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| **GROUP NUMBER:** | **G-10** |
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| **GROUP MEMBERS:** | **1.APARNA JHA**  **2.DIKSHA TANK**  **3. MONIKA SHARMA** |
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| **PROJECT TITLE:** | **PROPHECY AND ANALYSIS OF CARDIOVASCULAR DISEASES IN INDIA** |
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| **PROJECT DESCRIPTION:**  *(Type a brief description of the project. Also explain the reason for your selection)* | **INTRODUCTION:**  Heart Disease Analysis is a project done by our group with the help of PYTHON programming language along with it is one of the most efficient libraries, i.e., Pandas and Matplotlib . This project appeals to be very constructive for the interest of people as it provides them to contact the best medical facilities such as best doctors, hospitals, pharmacies, etc present in the progressing cities of India and, the project provides appropriate guidance to patients suffering from any cardiovascular disease.  We would also like to mention about the minimalism and user-friendliness of the software created. The general term used to cover malfunctions of the heart is heart disease, or sometimes Cardiac harms. Our project provides the analytical data about various predictions related to heart diseases and their rate across the country, we have also provided a discussion of preventative steps you can take to decrease your chances of having to deal with heart disease, or to minimize the negative effects of existing cardiac diseases.  **OBJECTIVE:**  The main objective of this venture is to manage the details of best doctor faculties available in the entire city, medications, and number of patient’s city wise. One value-basedobjective of the project is to make sure that our users are aware about the increasing rate of heart diseases in the country so that appropriate measures could be taken to avoid such diseases. Concisely the main aim is to serve the humankind and spread awareness about the hazardous but curable diseases.  **REASON:**  1. To help in the deep analysis of the result of major medical examinations of cardiovascular zones in our body and the prediction of any kind of heart disease.  2. To count the risk factor of suffering from a disease caused by smoking, alcohol intake and lack or excess of varying physical pursuits.  3. To help a patient to get a proper treatment in an emergency because the data provided is from reliable government websites.  4. To help an organization, media house, etc to get a non-biased, actual data from trustworthy sources; a database to release a study and make people aware about this crucial sector. |
| **DATA SOURCE:**  *(Specify the source of the dataset, whether created or taken from any reliable source. Mention the source [if applicable])* | The **sources** that helped us acing the project’s aims are:  1**. kaggle.com**  2. **ahajournals.org**  3. **who.int/data**  4. **catalog.data.gov**  5. **cdc.gov**  6.**assets.publishing.service.gov.uk**  7.**timesofindia.indiatimes.com**  8.**nhp.gov.in**  9.**medsurgeindia.com** |
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| **PROPOSED CSV FILES ALONG WITH COLUMN NAMES:**  *(List thenames of all CSV files and their fields)* | **The under given are csv’s along with their column names-**  **1. globe\_analysis.csv**  **COLUMNS:**1) COUNTRY, 2) POPULATION, 3) HEALTHCARE\_RANK,  4) TOTAL\_RATE, 5) FEMALE\_RATE, 6) MALE\_RATE,  7) MORTALITY\_RATE, 8) UNDER\_18, 9) B/W18\_50, 10) ABOVE\_50  Country-healthcare rank: Bar graph  Country-mortality rate: scatter chart  **2. india\_analysis.csv**  **COLUMNS:** 1) CITY, 2) RANKING, 3) TOTAL\_PATIENTS,  4) MALE, 5) FEMALE, 6) U-18, 7) B/W18-50, 8) ABOVE\_50  9) MORTALITY\_RATE  City-Ranking: line graph  **3. city\_analysis.csv**  **COLUMNS:** 1) CITY, 2) LEADINGGOV. \_HOSPT, 3) LEADINGPVT. \_HOSPT,4) BEST\_DISPENSARY, 5) BEST\_PHARMACY, 6) BEST\_CARDIOLOGIST, 7) CONT.\_CARDIOLOGIST,8) EMAIL\_CARDIOLOGIST, 9) BEST\_SURGEON, 10) CONT.\_SURGEON, 11) EMAIL\_SURGEON , 12) RANKING |
| **PROPOSED MENU LAYOUT:**  *(Specify the menu design. It may have the following:*   1. *Data frame Operations*    1. *Add / Remove / Update / Search of Rows / Columns*    2. *Sorting*    3. *Report Generations* 2. *Data-Analysis*    1. *Finding Max / Min / Sum / etc.* 3. *Data Visualizations. Specify graphs, which will be generated.* | **MAIN MENU**  **1.ADMIN**  **1.1 HEART DISEASE ANALYSIS ACROSS THE GLOBE**  1.1.1 Read records  1.1.2 Add records  1.1.3. Delete record by  1.1.3.1. COUNTRY  1.1.4 Search data by  1.1.4.1. COUNTRY  1.1.4.2. HEALTHCARE\_RANK  1.1.4.3. MORTALITY\_RATE  1.1.5. Data Visualization by  1.1.5.1. BAR GRAPH  A) COUNTRY-HEALTHCARE\_RANK  1.1.5.2. SCATTER CHART  A) COUNTRY-MORTALITY\_RATE  **1.2 HEART DISEASE ANALYSIS OF INDIA**  1.2.1 Read record  1.2.2 Add record  1.2.3 Delete record by  1.2.3.1. CITY  1.2.4 Modify record by  1.2.4.1. CITY  1.2.4.2. RANKING  1.2.4.3. TOTAL\_PATIENTS  1.2.4.4. MALE  1.2.4.5. FEMALE  1.2.4.6. U-18  1.2.4.7. B/W18-50  1.2.4.8. ABOVE\_50  1.2.4.9. MORTALITY\_ RATE  1.2.5 Search record by  1.2.5.1. CITY  1.2.5.3. RANKING  1.2.5.4. MORTALITY \_RATE  1.2.6 Data visualization by  1.2.6.1. LINE CHART  A) CITY-RANKING    **1.3 HEART DISEASE LEADS ANALYSIS OF PROGRESSING CITIES OF INDIA**  1.3.1 Read record  1.3.2 Add record  1.3.3 Delete record by  1.3.3.1 CITY  1.3.4 Modify record by  1.3.4.1 CITY  1.3.4.2 LEADINGGOV. \_HOSPT  1.3.4.3 LEADINGPRIV. \_HOSPT  1.3.4.4 BEST\_DISPENSARY  1.3.4.5 BEST\_PHARMACY  1.3.4.6 BEST\_CARDIOLOGIST  1.3.4.7 CONT.\_CARDIOLOGIST  1.3.4.8 EMAIL\_CARDIOLOGIST  1.3.4.9 BEST\_SURGEON  1.3.4.10 CONT.\_SURGEON  1.3.4.11 EMAIL\_SURGEON  1.3.5 Search data by  1.3.5.1 CITY  1.3.5.2 LEADINGGOV. \_HOSPT  1.3.5.3 LEADINGPRIV. \_HOSPT  1.3.5.4 BEST\_DISPENSARY  1.3.5.5 BEST\_PHARMACY  1.3.5.6 BEST\_CARDIOLOGIST  1.3.5.7 CONT.\_CARDIOLOGIST  1.3.5.8 EMAIL\_CARDIOLOGIST  1.3.5.9 BEST\_SURGEON  1.3.5.10 CONT.\_SURGEON  1.3.5.11 EMAIL\_SURGEON  **2.USER**  **2.1 HEART DISEASE ANALYSIS ACROSS GLOBE**  2.1.1. Read records for the topic  2.1.2. Search records for the topic  2.1.3. Stats of:  A) COUNTRY-HEALTHCARE\_RANK  B) COUNTRY-MORTALITY\_RATE  **2.2 HEART DISEASE ANALYSIS OF INDIA**  2.2.1. Read records of the topic  2.2.2. Search records of the topic  2.2.3. Stats of:  A) CITY-RANK  **2.3 HEART DISEASE LEADS ANALYSIS OF PROGRESSING CITIES OF INDIA**  2.3.1. Read records of the topic  2.3.2. Search records of the topic  **2.4 PERTAIN DETAILS OF A SUITABLE CARDIOLOGIST AND SURGEON**  **Note: the 4th option in user menu is a user input which would pertain for details entered by the user for retrieval of prediction of heart disease and contact details of a suitable cardiologist or surgeon.** |