CHAPTER 3
RESEARCH METHODOLOGY

There are some steps that are taken to conduct this project. Those steps are described below:

3.1 Collect References

The first step in this project is to find references from various journals, books, and research related to the problems in this project. The main problem in this project is about the recommendation system, how the Naive Bayes algorithm and J48 work, and whether J48 can be used to make a recommendation system. After that download the manga data in the kaggle dataset then look for ways to process the data obtained with the J48 and Naive Bayes algorithms.

3.2 Preprocessing Data

After getting data from kaggle, some data in kaggle is empty or data whose contents do not match. Therefore the first step is to first delete the data that is empty in some parts. then returns the actual value of the data. Example Manga title that title is dragon ball, the value of title is dragon and the value of chapter is ball. To make sure that there is no error testing it, so before we use the data we have to determine the type of data. If the attribute is chapter then the data type is INT , if the attribute is Title / Author then the value is Char or String. If one of the attributes has a different value than it should be, then the data must be changed first so that it can be used as testing data.

3.3 Analysis

This section is about analyzing websites or apps to read manga for free when we read manga there. The aim in this step is to determine the attribute of manga that can be used as a common standard for recommendation systems based on data that was obtained from kaggle. Because this is a recommendation system, the data that must be processed must be review data from users who have read the manga. Therefore, the data used for processing with this algorithm are Genre, Score, Popularity, Members, Favorites, and Score Voted By.

3.4 Design The Program

The program is designed based on the data which was collected. The program design consists of a search button to search for any manga that is downloaded on the kaggle data set, recommendation results from the naive bayes algorithm and J48, and website builder. If you click on the manga title, you will be directed to the Myanimelist.com website. Website builders contain some information about the website builder.