Work Breakdown Report

Analysis of Medical Appointment Compliance, Overdose Mortality, and Drug-Related Deaths

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This project conducts a comprehensive analysis of three critical health datasets: didn't make it to the medical appointment the number of deaths that resulted from drug overdose and the interventions related to drugs, especially opioid abuse increased.

Activities performed by me :

1. Selection of Dataset : Medical Appointment No Shows

   I have selected a structured dataset which contains factors that influence patient no-shows for medical appointments, which has become a significant concern in healthcare management.

   The reason behind choosing this dataset is that it takes into consideration all the demographic and environmental variables including age, gender, common health issues (hypertension, diabetes, alcoholism, handicap), scholarship status, SMS reminders, and clinic location that indicate whether patients may miss scheduled appointments without notice. Also, this dataset is somehow related or complement other health datasets used in the project.

2. Environment set-up:

   Downloaded and installed Anaconda Navigator to use Jupyter Notebook to edit and run code and describe data analysis. Also, installed python libraries for processing. After selecting the dataset stored it in MongoDb database using python.

3. Pre-processing of data :

   Used an ETL process to read the data from MongoDB. Started exploring the dataset by going through its data types, NaNs or duplicated rows, and any columns that may need to be dropped or parsed.

4. Data cleaning and transformation: perform operations on dataset based on the previous findings to make analysis more accurate and clearer.

5. Exploratory Data Analysis: Went through the data after carefully analysing found the project objectives, learning outcomes, and questions for EDA on it in order to extract useful insights from it.

6. Visualisation of the data: Used processed data to represent information graphically. After critically analysing the data came onto conclusion.

7. stored the processed output data in PostgreSQL database.

8. Gathered similar academic works and reference online materials.

9. Uploaded all the code and dataset on shared team repository on Github.

x22247734/HealthCareAnalyst: Analysis of HealthCare System (github.com)