CHAPTER 1

INTRODUCTION

1.1 Background of Study

Learning is an interaction process between students and teachers and study material in teaching learning process (UUSPN No.20, 2003). In other word, learning is a process to help the students to study well. The media and the method of learning process in transferring the material will be an important factor to get the best result.

The methods of delivery to students there are different kinds, one of them the lecture method. The lecture method is explanation and narrative verbally by teacher in the class, while the role of student is listen carefully, and noted of which presented by the teacher (Surahmad, 2003). The lecture method has disadvantage that the interaction to be centered on teachers so teachers cannot know with certainty how far students understand about the material (Muhammad, 2011). Seen here that the lecture method is learning more dominated by teacher as the "the transferor" science, and students were more passive as the "recipient" of science.

The material of the solar system actually is complex, such as discusses about all of planets in the solar system and satellite. It also discusses about meteors, comets, asteroids, and space objects other (Prihantono, 2013). This material is usually presented using textbook. The material of solar system presented in form of images and text that dominated with theory explanation.

To clarify the understanding of the solar system material, need information technology support that can be applied to this material. It was difficult we find in the past before the rapidly growing information technology. The sophistication technology lies in the ability of technology to combine real and virtual condition which the results are displayed in real-time.

Because of that, the writer tries to make an application as an interactive media to help elementary school students to study about solar system based on android mobile. Researcher chose android because Android is the one desired society platform besides blackberry platform and IOS that most popular of Smartphone. Almost all of ages used android platform, from young until old ages (antaranews.com, 2011). This application consists of solar system materials like: planet, space objects, earth, and moon movement that applied in interesting graphic to support learning process, so it will raise the student's desire in understanding the material. To support this application the writer also make interactive questions, to know how far the student's capability in understanding the material by using this application.

1.2 The Problem Statement

From the background study we can make a problem statement that "How to make an application based on android mobile as an interesting and interactive learning media to help in studying solar system?"

1.3 Limitation of the Problem

The limitation of problem is used to avoid the study of being too large in scope, so the purposes of the research will be reached. The limitations of the research are:

1. The application made is a learning media that aimed for the students of elementary school.

2. The content of the applications is solar system material for the 6th grade students of elementary school.

3. The application is presented with interesting and interactive design and information so the students are easy to understand the material.

4. The process of making applications using tools such as mobile phones with a 3,5 - 5 inches screen size as a reference on the application screen resolution.

5. The contents of the application for elementary school students are:

    a. Planets in the solar system

    b. Space objects

    c. Earth and moon movement

    d. Lunar and solar eclipse

    e. The evaluation (question) about solar system

    f. Searching

1.4 Objectives of Study

The purpose of the study to make an application based on android mobile as an interesting and interactive learning media to help in studying solar system.

1.5 Significant of Study

The advantages of this research are:

1. For the user

This application can be used as interactive and interesting learning media to help the students in studying about solar system includes planets, space objects, earth and moon movement, so the student can master the material that has been transferred. And there is an examination test to measure students' capability about solar system.

2. For the researcher

From this research, the researcher will have new experience which does not exist when we was in college. Getting new learning method by using this application.

1.6 The Systematic of Writing Process

The systematic of writing process in this research

CHAPTER I   INTRODUCTION

Introduction describes about background of study, problem statement, limitation of the problem, objectives of study, significant of study, and the systematic of writing process.

CHAPTER II   THEORITICAL REVIEW

It is about the theory that is used in the research, design, and making system

CHAPTER III   RESEARCH METHODOLOGY

It describes about the object of the research, problem analysis, the system design in generally and specifically.

CHAPTER IV   THE RESULT AND DISCUSSION

It describes about the result of the study, from the analysis, design, testing result and the implementation.

CHAPTER V   CLOSING

It describes about the conclusion of the research and suggestion as a consideration for the next researcher.