Design Software Algorithm k-means for Datamining of Epidemical Diseases: Case Study of Omdurman Teaching Hospital

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Abstract:
This research aims to work the system works with the patient data collections division building common characteristics or similar algorithms using one of the exploration data exploration devices which the (cluster), a method based on retail (k-means). In order to help the community in the fight against diseases and hospitals to learn more areas susceptible to disease epidemic by following the necessary measures, through Implementation and evaluation of the heuristic prevention program focuses on conduct periodic tests of the most vulnerable, or for individuals who have already exposure for the detection of the disease. Provide health education for patients newly explorers to make them aware of the nature of the disease so as to reach to see more Accurate and realistic to solve problems and increase the predictive ability to achieve goals.

Keywords: DataMining, k means, Clustering, patients, Algorithm.

I. INTRODUCTION

Considered data mining Science is responsible for tactics and methods of production of information and knowledge bases through a large amount of data that is being excavated and linked by methods to come up with scientific facts or new knowledge Data mining, the extraction of hidden predictive information from large databases, is a powerful new technology with great potential to help hospitals focus on the most important information in their data warehouses. Data mining tools predict future trends and behaviors, allowing hospitals to make proactive, knowledge-driven decisions. The automated, prospective analyses offered by data mining move beyond the analyses of past events provided by retrospective tools typical of decision support systems. Data mining tools can answer business questions that have traditionally been too time consuming to resolve. They scour databases for hidden patterns, finding predictive information that experts may miss because it lies outside their expectations. The research goals, assessing the validity of the results of the clustering algorithms build future predictions and explore the behavior and trends, which allows to take the right decisions and take timely and detach patient data into clusters of similar and finding the right number of bunches Portal for explanations of observed phenomena and prove hypotheses and get relations group hidden or unexpected. The importance of this research to explore the knowledge and useful new solutions in the future and the liquidation of the large amount of data to reflect slightly for the entire data and the ability to explore and focus on the most important information in databases and improve the diagnosis and outcome of health care.

II. METHODOLOGY

Been using an algorithm of algorithms data mining which mining tool cluster which is based algorithm on retail (k-means) for programming and design a program that works on for Datamining of Epidemical diseases using the Java language and create dynamic reports and connect them with a database mysql through phpmyadmin program, which is a graphical interface for orders mysql database, where works through the web browser where it was set up a local server on the device via the xampp program for the preparation of the database was used Jasper report reports in Java applications through JasperViewer and the NetBeans.

SCREENS DESIGNED BY THE NET BEANS:
III. RESULTS AND DISCUSSION

1. Provide a healthy system for the community of epidemic diseases, God willing.

2. Keep a database of all patients leads to speed data retrieval.

3. The study was applied to patients Omdurman Teaching Hospital, in some states of the Sudan cost a Khartoum and Jazeera, Kassala, Darfur and the northern Blue Nile in the years 2014, 2015 and 2016 and through the process of exploration has been reached and there are relationships between the data we reached them into useful information:

1. The people between 15-40 years are more prone to disease epidemiology.

2. Children less vulnerable to disease epidemic hepatitis, especially.

3. We find that females are more vulnerable to disease epidemic more than males.

4. Abound disease, hepatitis, tuberculosis and cholera in western Sudan in Darfur.

5. Abound disease Altaifued in eastern Sudan in Kassala.

6. Abound of TB disease in southern Sudan in Blue Nile.
IV. CONCLUSION:

We praise to Allah, praise befitting the dignity, ability, which helped me to bring out this image of this research which we hope will be permeated by the interest and achieve everything we wanted. Perhaps at the end of this study, we present this modest effort that we put in the hands of the reader a reasonable amount of information about the concept of data mining tools used and their significance. Acknowledgments We would like to thank all those who encouraged or assisted them in this work.

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VI. REFERENCES:


