Visualizing And Predicting Heart Disease With An Interactive Dashboard

Proposed Solution:

* Heart disease is the main cause of death in the developed world. Therefore, efforts must be made to reduce the likelihood of suffering a heart attack or stroke.
* This database has 14 fields in it.

**The data Dictionary is as follows:**

|  |  |
| --- | --- |
| **S.No** | **Field Name** |
| 1 | Age |
| 2 | Sex |
| 3 | Chest pain type |
| 4 | BP |
| 5 | Cholesterol |
| 6 | FBS over 120 |
| 7 | EKG results |
| 8 | Max HR |
| 9 | Exercise angina |
| 10 | ST depression |
| 11 | Slope of ST |
| 12 | Number of vessels fluro |
| 13 | Thallium |
| 14 | Heart Disease |

* Utilize this dataset to identify the patients who are most likely to develop a cardiac condition soon using the provided features.

Novelty:

* Over the past few decades, heart illnesses have become the leading cause of death worldwide in both industrialized and developing nations. The mortality rate can be decreased through early identification of heart disorders and ongoing clinical monitoring by professionals. Since it takes more intelligence, time, and knowledge, it is not always possible to accurately monitor patients every day, and a doctor cannot consult with a patient for a whole 24 hours. In this project, we have established and researched models for predicting heart illness using the patient's numerous heart features, and we plan to produce an interactive dashboard that will allow us to analyze heart disorders depending on a person's age, sex, and blood pressure available in the dataset.

Feasibility of the idea:

* understand core ideas and have experience with IBM Cognos Analytics In order to offer a viable answer, gain a thorough understanding of charting various visualizations. able to develop useful dashboards and visualizations. We take into account a dataset with 14 variables and use it to conduct investigations and create visualizations in order to analyze the patient's heart conditions.

Business Models:



Scalability of the solution:

* We are going to conduct investigations and visualizations, including investigations into the relationship between blood pressure and the type and gender of chest pain, the maximum heart rate during chest pain, the blood pressure relationship with age, and the relationship between age and gender and cholesterol.
* Average age for various types of chest pain, average exercise-induced angina, age-related variations in blood pressure, Average age for various types of chest pain in people with existing heart problems, and Average effort of existing heart disease on exercise angina, These are all representations of the maximum heart rate in patients with active angina who already have a heart condition.