Sunny Shah CS475 Snapchat Security Review

Snapchat is a multimedia sharing mobile application, giving the user the ability to share pictures and messages to other users for a short time. Snapchat has now also grown into sharing other types of public and private content, such as live events, network branded media, and other closely aligned content. Snapchat also comes with other features to enhance multimedia sharing. Filters can be added to pictures with a left or right swipe, such filters can denote the temperature, your geographical location, an event you might be at and so on. Draw gives the user the ability to draw on the image with a set of different colors. The user can also type a caption to the picture or video to be sent. The application also allows you to grow your friends list via searching a username or through your contacts list. The application achieves all these features by using the phones camera for taking the media, giving the application permissions to use the location, and access to your contacts list.

The stakeholders of the application are primarily the user, the user's friends and contacts, Snap inc., and the add companies promoting on Snapchat. The main incentive to use this application for the user is the ability to share media that you do not want to be saved, to consume media from others, and also to consume the public media that is available. The other incentive would be the ability to stay connected with friends and other contacts and they can stay connected to the user. Snap inc has the incentive to make sure the user base is growing and to make a profit.

Assets and security goals.

Users data and information is one asset that Snapchat needs to protect. If they are not able to keep the user's data and information secure then there will be harm to they company's reputation.

Software is another asset that they need to protect. This would be the company's intellectual property on their source code and application.

Potential adversaries and threats.

Customers is one adversaries trying to break into the application to be able to get other users information.

National governments are also another adversary. If they were to use this application to get access to the user's camera or information then this would lead to great security issues.

Potential weaknesses.

One weakness in the application is getting users account privileges through their Facebook login.

Unauthorized disclosure and misuse of users' personal information through the find friend function

• Potential defenses.

Letting users control the permissions given to snapchat and also warning them when certain permissions are being used.

Two step verification for secure login

• Risk evaluation

Using Snapchat has its own risk related to the information and user interaction that passes through Snapchat. If the application gets breached or compromised, and the users data gets stolen or the software behind snapchat gets stolen this could lead to many issues. Such as potential spying through information gathered or hacks done by governments not only to attack the user's device but all the devices that communicate through Snapchat with that users. The bigger picture here is that with how fast Snapchat is evolving more and more security holes will open up and with that comes risks with not only the data that the user puts on Snapchat but also might be a gateway into the user's mobile phone itself.

In conclusion, Snapchat is a great multimedia sharing platform and if the application can keep up with the ever so changing threats out there. Not only does the application need to be secure but the user has to take the necessary steps to implement certain policies to make sure it is secure, such as setting the correct privileges for the application, using two step verification, and updating the application.