CHAPTER I
INTRODUCTION

1.1. Background of the Study

Technology is very important in our daily lives. Most people in the world use technology to help them with their daily activities. Humans use technology as a means of communication and finding information quickly. The world of education needs information and communication technology (ICT) as it contributes greatly to the teaching and learning process in classrooms. ICT is a technology or system that is able to reduce various limitations of space and time in order to move, retrieve, present, analyze, store, and convey data information into important information. It creates learning opportunities through facilitating learners in sharing, accessing, extending, and transforming their ideas and information in different modes of communication styles and format (Majumdar, 2015).

Education means learning. Learning is the process of student interaction with teachers and learning resources. The learning process is carried out based on the curriculum in each education unit from elementary to university level. Teachers have the task of choosing learning materials according to the learning needs in the classroom. Learning requires teaching materials. Teaching materials owned by teachers can of course vary depending on the creativity of the teacher. There are many types of teaching materials such as textbooks, magazines, pictures, charts, and some technical aids such as YouTube, videos, Instagram, etc.

Teaching materials are very important so that the teaching and learning process runs well and exciting. There are still many Indonesian teachers who have not been able to utilize technology as teaching materials. Teachers need interactive application for a varied and not boring teaching-learning process. The development of technology and communication has presented android as learning application.

The use of interactive application is needed so that students can access listening material, practice and quiz more easily and interactively. Android-based learning application helps students to enjoy listening learning more. Not only that,

the use of learning application based on android helps lecturers control their students in the listening learning process.

Researchers see the need for android-based application development. Android provides opportunities for students to learn in an interesting and fun way. Android application becomes an activity to develop students' skills. Learning English was fun. Android application which includes videos, recordings, and practice questions can help teachers to model the use of the target language to students. By using android application, listening and speaking materials can also be delivered in a more interesting and fun way by using videos and images.

The English Language Education Study Program in Widya Mandala Surabaya Catholic University has a laboratory which helps students in enhancing their listening skills called Multimedia Language Laboratory. It is a lab that assists students in practicing their speaking and listening skills through exercises and worksheets.

Explanation of android application helps the laboratory in its learning process, where it becomes easier, more interesting and of course can be accessed anywhere through applications on Android. This application is also very helpful for lecturers in providing learning materials, assignments and reviews of what has been learned in class.

Applications was made with an application format consisting of providing material, practice and quizzes that was included in the score, so students can learn first through the materials and practice in the application. Usually in the current listening learning that exists in the laboratory is the use of google forms which are still difficult to use and require internet access to do so. This application is made in this form and format to really help students develop their listening skills easily and flexibly.

The application can be opened anytime and anywhere. The application is also complete with material and practice so that when students do quizzes they can get maximum results. The material taken is also very relevant to students and has

proven its quality. The material already exists from the cabin so that it is only packaged in a more flexible android form. The book by Longman in 2001 became the book of choice used as the basis for the material. Although actually android is not allowed to be accessed in the lab but the background of the laboratory lacks material in digital form so that the android application is made.

Mobile learning, or m-learning application have several advantages, including giving learners a much easier access to a variety of learning materials and facilitating learners and teachers' communication. Moreover, it can also save more resources and time as teachers nor students need to print any materials and search for the information they are looking for (Todoranova & Penchev, 2019).

1.2. Statement of the Problem

The listening materials delivered by the laboratory is still found to be using some application that are not interesting and risk of cheating such as G-form and Handbook which have not been used optimally. In other words, it uses a way that is less interactive and interesting. Factors that make it less optimal certainly come from teachers, materials, and learning application. Lecturers still do listening teaching in the handbook. Some other lecturers listen to audio tapes, videos, and then students answer questions. Lecturers only focus on handbooks without trying to apply interesting learning activities and application. Another problem is that lecturers need to be trained to operate the application regularly.

The general real conditions faced at this time are monotonous learning and still using books that are less interesting for students. They were all be very interested when the material, exercises and quizzes are in android that they can do anywhere. From this general thing, researchers began to enter the real conditions of the laboratory which still used work books and also G-forms which were not attractive in appearance and they had to do it in the lab. Through this application, it is hoped that it can change the conditions and problems of the real conditions above.

The lack of digitalization in learning makes learning monotonous and uninteresting. The lack of android application also makes the learning less flexible.

Therefore, there is a need for designing android learning application that is in accordance with the competency standards of English Language Education Study Program students.

Seeing that the laboratory does not yet have a form of practice that uses digitization, this application complements what the laboratory lacks, namely the provision of materials, practices and quizzes in the android application. In practices students still use books and also G-Form in the process of working on quizzes because of that students are facilitated to access material from Longman, practice as preparation for doing quizzes using android.

Provision of android facilities as learning, practice and listening questions using android so that students can easily access anywhere and anytime so that students are not expected to be lazy to learn. Listening material already exists in the lab but the shortcoming is that it is still in the form of a thick book taken from Longman 2001 so that listening is made in the form of android the goal is to make it easier for students to learn at any time and do not need to go to the laboratory to work.
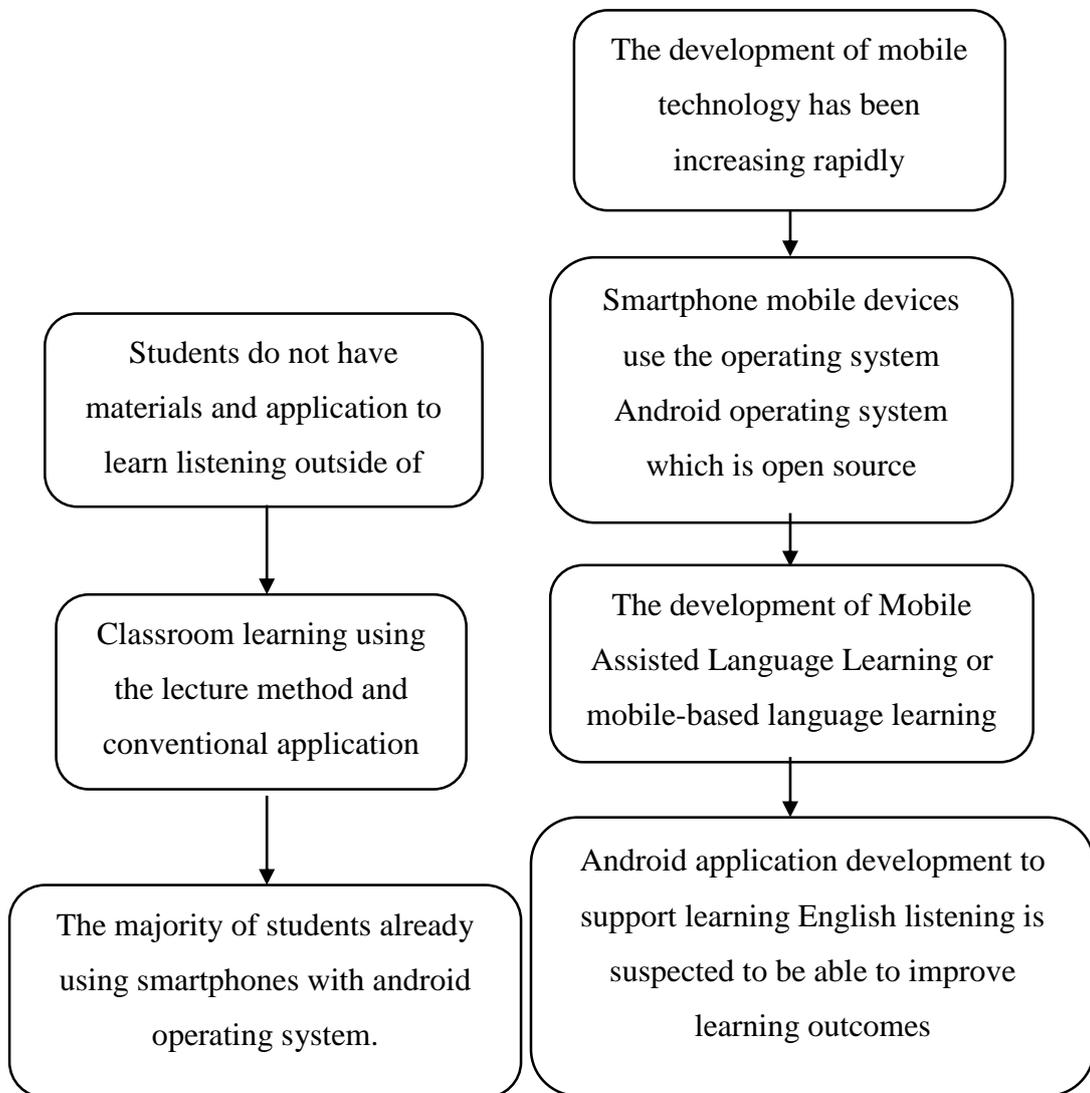
1.3.   Objective of the Research

Based on the formulation of the problem above, the objective of this development is to digitalize listening materials through the use android-based application for second semester students of English Language Education Study Program. Through an android-based application, it makes it easier for students to get more listening materials and practices. Through the android-based application students also facilitate students' access to get practice materials and also listening quizzes.

1.4.   Framework of Thought

Sugiyono (2011) states that the framework is a conceptual model of how theory relates to various factors that have been identified as important. Thus, the framework is an understanding that underlies other understandings, an understanding that is most basic and becomes the foundation for every thought or a

form of process of the whole research to be carried out. Below is the framework of thought for this research.

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                                          ┌──────────────────────────┐
                                          │ The development of mobile │
                                          │   technology has been     │
                                          │    increasing rapidly     │
                                          └──────────────────────────┘
                                                       │
                                                       ▼
┌──────────────────────────┐            ┌──────────────────────────┐
│   Students do not have    │            │ Smartphone mobile devices │
│ materials and application │            │  use the operating system │
│   to learn listening      │            │ Android operating system  │
│       outside of          │            │    which is open source   │
└──────────────────────────┘            └──────────────────────────┘
            │                                          │
            ▼                                          ▼
┌──────────────────────────┐            ┌──────────────────────────┐
│ Classroom learning using  │            │ The development of Mobile │
│   the lecture method and  │            │ Assisted Language Learning │
│  conventional application │            │ or mobile-based language   │
│                           │            │         learning          │
└──────────────────────────┘            └──────────────────────────┘
            │                                          │
            ▼                                          ▼
┌──────────────────────────┐            ┌──────────────────────────┐
│The majority of students   │            │ Android application       │
│already using smartphones  │            │ development to support    │
│with android operating     │            │ learning English listening│
│system.                    │            │ is suspected to be able to │
│                           │            │ improve learning outcomes │
└──────────────────────────┘            └──────────────────────────┘
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Figure 1.1
Framework of Thought

From the framework chart, it has been known that problems in learning English listening are that students do not have materials and application to learn listening outside the classroom and learning in the classroom itself still uses the lecture method and conventional application. This affects the learning outcomes of English listening which shows that there are still many students with scores below the average.

On the other hand, the development of mobile technology is increasing rapidly and there have been many smartphone mobile devices use the open source Android operating system. The majority of students already use smartphones with the Android operating system. These technological developments can now be directed as a means in the learning process called mobile learning or learning. Students can use the gadgets they have such as cell phones and tablets as learning devices that make m-learning a new solution in the development of the world of education.

Starting from the above, the researcher wants to develop an android-based application to support English listening learning. Android-based application to support English listening learning. In the end it is hoped that students can use this application well and can become a learning application that can improve student learning outcomes in learning application that can improve student learning outcomes in English listening activities.

1.5. Expected Product Specification

Product specifications to be developed in this study namely:

1. Android-based application was developed according to the needs of teaching student listening.
2. The application is designed to be used as a learning resource independently and flexibly.
3. The application was developed by utilizing the adobe XD application.

4. The specification of this application is that it can be downloaded on all types of android and IOS so that each student can install it on their mobile phone.

5. The design of this application when you first open it was greeted with your full name, then there were several menus for materials, practices and quizzes. In the application there is also a telephone image to contact the lecturer and also the lab assistant if there are problems.

6. In the material, menu was presented in the form of JPG files taken from the book created by Longman in 2001. Students can view these materials in JPG form.

7. The practice menu also allows students to practice doing some listening questions after working on the material and also before doing the quiz which was included in the assessment.

8. In the practice menu, the question was in the form of a question followed by an mp3 audio file.

9. Quiz menu, there was 10 theme units that can be accessed by students. Each unit consists of 3 and 4 types of questions. Students will see the score they get. In the unit there were many mp3 audio files and mp4 videos that are used as materials in doing the questions.

10. The developed application is easily accessible anytime and anywhere.

11. The appearance of the application is more attractive with material that is easy to understand and equipped with menus that encourage students to learn independently.

12. The application is equipped with pictures and videos that are suitable with the material developed in the laboratory.

1.6. Significance of the Development

The output of this application development is expected to result in these benefits:

1. Practical Benefits
   a. Assist lecturers in delivering learning materials in listening courses.

b. Can be used as a varied learning method in listening courses.

c. Can increase students' interest in taking listening courses.

2. Theoretical Benefits

a. This research is expected to expand theoretical studies in the field of Educational Technology.

b. As a contribution of thought and reference for further developers.

c. Can be used as a comparative study and study for future research in the field of education in the future.

1.7. Assumptions and Limitation of the Development

The following assumptions are made regarding this research:

1. The application will produce more effective and interesting listening learning.

2. The learning application compiled is an alternative learning application that can be used independently by students outside the classroom or anywhere and anytime.

3. The students will fully understand how to use the application that they have to use.

4. The students will provide feedback about the application in accordance with their experience.

5. Every student was able to access the listening materials easily through their mobile phone.

Based on the problem identification above, the research is limited to:

a. Research Type: Android-based learning application development research

b. Field of Study: English Language Education

c. Target: Students from batch 2022 of the English Language Education Study Program, Faculty of Teacher Training and Education, Widya Mandala Surabaya Catholic University who take Intermediate and Advanced Listening class

d. Place: Multimedia Language Laboratory, Faculty of Teacher Training and Education, Widya Mandala Surabaya Catholic University

1.8. Definition of Key Terms

To avoid misconceptions, the following are the definition of the key terms used in this study:

- Digitalization: Digitalization is the process of converting from analog to digital by using technology and digital data with automatic operation systems and computerized system.

- Learning Development: Suparman (2012:86) defined it as a conscious effort and planned systematically and procedurally to produce a learning program that can be assessed for effectiveness and efficiency for the achievement of learning objectives

- Learning Application: It is a software to realize the learning process in virtual space.

- Android: Purwantoro, et al. (2013: 177) said "Android is a software used on mobile devices that include an operating system, middleware and (mobile devices) which includes the operating system, middleware and core applications.

- Listening**:** Steinberg (2007) said that "Listening is more complex than merely hearing. It is a process that consists of four stages: sensing and attending, understanding and interpreting, remembering, and responding. The stages occur in sequence but we are generally unaware of them.

1.9. Thesis Organization

Part I. Thesis

Chapter 1 in the first part of this chapter is a background that reveals the context of project development in the problem to be solved. The second part of this chapter provides a description of the problem to be solved and the constraining factors. The third part of this chapter provides the alternative solutions offered and why they were chosen. The fourth section describes the product specifications

expected from the development process. The fifth section is expected to show the link between the urgency of problem solving and the context of the problem. The sixth section is the basis for determining the specifications of the products produced and the limitations of the products produced. The seventh section only contains a brief definition of key terms as the product development is presented. The last part of this chapter wants to show how the whole thesis is organized.

Chapter 2 contains a literature review that will reveal a comprehensive frame of reference, regarding concepts, principles or theories that are used as a basis for solving problems. This section is also intended to provide an overview of the relationship between development efforts and efforts that have been made by experts to take the same approach.

Chapter 3 in the first section contains a development model that will briefly explain the structure of the model used as the basis for product development. The second part is the development procedure which contains procedural steps taken by the developer in making the product. The third part is the product try-out which is intended to collect data that can be used as a basis for determining the level of effectiveness, efficiency of the products produced. The fourth section is a complete try-out design. The fifth section is the reasearch subject which contains a clear and complete identification of the characteristics of the research subject. Section six is the type of data related to the design and selection of research subjects. Section seven is the data collection instrument used for data collection as mentioned in the previous section. The last section is the analysis technique to analyze the data along with the rationale.

The first part of Chapter 4 contains the presentation of try-out data, where all data was collected from product try-outs. The second section analyzes the data which explains in detail the results of the try-out data analysis. The third part is product revision which takes the results of data analysis of the product try-out to determine whether the product needs to be revised or not.

Chapter 5 contains 2 sections, the first of which is a discussion of the revised product and suggestions for user dissemination and further product development.

Part II. The Developed Product

The product resulting from this development is an android-based application. Android-based applications to digitize listening exercises from books to android-based. The resulting application is an offline application that can be opened and done by students anytime and anywhere. The android-based application produced from this development also helps students to be faster, more effective and efficient in doing listening exercises in the lab.