

CHAPTER 1

INTRODUCTION

1.1 Background

The form of aircraft passenger satisfaction is an assessment given by airplane passengers to airlines based on the facilities provided to its passengers. There are various kinds of airline facilities for which an assessment can be carried out by passengers to the airline. With this program, it aims to determine whether or not passengers are satisfied based on the facilities provided by the airline in order to provide positive benefits for passengers and airlines as well. The positive advantages that aircraft passengers get are the comfort when traveling on an airplane by choosing a good airline, as well as the benefits that airlines get is that they can be better in the future based on the assessment given by passengers. As well as prospective passengers who want to use the airline for travel can find out the best airline to use.

For this reason, the use of this decision tree algorithm is very suitable and precise. This program is designed so that airlines can input passenger assessment data. This action is executed in order to know the results of the intended use of the algorithm from this program. This program will be implemented on MYSQL.

This research was conducted using Data Mining-based C4.5 Algorithm. The C4.5 algorithm can also be called a decision tree algorithm. The program is implemented in the form of a mysql to observe the decision tree and find out which facility affect passengers the most.

1.2 Problem Formulation

The formulation of the problem in this study are:

1. Can the C4.5 decision tree algorithm that is implemented determine the results of the airline passenger satisfaction data?
2. Which attributes can be used from the dataset to be implemented?
3. How much time it takes to calculate different amount of data?

1.3 Scope

In this research, there will be some limitations, such as:

This study nearly 26000 dataset from the airline passenger satisfaction dataset since 2020 which was obtained from Kaggle. There are 14 attributes from 15 dataset attributes that can be analyzed using the C4.5 algorithm. The final result is described in the form of a C4.5 algorithm calculation in the program implementation.

1.4 Objective

The purpose of this study is to implement the C4.5 Algorithm using MYSQL programming language to determine the level of airline passenger satisfaction data based on the calculation of the implementation of the C4.5 Decision Tree Algorithm.

