

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

The human disease has symptoms that share the same with another disease. This makes the disease prediction cannot be done using a simple query. There is a disease that has a specific disease, some of that share several of their symptoms, and some had all of their symptoms happened in another disease. Dataset is so random that needs some methods to solve.

Based on the problem above, an algorithm is needed to calculate the prediction. The Naive Bayes Classifier is used to calculate the score and it can be used to make a prediction. This algorithm to use the past data or the available dataset of disease and symptoms to make a future prediction or disease prediction based on the selected symptoms.

This research is to make a system that can predict human disease based on user or patient symptoms. User needs to enter the symptoms or what their feeling about their body then the system will give back a maximum 3 highest naive Bayes score. Then user based on doctor suggestion too can make a choice based on that 3 diseases that happen to their body.

### 1.2 Scope

Scope of this project are:

1. How Naive Bayes Algorithm can give disease prediction based on patients symptoms?
2. What is the algorithm's result if the disease has the same symptoms?
3. Does a Naive Bayes Algorithm suitable for detecting disease?

4. What kind of data should we give to Naive Bayes Algorithm so it could work properly?

### 1.3 Objective

The focus of this project is to make a system that can predict human disease based on selected symptoms. Naive Bayes Algorithm is used to make this system because it can classify several same symptoms and give a score so the system can use it to suggest disease.

