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Crime Mining From Crime Warehouse

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ABSTRACT
The manual method of keeping and maintaining records was found to be uncontrollable. So manual method is being progressively replaced. And finally database technology has evolved. This paper will mainly discuss the information about criminal record to be maintained and used for future use. The data will be withdrawn from data warehouse . A data warehouse is a place to store information from different sources. Data warehouse enhance data quality and reliability, saves time, provides historical intellect and delivers enhances business intelligence.
Keywords – Dreamweaver, Admin login, Crime login, Criminal login, SQL Server Management Studio 2008.

I.   INTRODUCTION

Police records are often maintained on papers. These papers include different types of information such as criminal name, crimes done,etc. So, it is difficult to extract any information from these records. So in our paper we are making all that work easier and manageable by computerizing it. In this approach, there is a database maintained on data warehouse. Data warehouse is nothing but arrangement of data in a systematic way so that it is easy to extract and manage a large amount of data. Data warehouse can be defined as middle storage area of data which is created by integrating data from one or more sources.

The use of the basic concepts of Visual Basic.NET to design the front end and back end of a Crime mining from crime warehouse.

The Welcome screen includes the three pages-
➢   Admin login page
➢   Crime login
➢   Criminal login

The complete website is designed in Dreamweaver. Dreamweaver is all in one visual development tool to create, manage and publish web sites. It is a proprietary web development tool by adobe systems. It can create very user friendly websites. Apart from the designing website the forms which are designed in asp.net are also hyper linked here itself. Asp.net is basically a server side web application framework designed for web development to produce dynamic WebPages.

The data base is created by using basic SQL commands. SQL is the special purpose programming language planned for   managing data held in a relational database management system. In this website, we are creating a search engine basically for crime data. The tedious work of extracting the data from the files is now done by a search engine. We are using the decision tree algorithm for data mining. As the name tells us that it is nothing but a tree used for taking decisions. It is a branching type of algorithm which uses branches to illustrate all possible outcomes.
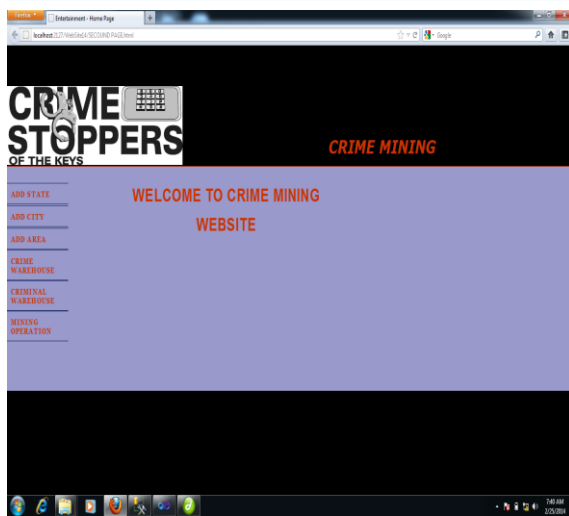
II.   LITERATURE SURVEY

In the latest years, a lot of research has been done in field of data warehouse. Ruilian Hou studied the development and conception of data warehouse and database and relationship between them. Fushan Wang studied different to provide effective policy making support for manager and provide better service and use of SQL server to research, design and analyze an application. Lavanya ,A in Research Issues on data warehouse Maintenance describes new ways of designing and developing data warehouse architecture, algorithms and tools for bringing together some selected data from multiple data bases into one data base. Jianxiong Yang and Junzo Watada in International Journal of Innovative Computing describes with the application of data transforms and fuzzy clustering to extract useful data.

III.   CRYSTAL REPORT

In our website, we have used crytal report which is used to generate reports in a systematic way. Crystal report is a business intelligence application, currently marketed to small businesses. It is used to

design and generate reports from a wide range of data sources. Crystal Reports allows users to graphically design data connection and report layout .In the Database Expert, users can select and link tables from a wide variety of data sources, including Microsoft Excel spreadsheets, Oracle databases, Microsoft SQL Server database, Microsoft Access databases, Business Objects Enterprise business views, and local file system information.

IV. DECISION TREE ALGORITHM

BuildTree(Node t,Training database D,Split Selection MethodS)
1) Apply S to D to find splitting criterion
2) if (t is not a leaf node)
3) Create children nodes of t
4) Partition D into children partitions
5) Recurse on each partition
6) endif

V. SQL Server Management Studio

SQL Server Management Studio (ssms) is a software application. It is used for configuring, managing, and administering all components within Microsoft SQL Server. A central feature of SQL Server Management Studio is the Object Explorer, which allows the user to browse, select, and act upon any of the objects within the server.

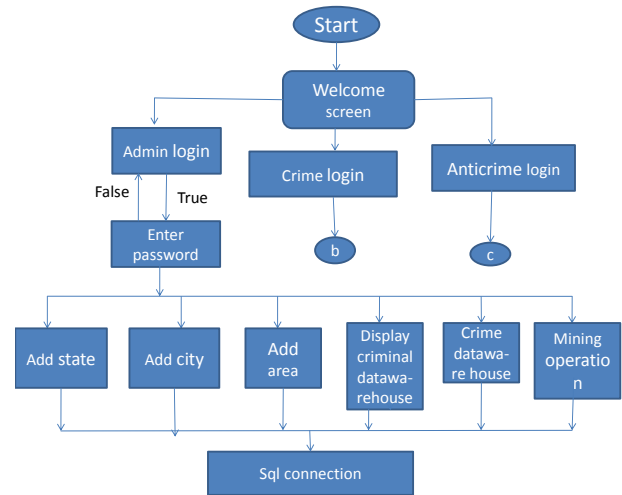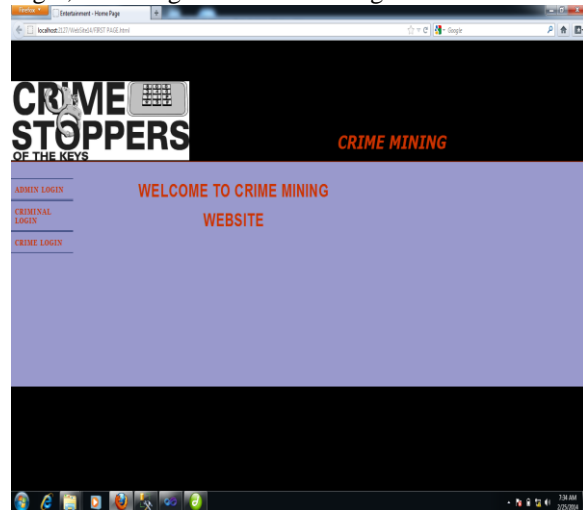## VI. IMPLEMENTATION
6.1 FLOWCHART

Fig. 1 Admin login

6.1.1. WELCOME SCREEN

This is the front page of our website "Crime Stopper". This form is designed is asp.net. This is very first page which the user will view while using the search engine. This page consist of links to the three pages which are three main module admin login, crime login and criminal login.

6.1.2 Admin login:

This page is for access by admin of the site. There is a user name and a password which is allotted to the admin. This can be changed if needed. The admin here is allowed to change, update, insert the data by using the basic SQL queries using SQL server 2008. This module is heart of whole system. The admin updates the database whenever there is a crime

committed. The fields updated are state, city, area and state code. If state already exists then a message that 'state code already exist' is displayed.
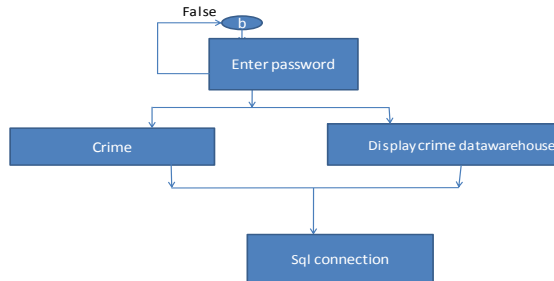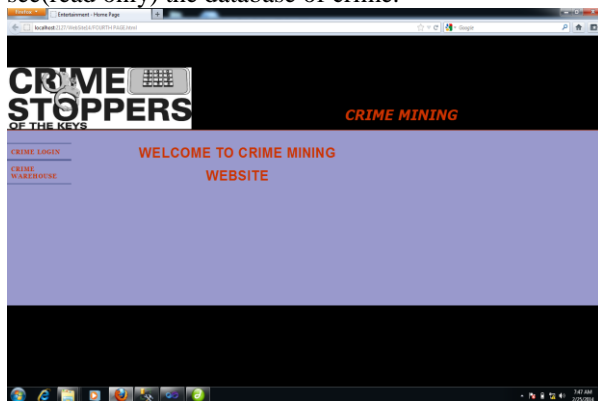
6.1.3 Crime login:

Fig.2 Crime login

This module can access the database created by the admin. The data mining is performed on this module. The decision tree algorithm is applied over it. It will handle the database of crime. This will be able to see(read only) the database of crime.
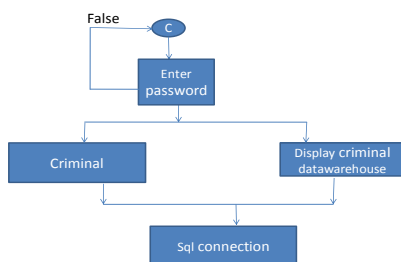

6.1.4 Criminal login:

Fig.3 Criminal login

This will handle the database of criminals. This will only read the data warehouse of criminal. This is updated or written by admin only.

VII.   DATA MINING

Data mining helps find patterns in existing data sets. It can be used as a tool for helping to explain the data and make predictions about it. Decision trees are one approach for such predictions. A decision tree is a classifier in the form of a tree where each node in the tree is either a leaf node or a decision node. Decision trees have the advantage of being easy to interpret which makes them practical and useful.

VIII.   CONCLUSION

We looked at the use of data mining for identifying crime patterns. Our contribution here was to formulate crime pattern detection as learning task. Implementation of Decision Tree algorithm. Minimizing the paper work and tedious data management.

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