

BUSITEMA UNIVERSITY

FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

ACADEMIC MONITORING ASSISTANT APPLICATION

BY

KABUGO EMMANUEL

BU/UG/2010/32

kehmar@gmail.com

+256-702-735-494

A Project Report submitted to the Department of Computer Engineering For The Award
Of The Degree Of Bachelor Of Computer Engineering Of Busitema University

SUPERVISOR

MR. ALUNYU EGWAR



Edit with WPS Office

DECLARATION

I Kabugo Emmanuel declare that the work presented in this proposal is my own and has never been presented to any University or Higher Institution of Learning for any Academic Award

Signature:

Date:



APPROVAL

This research project proposal report has been submitted to the Department of Computer Engineering for examination with the approval from the following supervisor

Mr. Alunyu Andrew Egwar

Signature:

Date:



ACKNOWLEDGEMENT

I take this opportunity to thank my parents for all their support, sacrifices just for my education. Thank you very much.

Special thanks go to my project supervisor Mr. Alunyu Andrew Egwar for his time, patience, guidance, motivation and encouragement.

To my friends Kaye Shafik, Kazibwe Rogers, Sendija Jolly Joe, Namirembe Racheal, Nantambi Allen Namukasa, Kato Damain, Aliro Robert Ivan and all my class mates thank you very much for supporting me always.



LIST OF ACRONYMS

M-learning:	Mobile Learning
E-learning:	Electronic Learning
TEL:	Technology-Enhanced Learning
CBI:	Computer-Based Instruction
CBT:	Computer-Based Training
CAI:	Computer-Assisted Instruction or Computer-Aided Instruction
IBT:	Internet-Based Training
WBT:	Web-Based Training
VLE:	Virtual Learning Environments
OS:	Operating System
iOS:	iPhone Operating System
SMS:	Short Message Service
E-mail:	Electronic Mail
MoES:	Ministry of Education and Sports
ICT:	Information and Communication Technologies
TV:	Television
CD-ROM:	Compact Disk-Read Only Memory



ABSTRACT

The Academic Monitoring Assistant Application will be an android based mobile application to help parents to monitor and supervise their children's academics both at home and in holidays.

It will have a knowledge bank (database) which will house the different topics according to subject and the level of education of the child i.e. senior 3 covering various subjects.

From each topic selected by the child, the application will generate an objective exercise which will be used to test if the child has understood what he has read and on submission of the test, the application will give a feedback to the child as the score he has obtained e.g. 4/15 and will automatically send an email to the parent indicting the subject read, topic selected, score obtained from the exercise and the time spent reading thus enabling the parents to monitor their child's academics.

The application will have the capability to lock the phone if the child spends sometime without reading say a week and it will send a SMS alert to the parent that it has locked the phone. To unlock the phone, the parent will be required to insert in his secret code.

Also when the child decides to uninstall the application, it will send a more active alert to the parent (SMS) that it has been uninstalled.



DEDICATION

To my future wife and family



TABLE OF CONTENTS:

DECLARATION.....	i
APPROVAL.....	iii
ACKNOWLEDGEMENT.....	iv
List of Acronyms.....	v
ABSTRACT.....	vi
DEDICATION.....	viii
Table of Contents:.....	ix
CHAPTER ONE.....	1
1.0 Introduction.....	1
1.1 Background of the study.....	2
1.2 Problem Statement.....	4
1.3 Objectives.....	4
1.3.1 Main Objective.....	4
1.3.2 Specific Objectives.....	4
1.4 Justification/ Significance of the Project.....	5
1.5 Scope of study.....	5
1.6 Limitation.....	5
CHAPTER TWO.....	6
2.1 Introduction.....	6
2.2 Social needs.....	6
2.3 Convenience of smart phone.....	7
2.4 E- learning.....	7
2.4.1 Key advantages of e-learning include:.....	9
2.4.2 Key disadvantages of e-learning.....	9



2.5	M-learning.....	9
2.5.1	Mobile Learning in developing Countries.....	11
2.5.2	Analysis (costs / benefits, forecast) of M-learning.....	11
2.5.3	Examples of Existing Education Applications.....	13
CHAPTER THREE.....		15
3.1	Introduction.....	15
3.2	Data Collection.....	15
3.2.1	Document review.....	15
3.2.2	Interview.....	15
3.2.3	Consultation.....	15
3.3	Data Analysis.....	15
3.4	System Design.....	16
3.4.1	Block diagram of the system.....	16
3.4.2	Tools.....	16
3.5	System Implementation.....	17
3.6	Testing and Validation.....	17
3.6.1	Unit testing.....	17
3.6.2	Integration testing.....	17
3.6.3	System testing.....	17
Chapter four.....	Error! Bookmark not defined.	
References.....		27
Appendices.....		30
Appendix 1: Budget.....		30
Appendix 2: Time Frame.....		31



CHAPTER ONE

INTRODUCTION

1.0 Introduction

Smart phones are mobile phones with more advanced computing ability and connectivity that comprise of functions such as portable media players, low-end compact digital cameras, pocket video cameras and GPS (global positioning system) navigation units. The popular mobile operating systems (OS) installed in the smart phones include Apple's iOS, Google's Android, Nokia's Symbian and RIM's BlackBerry OS among others. (Norazah Mohd Suki, 2013)

The student with his or her head buried in a smart phone screen is ubiquitous on college and university campuses. Walking down the street, in elevators, even during classes iPhones, Androids, and other similar devices are the constant companion of this generation of students. The question of what is being read or otherwise accomplished on these devices, however, has not been adequately addressed. Is this just a reflection of a need for constant companionship, or are these devices being utilized otherwise? The difference in the use of technology for this generation from those that came before it has been well-documented (Oblinger and Oblinger, 2005).

Having grown up with the internet, computers, instant messaging, video games and cell phones, the "millennial" generation, as it has become known, has a very different view of information access than their parents and grandparents (Prensky, 2001).

Rather than "going to get" needed information, the 13-20 year olds who make up the majority of high school students are accustomed to instant information access. Their expectation is to have their information needs and wants answered immediately, and speed usurps the accuracy of the information retrieved (Oblinger and Oblinger, 2005).

Libraries would like to believe that their services and resources are more accurate and efficient than keyword searching on the internet. But do the searching habits of high school students reflect this? If academic libraries wish to remain relevant to their student body, then services must be available when and where students access



REFERENCES

- ~ Parental Involvement and Effective Nation's Implementation of the Universal Basic Education (UBE) by Apebende, Eizabeth Ushang, Akpo, O. Bassey; April, 2010
- ~ Mothers' Constructions of their Roles in the Literacy Education of their Children by Ngozi Anyikwa and Ngozi Obidike, 2012
- ~ Parenting style and conduct problems in children: A report of deliberate self-poisoning in a Nigerian child by M F Tunde-Ayinmode and O A Adegunloye; June 2011
- ~ Factors associated with high school learners' poor performance: a spotlight on mathematics and physical science Andile Mji and Moses Makgato; 2006
- ~ Low-key m-learning: a realistic introduction of m-learning to developing countries by Ken Masters, Faculty of Health Sciences, University of Cape Town
- ~ Mobile Learning: A New Paradigm in Electronic Learning by Chi-Hong LEUNG and Yuen-Yan CHAN; 2003
- ~ Long-term Effects of Parents' Education on Children's Educational and Occupational Success: Mediation by Family Interactions, Child Aggression, and Teenage Aspirations by Eric F. Dubow, Paul Boxer; July 2009
- ~ Comparison of the learning effectiveness of computer-based and conventional experiments in science education by N.P.J. Molefe, M. Lemmer and J.J.A. Smit; 2005
- ~ Parental involvement in primary education in Anambra State. Journal of Childhood and Primary Education by Uzoechina, G. and Obidike N. D; 2008)
- ~ Parental involvement, interest in schooling and science achievement of junior secondary students in Ogun State by Olatonye, R. A and Ogunkola, B. J; 2008
- ~ Genova, G.L. (2010), "The anywhere office – anywhere liability", Business Communication Quarterly, Vol. 73 No. 1, pp. 119-26.
- ~ Kuhlmeier, D. and Knight, J. (2005), "Antecedents to internet based purchasing: a multinational study", International Marketing Review, Vol. 22 No. 4, pp. 460-73.
- ~ Suki, N.M. and Suki, N.M. (2007), "Mobile phone usage for m-learning: comparing



heavy and light mobile phone users”, Campus Wide Information System, Vol. 24 No. 5, pp. 355-65.

- ~ Tian, L., Shi, J. and Yang, Z. (2009), “Why does half the world’s population have a mobile phone? An examination of consumers’ attitudes toward mobile phones”, Cyber Psychology and Behavior.
- ~ Carayannis, E.G., Clark, S.C. and Valvi, D.E. (2012), “Smartphone affordance: achieving better business through innovation”
- ~ Goldman, S.M. (2010), “Transformers”
- ~ Schiffman, L.G., Kanuk, L.L. and Wisenbut, J. (2009), Consumer Behavior,

