MULTIMEDIA BASED TENSES LEARNING MEDIA INTERACTIVE USING THE ADDIE METHOD

Qodri Hariansyah[1], Yanti Faradillah S[2], Eka Rahayu[3]
[1,2,3]Department of Information System, University Harapan Medan, Indonesia

ABSTRACT

English is an international language as well as a universal language used by various countries in the world. This makes English also a foreign language that we often learn from elementary school to college. In English, Time (time) is very closely related to Tense (verb change). So learning tenses is also a basic asset for someone to master the context of English sentences. In this thesis, the media for presenting information about tenses is made in the form of PBK (Computer Assisted Learning), namely Interactive Multimedia. Interactive Multimedia can provide an interactivity between the user and the application. This study uses the ADDIE development method (Analysis, Design, Develop, Implement and Evaluate) and the C# programming language using Unity 3D application software. This research will produce an android-based application that is equipped with features of tenses learning material in the form of text and animated videos and is equipped with a question simulation feature to hone the level of understanding of the user's tensesmaterial. The application can be downloaded via the site https://www.mediafire.com/folder/1flg2c2qxyqs7/Application_Pembelajaran_Tenses

Keyword : Decision Support System, MFEP, HR Police

1. INTRODUCTION

Technological developments are currently growing rapidly, so that technology can affect many things in human life. Technological developments in the era of the modern industrial revolution are expected to improve the quality of education and the learning process in terms of teaching materials and environments that support learning and make it interesting and fun (Jumarlis, 2018). Building a learning environment is inseparable from the role of the teacher as an educator. The task of educators is to provide as much knowledge about this world as possible in a work environment for children that can provide learning experiences both inside and outside the classroom. One way educators can support children's natural learning processes is by creating a learning environment (Maemunawati & Alif, 2020)

In this study there were several problems such as the learning process was not enough by utilizing simple learning resources and learning media such as sketches, drawings, boards, books, and others that were visual and conventional in nature, but at this time it could be enriched with other wrong learning media one of which is the use of learning media applications which are activities that will provide knowledge to students. So that learning media with applications can be accessed anywhere in learning English can also be used to help a teacher convey material to students in a more interesting way. Tenses are one of the basics in learning English. Therefore, to be able to communicate well and be understood by others, the language used must comply with predetermined rules, where these rules must be adjusted to the time period, namely tenses (Puspaningrum et al., 2020).

Previous research conducted by (Handayani & Aji, 2019) entitled Design and Build of Multimedia-Based Tenses Learning Applications in English concluded that Tenses Learning Applications can be used as an alternative to Tenses learning which provides Tenses information and can make it easier for students, while other research conducted by (Ahmad et al., 2018) entitled Android-Based English Tenses Learning Media Application concluded that with the Android-based English tenses learning media application, it can bring innovation to tenses learning methods to be more interesting. With this application, students can learn independently without the direct role of the teacher. Based on this explanation, the researcher wants to make an Android-based learning application as a tenses learning medium to attract interest in learning, especially for junior high school (SMP) students so that they can more easily understand material related to the correct and appropriate use of tenses. This is what underlies the researcher in taking the title of the thesis "Interactive Multimedia-Based Tenses Learning Media Using the Addie Method".

2. RESEARCH METHOD
2.1 Research Procedure
This research is research in making tenses learning media using the Addie method (Analysis, Design, Develop, Implement and Evaluate). The data collection method in the form of tenses learning material is carried out by reading books and journals related to the problems that are used as the basis for making tenses learning applications. While the testing phase is carried out using the black box method which focuses on the functional requirements of the application and testing the quality of the tenses material is carried out by material experts in their fields.

2.2 Research Design
In the system research design, there is a research design that functions as the stages in developing tenses learning media. The research design made by the author can be seen in Figure below.
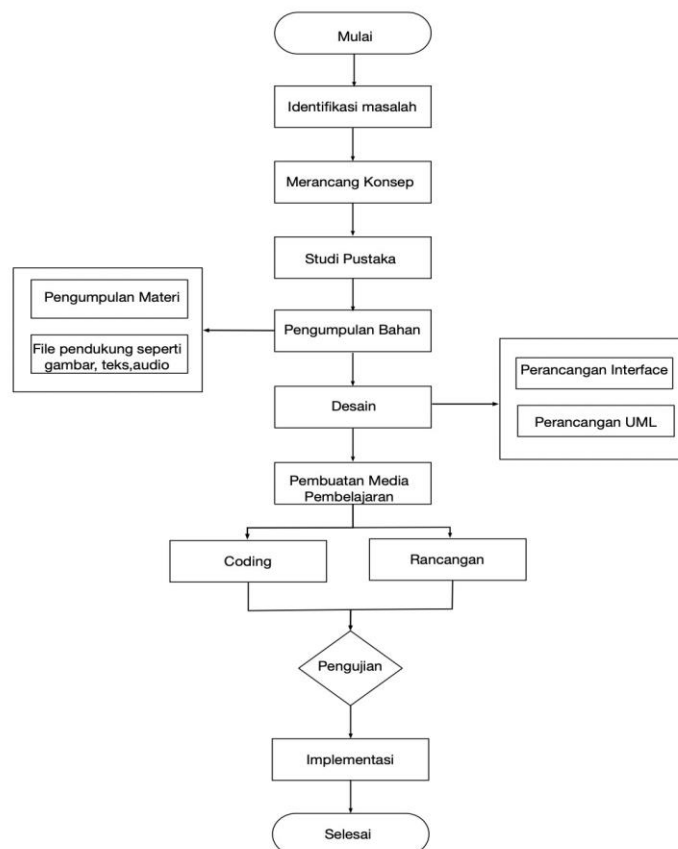

Figure 1. Research Design

2.3 Problem Statement

After observing the current tenses learning, many teachers do face-to-face tenses learning by the teacher, causing boredom in doing tenses learning. then the author tries to implement the tenses learning application in English.

2.4 Use Case Diagram

The use case diagram will explain the diagram to describe the flow of the user-designed tenses learning media application, the following is the use case diagram of tenses learning media contained in Figure 2 below:
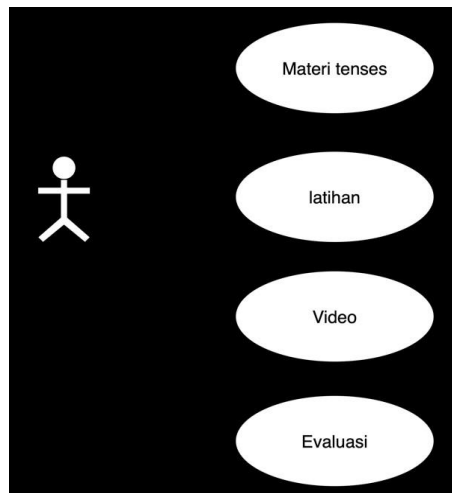
Fig. 3. Usecase Diagram

Description of Figure 3.1 explains that in the tenses learning application process there are menus such as tenses material, exercises, videos and developers that students can understand.

2.5 *Activity Diagram* materi tenses

The Activity Diagram of tenses material will design the flow of activity or work flow in an Android-based learning media application. The tenses material activity can be seen in Figure 4 below.

Fig 4 Diagram Asctivity

3. RESULT AND DISCUSSION

3.1 Result
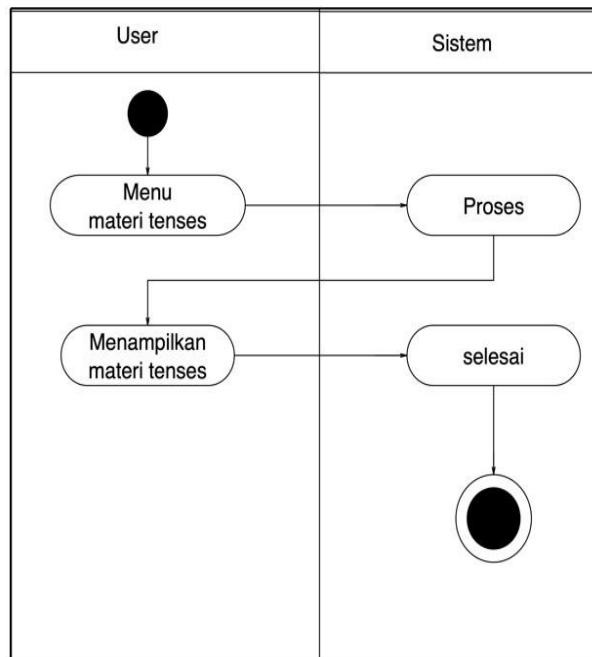
The results of the research produced are in the form of an Android-based tenses learning application. The application features available in this application consist of several sub-menus, namely: the tenses material menu, the tenses learning video menu, the tenses learning exercise test menu, and also the tenses evaluation menu. The minimum specifications for the device used in this study are an Android smartphone.

3.2 Discussion

Pada penelitian ini, implementasi akan dilakukan setelah perancangan selesai dan selanjutnya akan di implementasikan dengan menggunakan bahasa pemrograman C#. Tujuan Implementasi pada penelitian ini untuk mengkonfirmasikan modul program perancangan dan melakukan implementasi media pembelajaran tenses bahasa inggris yang menggunakan software unity 3D. Pada aplikasi media pembelajaran tenses Bahasa inggris ini dilengkapi dengan adanya fitur menu yang akan memberikan penjelasan tentang pemaparan dasar-dasar tenses yang meliputi definisi tenses, struktur pola kalimat tenses serta contoh-contoh penggunaan kalimat pada setiap jenis tenses dan dilengkapi juga dengan pemapasan soal-soal latihan untuk mengasah tingkat kemampuan pengguna (user) aplikasi.

Pada fitur terkait penjelasan materi tenses pada aplikasi ini disajikan dalam bentuk materi teks dan juga video animasi pembelajaran yang akan menarik minat user (pengguna) dalam belajar tenses. Materi pembelajaran berupa video animasi yang dihasilkan pada aplikasi ini dibuat menggunakan aplikasi animaker. Dan sedangkan pada tampilan media pembelajaran tenses Bahasa inggris ini dibuat pada aplikasi unity yang berfungsi sebagai tampilan interface yang nantinya akan digunakan oleh user (pengguna) untuk melakukan pembelajaran berbasis tenses Bahasa inggirs berbasis android. Berikut ini adalah tampilan interface pada sistem aplikasi pembelajaran tenses Bahasa inggris berbasis android.

3.3 Appliocation Interface

Pada tampilan menu utama pada aplikasi pembelajaran tenses bahasa inggris yang dibangun mengunakan softaware unity 3D akan menampilkan beberapa fitur menu yaitu: menu mulai test, menu materi tenses, menu video dan menu evaluasi. Bentuk tampilan *interface* menu utama aplikasi pembelajaran tenses dapat dilihat pada gambar 4.1 berikut ini.

Fig. 5 Application Interface

3.4 Start Menu Test

In the start menu display, the test will display 16 menu choices for the type of English tenses that the user can choose to train the level of understanding of tenses. Each choice of tenses type will display several multiple choice questions based on the type of tenses that have been selected by the user and then the user can start the tenses practice test by selecting one of the available answer options, then the application page display will continue on the next question page until the practice test is complete. The following figure is a display image on the start test menu feature, which has a choice of quiz type sub menus from the 16 English tenses.
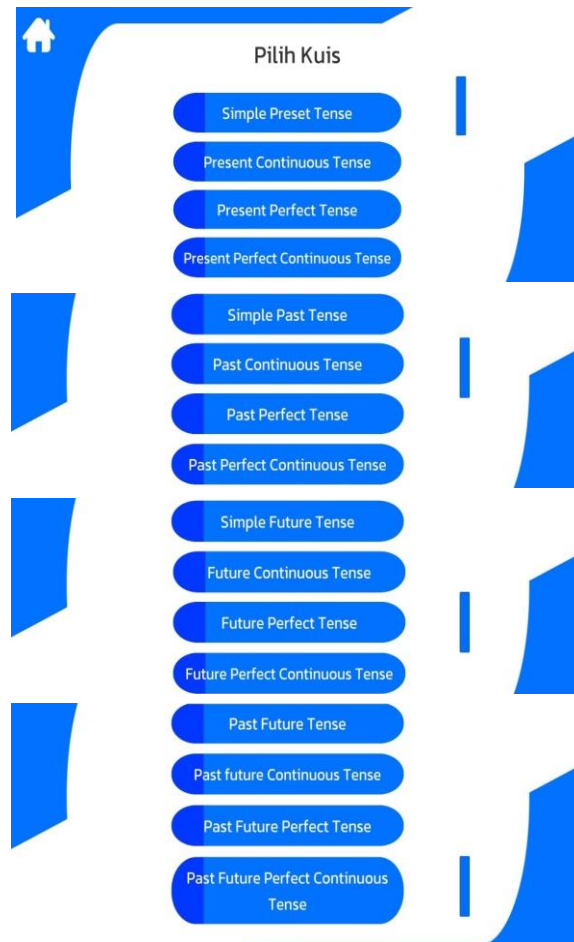
Fig 6. Start Test

Tampilan Kuis Tenses

Pada tampilan ini akan menampilkan beberapa soal pilihan berganda berdasarkan jenis tenses yang telah dipilih oleh *user* dan kemudian user dapat memulai tes latihan tenses tersebut. Contoh bentuk tampilan kuis tenses dapat dilihat seperti pada gambar 4.3 berikut:
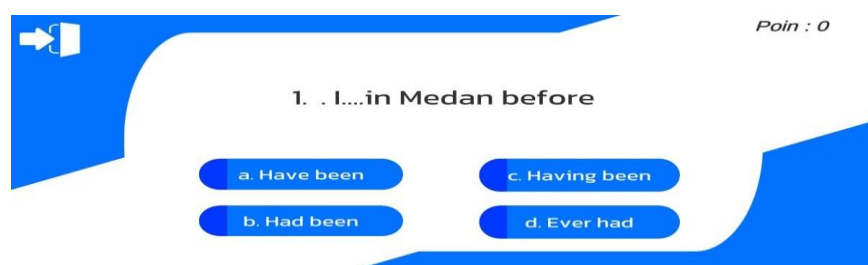
Fig. 7 Perfect Teses Quiz

4.   Tampilan score kuis

Pada tampilan ini akan menampilkan score kuis yang berhasil dijawab oleh *user* (pengguna) aplikasi untuk dapat melihat seberapa besar nilai pemahaman user berdasarkan jenis kuis tenses yang telah dipilih sebelumnya. Bentuk tampilan interface score kuis dapat dilihat pada gambar 4.4 berikut ini:

Rencana Pengujian

Rencana pengujian yang dilakukan terhadap sistem berupa pengujian dengan menggunakan metode *black-box* testing dimana pengujian lebih memfokuskan kepada kebutuhan fungsional dari user. Pengujian ini dapat menemukan kesalahan seperti:

1. Kesalahan *Interface*

2. Error Data

Table 1 System Testing

Kelas Uji	Butir Uji	Tingkat Pengujian	Jenis Pengujian
Pengujian tombol menu materi	tombol menu materi	Sistem	Black Box
pengujian tombol menu tes	Tombol soal	Sistem	Black Box
pengujian tombol video	Tombol video	Sistem	Black Box

Result Testing

Performance results on the application are made after the system testing process has been tested. The results of system testing were obtained by distributing questionnaires to 15 amateur respondents. The following is general respondent data which can be seen in table 2.**Tabel 2.** Public Respondent

No	Nama	Usia	Jenis Kelamin	Pekerjaan
1	Neneng Julia	16	Perempuan	Pelajar
2	Juliani	15	Perempuan	Pelajar
3	Rubiatik	16	Perempuan	Pelajar
4	Zulkifli	17	Laki-laki	Pelajar
5	Azwir	22	Laki-laki	Mahasiswa
6	Yessy Eria	17	Perempuan	Pelajar
7	Salmawati	15	Perempuan	Pelajar
8	Alfian Julianta	15	Laki-laki	Pelajar
9	Rizki Kholilah Lubis	17	Perempuan	Pelajar
10	Yulnita	17	Perempuan	Pelajar
11	Siti Rusma	16	Perempuan	Pelajar
12	Susilawati	21	Perempuan	Mahasiswa
13	Wasmin	15	Laki-laki	Pelajar
14	Nani Adriana	19	Perempuan	karyawan
15	Sri Ramadani	20	Perempuan	Mahasiswa

Quistionare Result

Kuesioner terdiri dari pertanyaan yang dapat diberikan penilaian untuk memudahkan perhitungan hasil analisisnya. Tabel 4.7 Berikut adalah hasil kuesioner yang didapat dari responden umum.

Table 2. Result Quiesiontare

No	Pertanyaan	STS	TS	RR	S	SS	Rata-rata
1	Apakah menurut anda tampilan antarmuka yang terdapat dalam aplikasi pembelajaran ini menarik?			2	13		75,55%
2	Apakah menurut anda materi yang tersedia dalam aplikasi dapat dengan mudah dipahami?			2	8	5	87,44%

3	Apakah atribut seperti suara efek, kuis, suara musik latar dan sebagainya yang ada dalam aplikasi ini cukup lengkap?			2	3	10	83,22%
4	Menurut anda apakah aplikasi media pembelajaran ini mudah digunakan ?				7	8	90,32%
5	Apakah aplikasi ini dapat menumbuhkan ketertarikan dalam pembelajaran tenses			2	8	5	87,44%

Berdasarkan pada tabel 4.7 menunjukan bahwa secara keseluruhan user merasa puas dengan hasil akhir implementasi aplikasi media pembelajaran tenses yang dihasilkan. Penilaian ini didasarkan pada respond baik dan buruk dari responded yang diberi angket nilai terhadap pengisian kuesioner yang ada. Pada tampilan interface aplikasi ini memperoleh nilai 75,55% yang terkategori baik. Kemudian pada kesesuaian isi materi dan juga ketertarikan user dalam belajar tenses melalui aplikasi ini memperoleh nilai yang sama yaitu 87,44% terkategori sangat baik. Sedangkan berdasarkan aspek kelengkapan aplikasi secara keseluruhan memperoleh nilai 83,22% terkategori baik.Dan pada penilaian tingkat kemudahan penggunaan aplikasi memperoleh nilai tertinggi dari seluruh aspek penilaian yaitu 90,32% terkategori sangat baik.

4.CONCLUSION

The conclusions of this study are:
1. Android-based interactive multimedia tenses learning media can help make it easier for users (users) to understand tenses learning material properly and precisely because it is packaged with an attractive interface. And this application has been equipped with a practice question feature and also an evaluation feature that can help the user (users) hone the level of understanding of the tenses material that has been taught.
2. This research uses the ADDIE development method (Analysis, Design, Develop, Implement and Evaluate) and the C# programming language using the Unity 3D application software. Learning materials in the form of animated videos produced in this application are made using the animaker application because this application can produce Full HD video display quality and can be accessed free of charge.

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