

**MULTIMEDIA UNIVERSITY OF KENYA**

FACULTY OF COMPUTING & INFORMATION TECHNOLOGY

**PROJECT PROPOSAL**

**CAMPUS APP**

BY

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REG. No: CIT-223-025/2013**

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Submitted in partial fulfillment of the requirements of Third Year Bachelor of Science in Computer Science.

**DECLARATION**

I hereby declare that this Project is my own work and has, to the best of my knowledge, not been submitted to any other institution of higher learning.

**Student : KELVIN NDUNG'U KAMAU**

**Registration Number: CIT-223-025/2013**

**Signature: ............................................... Date: .....................................................**

This project has been submitted as a partial fulfillment of requirements for the Bachelor of Science in Computer Science of Multimedia University of Kenya with my approval as the University supervisor.

**Supervisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature: .....................................................**

**Date : ..................................................**

**ABSTRACT**

A campus app is a fundamental resource used to drive recruitment and engagement between students and various campus departments.

**CHAPTER 1: INTRODUCTION**

**1.1: BACKGROUND OF STUDY**

A campus app is a fundamental resource used to drive recruitment and engagement between students and various campus departments.

**1.2: PROBLEM STATEMENT**

Consider the following,

Prospective students finding an idea of the life they would have in campus to help aid in the satisfactory selection of the campus as their place of study is currently a difficulty.  
  
Students' needing to settle fee accounts, seek advice on exam results & academic progressions, defer studies, resume studies etc results to a hectic time for the students, faculty and administration advisors mostly prior to and to the end of each of each semester.

Long lines are seen in faculty and administration lobbies. Advisors also spend so much time handling walk-in cases in their offices.

Accessing course material i.e unit outlines, unit study material currently requires individual request to a lecturer.

**1.3: AIM OF THE STUDY**

This project proposes a campus app that spans the following:

**i) Best Recruiting and Admissions** - Integrating personas and tours for prospective students. The aim is to provide a seamless simulation from the admissions process to class enrollment making it an intuitive and easy to follow navigation for everything a new student will need as they join the campus.

**ii) Innovative Communication**a) Utilizing personalized and timely push notifications and in - app banners to improve communication between students and/or various campus departments.

b) Providing individualized answers to students' questions and online submission of requests in lieu of in-office visits.

The requests are captured in a ticket system that has a backend for advisors to login and process the student’s requests. It keeps a dated history of all requests and their outcomes, in addition to notifying students in app of the status of their requests.

These improve case management, documentation, and efficiency across the campus.

**iii) Academics**

a) Shows a list of faculties in the campus.

b) Shows the courses available in each faculty.

c) Shows Course content for all courses i.e Course Outline and Course Study Material.

**1.3.1: PROJECT OBJECTIVES**

A prospective student XYZ should be able to do the following with the app.

a) Obtain everything a new student will need as they join the campus. i.e Campus Joining Requirements and a guided simulated tour of the institution.

An ongoing student XYZ should be able to do the following with the app.

a) Download course and unit study material.

b) Submit requests to be handled by school advisors in-app in lieu of in office visits.

School Advisor XYZ should be able to do the following with the app.

a) Providing individualized answers to students' questions and requests in-app.

b) Post in- app banners to improve communication between students and/or various campus departments.

**1.4: SIGNIFICANCE/JUSTIFICATION OF STUDY**

The deployment of a campus application within a campus is beneficial to both prospective and ongoing campus students. It's also highly beneficial to campus administration and campus advisors in ways specified in the project objectives above.

**1.5: SCOPE**

The first development and deployment of the proposed campus app will take place at Multimedia University of Kenya - Ongata Rongai Campus.

The targeted users are potential MMUK students, current MMUK students and MMUK Administration and Staff and Faculty Advisors.

The development period is scheduled from March to April 2020 as Phase 1 and May to July 2019 as Phase 2.

**1.6: ASSUMPTIONS**

1. All prospective and current MMUK Students will use the app.

2. All Faculty Admin, Staff and advisors will use the app.

**1.7: LIMITATIONS**

Accessibility of Android Phones to run the first version of the application that requires the android framework to run amongst students and staff might limit 100% efficiency of the application.

**CHAPTER 2: LITERATURE REVIEW**

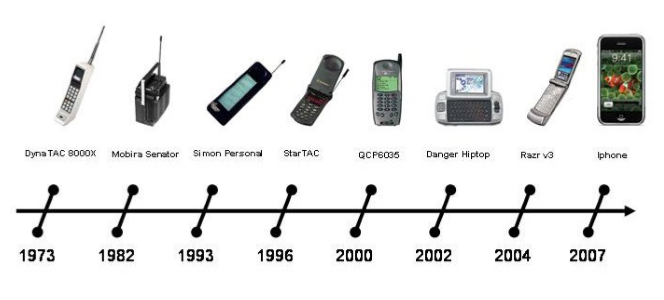
**2.1: INTRODUCTION**

**2.1.1 Brief Overview of the History of Mobile Phones**

In 1946 the world was introduced to the first worldwide mobile network. It was introduced by the USA and could only be used nationally at the time, and used mostly for military purposes. In the latter part of the 1950s, mobile networks replaced the Analog network. Then, in 1973, Motorola were the pioneers presenting a prototype of the world's first mobile telephone. It was one foot long, and weighed almost 2 pounds, and came in with a high price tag of $3995. This mobile phone became commercially available in 1983, providing one hour of talk time, and allowing you to store thirty phone numbers.

In one year, 300,000 people worldwide were owners, considering the high price; it was a big achievement and significant market growth. In 1982 the Finnish handset maker Nokia introduced its first Mobile phone, “Mobira Senator”. It looked like a portable radio, and weighed 21 pounds. Bell South/IBM was the first to produce a mobile phone with PDA features. It had a calculator, calendar applications, and also fax and e-mail capabilities. It weighed 18 pounds and sold for $900. Motorola’s “StarTac” was 3.1 pounds, which is lighter than some of the mobile phones available today, and it was both fashionable and functional. In 2000 Kyocera introduced QCP6035, the first widely available Palm OS based phone. 2002 saw the introduction of the “Danger Hiptop” which was later known as the T-Mobile Sidekick. It was one of the first mobiles to include a web browser, reliable e-mail access and instant messaging. In 2004 the RAZR v3 was introduced, Motorola started a trend towards ultra thin and stylish phones. Then in 2007, Apple introduced the innovative iPhone with its innovative touch screen.

(Speckmann 2008)



**2.1.2 Android Information and Background**

“Android is the first open source mobile application platform that has the potential to make significant inroads in many markets.” (Ableson et al 2009). Android is a software platform, and operating system for mobile devices. Android was based on the Linux kernel and was developed by Google/ the Open Handset Alliance. The Open Handset Alliance is comprised of various corporations and companies. Members include, Google, HTC, LG, Samsung, T-Mobile, Vodafone, Nvida, Dell, Intel, Ebay, Garmin, Accenture and much more. A mix of mobile operators, handset manufactures, semi-conductor companies, software companies, and commercialization companies. (Feinbube 2011, Open Handset Alliance 2012).

Google wanted to enter the mobile phone market mostly to sell more ads in this new area. They acquired in July 2005 Android Inc., appointing Andy Rubin as their Director of Mobile Platforms group. Google then entered the mobile market, not as a new handset manufacturer but instead by introducing a new Operating System(OS), called “Android” on November 5th, 2007. Google wanted the OS to run on any device, whether they were HTC, Samsung or Motorola. With this vision and the vision of having Android based devices being able to do all a pc could do, they launched the Open Handset Alliance, to help make it possible. (Gadhavi and Shah 2010).

**2.2: RELATED SYSTEMS**

a) St Paul’s University Students App

b) South Eastern Kenya University Students App

**2.3: BENEFITS OF PROPOSED APP OVER RELATED SYSTEMS**

a) Sometimes it is harder to wake up than to solve the most complicated math problem. Well, yes we already have an alarm clock. But what is the main problem of such devices? They simply don't work the way they should. People just go to sleep. Built in alarm clock in the college app can only be turned off under certain conditions. For example, student needs to gather a puzzle or solve an arithmetical problem.

For those who particularly get a little sleepy, app can offer 2 or 3 levels more in order to snooze. As a consequence in such a situation, brain starts to work and energy comes with it (the day will surely be productive).

b) Having a thick notebook while using a mobile device is nonsense. The campus app can become a new outline for a student. With the help of such a function, a user can record lectures and add photos.

In addition, it is possible to synchronize all the information with the cloud services, so student can use data on the computer or any other device. A paper notebook isn’t a particularly reliable device because you can leave it in the classroom or in the cafe. With campus app, there is no way to lose notes. Besides if the student doesn’t have time to take notes, he can use the built-in voice recorder to record a lecture.

Built in recorder is initially present in every smartphone, but sometimes it is really difficult to understand the record itself. One interesting feature of campus app is to mark important pieces of the record while recording. User can even add notes, tag pictures to certain parts of the audio, in order to quickly find needed piece of information.

The aforementioned benefits are additional services i propose the campus app to incorporate.

**CHAPTER 3: METHODOLOGY**

**3.1: INTRODUCTION**

I propose Rapid Application Design for the development of this application considering its straightforward nature.

**3.2: METHODOLOGY**

1. Developing a HTML/CSS Website incorporating JavaScript and PHP to fulfill the objectives outlined in the project objectives.

2. Converting the website to a mobile application.

**3.3: DATA COLLECTION METHODS AND TOOLS**

Data and observation on current activities in MMUK has been taken experientially denoting the following:

a) Students' needing to settle fee accounts, seek advice on exam results & academic progressions, defer studies, resume studies etc results to a hectic time for the students, faculty and administration advisors mostly prior to and to the end of each of each semester. Long lines are seen in faculty and administration lobbies. Advisors also spend so much time handling walk-in cases in their offices.

b) Accessing course material i.e unit outlines, unit study material currently requires individual request to a lecturer.

These two points must be generally approved as true by any student or staff in MMUK.

Considering this, this project proposes a Campus App.