CHAPTER I
INTRODUCTION

1.1 Background of the Research

Teaching English to foreign students involves an appropriate learning model. There are four skills that must be achieved by students such as speaking, writing, listening, and writing. Moreover, there are also other elements such as vocabulary, structure, spelling, symbols, and structure or grammar that students need to mastery. Among those skills and elements, grammar is considered the most difficult subject to be achieved due to its complexity and the wide difference with the student's native language.

Grammar sets the rule in the structure of language. Each language use a different structure and rule. The differences could be just slightly or very different. Those sets of rules make the language easier to understand because of its coherence and cohesiveness. Azar mentioned that grammar is significant in language. Moreover, she stated that without grammar we would only use a single word or sound, picture, and gesture to convey a message (Azar, 2007). It's clear how important to learn grammar for the foreign learner.

Arguably, grammar is the capital of language. Learning grammar is significant and necessary to master the language itself. For instance, students use grammar to form the writing or speaking material. Moreover, understanding grammar also makes students easier to comprehend written or oral text. Thus, mastering grammar could increase student ability in English in general.

Mastering grammar could be a big issue since differences between students' native language grammar and English grammar. Effendi (2017) found that the difficulties encountered by the students were linguistic and non-linguistic ones. They comprise:

1. The structure differences between the English and Indonesian languages makes the students get difficulty to understand the structure of English and to write in English.

2. Students who write sentences not directly in English but in Indonesian first, encountered difficulties in using the English language.

3. Some students (20%) stated they didn't choose to be in English department. This issue lower their motivation.

4. Majority of students have low participation in class (59%).

Nowadays, almost everyone, including students, has a smartphone, especially Android. 6.378 billion people are own a smartphone in 2021. In Indonesia, There were 338.2 million mobile connections in January 2020. The reason behind this number is that a smartphone has various features and apps. It is utilized for entertainment and communication. Students or learners who have a smartphone can use it for learning.

Learning could take place nearly anywhere. It's common today for people to learn using their smartphones. Since the smartphone is the most used thing in most people's lives, people could learn by using their smartphone anywhere. Using a smartphone to learn is not a new thing. However, there is still a place for improvement. For instance, Learners who use a smartphone did not always have

good signals or cheap internet data. It means they need fully offline learning media on their smartphone. Undoubtedly, online apps are way more effective than offline apps with their full support and update. But, the third country like Indonesia hasn't yet had a stable internet across the country.

Researcher found out that at SMAN 15 Batam, learning process is implemented on a half-offline-half-online system. At the first-week meeting, half of the students took an offline class. Then, these offline students brought the second week's meeting material to be studied at home in an online class at the second-week meeting. Half of the students who did not take offline lessons at the first-week meeting took an offline class at the second-week meeting. Then students who take an offline class at the second week's meeting, take the third week's material to be studied at home at the third week's meeting. And so on and so forth. When students take online lessons, the teacher is only in charge of supervising by doing attendance and evaluation. The problem is, students who took online was not actually take an online class. They were required to do their learning by themselves with the material that has been obtained in the previous week. Moreover, for Students who took offline class, they only allowed to come to school for 5 hours. This causes an hour lesson to be reduced to 30 minutes. This means that Students who took online class or offline class, both have their problem.

According to the Khoirudin, English teacher of SMAN 15 Batam, students show lack of motivation and interest in learning such as grammar material. The teacher said students need a special treatment in learning difficult material such as grammar. The teacher also stated that the students showed an interest in learning

using their mobile device and it will be a good idea to create a learning media that integrated with technology. Moreover, According to Students' need questionnaire that conducted in 37 student of X grade at SMAN 15 Batam, even though 70,3% students chose simple past tense and present perfect tense material is not difficult, 37,8% students are not able to construct their own sentence and didn't know the function of the tenses. Moreover, 45,9% students are able to construct the sentence but didn't know the function of the tenses. The data from questionnaire found that 51,4% students' source of learning is taught by someone such as teacher or friends. Relating to the system that SMAN 15 Batam applied, the dependencies of students to their teachers will expectedly not give a good result in learning due to a little time for students to learn with their teachers and friends at school.

According to the problems stated above, students need a supportive learning media that can accommodate their learning process in class and also their self-learning process at home. According to students' need questionnaire, 78,4% students were agree about using technology integrated learning media in simple past tense and present perfect tense material. Thus, researcher will develop GrammarGram, a learning media that can accommodate students learning process and integrated it with technology. The main purpose of this app is to learn about tenses in grammar. Musahrain found that the development of android-based mobile learning as the learning media can serve as one of the solutions to deal with the learning problems, both in terms of time limitations, media & broadcasting, and learning methods. The use of android-based mobile learning that uses offline system operation as a media give a positive effect on the students' learning results

in learning English as a foreign language. (Musahrain, 2016). Moreover, Zatulifa et al. found that by using learning media based on Android have a potential to student to learn independently. By using pre-test and post-test, researcher found that using learning media based on Android increase the effectiveness of student learning process and also increase their learning motivation and creativity. (Zatulifa et al., 2018).

GrammarGram is an interactive multimedia product. Following the curriculum and basic competencies, there are two tenses that covered in this app, simple past tenses and present perfect tense. This material is found in second semester in the tenth grade. The product includes materials, exercises to test learners' ability and understanding, and "Sentence Builder" menu to help students understanding how to build a sentence. The media included in this product is text, audio, and graphic. First, text is common media to convey the messages or ideas. By reading the text, learners can comprehend the materials or answering the exercise in this app. Second, other media that include in this app is audio. Some people are prefer learning by listening. In this media, students can improve their listening skill. Last, graphic is visual media that also included in the product. By using graphic as a media, learner can visualize the situation or description in learning media easily. Combining these three media as a multimedia is hoped to have bigger advantage in learning process. Moreover, this media can be used during the class or outside the class as self-learning media. Hopefully, this media can be a solution for little class hour time in an offline class and self-learning media in an online class.

1.2 Problem Formulation

The research question formulated as:

1. How is Android-based learning media "GrammarGram" developed?

2. How is the validity of Android-based learning media "GrammarGram"?

1.3 Purpose of the Research

The purpose of this Research are:

1. To develop Android-based learning media "GrammarGram" to learn grammar by using AIR SDK.

2. To find out the validity of Android-based learning media "GrammarGram".

1.4 Specification of Product

1.4.1 Media Produced

Media produced is interactive multimedia that can be used as learning media in Android operation system smartphone. In this research, Android-Based media for learning grammar has specific as follows:

1. The product is formed in Application Package File (APK) and can be operated on Android devices.

2. The product is multimedia interactive. It means that each time a learner gives an input by clicking/touching in the apps, the apps will show a response.

3. The product can be used without an internet connection.

4. The product included material and exercises.

5. In the "Home" menu, there are Four sub-menus; Material, Exercise, Sentence Builder, and Basic Competence.

6. In the "Material" menu, there are two sub-menus; Simple past tense and present perfect tense. In the Material menu, students can read material about simple past tense and present perfect tense.

7. In the "Exercise" menu, there are two sub-menus; Exercise mode and Story mode. In Exercise mode, students will answer question in multiple answer form. In Story mode, students will take into graphic dialogue story and have several grammar related question to advance the story.

8. Sentence Builder menu is used to input object, verb, and adverb and then the media will automatically convert them into sentences.

9. In the Basic Competence menu, students can read about the basic competence this media is based on.

1.4.2 Material Presented

The material delivered is simple past tense and Present Perfect tense. This material is based on 10th grade English subject, curriculum 2013. The Basic Competency is;

3.6. Menerapkan fungsi sosial, struktur teks, dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan/tindakan/ kegiatan/kejadian yang dilakukan/terjadi di waktu lampau yang merujuk waktu terjadinya dan

kesudahannya, sesuai dengan konteks penggunaannya. (Perhatikan unsur

kebahasaan simple past tense vs present perfect tense).

1.4.3 Type of Learning Media

Type of learning media in this research is based Android. Learning media can be used via smartphone with Android operating system. This media can be used for students to study independently.

1.5 Significance of the Research

This research is tried to develop Android-based multimedia for learning grammar by using AIR SDK. The finding of this research is expected to give a contribution as follows:

1.5.1 Theoretical Significance

The theoretical significance of this research is hoped to give more knowledge in developing of Android-based learning media "GrammarGram" to learn grammar material by using AIR SDK.

1.5.2 Practical Significance

This research is beneficial for teachers, students, and other researchers. They are as follow:

a. Teacher

The teacher can use the result of this research as an alternative in teaching grammar.

b. Student

Students can use the result of this research to assist their learning process.

c. Other Researchers

For other researchers, this research can be used as an additional insight in doing further research in the same field.

1.6 Assumption and Limitation

The assumption from the developing of Android-based learning media "GrammarGram" to learn grammar material by using AIR SDK is it can make students easily and effectively in learning English grammar. This research also expected to be advantageous for the teacher to use the result of this research in their class as an alternative to teaching grammar to students. The development of interactive multimedia is limited in the Android platform. The material is limited in simple past tense and present perfect tense for 10th grade English subject, curriculum 2013. In this research, researcher used 3 steps of level 1 Mantap Model. According to Sugiyono in Sumarni (2019), level 1 of RnD is research that produce a draft or prototype, but do not proceed with creating the product or testing it. Thus, the research procedure in this research was Preliminary research, Development stage, and Validation Trial stage.

1.7 Definition of Key Term

The title of this research is "Developing Android-Based Media for learning Grammar by Using AIR SDK". Here are the terms of this research:

1. GrammarGram

GrammarGram is Android-based interactive learning media. Interactive multimedia is a method of communication in which the user input determine the output of the media. Interactive media involve user participation during the use of the media. As multimedia, the media include text, visual and audio. GrammarGram is used as learning media in learning grammar material, simple past tense and present perfect tense.

2. Grammar

Grammar is a set of patterns about how words of language are arranged in order to convey meaning. Learning grammar is the process of acquiring understanding and knowledge about the proper use of English grammar. Tenses that presented as material in the media is simple past tense and present perfect tense.

3. AIR SDK

AIR SDK (also known as Adobe Integrated Runtime) is a runtime system currently developed by Harman International that coder used for building an application. In this research, AIR SDK is used to deploy the product in Android platform. It was programmed with Adobe Animate and Action Script 3.0 to create a standalone executable application on a supported platform.