

Desktop Application Development To Practice Pronunciation

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Abstract

English pronunciation studies the techniques of uttering English words, making it one of the most challenging subjects and considered a formality. By mastering proper English pronunciation, there will be no miscommunication when speaking with others or native speakers. Learning pronunciation from a native speaker creates a benchmark for appropriately pronouncing words. Unfortunately, it is overpriced and impractical. Therefore, this study developed an e-learning application to learn English pronunciation. Through a desktop-based e-learning application, users could freely improve their ability and interest in learning pronunciation without time constraints. They could also evaluate their progress. This desktop application could be utilized frequently without incurring excessive fees. In order to acquire study data, the application was assessed by administering a questionnaire to 34 respondents. As many as 27 respondents believed that the application's content was easily accessible on their individual computers. Additionally, 30 respondents acknowledged that the audio quality was clear. Moreover, 29 respondents asserted that the desktop application encouraged them to improve their pronunciation. In other words, the desktop application for learning English pronunciation was highly useful for independent study and could enhance the comprehension of each learned word.

Keywords: *English pronunciation, e-learning, desktop.*

1. Introduction

In addition to grammar and vocabulary, English pronunciation is crucial as it studies methods for enunciating English words. English pronunciation is critical since many English sounds and words are difficult to pronounce accurately. With proper pronunciation, conversation with others or native speakers will be simpler to comprehend.

In Indonesia, from elementary school through college, studying English is only a formality; thus, English pronunciation is seen as unimportant. Understanding and using proper English pronunciation will help win the competition and avoid misunderstandings in communication. Maintaining accurate pronunciation can assist in speedier English acquisition and fluency. Consistently pronouncing English correctly might also boost confidence and communication abilities. To master English Pronunciation, students must normally speak English vocabulary every day. In order to accurately pronounce the sound or intonation of a word, one must first hear it from a native speaker [1].

Therefore, advancing technology should be utilized to assist in learning pronunciation. One of the various forms of media that can be utilized to help pronunciation learning is e-learning, which can be accessed through a computer connected to the internet.

Research conducted with the title "Application Learning English Vocabulary And Pronunciation Based Multimedia for Elementary School Students" has a goal for more students easy to absorb lessons and can add to vocabulary with quickly by using multimedia-based learning tools. In the discussion the author utilizes multimedia facilities interactive in making applications so that there is direct involvement between students and learning tools so that students feel more comfortable and enthusiastic in learning even

though the learning tools used are visible like studying and playing but the goal is for students to be able to accept the material easily [2].

Has conducted research with the title “Application of Speech Recognition Technology for Pronunciation Practice English Through the Dictation Method in the Multimedia Study Program Surabaya State Electronics Polytechnic Broadcasting). Types of research methods used is a type of Narrative Inquiry research, where the researcher the same maker trying to decipher knowledge in educating the been run before. Similarly, this research makes students from the Multimedia study program Broadcasting as a respondent to outline how it works speech recognition technology used as a teaching tool as well as being the pronunciation of the learner's device. Technology use speech recognition with the dictation method tends to be difficult to apply however can motivate students' learning [3].

Another material that reflects the author's literature is research conducted with the title “English Teacher Application As an Android-Based English Conversation Learning Tool with Voice Recognition Image”. This research makes the application possible easily process the pronunciation of users according to the topic available learning. Applications can directly translate sentences what the user has said. It is recommended that the user give the command sound clearly and in a quiet place not too far away away from the device [4].

Education through electronics (E-learning in short) has been variously defined by researchers. This is interpreted from various perspectives, including distributed learning, online distance learning, and blended learning. other terms as synonyms of E-learning which leads to the conclusion that there is no specific definition of E-learning. E-learning as the delivery of digital content material, including the internet, intranets, extranets, satellite broadcasts, audio/video tapes, interactive television, and CD-ROMs [5,6,7].

According to experts e-learning is learning that is structured with the aim of using an electronic system or computer so that it is able to support a learning process. Electronic-based e-learning learning process. The method of delivering e-learning by means of the web uses a network on a computer. With this, the learning process in lectures can be made more flexible and more interesting [8].

According to e-learning has network-like characteristics, can transfer and at the same time filter stored material and information, and is able to recover and display damaged data quickly [9].

E-learning is teaching material that is self-learning so that it can be accessed by lecturers and students anytime and anywhere. By utilizing this growing technology, e-learning can reduce travel expenses and does not require a specific place to access information.

The benefits of e-learning are :

- a. The application of e-learning can support student absorption in the learning process.
- b. More active participation of students.
- c. Increased student ability to learn individually 4. Advance the material capacity of educators
- d. Through technological devices, information is easy to obtain. [10]

To summarize the meaning of e-learning that has been stated above, it can be concluded that e-learning is a method used by electronic media for educational purposes, especially to improve communication, participation, and collaboration in the teaching and learning process.

2. Method



Figure 2.1 Development Method

Figure 2.1 depicts the application development in this study, described as follows.

- The research began with requirements analysis—the information collection phase required for application development. The information was gathered through literature study and discussions with lecturers.
- The application design was then conducted, referring to creating the application’s appearance to facilitate user interaction with the software.
- Subsequently, application development required tools and materials to aid in creating and testing the application.
- Finally, the application was tested to observe the implementation results and assess every functionality. Module testing was conducted by employing a questionnaire.

3. Results

3.1. Application Display

After undergoing evaluation and testing, the results of the application display are exhibited in Figure 1.



Figure 1 Pronunciation Material

After logging in with the previously registered account on the desktop application, the users could select the content they wished to study. After determining the topic to be studied, the application allowed the immediate download of the necessary materials. Figure 1 represents one of the desktop application's displays. This page contained fundamental content, particularly the pronunciation material of numbers. The image of this pronunciation material included a help button displaying directions for beginning the activity. In addition, there was also a practice button to begin the practice session, and a confirm button to view the practice session's results.



Figure 2 Practice Result

Figure 2 depicts the display when the desktop view was switched to the browser view. By clicking the gender icon on this browser display, the users could listen to audio recordings of native speakers demonstrating proper pronunciation. After practicing the pronunciation, the results were presented. The score displayed signified the users' practice confidence. The users could repeat the pronunciation practice session without time constraints by hitting the replay button. After achieving desirable results, the users could terminate the practice session by pressing the finish button.

3.2 Test Graphs

After testing the desktop application to practice pronunciation and distributing questionnaires to 34 respondents, the following are the graphs and explanations.

a. Easily accessible materials

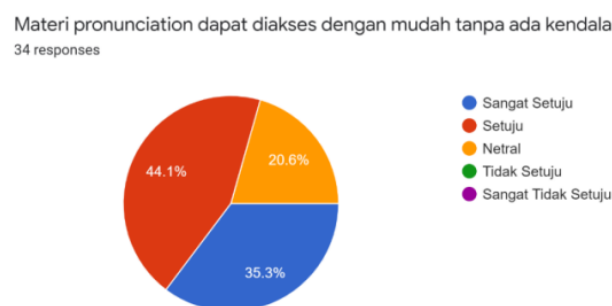


Figure 3 Easily Accessible Material Graphic

A total of 44.1% of respondents agreed that the application's pronunciation materials were conveniently accessible to their laptops. Stable internet connectivity facilitated the accessibility of materials.

b. Clear audio

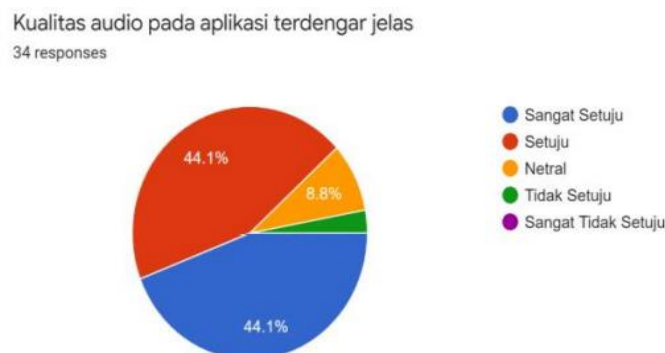


Figure 4 Audio Graphic of the Application

Of the 34 respondents, 30 asserted that the audio was clear enough for them to listen to native speakers' voices in the application and understand the proper pronunciation of the words in the materials.

4. Conclusion

The following conclusions were drawn from the application development results for practicing pronunciation.

The module's test results produced a desktop application for learning to practice pronunciation, which is extremely useful for individuals who prefer to study independently at home and sharpen skills and build speaking and pronunciation abilities. Additionally, the application could increase the quality of word comprehension through audible samples. This application has offered highly modern features, such as the fact that it can be accessed online anytime and anywhere.

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