INTRODUCTION

This chapter discusses the origin of the problem, the problem description, basic definitions, and object detection applications.

1.1 Origin Of the Problem

Nowadays the health care department plays a critical role in curing the diseases of the patients. So, it is the responsibility of the healthcare domain to ensure the maximum safety and in addition to its benefits for the person. Since the world is running behind time and money many of the people are not much focused on their health and 40% of people forget the diseases which may lead them to dangerous disorders later. Nowadays scientific medical doctors are adopting many clinical technologies and methods for identifying and diagnosing the disease. The success treatment is continuously gained via a way of proper and correct prognosis.

But in case if he (or) she can’t go to the hospital or any other health care clinics, then just by entering the symptoms and all other useful data of the person, they can

get to understand the disorder from which he or she is suffering from. The health organizations can gain moore help from this research via just asking the symptoms from the patient and by entering in the device either on webosite or application. Later the device can inform the aoccurate

diseases. This mission is based on the symptoms which completely uses the machine learning and python programming language. The GUI was made by using the Python T-kinter. By using the previous data set which is available in hospitals the machine can be trained to predict the disease.

According to analysis, seventy percent of people in India who suffer fro m common sickness and twenty five percent of people are facing the loss of life because of lack of early detection of the disease and this is the reason to develop this mission. People can use this at their handy place and function an exa mination in their workplace or at home by using the GUI. GUI is designed in this sort of way so that everyone can effortlessly perform by using it and can check their health

1.2 Basic Definitions and Background

1.2.1 Random Forest:

Random forest, it is a supervised M.L Method which is mostly used in Regression problems and classification issues. It chooses the random samples by using a sampling technique and constructs a decision tree for each sample and then considers the majority votes among all the decision trees. One of the most essential capabilities of the RF Algorithm is its set of rules as it can handle all the facts which contain the continuous values as well as the numerical values and categorical values as part of classification. It performs better effects for classification models

Operating of Random Forest algorithm:

o Step-1: First, begin with selecting random samples from a given dataset.

o Step-2: Subsequent, this set of rules will construct a choice tree for every selected random pattern. Then it'll get the predicted result from each selection tree.

o Step-3: On this step, vote casting may be finished for every anticipated result.

Step-4: At closing, pick the maximum voted prediction and gives the final prediction result.

1.2.2 Naïve Bayes:

Naïve bayes is the word that is used for classifying

the data based on the probabilities of the given classes which are mainly derived from the Bayes Theorem. It is used for the data which are not having the class labels, These are the algorithms which are used to determine the results without having the predefined class labels in the training dataset and using the probabilities