Korean Learning Mobile Application for UiTM Students

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ABSTRACT

The learning method that is not attractive lead learner to feel bored and do not want to read a book. There is also insufficient face to face a learning session which only two hours per week to learning Korean language with the lecturer. Therefore, this project is developing a mobile application to learn Korean language by using educational game technique. Korean learning Mobile application for UiTM students is intended to be used by UiTM students who enrolled for the Korean language subject, Korean language lecturer and anyone that interested in learning Korean language. The purpose of this system is to help users to learn Korean language more easily at anywhere and anytime. Currently, UiTM students used traditional book-based learning as a learning platform. This required much time to find the information since they need to read line by line of the book until they found the information that they require. Gamification techniques refer to the use of game symbols, game elements and concepts in a context other than games to increase motivation and interaction and influence user behaviour. The mobile application functionality has been evaluated. The result shows the system can run smoothly and meet the user's expectations. In conclusion, this application is able to use by Android users only, this limitation can be improved in the future so anyone either Android user or iOS user can use this application system.

KEYWORDS: android, Korean language, gamification

1   INTRODUCTION

Nowadays, Universiti Teknologi MARA (UiTM) offered the variety of course to the students. One of the courses is the third language that have been divided into several language such as Korean, Japanese, Arabic, French, Mandarin, German, Thai, Spanish and Italian [1]. This course has been offered in order to help the student to have more communication skill to ease them for their future career and get respected [2]. There are three level that must to be passed by the students. Another document called the Hunmin Jeong-eum Haerye explain that the

consonant was design after the shapes of the mouth have been makes when saying the letters while the vowel designed after the principles of Yin and Yang. The Korean alphabet is made up of 3 atomic vowels and 5 atomic consonants and then extends them to the 28 basic of alphabets that consist of 17 consonant letters and 11 vowel letters [3].

This project uses gamification learning technique in order to help student to gain knowledge from the formal learning by using mobile device with several learning module and quiz question in order for the learner to know their skill level of the Korean language. Gamification, is the use of game design elements in non-game settings, is often suggested as a way of bridging knowledge gaps, through understanding, and encouraging change in behaviour [4]. Gamification is a new field of research, which consists of incorporating game features in non-game texts. In this context, a business method can be strengthened. Of example, it can also be commonly used in the scope of learning. By studying the personality of software professionals, a gamification design process will enhance the software development process [5].

2   OBJECTIVES

The main objectives of this project are:
   a. To develop a mobile application to learn Korean language for UiTM students by using a gamification technique.
   b. To test the functionality of the mobile application to learn Korean language for UiTM students.

3   SIGNIFICANCE (S)

By developing this mobile learning application, it may help students to improve their capability of learning the Korean language through mobile application as alternative learning material. It also may help students to memorize vocabulary through mobile application. Moreover, this application may act as teaching aid for Korean language lecturer. This application may be use anytime and anywhere depend on the user.

4   METHODOLOGY/TECHNIQUE

Mobile Application of Korean Learning system use an educational game Techniques to attract user to learn Korean Language by using Mobile devices. The gamification element can be found in Quiz module which this module was divided to two section. First section is Vocabulary Quiz and second is a Grammar Quiz. For Vocabulary Quiz, student will be answered by playing the flipping card which is known as memory game. This memory games used to help students on memorizing their vocabulary. This games also has three level which is easy, medium and hard level. Every level of the games has its difficulties. The game will flip the card until it finds its match, but only two cards will be open at the same time. For Grammar Quiz, students will be given several questions to be answered according to the level that they choose.

Next, marks also one of the game elements. This element has been implementing in Grammar Quiz module. In this module, each of question has been answered correctly will

increase the mark. Firstly, the quiz starts with zero score. User start to answer the question, for example if the first question has been answered but get the wrong answer then the score will remain but when the answer is correct the score will be increasing to 1.

In addition, the next game element that has been used is timing. Each game level will be provided the timer to answer each question which is 30 seconds. For each question the timing will renew to 30 seconds again. Moreover, sound also will be implementing in this system. A sound is a sound captured and interpreted without the use of narration or music to establish a particular narrative or artistic point. The sound also needed to create a creativity and efficient presentation.

Lastly, is a flipping card known as memory game. This memory games used to help students on memorizing their vocabulary. This games also has three level which is easy, medium and hard level. Every level of the games has its own difficulties. The game will flip the card until it finds its match, but only two cards will be open at the same time. For example, if students played for medium level, they need to find match of 8 cards by flip the card. If the card is not match, it will flip back, and the process continue until it meets their matching card. The level considers complete when all the card has been matching

5   RESULT

Mobile Application of Korean Learning system use a Gamification Techniques to attract user to learn Korean Language by using Mobile devices. The gamification element can be found in Quiz module which this module was divided to two section. First section is Vocabulary Quiz and second is Grammar Quiz. Vocabulary quiz uses a game element which is Memory Game in order to improve user memory of vocabulary while playing the game. Fig. 2 shows the example of Memory Game. The Memory game consists of two similar sets of cards in an ordered arrangement that are face-down. The cards are revealed two at a time and for a player to grab a matching pair of cards must be exposed simultaneously. Then, for the Grammar Quiz, the level of quiz has been chosen and displayed successfully. This quiz will provide a few grammar questions with the multiple-choice answer that need to be choose as the answer. Fig. 3 shows the example of quiz question need to be answered. This system also providing sound as gamification element. A sound effect is a sound captured and interpreted without the use of narration or music to establish a particular narrative or artistic point. The sound also needed to create a creativity and efficient presentation. From the Fig. 1, it shows that this project uses a sound in the learning session. This sound will read the vocabulary of Korean language to help students speaking fluently.

Fig. 1: Sound in vocabulary learning

Fig. 2: Vocabulary Quiz

Fig. 3: Grammar Quiz

6   CONCLUSIONS

Mobile application of Korean Learning is an application that is used by UiTM students, lecturer or anyone that interest to learn Korean language. Based on survey conducted, 94.9% respondent agree that the mobile application to learn Korean language can help them in the study and understanding more for this course. Students nowadays are so busy with activities and classes. Sometimes they have no time to study and it is difficult for them to bring a book anywhere and only bring short notes to revise their topic. Two hours learning session per week with their lecturer are not enough to catch up on everything. Thus, this mobile application has been developed in order to solve this problem. The technique that has been used in this application are gamification technique with interesting interface and sound. This technique has been applied in quiz module. Furthermore, the functionality of this application has been tested. It has shown a positive result to make it easier for users to use the application.

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