

# **CHAPTER I**

## **INTRODUCTION**

### **1.1 Background**

In the Learning Data Mining include FP-Growth Algorithm and Hash Based Algorithm. This Algorithm constitute subgroup Association Rule Algorithm, where the function is for determine the data association or Itemset which often appear concurrently in the data collection. This Algorithm can be implementation in a variety of area, include: agglomeration of sales goods, agglomeration of borrowing books, etc. The batting average can be doing by counting execute accord with the Algorithm. The FP-Growth Algorithm contains 2 iteration or step, where in second iteration must applying for FP-Tree to get the result. And in Hash Based Algorithm contains 3 Iteration, where in second Iteration we must applying for Hash Table in determine the Itemset 2 Item. The batting average will go on for long time if data input is a lot and we finish by getting manual. To facilitate the batting average, so maked by an application what can finish the process of FP-Growth Algorithm and Hash Based Algorithm. But now, doesn't yet make it in Android Application.

So now the writer wants to make an android application what can finish the FP-Growth Algorithm and Hash Based Algorithm process. Into the bargain be provided that application doesn't only help to fnsih the FP-Growth Algorithm and Hash Based Algorithm process and yet can help the user studies ways of working FP-Growth Algorithm and Hash Based Algorithm. Because in the application will contains the explanation about ways of working FP-Growth Algorithm and Hash Based Algorithm. With understand the FP-Growth Algorithm and Hash Based Algorithm process, the users can

conclude to know the most effective Algorithm and compabitle for finsih the problem. So this Application can help the users study Learning Data Mining. Specially items what discussed about FP-Growth Algorithm and Hash Based Algorithm. Because the purpose of this application is to help the users study FP-Growth Algorithm and Hash Based Algorithm and finish the problem what needs FP-Growth Algorithm and Hash Based Algorithm process.

### **1.2 Scope**

In this project, The writer uses Java Language to making Simulation FP-Growth Algorithm and Hash Based Algorithm application based on Android. This project include arragement an association rule problem with use the FP-Growth Algorithm and Hash Based Algorithm. This application can actually facilitate completing the FP-Growth Algorithm and Hash Based Algorithm process and solve a problem what need the FP-Growth Algorithm and Hash Based Algorithm.

### **1.3 Objective**

Purpose from the making of this project as follow :

- To facilitate the users completing the association rule problem in case of effectivity, time, counting and description data.
- By this application, Users can also study about FP-Growth Algorithm and Hash Based Algorithm.