

## CHAPTER I

### INTRODUCTION

#### 1.1. Background

Multimedia is widely used as an effective information delivery medium because it is done by combining the bermacam-macam of multimedia elements, among which are text, image, sound, video, and animation so that the information Delivered became clearer. Multimedia applications are growing very rapidly, especially in the field of smartphones. Human life in the era of globalization as it now does not escape technological developments, technology is able to provide convenience to the community to obtain information more quickly, precisely, and accurately. In the field of sportsmen, technology can be used for interesting learning media so as to provide information in the field of sports using multimedia means. The multimedia advantage of delivering all the information is not limited to drawing and writing but it can present its own appeal such as animation, sound and video.

The choice of people to exercise is increasingly diverse due to the availability of easy to find Gym. There is a wide range of sports activities that can be done in the Gym itself, including lifting weights, running, cycling, gymnastics, yoga and many more. The purpose of the sport activities is for health, hobby and body shaping to be ideal, in conducting the desired type of exercise, such as lifting weights or commonly called ngeGym it takes a basic technique and enrichment to understand the tools and effects resulting from the use of such tools,

In accelerating the process of body shaping, the role of a personal trainer is needed to determine a suitable exercise program for fitness center members. The Personal trainer also helps fitness center members understand how to use the tools that are located in the Gym. It also provides information on nutrition intake that the body needs to support the exercise program. The role of personal trainer here is quite important, because it can help the members of the gym in maximizing the exercise done. But most people do not use the service of this personal trainer for various reasons, such as the price is expensive, feel uncomfortable and so without a personal trainer risk of increasing injury is not surprised. Members of the gym who are still beginners tend to experience injury because they do not know well how to train the correct muscles.

With the advancement of technology the role of a personal trainer can be replaced with an application that can help a beginner understand the use of GYM tools. So as to lower the risk level of injury for a beginner, without having to Spend a lot of time and expenses to attend a formal training program from the direction of a personal trainer.

Based on the explanation above, the authors will design and create a multimedia-based fitness exercise application. Authors will take the title of "Designing and creating an Android-based GYM Tutorial application"

## 1.2. Statement of the problem

Based on the background and identification of the problem can be made the following problems:

1. How to design and create a GYM tutorial application that can help beginners understand the use of Gym tools?
2. How to test a GYM tutorial application for beginners that have been created?

## 1.3. Scope Limitation

Based on the problems above, to focus the discussion in this case the authors restrict the scope of the discussion, namely:

1. This application is run with the help of Android smartphones.
2. This application must be installed on a smartphone with Android system 4.4 and above.
3. This application is made by using Adobe Flash CS6 application.
4. In-app Video will use Liveshoot method.
5. The Software used is Adobe XD CS6 (64 Bit), Adobe Audition CC 2017, Adobe Premiere Pro CC 2017, Adobe Flash CS6.
6. This app uses English.

## 1.4. Objective of the research

The objectives that want to be achieved from the preparation of this research are:

1. Design and build an Android-based Gym tutorial app
2. Testing of the created application

3. Provide information to the reader a process of designing and creating applications using Adobe Flash

#### **1.4.1. For Researchers**

1. Apply the theoretical sciences studied at Amikom in practice.
2. Training skills in drafting research.
3. Train and add work in the Multimedia field.

#### **1.4.2. For Amikom**

1. As an evaluation material for students.
2. Become a useful scientific work later for Amikom and students who will work on scientific work by taking the same theme.

#### **1.4.3. For Readers**

This research can provide a reference in the creation of design work Tutorial Gym Beginner Tutorials.

### **1.5. Research Methods**

In the preparation of this thesis, the authors do the data retrieval and collection with qualitative method according to the problem that will be discussed. Some of the following methods of research will be used to support the composition activities of this thesis, including:

#### **1.5.1. Data Collection**

Zainal A. Hasibuan (2007). The data taken and used in the study must meet good data requirements, i.e. (1) The data must be accurate; (2) The data must be relevant; and (3) the data must be uptodate according to the topic.

Qualitative methods consist of three ways of collecting data: (1) in-depth interviews, interviews with open question formats; (2) direct observation; and (3) The utilization of written documents, including written sources of open interviews on questionnaires, person's diary, and program records. [1]

### **1. Interview Methods**

"The interview, which is questions and answers researchers with speakers, both the status of speakers as informant or respondent. Interviews are conversations with specific intent. The conversation was done by two parties, the interviewer who asked the question and interviewee who gave the answer to that question "(Zainal A. Hasibuan, 2007:157). [1]

### **2. Study Library**

The library study method is done by searching for information through books, magazines, newspapers, articles, journals and so forth with appropriate themes and data search through the Internet with a valid source as a guideline for conducting research.

### **3. Observation Methods**

"Observation is a study done to understand a phenomenon based on the idea or knowledge that has been known before "(Zainal A. Hasibuan, 2007:157). This method is done by observing directly on the related object, so that the data is obtained accurately. [1]

### **1.5.2. Analysis Methods**

Methods used by the authors based on the results of interviews and observations in this study are using methods of SWOT analysis and needs analysis.

### **1.5.3. Production Methods**

It is a step that must be taken before entering the production process/manufacturing. The function of this stage is as a foundation/guideline in the creation of a fitness tutorial application. That is, preparation before application creation, such as creating interface design concepts, creating storyboards for video retrieval. Which is then focused on designing the application as much as possible into the application User friendly.

### **1.5.4. Evaluation Methods**

The test method used is the acceptance testing method or can be called alpha Test and beta test, this process uses the questionnaire measured with the scale of the Likert as a systematic assessment and is the last stage of the fitness application to Beginners.

### **1.5.5. Implementation Methods**

## **1.6. Writing System**

The thesis writing system is essentially to facilitate the understanding of the thesis content in large lines. The writing is divided into 5 chapters, as follows:

## **CHAPTER I INTRODUCTION**

In this chapter will be outlined and explained about the background of the problem, the problem formulation, the limitation of problems, the intent and purpose of the research, the benefits of research, research methods, and writing systematics.

## **CHAPTER II THEORETICAL RIVIEW**

In this chapter will be outlined about the theories used by the authors as the basis of research and description of the software to be used by the authors in compiling the Gym Tutorial application for Beginners.

## **CHAPTER III ANALYSIS AND DESIGN**

In this chapter contains a description of the system to be built encompassing ideas and concepts, scenarios and scripts, liveshoot use of fitness tools, storyboard creation and implementation design.

## **CHAPTER IV IMPLEMENTATION AND ASSEMBLY**

In this chapter will describe the steps of creating a fitness app for beginners from creating an inteface concept; Storyboard, liveshoot, coding, animation, and rendering are then proceeded to the post-production stage until the final stage.

## **CHAPTER V CONCLUSION AND RECOMENDATION**

In this chapter will be explained about the conclusion, advice from the research and advantages and disadvantages of the tutorial fitness application for Beginners.