Developing Interface Design of Interactive Multimedia for Learning English in Senior High School

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ABSTRACT

The development of mobile technology leads to changing of learning style and environment. This situation encourage the educators uses the mobile technology as media or tools to support learning activities. Many developer and researchers have been completed their works to explore about application for learning English. This research attempted to complete preliminary research to understand main feature and interface design of application for learning English in Indonesia. The phases of research methodology are literature review, data collection, use case modelling, interface design and report. As the result, we grouped the interface design based on learning categories, including speaking, writing, listening and reading. Moreover, application must support for accessing content and communicating with native speakers or other users to support learning English. The further study is collecting data from student in senior high school and building application by using mobile technology.

Keywords : Interface Design, Mobile Learning, English

I. INTRODUCTION

Today, the era of smartphone allowed the people to download and install application on their phone easily [1], [2]. In field of education, many developers attempted to design the application that can support learning process by using mobile phone [3]. The emerging of mobile technology lead to the change of learning style and environment. This situation encourage the educators uses the mobile technology as media or tools to support learning activities [4][5].

Many researchers have been completed their works to explore about application for learning English in 2013 until 2017 [6]–[9]. Andersen (2013) explored several applications to learn English. In their research mentioned the feature for each application. The application that is reviewed including Voxy, eTeacher, Learn English, Hello-hello and Busuu [9]. Mindog (2016) explored the research about mobile application to support learning English as a Foreign Language (EFL). Based on their findings, mobile application can support learning process because learners can access content and communicate with native speakers [8].

Amasha and Al-Omary (2017) designed and evaluated Quizrevision that is developed to help student Phonetics course (Arab 342). This application allowed student to recognize differences between sounds and their pronunciation. The application is developed using MIT App Inventor code [7].

Wang (2017) studied about preliminary study of mobile application development to enhance ability of college students to remember English vocabulary named New General Service List (NGSL) application. The NGSL application is application which is provided twenty-four vocabulary-learning units for study in one academic year [6]. This research attempted to complete preliminary research to understand main feature and interface design of application for learning English in Indonesia. The further study is collecting data from student in senior high school and building application by using mobile technology.

II. RELATED WORK

We attempted to find the related work based on the current development of mobile application for learning English. This related work used as basic design of interface of interactive multimedia for learning English in senior high school in this research.

Wang (2017) explored research about pilot study of mobile application development to enhance ability of college students in memorizing English vocabulary with both description of English and Chinese named New General Service List or NGSL application [6].



Figure 1. Overview of NGSL application [6]

The NGSL application provided twenty-four vocabulary-learning units for study in one academic

year. In this application, student must learn thirty words a week. Moreover, this application is completed by questionnaires that were used to collect opinion of student toward the application [6].

Amasha and Al-Omary (2017) designed and evaluated Quizrevision that is developed to help student Phonetics course (Arab 342). This application allowed student to recognize differences between sounds and their pronunciation. The application is developed using MIT App Inventor code [7].



Figure 2. MIT App Inventor code [7].



Figure 3. Quizrevision in Google Play [7].

Mindog (2016) explored the research about mobile application to support learning English as a Foreign Language (EFL). Based on their findings, mobile application can support learning process because learners can access content and communicate with native speakers [8].

Participants	Listening	Reading	Speaking	Writing	Grammar	Vocabulary	Spelling
Akira	Charades, TED	Metro	Charades		Metro	Metro	
Aiko	iTunes U,	Zite		Facebook		Facebook,	Zite
	Umano					TED, Zite	
Jun	YouTube	HelloTalk	Skype	HelloTalk,			
				Line			
Kenji	NHK			Facebook		NHK World	
	World						

	Figure	4.	The	appli	cation	used	for	learning	English	[8]
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Andersen (2013) explored several applications to learn English. In their research mentioned the feature for each application. The application that is reviewed including Voxy, eTeacher, Learn English, Hello-hello and Busuu [9].





Figure 5. Overview of Busuu [9]







Figure 7. Overview of Learn English [9]





Figure 8. Overview of eTeacher [9]





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Lesson

Correction





Smiles And Airmiles 11 March 2013 Bruno Delavigne se nds an e-mai

> Corporate Investment Stra 06 March 2013 Icarus Quincy begins his finan



I am unable to listen to the audio

Your Lesson

Smiles And Airmiles

14 March 2013

Previous Lessons

Brian Jones replies to Bruno Delavigne regarding corporate travel solutions

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05 March 2013 Icarus Quincy knocks on Bruno



Smiles And Airmiles (Scene 4 of 4)

Brian Jones replies to Bruno Delavigne regarding corporate travel solutions



From: Brian Jones (brian.jones@DelavigneCorp.com) To: Bruno Delavigne (bruno.delavigne@DelavigneCorp.com) Subject: RE: Corporate Travel

Good day sir,



Figure 10. Overview of GymGlish [9]

III. RESEARCH METHODOLOGY

In this study, we first conducted preliminary research to understand main feature and interface design of application for learning English in Indonesia. The phases of this study including literature review, data collection, use case modelling, interface design and report, which is depicted in Figure 11.



Figure 11. Research Methodology

IV. RESULT

We attempted to explore some famous applications to learn English. We grouped the interface design based on learning categories, including speaking, writing, listening and reading. The use case diagram is presented in Figure 12.



Figure 12. Use Case Diagram LearnEnglishStudent (L.E.S)

Based on Andersen (2013), the points of mobile application of learn English refers to Voxy, eTeacher, Learn English, Hello-hello and Busuu is to learn speaking, writing, listening and reading [9]. Moreover, the representation to learn those points is different based on age of users [10].



Figure 13. Main menu of LearnEnglishStudent (L.E.S)

Every learn speaking, writing, listening and reading menu is contained material course and exercise. Student can check the material course first, and then conduct exercise to know their scores or ability as shown in Figure 14.



Figure 14. Sub menu of LearnEnglishStudent (L.E.S)

Based Mindog (2016), accessing content and communicating with native speakers is important to support learning English as a Foreign Language (EFL). The feature of those services in mobile application can support learning process [8].



Figure 15. Menu to access other resources (L.E.S)

In this application, user also can contact other users to exchange knowledge and interact each other. Every user also can see status of learning process of other user as shown in Figure 16.

	Les LearnEnglishStudent	
н.	☐ Find Other User	
11	🛃 Anita 🗍	
	🛃 Wachyu	
н.	🏭 Riad	
	🛃 Hendra	
	🚑 NurAni	
	🛃 Desi	
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Figure 16. Menu to see other user (L.E.S)

V. CONCLUSION

As the conclusion of this research is presented as follows:

- 1. The research aim is to complete preliminary research to understand main feature and interface design of application for learning English in Indonesia.
- 2. The phases of research methodology are literature review, data collection, use case modeling, interface design and report.
- 3. We found the group of interface design based on learning categories, including speaking, writing, listening and reading. Moreover, application must support for accessing content and communicating with native speakers or other users to support learning English.
- 4. The further study is collecting data from student in senior high school and building application by using mobile technology

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