

Is Every Application That Are Using In Mobiles Are Secure?

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Abstract- *Is our Personal data secure? With the increasing Technology present days, we are doing every work with mobiles and installing different specialized software's for our daily works. At the time of installation they need some requirements like accessing of location, accessing of Contacts, accessing of Storage, Accessing of Camera etc., We are simply giving the permissions to them and we are always attracted to wards those software's because they are giving more offers like giving money, discounts etc., we are not thinking about our personal data is utilized there and we are doing these works continuously.*

By this type of Activities people are affected widely and in some situations the companies also affected by this type of activities. Due to that they got economical loss also. In this paper we are going to discuss about These factors and how to protect our data from the unauthorized stole.

Keywords- Applications, Data, Discounts, Offers, Permissions, Secure.

I. INTRODUCTION

In our present world we are seeing that data is hacked by someone and utilized for various actives. Sometimes we think that Is our Personal data secure? With the increasing Technology present days, we are doing every work with mobiles and installing different specialized software's for our daily works. At the time of installation they need some requirements like accessing of location, accessing of Contacts, accessing of Storage, Accessing of Camera etc., We are simply giving the permissions to them and we are always attracted to wards those software's because they are giving more offers like giving money, discounts etc., we are not thinking about our personal data is utilized there and we are doing these works continuously.

This modern world the people are easily addicted to the latest Applications and software's by using these software's Person don't have much time to read the descriptions and privacy policies of the software's and they simply giving the permissions to the applications. Due to that activity their personal data is always utilized by the software owners.

By this type of Activities people are affected widely and in some situations the companies also affected by this type of activities. Due to that they got economical loss also. In this paper we are going to discuss about These factors and how to protect our data from the unauthorized stole.

II. DATA UTILIZATION

In this section we will how the data is utilized by the companies with their software's. If we consider some software's like (True caller,Hike,Messenger, Google maps etc.,) We are Seen the dialogue box like fig 1. In that section we must give the permissions for those applications to run. In some times we have seen that some of the applications need not require some functionalities like location, contacts, camera, microphone, SMS and finally storage not only for installation but also for automatically install some applications by using that permissions.

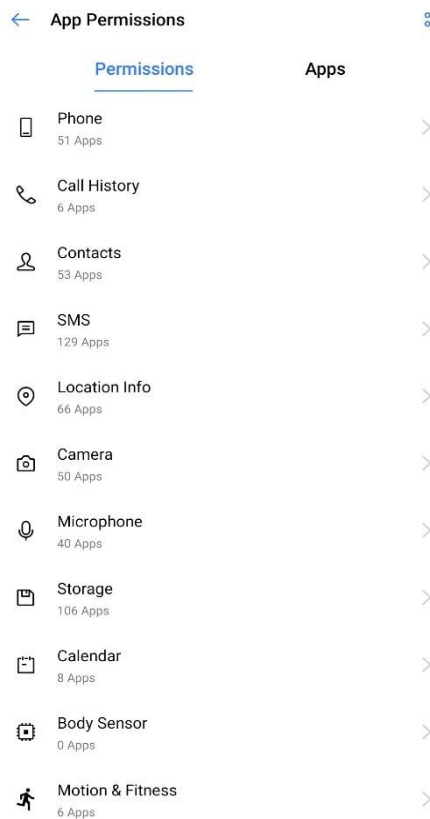


Fig 1: Application permission settings tab present in our mobile settings

I. Location:

In our daily life we are travelling to various locations from our place. If we are turn on the data at any time it will automatically allots the plot between our location to that place in maps and it is stored in their data base when we give the permission to the software's. In general, we are simply giving the access to location. And they can be having a chance to track us at any moment. For example, if we see the google maps, we are giving the access to the location it will sends the timeline i.e., travelled information to their Gmail for every month. And if anyone access your Gmail then your entire information will be Stolen.

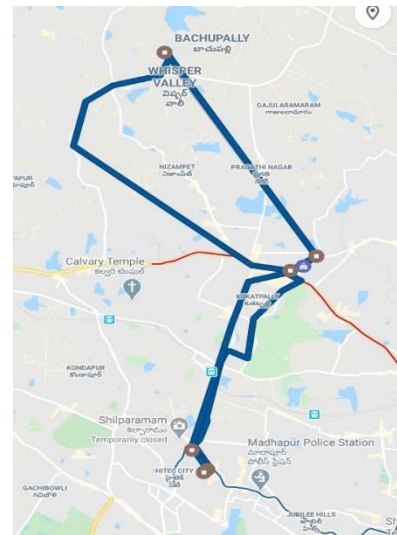


Fig 2: Accessing our travelling information by the software

II. Contacts:

Contacts is very important information in our life. We are seeing that many applications want to access your contacts for to give better experience. We are always giving the access to the contacts options. And we have seen that it will be present at the console which designed in software. Sometimes we have seen that we got notifications like your friend just joined into this application send money or say hi, like these messages are seen in the screen of our mobiles. If we think, how the information is known by the software? The information will not be known by the software itself we are giving the simple access of our contacts to that software. For example, if you see True caller, Google Pay (TEZ), Hike and etc., the persons in our contacts who have joined in those software's it will gives the alert message in our notification field.

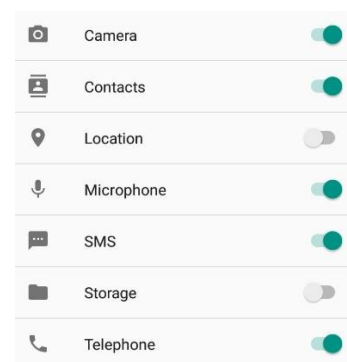


Fig 3: Accessing our Contacts by software1

III. Camera:

Camera plays a vital role in our life. We are capturing every moment in that camera. If we think how anybody got

profit by using others camera, but in our real life it plays a n important role for example if we see the movies the companies will find the correct persons by using the other persons camera. And the new feature introduced in google maps also utilizes the camera to give better experience in giving the directional information to the user. In that way we are giving the information to the companies from our mobiles. In some situations, we have seen that some persons are always monitoring by others with installing spy apps. These apps give the information to the other countries also. And some people got loss in their companies due to these attacks. And we are showing some applications doesn't need on camera but the applications are utilizing.

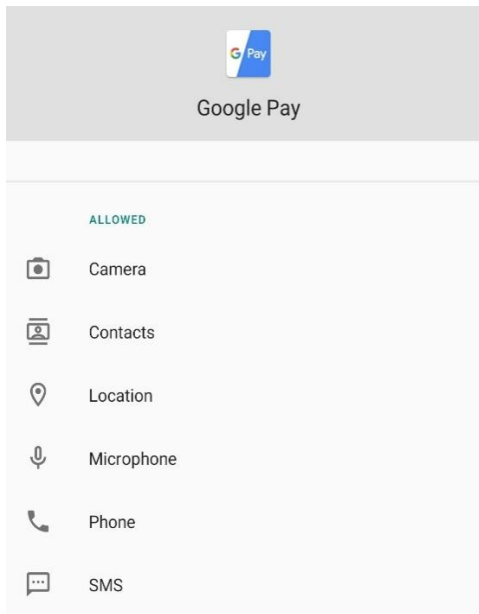


Fig 4: Accessing the camera by the application1

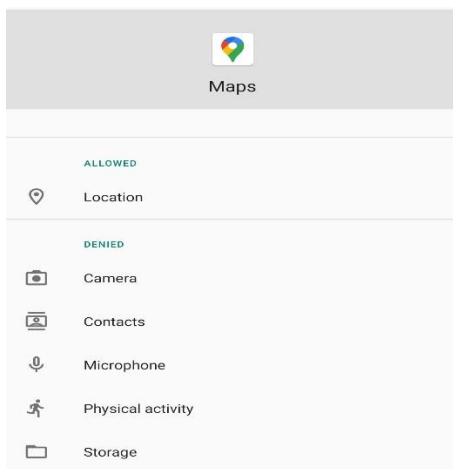


Fig 5: Accessing the camera by the application2

IV. Microphone:

We have seen that in some situations somebody knows our information without being person is present there. It can be done by accessing our microphone. When we are giving the permission to accessing of microphone in the time of installation of any software, we are simply giving the information to them. And this information can be utilized by the company in any time they want. These types of activities are generally seen in conferences, for that reason at the time of conference the authorities not allow the phones into the conference hall.

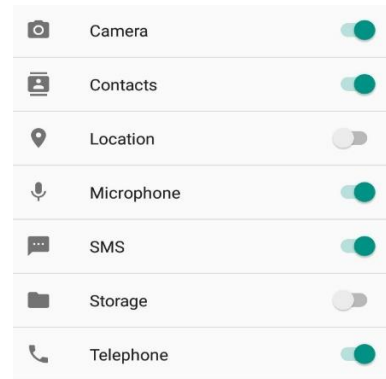


Fig 6: Accessing the /microphone by the software

V. Messaging:

Messaging is also important in our life. We will send the information to anybody using message app designed by the mobile company. It is very secure and we are using different types of applications for better visual effects. These types of applications will access the information in any time for example the famous application like true caller is always asking to give default permissions to that application to distinguish the spam messages. At that time, we can clearly see that it is saving our information in their data base and checking for the good message.

In some times we are seen that the notification message is coming from the true caller that your account is deposited by some amount of money like this. We are feeling wondered that how this application knows about our bank account information. It is accessing the information from our messages.

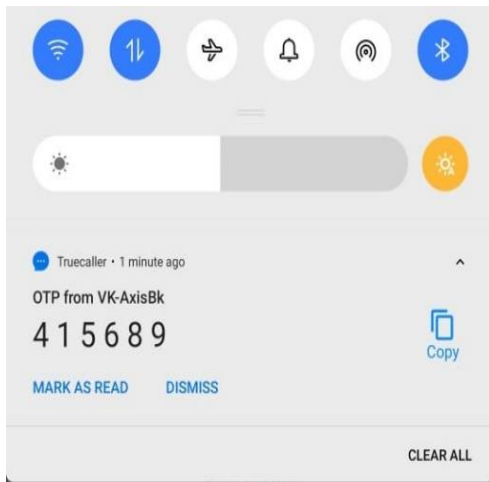


Fig 7: Accessing the message information

VI. Storage:

It is a very important feature in our mobile. While taking the mobile we are choosing the high storage capacity to the mobile but we are not seen the storage information of the application while installing. For example, if we are installing any application from the application store it shows some amount of storage but after completion of application installation it occupies grater that shown memory. How it is possible? If we see the entire application it shows some services in that and it always want to access the storage, contacts, location etc., this information can be accessed by the software company at any time. And in some cases, we have seen that advertisements are present in the applications. We are not known what is reason behind that but the real reason is we are giving the storage permission at the time of installation that’s why we are seen the advertisements on the screen.

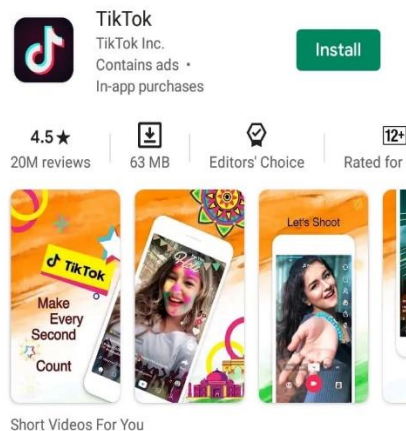


Fig 8: An Application memory at the time of installation

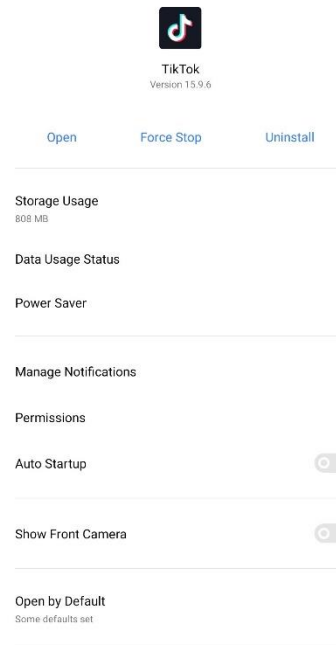


Fig 9: An Application memory after installation

And some other type of accessing like body sensors and motion and fitness sensors these are utilized by the companies rarely.

III. DATA SECURITY

Data security means we have to protect our data from the unauthorized usage. Here we are giving some of the data security techniques. Those are:

- a. Give the required permissions only for the applications to get secure.
- b. Must read privacy policies while installing the applications.
- c. Do not change the default applications given by the factory if changed which may leads to give poor security of data.
- d. Use good antivirus software’s to protect from unwanted attacks.
- e. Do not install unwanted applications from the unauthorized links.
- f. Use secure passwords to the accounts and applications to get run.
- g. Do not login your accounts in different places which may lead to hack your data.
- h. Do not open the links which are provided by other only open official links.
- i. Do not download the cracked software’s. Install only purchased software’s.

IV. CONCLUSION

Finally be careful while using any applications do not save any personal data in your applications, use security applications like anti viruses, give only required permissions to the applications instead of giving all the permissions and must the privacy policies while installing any applications to be secure.

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