

Implementation of Semantic Approach Security in Online Social Networks by using privacy policy and encryption

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ABSTRACT

Now days, internet or social is one of the most efficient and effective ways to communicate and sharing the information using the social networking sites like twitter, Facebook, etc. With multiple people connected through online social networking sites and due to the popularity of online social network sites, more people are concerning about their own privacy and policy. it has become an important issue OSN. In this paper we will study how the current privacy plays on social network sites, analyze how personal information is being attacked by internet and social network, and also we identified how the privacy become a risk and how to employ security awareness to avoid privacy risk. we apply encryption for enhance security to the uploaded personal images.

Index term: privacy, social networks, security issues, OSN, image encryption

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I. INTRODUCTION

Online/Internet users use social networking website to communicate with attached with OS friends, share anything like, photos, and videos, etc. It's very critical for all internet computer users to be don't know anything about computer security and privacy and to know what steps to take to defend against attacks. Social networking privacy issues have risen among users. As number of social networks is growing, the default settings share everything and what is important is that users have to set their privacy setting options to make their accounts more private. At the same time security attacks continue to be a major concern of all users. How to keep computers and social networking more secure and more private are the challenges that have been concern for every users. Not only because of the number of attacks but also because of the difficulties faced in defending against these attacks and threats.

Online networks provide significant advantages both to the individuals and in business sectors. Many users provide information about themselves on social network which can be searched and hacked by the strangers. Thus, it raises privacy and security issues. Unfortunately many users are not aware of this.

Related Social Network:

The social network websites are used by the young user of this generation. Facebook application is the mostly used by the internet users. Users create user profile in OSN applications with and existing E-Mail id. Once the user profile is created, the users can post their real images, personal information such as E-Mail id, Phone numbers, and home address and so on. They can post their day to day activities, life style, what they like and don't like and even users are tagging their present location in online social media. This shows very clearly that all the information about the people is most probably publicly available in online social networking applications. [1]

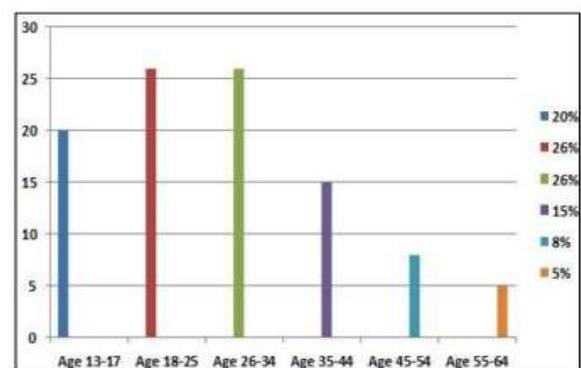


Figure 1 Online Social Network Users Age wise.

The Figure 1 shows the users of online social network applications age wise. From the Figure 2 it can be identified that people between the ages 18 to 34 are mostly using the online social networks. [1] In online social network applications all the people’s sensitive information and their real images are publicly available.

II. RELATED WORK

Upload images:

User uploaded image on social media. We apply privacy and security by using the encryption algorithm.

Encryption AES Algorithm:

Encryption process has two inputs one image which is already converted into plain text and one encryption key.

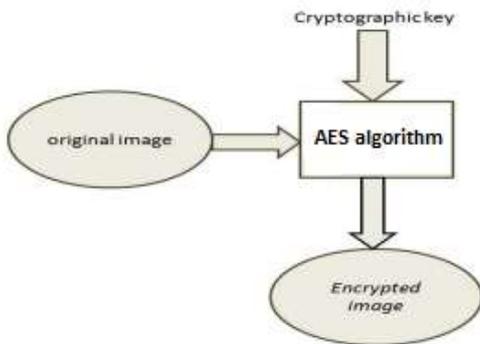


Fig 2. Encryption

Advantages:

1. It also prevents hacking.
2. It uses Encryption algorithm for image secure
3. The system prevents identity theft.
4. It also provides security to the user personal data.

III. PROPOSED SYSTEM

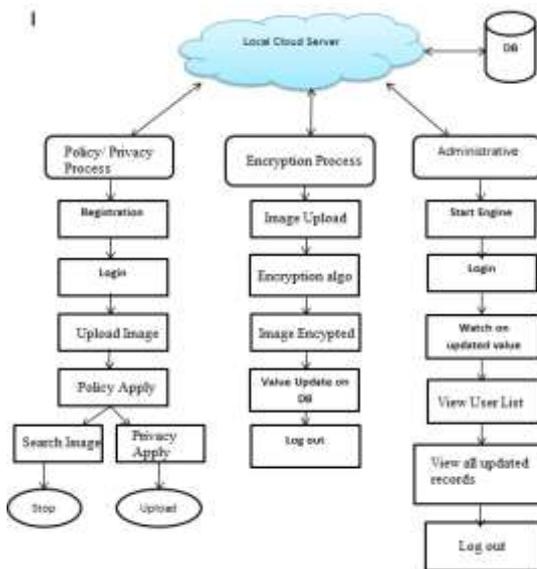


Fig 3. System architecture

The proposed system Secure Request-Response Application Architecture. It is an architecture developed for the secure data sharing on OSN websites. This architecture allows a user to accept or reject the request of accessing information from his profile. The user can reject the request of friend as well as the visitors. The second functionality of this architecture is that user can have two different databases with different information provided. The user may select data from any one of the two databases to response a particular request. This architecture improves the degree of customization of the profile of a user. According to this architecture the visitors or friends request for any information to the application between the visitor and the user. The application requests to the user for the response then the user can response from any one of the databases according to his trust on the person who has requested for the information.

SOFTWARE REQUIREMENT SPECIFICATION

We have created system in java programming. Data is stored in mysql database. We have created a web application with local server. Web application that communicates with local server and Trustee Server using REST API. We have uploaded image on cloud, add profile, post comment, apply security, privacy on online social network.

IV. MATHEMATICAL MODEL

Our system can be represented as a set

$$\text{System } S = \{I, O, C\}$$

Where,

I= set of inputs

O= set of outputs

C = set of constraints

Input

$$\text{Input } I = \{\text{Login, Request}\}$$

$$\text{Login} = \{\text{Username, Password}\}$$

$$\text{Request} = \{\text{Upload images, Search images, download images, Apply security, View History}\}$$

$$\text{Users} = \{\text{User, Service provider}\}$$

$$\text{Username} = \{\text{Username1, Username2... Username n}\}$$

$$\text{Password} = \{\text{Password1, Password2... password n}\}$$

Output

$$\text{Output } O = \{\text{Display uploaded images, Download start, Prevent hacking, Display history}\}$$

Constraint

$$C = \text{“User should login to the system”}$$

V. RESULT

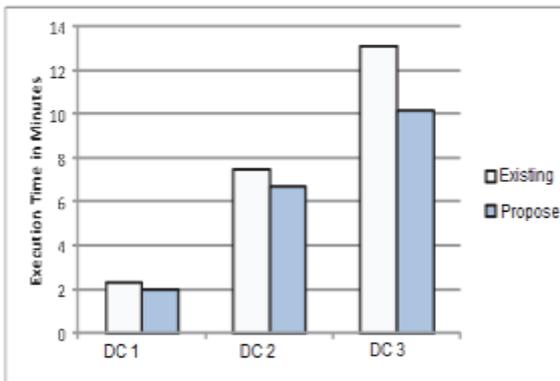


Fig 4. Performance analysis for proposed and existing



Fig 5. Registration page



Fig 6. Privacy uploading for images



Fig 7. Search images

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VIII. CONCLUSION

This paper introduced a technology and social network have made interaction and communication much easier than early decade. In this paper, we have briefly come across privacy on social network. As many websites and social networks out there, people are more concern on how much privacy do they still have. We have also highlighted what is the current situation on using social network, as well as what are the threats that can affect the users on social network.

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