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Survey on Hospital Database Integration

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ABSTRACT: Integrating is the process of combining different databases and stores the values in a single database. In this paper, it is the process of combining different hospital databases into a single database and stored in a single server. Each hospital database consists of different formats of database. Our technique is to combine different formats of hospital databases into a single format and only the autonomous data of the patients are stored in the database. This database helps us to detect new emerging disease in a particular hospital. An alert system is introduced in the database if any intrusion occurs in the database.

KEYWORDS: Integration of databases, Security to the database, Alert system

I.INTRODUCTION

Is the process of integrating data from multiple sources and probably have a single view over all these sources and answering queries using the combined information Integration can be physical or virtual

- Physical: Coping the data to warehouse
- Virtual: Keep the data only at the sources

Integrating is the process of combining different databases and store the values in a single database. It is the process of combining different hospital databases into a single database and stored in a single server. Each hospital database consists of different formats of database. Our technique is to combine different formats of hospital databases into a single format and only the autonomous data of the patients are stored in the database. This database helps us to detect new emerging disease in a particular hospital. An alert system is introduced in the database if any intrusion occurs in the database.

Databases like mysql, oracle, postgresql may represent each hospital management system. All these different databases are combined together to form a single database and the autonomous values of the databases are stored in that database.

Security to the database is given through Elliptic Curve Cryptography (ECC) algorithm. Cryptography is the technique of hiding a message in some unintelligible format so that the message lies hidden in plain. With technological advancement, techniques have evolved significantly. Public key cryptography offers a wide range of security over the various modes of transferring data, especially over the internet. The security of a public key encryption is stronger only if the authenticity of the public key is ensured. Data Encryption standards like RSA, Diffie-hellman are incapable due to requirement of large number of bits for cryptographic process. ECC has become the latest trend in the cryptographic scenario.

II.RELATED WORK

Mr. Saurabh Kulkarni; Dr. Siddhaling Urolagin[1] present a Data is most important in today's world as it helps organizations as well as individuals to extract information and use it to make various decisions. Data are generally stored in database so that retrieving and maintaining it becomes easy and manageable. All the operations of data manipulation and maintenance are done using Database Management System. Considering the importance of data in organization, it is absolutely essential to secure the data present in the database. In this paper, concise review of major database security techniques along with their usage is presented. The **methodology** used in this paper are as follows: **1.Database, 2.SQL Injection attack, 3.Access Control, 4.Encryption, 5. Data Scrambling.**

Piyush A. Sonewar; Nalini A. Mhetre[2] proposed an Web applications provide vast category of functionalities and usefulness. As more and more sensitive data is available over the internet hackers are becoming



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more interested in such data revealing which can cause massive damage. SQL injection is one of such attacks. This attack can be used to infiltrate the database of any web application that may lead to alteration of database or disclosing important information. Cross site scripting is one more attack in which attacker obfuscates the input given to the web application that may lead to changes in view of the web page. Three tier web applications can be categorized statically and dynamically for detecting and preventing these types of attacks. Mapping model in which requests are mapped on queries can be used effectively to detect such kind of attacks and prevention logic can be applied. The **methodology** used in this paper are as follows: 1.Public Auditing, 2. Third Party Auditor (TPA).

Shoohira Aftab, Hammad Afzal, Amna Khalid[3] Proposed Data Integration provides a uniform view of a set of heterogeneous data sources and facilitates users to query without any knowledge of the underlying heterogeneous data sources. In the current era, Service oriented Architecture and Cloud Computing together has enabled users to access services over the internet at low cost. Cloud computing model provides a layer which is responsible for providing data to the layers and services i.e. (Daas) layer. The issue of providing an integrated view of data can be handled using semantic data technology. Different data owners store data in heterogeneous format based on the requirements. This approach resolves the problem of interoperability. The **methodology** used in this paper is as follows: 1.Access Control Management, 2. Data As a service (DaaS), 3.Data integration.

Ssen Su, Shengzhi Xu, Xiang Cheng, Zhengyi Li, Fangchun Yang[4] Present there has been a growing interest in designing differentially private data mining algorithms. Frequent itemset mining (FIM) is one of the most fundamental problems in data mining. In this paper, we explore the possibility of designing a differentially private FIM algorithm which can not only achieve high data utility and a high degree of privacy, but also offer high time efficiency. To this end, we propose a differentially private FIM algorithm based on the FP-growth algorithm, which is referred to as PFP-growth. The PFP-growth algorithm consists of a preprocessing phase and a mining phase. In the preprocessing phase, to improve the utility and privacy tradeoff, a novel smart splitting method is proposed to transform the database. For a given database, the preprocessing phase needs to be performed only once. In the mining phase, to offset the information loss caused by transaction splitting, we devise a run-time estimation method to estimate the actual support of item sets in the original database.

Xiaoxue Liu; Peidong Zhu; Yan Zhang; Kan Chen[5] Proposed Smart meters are inherent components in advanced metering infrastructure (AMI) in the smart power grid. They are serving as the crucial interfaces through which the cyber, physical, and social domains of the smart grid can interact with each other. Due to the complicated interactions, smart meters may face a large variety of threats. In thispaper, we exploit the colored Petri net to describe the information flows among units in a smart meter. Then, we propose a threat model for smart meters. Considering the constrained computation and storage resources of a smart meter, we present a collaborative intrusion detection mechanism against false data injectionAttack. The proposed scheme can work regardless of changes in a smart meter's software. Numerical results demonstrate the low cost and effectiveness of our proposed intrusion detection mechanism.

III.CONCLUSION

It is the process of combining different hospital databases into a single database and stored in a single server. Each hospital database consists of different formats of database. Our technique is to combine different formats of hospital databases into a single format and only the autonomous data of the patients are stored in the database. This database helps us to detect new emerging disease in a particular hospital. An alert system is introduced in the database if any intrusion occurs in the database.

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