SHRI VAISHANAV VIDHYAPEETH VISHWAVIDYALAYA

SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY

SOFTWARE REQUIREMENT SPECIFICATION (SRS)

ADVANCE HEALTH-TECH SYSTEM

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Project Guide-

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ADVANCE HEALTH-TECH SYSTEM

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Acknowledgement

I would like to express our gratitude towards our faculty Ms. Saloni Gulati and our university Shri Vaishnav Vidyapeeth Vishwavidyalaya, for providing us with the opportunity of creating a dataset Analytic report using the online IBM Cognos Analytic tool.

This project enhanced our technical and practical approach towards the in depth skills and technicalities related to Big Datasets and its analysis measures. The knowledge of practical aspects of IBM Cognos tool were also strengthen by being engaged in this project.

Also, I would like to thank the whole IBM team for guiding us and helping us to finalise this project within the limited time frame.

Disclaimer

This Software Requirements Specification document is a guideline. The document details all the high level requirements. The document should be used as a guideline by the students to design the Solution Architecture for the project. The document also describes the broad scope of the project and high level DB requirements are captured in the DB specification. But while developing the solution if the developer has a valid point to add more details being within the scope specified then it can be accommodated after consultation.

Scope

This document describes the scope of the requirements for the descriptive and predictive analysis for an Advance health-tech system, majoring in health. The document details all the high level requirements with intent to validate the requirements of the aforethought system. This document should be used by the Architect and the developers to design the Solution Architecture for the project. In addition to this, the document also describes the broad scope of the project. The scope of the project involves the integration of a subset of all the components of current IT environment.

The advance health tech system entails all the specific detail needed by government and other Hospitals . The system works as a platform for the government, hospitals and their engineers to analyse the need of hospitals , medicine and doctor in particular area. It also helps to monitor the growth rate of disease .

Database Parameters

The data is analysed on the basis of any numerical or other measurable factor forming one of a set that defines a system or sets the conditions of its operation. The data here, is analysed from many different data modules in order to get information .

Data modules:

The data modules contains details about government hospitals , disease death rates, state wise disease rate , number of different doctors in a state ,death cases in particular state, death cases for a particular disease and many more all these data sets are governmental.

Analogical Details

The diagram depicted below shows the basic working of advance health-tech system which entails the 3 basic platform prerequisite for its basic architecture.

The Health-tech system using IBM Cognos tool to analyzing the data and getting the necessary information form bulk data which connects and bounds the various independent platforms.

These are:

- **Web application**-This is for government or hospitals in order to get the details of number of beds in a particular hospitals , number of death causes due to particular disease and state wise information and future prediction .

- **Mobile application-** This is for a user or a patient who gets all the details regarding a hospitals. User can find the best hospital for a particular disease in a particular area.

- **Trends-** Whole application has additional functionalities like blood bank system, ambulance tracking system, health tips, disease precautions and many more advance function.

Prediction Methods

Online tool, Cognos by IBM integrates reporting, modeling, analysis, exploration, dashboards, stories, and event management so user can understand your organization's data, and make effective business decisions.

Use of dashboard and visualisation tools is done in order to create data reports which helps the user to monitor events or activities at a glance by providing key insights and analysis about data on one or more pages or screens.

The data is differentiated on the basis of two aspects namely, categories and the apps belonging to that category.

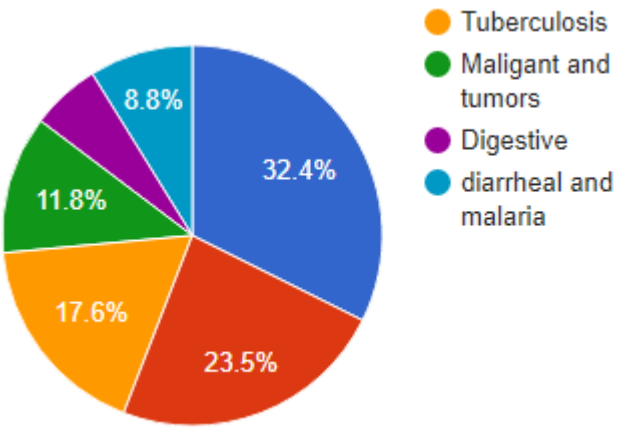
Many features are used compare and contrast between different datasets and the prompts used here are the categories..

Visualisation tools:

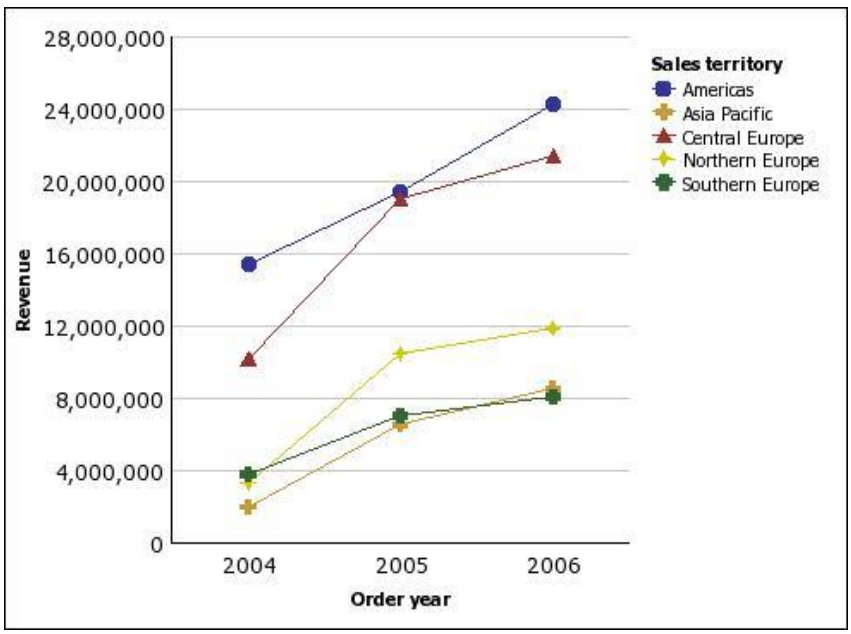
Visualisation is any technique for creating images, diagrams, or animations to communicate a message. Visualization through visual imagery has been an effective way to communicate both abstract and concrete ideas since the dawn of humanity .The IBM Cognos tools provides it users with plenty inbuilt visualisation options to choose from. The tool must be so chosen that it fulfils the conditions of ‘categories’ and ‘values’ provided by IBM Cognos.

Here the charts used for analysis of data are:

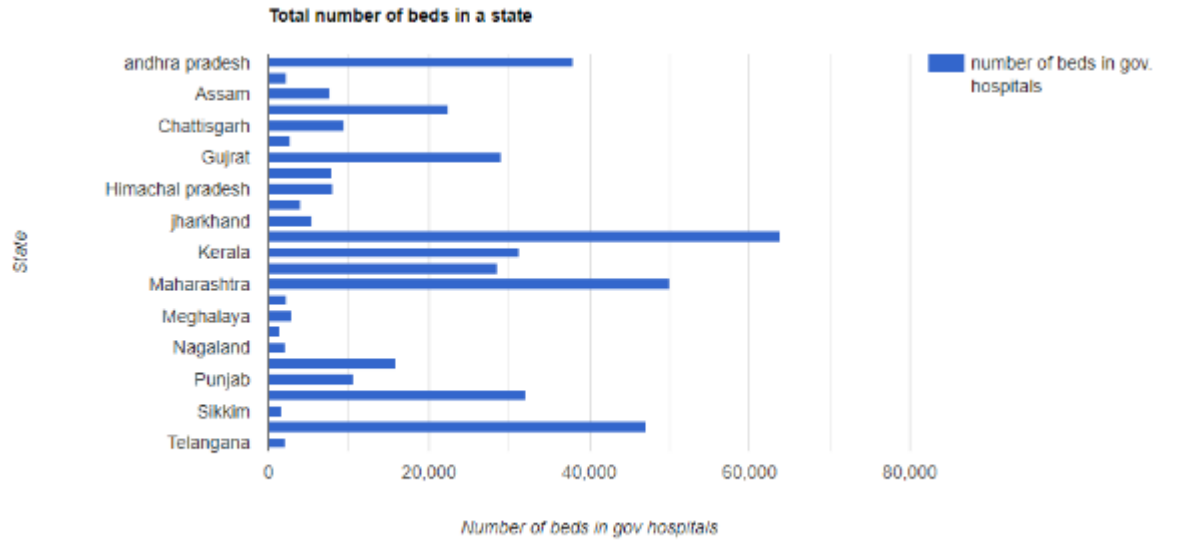
Pie charts:A pie chart is a circular statistical graphic, which is divided into slices to illustrate numerical proportion. In a pie chart, the arc length of each slice, is proportional to the quantity it represents.



Line charts:A line chart or line graph is a type of chart which displaysinformation as a series of data points called 'markers connected by straight line segments. It is a basic type of chart common in many fields.



Bar graphs: A bar graph (also known as a bar chart or bar diagram)is a visual tool that uses bars to compare data among categories. A bar graph may run horizontally or vertically. The important thing to know



is that the longer the bar greater its value.

Outcome Achieved

A detailed examination of the elements or structure of dataset(s) is concluded using a dashboard which gives the system insights of the different categorical information for a specific sector. The investigation of disease category is concluded according to its death rates. This gives the aforementioned details about the dangerous disease and suffering areas.

Dangerous disease is determined on the basis of the total number of cases in State. The Advance Healthtech System provides the facility of keeping a check on the number of beds of their hospitals with increasing rate of a particular disease.

The total number of death cases can also be calculated in a particular state for a particular disease, This helps the government and Health Organisations to select their area for medicinal development. Eventually the Research and Development sector of health organization gains from the Advance Healthtech System.

The information about number of doctors in particular specialization is easy to gather using this system as it entails the description of numberof doctors in a state.

The whole application is based on datasets displaying the information in a web application in a form ofvisualizations.We can extract informationfor number of disease in area and can drive death zone and dangerous zone based on number of death cases in that area.

The application has feature like ambulance management,blood bank, health tips, prevention from diseases and many more as we are creating a solutionfor a particular problem.The tools helps in analysing the datasets from where we can find the problems.

AdvanceHealthtech system is a need of future where solutions can be given on the basis of prediction of upcoming disease rates.