# CHAPTER I INTRODUCTION

This first chapter provides an overview of the research in separate subchapters. This includes the background of the research, identification of problem, delimitation of problem, research question, research objective, assumptions and delimitation of the research, specification of the product, research significance, and also the definition of key terms.

## A. Background of the Research

One of the foreign languages taught to Indonesian students from kindergarten through university is English. For Indonesian students, English is regarded as a challenging topic because it differs significantly from Indonesian in terms of vocabulary, pronunciation, and the grammatical structure of the language. The four components of English are speaking, writing, listening, and reading. However, before learning more about the four skills, it's crucial to be familiar with the terminology. One of the language components taught in the classroom as part of language teaching is vocabulary.

Language proficiency is necessary for scientific mastery in the twenty-first century. Learning a language makes it simple for a person to comprehend, apply, and learn new information on a daily basis. English is the language that needs to be learned in the twenty-first century or else 4.0 will be nullified. Globally, English has become a widely used language worldwide. In a similar spirit, the government claims that English is the first foreign language taught in Indonesian schools. English is taught at all levels and in all types of educational institutions in order to fulfill the needs of language proficiency in the modern era and to get the younger generation ready for the revolutionary period.

A limited vocabulary would prevent students from understanding what was being said or from expressing their own opinions. As noted by (Rashid et al., 2022), word choice is more significant than spelling. As students' proficiency in speaking and writing English increases, it is imperative that they also develop their word awareness and acquire language learning strategies. The

first step for teachers is to comprehend how challenging the English language is for their students. Since English is by far the most commonly spoken language, it can be difficult to comprehend enough of its vocabulary. To generate wholly new words (like German) or ones (like Spanish), prefixes and suffixes are regularly added in other languages. Because you may rapidly come up with and comprehend many new concepts when you are aware of the procedures that go into the production of words. As a result, learning English necessitates understanding multiple informal words.

Parallel to the evolution of language learning are advancements in technology, notably the smartphone, described by Lestari (2023) as a mobile phone equipped with computer-like functionalities. Smartphones are essentially compact computers integrated with telephone capabilities, revolutionizing how we communicate and learn. Over recent years, the demand for sophisticated, portable devices has driven significant improvements in processing power, memory capacity, display quality, and operating systems of mobile phones. These advancements have transformed smartphones into indispensable tools that offer not just advanced communication options but also a plethora of computing capabilities, including high-quality cameras, internet access, and various management tools. This convergence of language learning needs and technological advancements underscores the potential of smartphones as powerful educational tools, enabling learners to navigate the complexities of English vocabulary more effectively.

There are several benefits to using Android apps for learning vocabulary. First of all, users can easily download and access them on a range of devices thanks to their availability, which permits self-directed learning to occur anywhere. Second, interactive elements like games and quizzes boost motivation and engagement, which improves the effectiveness and interest of learning. Thirdly, the app's adaptability allows for a customized and inclusive learning experience by tailoring the content to the user's comprehension level. Because of these benefits, Android apps are an effective and adaptable tool for increasing vocabulary acquisition in the English language.

The first previous research from (Agung, 2019). Developing A Web-Based Application for Teaching Grammar for 10TH Grade Students Of Senior High School. The research's goal was to create a web-based tool for senior high school students in the 10th grade to learn grammar. The research set out to address the difficulties that students face when learning grammar. Using the ADDIE approach, the research was labeled as a Research and Development (R&D) research. Quizzes, games, and simulations were included in the application's dynamic and user-friendly design. Senior high school students in the 10th grade took part in the research. The research discovered that the webbased program helped pupils' grammar proficiency. Additionally, the application was found to be helpful in giving pupils quick performance feedback. Overall, the research found that teaching grammar to senior high school students can be successfully accomplished through the use of a webbased application. The second previous research from (Safara et al., 2019). Mobile-based Learning in Digital Era: Android Application as a Media to Teach Grammar. The purpose of the research was to investigate the advantages of teaching and learning English, especially grammar, through mobile learning. The research was descriptive research that included several teaching strategies, including experiential learning and blended learning. The research's grammatical instruction was delivered through an Android app. With elements like quizzes, games, and simulations, the program was created to be engaging and interactive. Students who used the Android app to learn English grammar made up the research's participants. The research discovered that an Android application used for mobile learning was a suitable teaching tool for grammar. The program was successful in helping the children' grammar abilities. The research also discovered that the application's interactive elements, such as quizzes, games, and simulations, increased both the fun and difficulty of learning. The third research from (Sri, 2022). Developing The Ewmar (Easy With Grammar) Application For Learning Grammar. The objective of this research was to create the EWMAR (Easy with Grammar) Android app, which would teach grammar. The goal of the project was to develop a user-friendly, interactive program that would make it simple for kids to learn grammar. With

ADDIE, the research was classified as research and development (R&D) research. The research's participants were students who learned grammar using the EWMAR program. The research revealed that the EWMAR application helped pupils' grammar proficiency. The program was also considered to be helpful in giving the pupils quick feedback on their performance. The research came to the conclusion that the EWMAR application is an effective tool for grammar instruction.

Both this research and the earlier one mentioned above have similarities and differences. The research employing the research and development method is where this research and the preceding one above overlap. In the meantime, this research differs from the earlier research in that it builds on the application of English components, like vocabulary, at the university level.

The purpose of this research is to develop interactive android-based apps for learning English vocabulary. Through this application students can easily learn about vocabulary that can be learned easily wherever they are. Fourth-semester students of IAIN Kediri were chosen as the research subjects for the "English Explore" application because they already have a sufficient base of English knowledge and can help in testing the effectiveness of the application in improving English language skills, as well as obtaining more accurate and relevant feedback for the development of this application. This application also has a feature to know the correct answers through quizzes that will be provided in the learning English vocabulary application. researcher will analyze what needs are needed in making this application and build interactive android-based application for learning english vocabulary.

#### **B.** Identification of Problem

Several issues can be recognized based on the background information provided. Students first struggle with learning vocabulary in English. Second, students find using tablets and phones to be more comfortable than reading books.

#### C. Delimitation of Problem

This research addressed the issue and concentrated on creating an interactive vocabulary-learning application in response to the above-mentioned problem

identification. The delimitation of this study is focused on evaluating the effectiveness of the "English Explore" application in enhancing English vocabulary acquisition among fourth-semester students at IAIN Kediri. Furthermore, the scope of the study is limited to vocabulary acquisition and does not encompass other language skills such as grammar, listening, or speaking in detail. This delimitation ensures a concentrated and manageable research focus, allowing for a thorough examination of the application's impact on vocabulary learning within the specified context.

## **D.** Research Question

The problem can be expressed as follows in the research's background: How can interactive Android-based apps be utilized for learning English vocabulary?

#### E. Research Objective

The research objective is to infer from the problem outlined in the research question: develop an interactive Android-based application for learning English vocabulary.

#### F. Assumption and Delimitation of This Research

The following presumptions form the basis of this development research:

- 1. The interactive learning vocabulary application for English can be utilized as a teaching tool in the classroom or for independent research at home.
- 2. Students can conveniently carry and use the interactive learning vocabulary application on their smartphones for their education.

The preparation of the interactive application learning grammar for senior high school have delimitations, as follow:

- 1. The primary intended user base for the interactive application learning vocabulary is for students who learning at university
- 2. The content of this application is only the top 10 content that has been selected from the beginning through a questionnaire that has been distributed to students.

#### **G.** Spesification of the Product

The following specifications apply to the product that the researcher anticipated as a result of the development in this research: The product will be designed using the canva and kodular websites, and it will be presented electronically and shared via QR Code (which can be evaluated with the Kodular application in the Play Store).

#### H. Research Significance

The following are anticipated to benefit from this research:

- Students: the purpose of this research is to help students learn vocabulary using smartphones.
- Teachers: the research's conclusions enable them to provide interactive media to their students so they can learn vocabulary in the classroom.
- Additional researcher: the results of this research should be useful as a
  guide for future research, and they can use the information to create an
  application that would be useful to other high school students.

### I. Definition of Key Terms

To help readers in understanding the terms used in the research title, the researcher defines a few terms as follows:

#### 1. Interactive Application

Interactive application is an application that allows two-way interaction between the user and the application. These applications usually integrate various media such as text, images, animation, video and sound to provide an interactive and fun learning experience. By using interactive applications, users can participate directly in the learning process and improve English language skills effectively and efficiently. To increase knowledge, learning involves a variety of interrelated components. The interactive process takes into account the fact that information is acquired, assimilated, and then transformed into knowledge by learners. The outcomes of this data transformation depend on how the learner interprets the information and data they receive and gives them meaning based on prior knowledge. It is possible to create and develop computer-aided tools

to support learners during the learning process (Kira et al., 2019). However, it's important for both instructors and students to adjust to the quick changes in the technological landscape. In order to create and sustain a continual computer-aided learning environment, educators must upgrade their technical knowledge base. Therefore, it is recommended that computer applications be incorporated into various learning methodologies, and that these programs themselves be built so that they not only adhere to modern learning concepts but also incorporate some level of pedagogy. These components must be present for the learning technique to be effective.

## 2. Learning Vocabulary

Learning vocabulary refers to the process of acquiring and comprehending the words, phrases, and expressions of a particular language. It involves the memorization, understanding, and application of a language's lexicon to facilitate effective communication, reading comprehension, and writing proficiency. Increasing one's vocabulary is an essential part of learning a language. It entails identifying, comprehending, and applying words appropriately in various contexts. Understanding words entails understanding their definitions, usage patterns in sentences, synonyms, antonyms, and connections to other words in the language. A variety of techniques, including repetition, application in authentic settings, and connections to other language abilities like speaking, listening, reading, and writing, can be used to help with vocabulary learning. The ultimate objective is for students to comprehend the vocabulary and apply it successfully in both academic and professional settings as well as in daily communication.