

CHAPTER 1

INTRODUCTION

1.1 Background

The learning process at all age levels will sometimes lead to boredom if the teacher does not have a unique idea in the learning process. In the structure of data programming, because the data structure is the basis of data allocation in making the program so that data can be neatly arranged and optimize memory usage. Therefore, students are required to understand the learning materials of data structure.

The teaching and learning process is now more varied, the most popular is the interactive learning by utilizing the media as the main media. Media that is widely used one of them is a smartphone, especially on the android platform. This development is considered reasonable because Android is one of the most popular mobile-based operating system in southeast asia and even the world. According detik.com, Indonesia in 2015 android users reached 41 million users or 94% of its market share. Interactive learning media on android has the main advantages of a good user interface, can interact directly with the user and easy to access because it runs on the android platform.

This project uses hashtable data structure that have graphical visual output that can explain how the hashtable process has run. Users can perform the process of insert, searching, delete with dynamic 2D graphical display.

1.2 Scope

In order to work on a hashtable simulation project on the android platform can be directed and the problem is not too wide it needs a problem limitation. This application is based on mobile application that displays

visualization of data structure hashtable in the form of 2D graphics. This visualization has a process of insert, searching and delete running dynamically in accordance with user input.

1.3 Objective

Android is a mobile operating system based on the most popular today. To facilitate the teaching and learning process more interesting media needed. The objective of this project is developed an application to facilitate learning hash table of data structure. Users of this application can simulate the process of hash table on smartphones with android operating system.

