third party apps that offer extra features that Snapchat does not, such as saving photos from users without notifying them, or even viewing photos for an infinite amount of time. These features are concerning for users as they are not notified of their pictures being saved and do not truly know if someone has viewed a photo.

2e. For each online source, include the permanent URL. Identify the author, title, source, the date you retrieved the source, and, if possible, the date the reference was written or posted. For each print source, include the author, title of excerpt/article and magazine or book, page number(s), publisher, and date of publication.

- [1] https://courses.csail.mit.edu/6.857/2016/files/11.pdf
- [2] https://iptc.org/standards/photo-metadata/photo-metadata/

- [3] https://smartsocial.com/effects-of-snapchat-teens/
- [4] https://cyberbullying.org/snapchat-basics