

Mobile Learning With Cyberpreneurship On The Go (COG)

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ABSTRACT

Learning and teaching through m-learning interest the education fields where the materials can be accessed anywhere and everywhere. A preliminary survey had been conducted to investigate the device possession and the usage of the student's smartphone. There are six modules within the app which are course outline information, notes, exercises, videos, about us and Whatsapp. Whatsapp application is the element that will be added into the development of Cyberpreneurship On The Go (CoG) due to the results of frequent usage of smartphone among students in Politeknik Muadzam Shah (PMS). The development of CoG is developed by using ADDIE methodology and the language used are HTML5, CSS, Javascript and JQuery Mobile. The Phone Gap is used to convert the CoG into apk and it is hosted in the Android Google Play.

1.0 INTRODUCTION

Knowledge is key essential to human being and knowledge can be obtained through learning whether learn it in class or on our own and by doing research to extract new knowledge and discovery. Knowledge can be presented in many ways, it evolves from teaching face to face in the classroom, web based, e-learning and m-learning. M-learning is relatively new to the educators and it has been robust growth on the emergence of mobile apps to embed within the syllabus.

Successful identification will send a signal through a serial communication circuit and open an application (Muhammad Amree et al 2020) The traditional classroom said in the research of Li, Qi, Wang, & Wang, (2014) does not impact the sense of mind which it is not inspiring a person to learn. Chen, Jones, & Xu (2015) stated that variation of teaching style might have an impact and influence on the student's performance and different generation may need different of method of teaching as well (murtaza et al.2020).

M-learning does not specified only for certain course, it can be seen that there are various cross courses that apply m-learning such as mathematic (Borba et al., 2016)(Avraamidou, Monaghan, & Walker, 2015)(Kearney & Maher, 2013), engineering (Kob, Kannapiran, Shah, & ., 2018)(Shamsul Arrieya, 2011)(Pantoja & Maria, 2017)(Franzwa, Tang, Johnson, & Bielefeldt, 2014),

accounting (Kutluk & Gülmez, 2014) and language (Ain, Abdullah, & Tajuddin, 2017).

M-learning is most suited best for current generation where it is a collaborative learning environment (Ozuorcun & Tabak, 2012) and it has the feature of flexibility to learn anytime and anywhere. The students can take the advantage of their free time to access note, study and communicating with fellow friends and educator (Almaiah & Abdul Jalil, 2014). From the findings of Kob et al.(2018), 94.3% of students spend most of their time with their smart phone and use them to do their homework and most of Malaysians agreed that mobile phones is a necessity. Therefore, educators should grab the opportunity to learn and develop a mobile application to assist the students (abdullatif et al. 2020).

2.0 METHODOLOGY

In this paper, we will discuss the development process of Cyberpreneurship On The Go (CoG) and analysis from the survey of mobile learning usage for the students of Department of Information Technology and Communication (JTMK), Politeknik Muadzam Shah (PMS). Figure 1 shows the ADDIE Model that being used to deliver the CoG application.



Fig 1: The ADDIE Model

A preliminary survey had been handed out across 140 respondents for JTMK students in PMS where it involved from semester 1 until semester 5 students. The survey is to focus on what purpose the student's use their smartphone and this survey had been conducted by using the Google Form services. The design phase shows the outline of content in the CoG application. In the CoG, it has 6 module which are course information, notes, exercises, video, whatsapp and about us. The interfaces for each module are also being designed. The application was developed by using the Hybrid method and the language used is HTML5, CSS, Javascript and JQuery Mobile. The application is

converted by using the PhoneGap and the application was hosted in the Android Play store as in Fig 2. The CoG had been implemented for course of DFT5013 Cyberpreneurship in PMS.



Fig 2 CoG in Google Play Store

3.0 RESULTS AND DISCUSSION

In this section, we will discuss the preliminary survey on smart phone usage for mobile learning on JTMK students in PMS. The survey involved 140 respondents are 59.3% is female and 40.7% is male. The results of student's phone possession are 74.3% owning the Android phone and 25.7% own the IOS phone (Fig 3). The analysis of allowing phone in classroom shows that 95.7% agreed to allow phone usage while 4.3% disagreed (Fig 4). WhatsApp/Telegram show that 91.4% is the most frequent use application when they use their smartphone and the second highest is used for social networking resulting in 70% such as Facebook, Instagram and Twitter. Fig 5 shows the main purpose of student's using their smartphone.

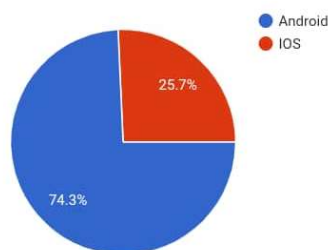


Fig 3 Smartphone possession

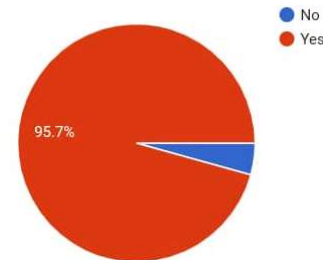


Fig 4 Smartphone allow in class

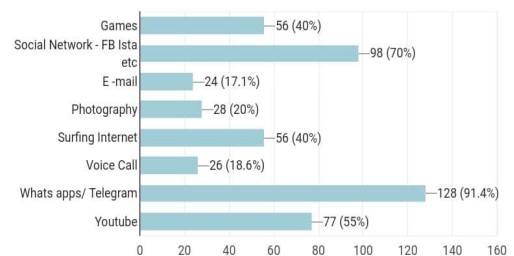


Fig 5 Usage of Smartphone

Last but not least the connectivity that being used for their smartphone is by using their own personal data and they mostly focused on the WhatsApp as a medium to share their notes, enquiry to the lecturer teaching the course and collaborative group to communicate with each other. From the preliminary results, it can be concluded that learning by using mobile helps their learning be more convenient and easier. It is supported by the research of

Ahmad & Sarlan (2015), these are the benefits of using m-learning (Fig 6).

Elements	Mean	SD
Increase the quality of the instruction at the university.	3.9	0.8
Always be available to me when it's needed.	4.3	0.7
Make my learning more convenient and easy.	4.2	0.8
Improve my learning time.	4.0	0.9
Encourage me to learn.	3.8	0.9
Enhance communication with my lecturers.	4.1	0.9
Enhance communication with my colleagues.	4.4	0.8

Fig 6 Benefits of using m-learning (Ahmad & Sarlan, 2015)

The development of CoG leads the implementation of WhatsApp application within the apps as the result shows WhatsApp is the most using application by the JTMK student in PMS.

4.0 COG INTERFACE MODEL

From the preliminary survey that had been conducted, the elements that should be within the app are the WhatsApp application. In the Cog application which it is focused on the course of DFC5013 Cyberpreneurship, it has 6 module which are course outline information, notes, quizzes, videos, WhatsApp and about us. Figure 7(a) shows the home page of the application, figure 7(b)

is the course information interface, figure 7(c) is the notes interface, figure 7(d) is the exercises interface, figure 7(e) is the video page, figure(f) is the WhatsApp application and figure(g) is the about us page.

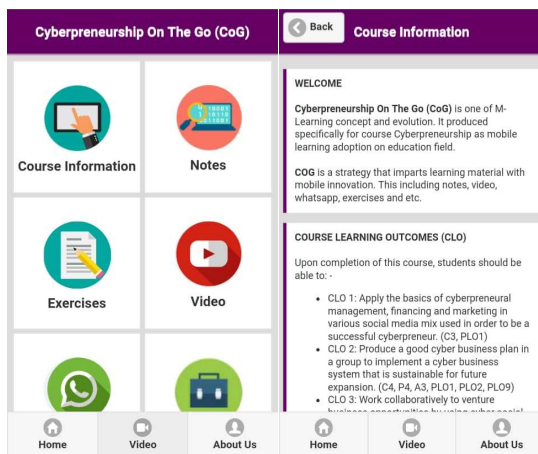


Fig 7 (a) Fig 7 (b)

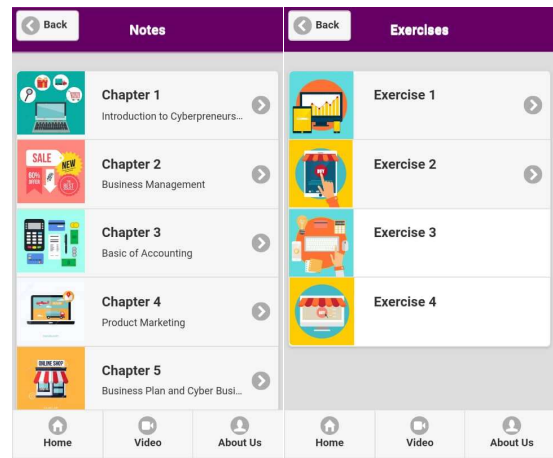


Fig 7 (c)

Fig 7 (d)

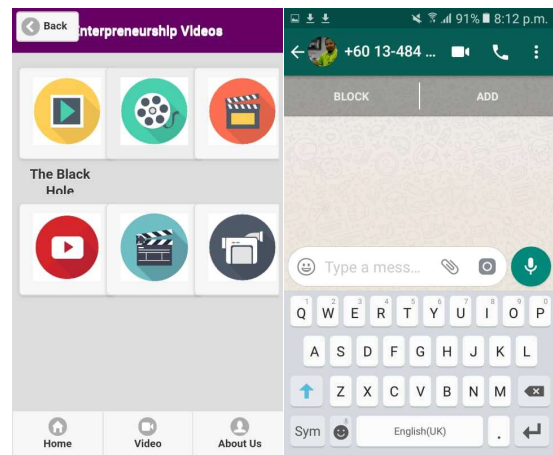


Fig 7 (e)

Fig 7 (f)

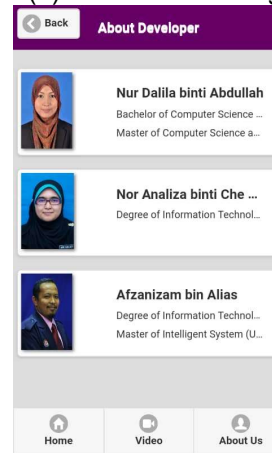


Fig 7 (g)

In the notes module, there are 5 chapters which are chapter 1 (Introduction to Cyberpreneurship), chapter 2 (business management), chapter 3 (basic of accounting), chapter 4 (product marketing) and chapter 5 (business plan and cyber business). In Exercises module, there are 2 available exercises which are exercise 1 for chapter 1 and exercise 2 for chapter 2. Figure 8(a) is the interface for notes and

Figure 8(b) is the interface for exercise. The functionality of WhatsApp application is embedded within the app due to the most frequent use among students in PMS.

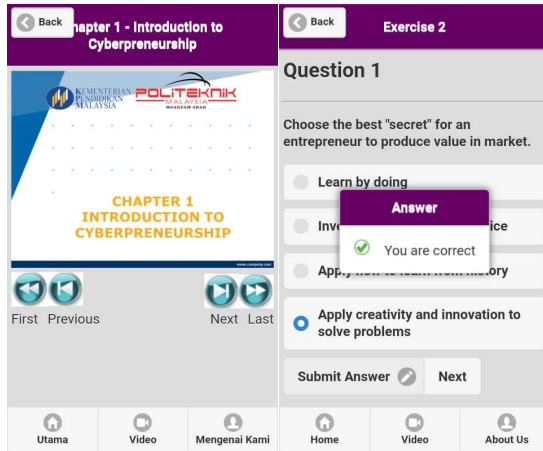


Fig 8 (a)

Fig 8 (b)

5.0 CONCLUSION

The way we learn in education had changed due to the impact of emergence smartphone in our lives. The mobile devices offer the features of collaborative environment and it encourages educators to think of a new alternative to teach in class. The educators learn on how to develop an app to implant the collaborative and interactive learning to the students. From the preliminary survey, it can be concluded that the students used their smartphone almost every day and it shows the main purpose of they using their smartphone and it is not a crime to develop an app for the student to be used as teaching material to help them learn and make them more understand regarding the course. In the research of Kesava & Soong(2016), it shows that the energy consumption is lower by applying m-learning rather than using the desktop which the m-learning can contribute to Green ICT Campus. The CoG application were developed to cater the needs of m-learning in this century.

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