Virtual Data Analytical System

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ABSTRACT: There is currently considerable enthusiasm around the Map Reduce (MR) paradigm for large-scale survey of data. Although the basic control flow of this framework has existed in parallel SQL database management systems (DBMS) for many years, MR has been called a dramatically new computing model. To provide an On-line virtual network for data analytical system (DAS) it is an approach to answering multi-dimensional analytical (MDA) queries swiftly. It is a part of the broader category of business intelligence, that encompasses relational database such as report writing and data mining. Typical applications of this web based project include management reporting, business reporting for sales, marketing and business process management (BPM) also budgeting and forecasting, financial reporting and similar areas, with new applications coming up, such as agriculture. It basically reduces manual work and increases efficiency of the existing system. This makes things much easier for the clients as well as for the staff members.

A data warehouse is often used as the basis for a decision-support system. In virtual network for data analytical system (DAS) it is consolidate and addressed a Data Mining Tool. It is helpful in determining the future profit /loss by feeding their past and present information in regards of that area. Here we are able to work on this site by viewing it on any android platform.

KEYWORDS:-DAS(Data Analytical System), Virtual Network, Future Profit.

I. INTRODUCTION

A Data Analytical System focuses on the modeling and analysis of data for decision makers. Hence, Data Analytical System typically provide a simple and concise view around particular subject issues by excluding data that are not useful in the decision support process. A Data Analytical System is usually constructed by integrating multiple heterogeneous sources, such as relational databases and on-line transaction records. Data cleaning and data integration techniques are applied to ensure consistency in naming conventions, encoding structures, attribute measures, and so on.

Time-variant

Data are stored to provide information from a historical perspective (e.g., the past 5-10 years).Every key structure in the data warehouse contains, either implicitly or explicitly, an element of time.

Nonvolatile

A Data Analytical System is always a physically separate store of data transformed from the application data found in the operational environment. Due to this separation, a Data Analytical System does not require transaction processing, recovery, and concurrency control mechanisms. It usually requires only two operations in data accessing: initial loading of data and access of data.

An On-line virtual network for data analytical system (DAS) is an approach to answering multi-dimensional analytical (MDA) queries swiftly. Two techniques used are Data warehousing- used for collecting past and present data available in different formats and Data Mining- used for analyzing the future goal or future expected data from data warehouse present. In this project using this two techniques the analytical and graphical visualization of the required future expected output is drawn here the use of android mobile is done for accessing this virtual network i.e. DAS.

II. LITERATURE SURVEY

One of the major advantages of Virtual Network is that it is easy to define and reduce the networking hardware investment. Onthe basis of an integrated data mining process of selection ofdata samples, data conversion, network modeling, networksimulation, and evaluation of results, the prediction about thetrend Composite Indexprovides a higher accuracy. Points below explains overall review from references-

The handling and analysis of data require large-scale computing infrastructures such as clusters and grids. In this area, studies aim at improving the performance of data-intensive applications by optimizing data accesses [1].On the basis of an integrated data mining process of selection ofdata samples the trend of SSE Composite Indexprovides a higher accuracy. It indicates that the use of datamining in the forecast of non-linearsystem has advantages, so will it provide a new idea for theforecast of non-linear system [2].The Android apps access and modify the stored data. To provide users with more detailed information about it AQUA the Android Query Analyzer was developed that analyzes application binary code, performing a lightweight static analysis to determine possible values of string variables that are incorporated into queries [4].

The platform for Android is developed and maintained by Google. It enables us to know that the service also allows users to browse and download applications that were published by Google. An Android application is written in Java and translated into Dalvik executable (dex) format .The Dedexer is able to read the DEX format and turn into assembly like format. The API libraries and developer tools are necessary to build test and debug apps for Android. The work of classes and packages are developed in Android Development Kit. The connection is created with the database and other required operations to be performed on it are also discussed [5][6].

The OLAP functionality for exploring the data and data mining tools for more sophisticated analysis. The process of transforming the original stream into a set of related multidimensional cubes and demonstrate how the resulting data warehouse can be used for solving a variety of analytical tasks. Data Warehouses (DW) and Online Analytical Processing (OLAP) tools are used in Business Intelligence (BI) applications and beyond to support decision-making processes [7][2].

Thus from all references, it is concluded that, the mobile application could be used to access anyone's personal or business accounts anywhere and at any time in a secure way. It also improves the user experience by minimizing the users' inputs. Although the mobile device emulator used for testing the proposed application mimics all the hardware and software features of a physical mobile device, some possible problems might arise when a real mobile is used.

III. SYSTEM ARCHITECTURE

A. Administrator

The administrator holds the topmost position in an organization with certain authorities. Administrator has the power to view all the registered users and also detailed information about them. Administrator can update the contents and if required can also delete the records. The customer can also send their queries to the administrator if they face any problems. These queries are answered by administrator as per the best of his knowledge.
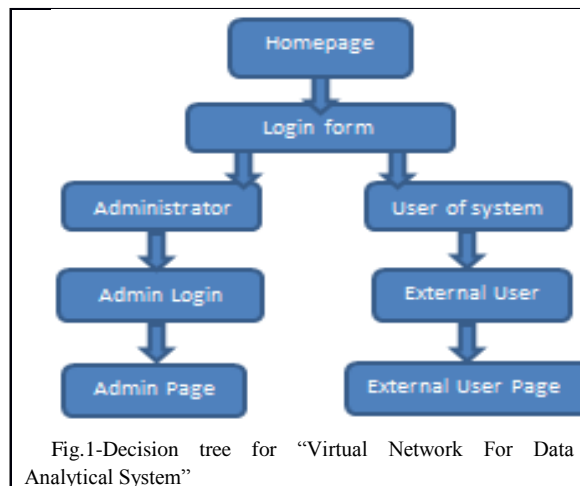
Manipulation of Client's Details

The administrator initially gets logged in him and then does the further proceedings. Admin can make registration of a user if he wants to. Also when a user registers him, his/her registration details will be sent to the admin. Here the admin views all the details of a user and performs necessary manipulations. Similarly he also keeps an eye over the records of all the users and is authorized to take any legal action on them if something goes wrong.

Manipulation of Service Provider's Details

Along with clients, the administrator has also got the rights to go through all the service providers that are providing these services to clients. If the admin finds that a particular service provider is not able to provide quality services or if they are unable to fulfill the client's requirements, he/she can take strict actions over it. It also keeps watch over all the functioning of service providers.

Management of Payment Gateway

A payment gateway facilitates the transfer of information between a payment portal (such as a website, mobile phone) and the Front End Processor or acquiring bank. When a customer orders a product from a payment gateway-enabled merchant, the payment gateway performs a variety of tasks to process the transaction. If a customer places an order, the merchant then forwards the transaction details to their payment gateway.

Fig.1-Decision tree for "Virtual Network For Data Analytical System"

B. Client

The client (end user) actually seeks for various services provided by service providers. Client is the one who spends or invests money for various purposes. Above all the client devotes valuable time and money in order to fulfill the requirements.

Seeking for Services

According to the requirements, the client has to go through various service providers in order to get the best service in return of his money. Whatever the transactions performed by the client with the service provider, it is

recorded in the payment gateway. In this way the client is ensured that his/her money has been transferred to the authorized hands and there will be no misuse of his money.

Undergo Banking Transactions
When the client registers him, he also has got the credit and debit limits. He has to choose a bank through which all the transactions are to be fulfilled. In accordance with the banking transactions, a client can deposit, withdraw or transfer money to other account. If needed, the client can delete the account too

C. Technical Advisor

After the authentication provided by the Administrator the proposal of the client is forwarded to the Technical Advisor. The data filled by the client is viewed by the Technical Advisor in the same format as it was. After going through this proposal he assigns that particular proposalto the Project Manager.

D. Project Manager

Going through the Technical Advisor the proposal is viewed by the Project Manager where he maintains the Query for processing further. Here he also allocates the data analyst and account manager.

IV. OBJECTIVES

Security: Any clients who have registered to this site is authenticate first. Both work providers and service providers are trustworthy.

User-friendly*:*This portal is very easy to use for everyone. Every user can view their respective records easily. Clients can easilycomplaint to the headwith respect to this service. Both admin and clients can view updated status of their work.

Interaction: This portal provides direct interaction between HOD, incharge and clients through mails. They can also interact with the administrator through mails and vice versa.

Cost Effective*:* As far as cost effectiveness is concerned, authenticated clients and staff can register them on this portal free of cost.

Rating: Rating is given to each client's complaint by the administrator, which helps in giving implementation to the complaints in the form of solutions.

Clients*:* Connecting to web server from virtual location using network

Web Server*:* Having Application Logic.

Data Base Server*:* Manages process data

V. FEASIBILITY STUDY

A feasibility study is conducted to select the best system that meets performance requirements. Three main considerations are involved in the feasibility analysis:

1. Operational Feasibility:

Operational Feasibility describes the intended system by describing behavior, usually by providing a model implementation of the system.Software provides reliable, flexible and expandable services.

2.Technical Feasibility

The proposed system has been tested on Windows XP Server, but works fine under most variants as well.The proposed equipment has the technical capacity to hold the data required to use the new system.It is accurate, reliable, easy to use and implement. Technical documentation is also provided for the proposed system. In the choice of hardware and of the development software good attention is paid.

3.Economic Feasibility:

Economic planning is area in which strong interaction between engineering and non-engineering skills is needed in the early planning of the products. Economic planning require both the ability to forecast future sales-which is influenced by one's knowledge of both the price at which the product can be sold and the number of items sold-and the ability to estimate development costs.

VI. CONCLUSION

This Software helps to analyze the past and present data to visualize the future profit/loss accordingly. The graphical interface helps user to understand the end result that is statistical in nature. For visualizing the end result in numerical form the client has to enter the rough overview of the available data that on submitting provides with the main overall profit. Thus this system is applicable at colleges for viewing progress report of the students also applicable in companies for analyzing the future profit/loss so that the current work can be carried accordingly in achieving the targeted goal.

In future work, we will explore using more compact representations of the set of possible string values (such as automata). To automatically determine whether an app maliciously uses private information of the user we will explore threat models characterizing apps that access private data and store it in other data repositories or transmit it to other hosts or apps.We can also explore the project by adding provision of suggestions by Data Analyst on calculated future data.

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