CHAPTER 1

INTRODUCTION

1.1 Introduction

Oncology children is define of children who have tumours and cancers. Virtual Education Game for Oncology Children using mobile application (VEGOC) is an online mathematic practice application, where focusing on mathematical subject. This application is designed for oncology children where there are stays in long period at hospital. It will help student (children) do the mathematic practice besides having good time chat with friends. By providing online platform and user-friendly interface concept it will make the student easily access this application anytime and everywhere. In additional, special sound effect and attractive animation will give more fun and at the same time their will motivate them to compete with their friends.

The application is Mathematic practice based on student level which is have three levels that are module 4 (10 years old), module 5 (11 years old) and module 6 (12 years old). The application will help student to improve their skill in problem solving and help student to monitor their performance.
The concept for this application is answer the mathematic questions. Each student have their own character represent as a panda. To get the high a score, student need to answer correctly and faster. Each correctness answer will get 100 points and the panda will move one step ahead.

Currently Pusat Perubatan Universiti Malaya (PPUM) is using conventional method during learning process for oncology student such as reading text book and exercise book. This is the reason why students are being demotivated and fell bored during learning process. Mostly hospital does not provide proper classes for oncology children, which is teacher need to approach student individually because of student have weak antibody and cannot move easily.

From the study, some student have communication problem and lost confident level. This is because of their sadness and pain. Their classes based on thermotherapy schedules, in other hands, they do not have fix schedule classes like normal students. Because of this situation, student will waste their time and do nothing at hospital during waiting for their teacher.

VEGOC as a mobile learning (M-learning) device. Nowadays, M-learning is set to be the next big wave in education. It offers a massive potential as a tool to be used in situations where learners are physically isolated, to promote collaboration learning, to engage learners with content, as an alternative to books or computers delivery of information (Tsai, et.al, 2010).
1.2 Problem statement

Based on the study, some problems that were recognise in the current method of education system for oncology student are:

a. Student has communication problems and loss confident level with friends because of weak antibody and sadness.
b. PPUM has lack of providing platform for communication activity between friends.
c. Learning process using conventional method such like exercise book and text book will be make student fell bored.
d. Teacher comes one by one to student (patients). So, student will waste their time for waiting the teacher.

1.3 Objective

In order to overcome the problem the objective of this research are:

a. To develop an attractive online mobile application prototype of VEGOC
b. To provide mathematic practice to help student learn interactive and monitor their performance in term of solving mathematic problem.
c. To provide group chatroom for student to improve their self-confident and communication skills with their friends during their waiting period.