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THE EFFECT OF SOCIAL MEDIA USER BEHAVIORS ON SECURITY AND PRIVACY THREATS

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***Abstract*—** The number of online social network (OSN) users is increasing daily and attacks and threats against over the time spent on online networks has been increasing equally. Attacks against OSN users exploit not only system vulnerabilities but also user-induced vulnerabilities, which naturally affect the hacker's attack strategy as well. This study is designed to investigate the effect of social media user behaviors on their ulnerability level in terms of security and privacy. The study was conduct survey methods, which was applied to social media users in two countries - Turkey and Iraq. This study documents and analyzes the behaviors of 700 OSN users in two countries. This study examines the behaviors of social media users from two nationalities, investigating whether there is a relationship between social media users' behaviors and security and privacy threats. Research findings demonstrate that there is a significant relationship between OSN users' behaviors and their attitudes towards security and privacy. Additionally, Turkish social media users pay more attention to their behaviors in terms of privacy and security awareness than Iraq users.

I. INTRODUCTION

Online Social Networks (OSN) have become an integral part of the lives of billions. People from different regions of the world and from different age groups visit these networks, which have achieved remarkably widespread penetration, and continue to develop their prevalence. Social networks allow social media users to create user profiles, add other users, and see each other's activities. Face book (FB), Twitter, and many other Social Network users can do different types of activities on these sites such as post photos and update and comment on nearly anything every minute. Emerging through the Internet, these have started to spread over the so-called social network sharing sites. In this way, approximately 50 million Face book users' profiles were hacked. Face book provided the following explanation after the incident: ``People knowingly shared their information and there was no entry to any system; passwords and sensitive information were not stolen or hacked". Here, it is clear that the behaviors of users of Online Social Networks (OSN) have a big impact on information security. In this context, this study analyzes the behavior of social network users in terms of information security and privacy. We aim to determine the relationship between the behaviors of OSN users and security/privacy. In this context, users belonging to two different cultures (Turkish and Iraq) are included in the study. Hence, the effect of the different cultures is also investigated in terms of security and privacy awareness.

Dataflow Diagram

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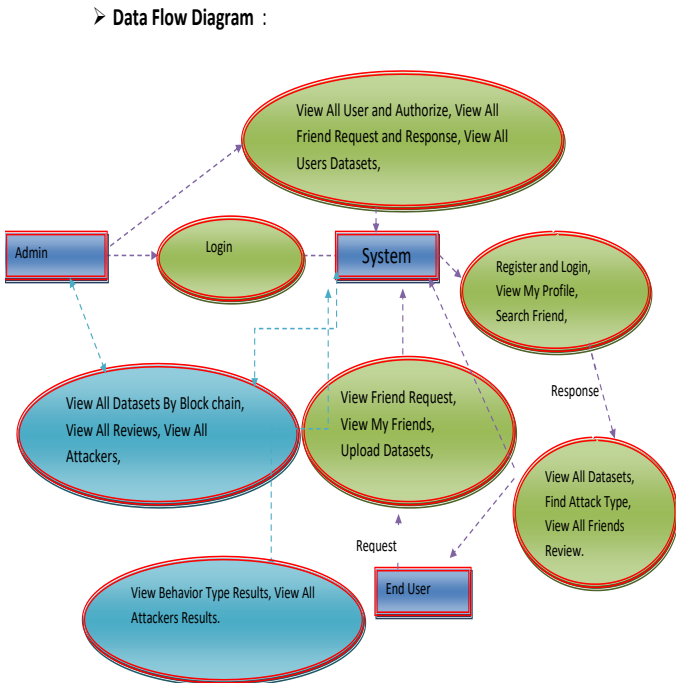

Figure1: Overview-Admin & End User: System View

Two prominent systems in existence are client server and file server systems. It is essential to distinguish between client servers and file server systems. Both provide shared network access to data but the comparison dens there! The file server simply provides a remote disk drive that can be accessed by LAN applications on a file by file basis. The client server offers full relational database services such as SQL-Access, Record modifying, Insert, Delete with full relational integrity backup/ restore performance for high volume of transactions, etc. the client server middleware provides a flexible interface between client and server, who does what, when and to whom.

Client server has evolved to solve a problem that has been around since the earliest days of computing: how best to distribute your computing, data generation and data storage resources in order to obtain efficient, cost effective departmental an enterprise wide data processing. During mainframe era choices were quite limited. A central machine housed both the CPU and DATA (cards, tapes, drums and later disks). Access to these resources was initially confined to batched runs that produced departmental reports at the appropriate intervals. A strong central information service department ruled the corporation. The role of the rest of the corporation limited to requesting new or more frequent reports and to provide hand written forms from which the central data banks were created and updated.

II. LITERATURE SURVERY

The typical client either a PC or a Work Station connected through a network to a more powerful PC, Workstation, Midrange or Main Frames server usually capable of handling request from more than one client. However, with some configuration server may also act as client. A server may need to access other server in order to process the original client request.

The key client server idea is that client as user is essentially insulated from the physical location and formats of the data needs for their application. With the proper middleware, a client input from or report can transparently access and manipulate both local database on the client machine and remote databases on one or more servers. An added bonus is the client server opens the door to multi-vendor database access indulging heterogeneous table joins.

III. EXISTING SYSTEM

- Studied awareness of users' privacy on social networking sites and how this awareness is reflected in their attitudes, observing that although users have some awareness of privacy issues, they still reveal a lot of information about themselves.
- The reason for this was reported as being their desire to build their own identities. O'Brien and Torres subsequently supported these findings with their 2012 study on the awareness of OSN users on privacy and how their behavior was affected by this awareness.
- The rate of profile updates shows that OSN users do not feel uncomfortable about privacy. On the other hand, [9] observed that most of social media users are aware of security settings, but they do not change the default privacy settings. Madden [10] observed that half of social media users have difficulty in managing their privacy settings.
- Social media provides users with the opportunity to conceal their identities and the weak control

mechanisms of the social media environment enable OSN users to perform actions they cannot perform in real life [19]. This explains why OSN users feel the need to use pseudonyms or fake names on social media.

Disadvantages

- The system is not implemented Hash Code techniques to find user behavior.
- The system decreases the usability of the suggested models and doesn't have an impact on reducing the effect of OSN based threats.

IV. PROPOSED SYSTEM

- In the proposed system, due to their behavior identification common usage, we selected three types of classical attacks used by the attackers. We investigated the behaviors of these attacks to identify the channel or the process that an attack pursues to penetrate systems.
- In most cases, attackers try to find open channels to access or to connect with OSN users. Through these channels, attackers can victimize OSN users. Each attack has its own policy to find an open channel(s) toward the victim.

Advantages

- In the proposed system, significant techniques have used in which relationship between parents' follow-up of their children's activities on OSN.
- In the proposed system, there is a strong techniques in which the behaviors of OSN users and their attitudes towards privacy/security.

IMPLEMENTATION AND EXECUTION

- Admin
- View and authorize Users
- END User

V. MODULES

1) Admin

In this module, the Service Provider has to login by using valid user name and password. After login successful he can do some operations such as Login, View All User and Authorize, View All Friend Request and Response, View All Users Datasets, View All Datasets By Block chain, View All Reviews, View All Attackers, View Behavior Type Results, View All Attackers Results.

2) View and Authorize Users

In this module, the admin can view the list of users who all registered. In this, the admin can view the user's details such as, user name, email, address and admin authorizes the users.

3) End User

In this module, there are n numbers of users are present. User should register before doing any operations. Once user registers, their details will be stored to the database. After registration successful, he has to login by using authorized user name and password. Once Login is successful user will do some operations like Register and Login, View My Profile, Search Friend, View Friend Request, View My Friends, Upload Datasets, View All Datasets, Find Attack Type, View All Friends Review.

VI. DESIGN

1) INPUT DESIGN

Input Design plays a vital role in the life cycle of software development, it requires very careful attention of developers. The input design is to feed data to the application as accurate as possible. So inputs are supposed to be designed effectively so that the errors occurring while feeding are minimized. According to Software Engineering Concepts, the input forms or screens are designed to provide to have a validation control over the input limit, range and other related validations.

2) OUTPUT DESIGN

The application starts running when it is executed for the first time. The server has to be started and then the internet explorer in used as the browser. The project will run on the local area network so the server machine will serve as the administrator while the other connected systems can act as the clients. The developed system is highly user friendly and can be easily understood by anyone using it even for the firsttime.

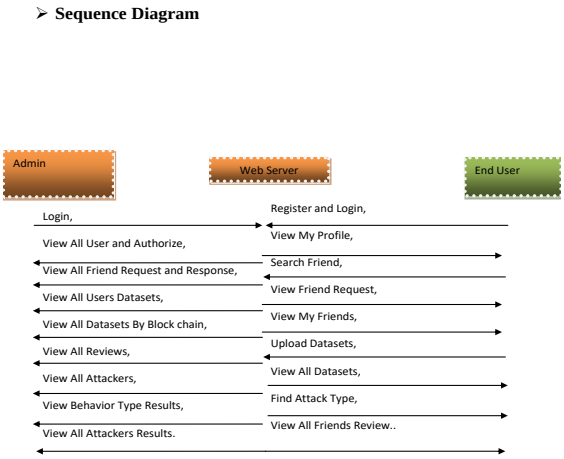

Figure2: SEQUENCE DIAGRAM

3) Architecture Diagram

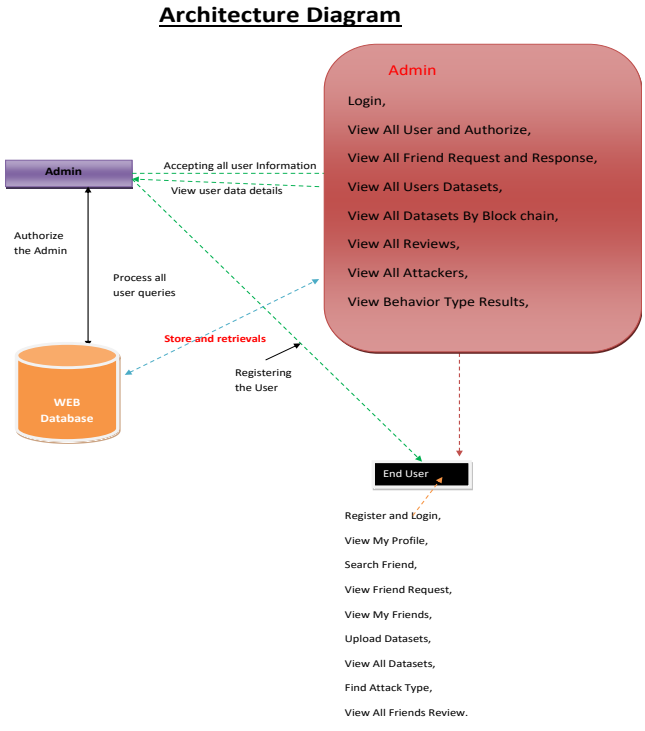

Figure3:System Architecture

The above figure system architecture of proposed system, where we are showing the process of Admin and End users activity.

4) USECASE DIAGRAM

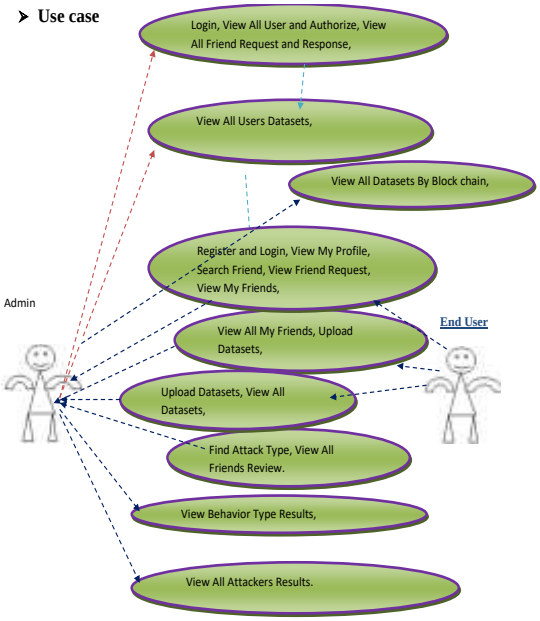

Figure 4: UsecaseDiagram

Facilities for a competent system of social media communications by enhancing security and privacy rules.

VII. CONCLUSION

In this paper, we aimed to analyze social media user behaviors in terms of security and privacy. In order to investigate user behaviors, we conducted surveys in two different countries: Turkey and Iraq. Then we analyzed data obtained from Turkish and Iraqi social media users so as to present the region and culture effect on user behaviors. Then, we identified the vulnerability level (insecure, moderate, and secure) of the two cultures for Internet Fraud, Information Leakage and Behavior, Cyber Bullying attacks based on their behaviors.

It is quite essential that security specialists, software security coders should have well elaborated our results. Then, they should adapt new security and privacy solutions based on user behavior and treatment strategies after security attacks by considering our paper results.

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