# RUBIX'23\_27\_codeZillas



#### PROBLEM STATEMENT 02:

BEING A HEALTHCARE PROVIDER CAN BE EXHAUSTING AND HECTIC, HENCE A TOOL THAT SPECIFICALLY CATERS TO THE NEEDS OF DIFFERENT HEALTHCARE PROVIDERS COULD BE OF GREAT BENEFIT. CREATE A TOOL THAT HELPS HEALTHCARE PROVIDERS WITH DIAGNOSIS, DISEASE DETECTION, AND HAS USER FRIENDLY FEATURES FOR HEALTHCARE PROFESSIONALS. ONE CAN INTRODUCE FEATURES/ APPLICATIONS TO EASE PROCESSES OF HEALTHCARE ADMINISTRATION OR OPERATIONS. ANY INNOVATIVE FEATURE WHICH WILL ENHANCE THE HEALTHCARE INDUSTRY. SO USE AI /ML TOOLS TO CREATE AN INNOVATIVE SOLUTION FOR THIS SECTOR.

- IT SHOULD HELP WITH DISEASE DETECTION.
- IT SHOULD OPTIMIZE PRESCRIPTION AND CARRY OUT DIAGNOSTIC GENERATION THROUGH SPEECH OR HANDWRITTEN SCRIPT.
- SHOULD SUGGEST DOCTORS ON THE BASIS OF SURROUNDING FACILITIES AVAILABLE AND SERVICE REQUIRED.
- AVAILABLE LIC POLICY RECOMMENDATIONS SYSTEM.
- IT SHOULD HAVE A FIELD FAQS WITH A CHATBOT.



#### **APPROACH:**

- 1. Implementing various types of ML models and selection of the one with highest accuracy.
- 2. Deploying the results with the help of a WebApp.
- 3. A ChatBot that can prescribe homely remedies and recommend medical facilities.

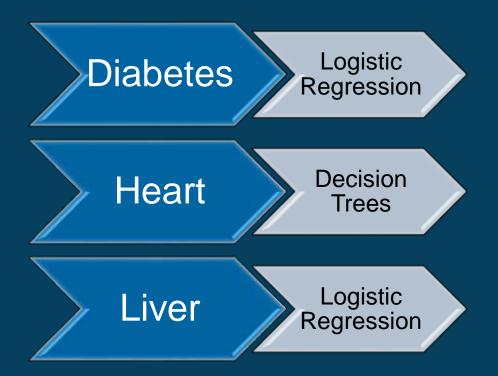


## MACHINE LEARNING MODELS USED:

- DECISION TREES.
- NAÏVE BAYES .
- SUPPORT VECTOR MACHINE(SVM).
- LOGISTIC REGRESSION.
- RANDOM FOREST CLASSIFICATION.
- KERNEL SVM.
- K- NEAREST NEIGHOURS.



#### **DIESEASE DETECTION PREDICTION:**



These are the most efficient models for respective disease.



# **CHATBOT** using kommunicate:

→ A HealthCare Tool to prescribe remedies for some common bodily problems like fever, wounds, and cuts, headaches ,ETC.

→ This DocBot helps user with some homely remedies and suggests doctors, and helps book appointments according to their problems.



## WEBAPP using streamlit:

→Built a WebApp using streamlit which is an app framework in python.

>streamlit is compatible with python libraries (numpy, scikit-learn, matplotlib, pandas, etc.).



#### **CONCLUSION:**

- We have used and learned different technologies, namely some python libraries, streamlit framework, and making a chatbot.
- Thus, we were able to create a effective solution.

# Thank You.