***MEDICAL CHATBOT***

# INTRODUCTION:-

* We have done a project on machine learning.
* We have used NLP [Natural language processing] which is a branch of Artificial Intelligence.
* It is used for computers to understand the language (or) communicating.
* Medical chatbot is used to predict the features of the disease .
* If we give a disease it gives a description.

# METHODS USED:-

* The methods used in Machine Learning are:

1. Supervised Learning: Learns from labelled data.
2. Reinforcement Learning: It is an outcome or reward based.

# Algorithms used:-

* The algorithms used in this project are:

1. Decision tree: Parent node takes a decision and spilt to child nodes.
2. Navie Baye’s: P(A/B)=[P(A).P(B/A)]/P(B)

P(A) is a class and P(B) is a class whose relation leads to probability.

* We have almost completed the project and whenever we give a symptom or a disease it is taking that symptom and giving us a reply that “ yes I have understood the problem and I will give u the result by analysing so please type done after entering a symptom.”
* So, we have to still work on it to display the result as “ yes, I am going to give you the description for the symptoms you have given.”

*TOPICS HAVE LEARNED FROM THIS*

* *GIT: It is a Host of GITHUB.*
* *GITHUB: Store the repository,projects.*
* *DATA COLLECTION & DATA PRE-PROCESSING:*

1. *COLLECT DATA*
2. *DATA TYPE*
3. *DATA QUALITY*
4. *DATA CLEANING*
5. *DATA TRANSFORMATION.*

* *LINEAR REGRESSION: Linear relation between x & y variables.*
* *LOGISTIC REGRESSION: Based on classification.*
* *DECISION TREES: Parent node take a desicion and split to child node.*
* *RANDOM FOREST: One or more ensemble learning🡪 take a model🡪Random forest.*
* *SVM(SUPPORT VECTOR MACHINE): Based on best hyperplane which seperates objects.*
* *NAVIE BAYE’S:* P(A/B)=[P(A).P(B/A)]/P(B)
* *KNN(K- NEAREST NEIGHBOUR):*

*🡪 K=value,N=nearest,N= neighbour*

*🡪 Which predict nearest values.*