

AUBIT MCA A Mobile Application for the College

S. Gokila, Dr. A. Valarmathi

Master of Computer Application, University College of Engineering, Anna University, BIT Campus, Tiruchirapalli, Tamil Nadu, India

ABSTRACT

The development of mobile phones is massive in technology and usage. The first mobile phone was invented in 1973 by Motorola [3]. The operating system is responsible for determining the functions and features available on the device such as keyboards, applications, email, text messaging. According to data from the International Data Corporation (IDC), the worldwide Smartphone market grew 1.1 percent year over year in 2016. Android dominated the market with 86.8% share in 2016, followed by iOS at 12.5%, and Windows phone at 0.3% [4]. Android is an open source Linux based system developed by Google, and primarily aimed at mobile handsets and other portable devices. Android provides a java based development platform for applications. The purpose of developing a college website is to use it anywhere and anytime to gain knowledge or to know some information. The website is not very effective to be viewed in a mobile phone and using several applications for various reasons can consume lot of memory. This College application provides a wide range of useful information which is split into several functionalities. These include: academics, news, events, facilities, and all the college details. In particular it is specially designed for the department of Computer Application that covers: Syllabus, explanation for each unit, notes for every subject, e-learning platform for programming languages and chat area to discuss and express our doubts and views. Users can install this application in their android mobile to view all of these college details and make use it.

Keywords : Android, Smartphone, College website, e-learning

I. INTRODUCTION

In the previous system, all the information has to be viewed in a hard file, or in website. Having a pc everywhere is not practically possible. Hence, in order to overcome this problem a smart phone based application can be used to make this process easier, secure and less error prone.

Android is very popular among Smartphone because of its low cost and support for variety of features. Android gives world class platform for building apps and games with several tools that makes the developer more efficient.

Mobile learning has many different definitions and is known by many different names, like M-Learning, U-Learning, personalized learning, ubiquitous learning, anytime and anywhere learning, etc.,

One definition of mobile learning is, "any sort of learning that happens when the learner is not at a fixed, predetermined location" (MOBIlearn., 2003).

Mobile OS

A mobile operating system, also called a mobile OS, is an operating system that is specifically designed to run on mobile devices such as mobile phones, smartphone, PDAs, tablet computers and other handheld devices. Popular mobile os are Android, BlackBerry, iOS, Bada, Windowsn MeeGo, Palm, Symbian, webOS.

Android

The Android operating system is used on smartphone, netbook, tablet computers, Google TV, and other devices.

The main hardware platform for Android is the ARM architecture. There is support for x86 from the Android-x86 project, and Google TV uses a special x86 version of Android.

The first commercially available phone to run Android was the HTC Dream, released on 22 October 2008. In early 2010 Google collaborated with HTC to launch its flagship Android device, the Nexus One. This was followed later in 2010 with the Samsung-made Nexus S.

In September 2011, many companies which produced smartphone powered by MeeGo, Bada, WebOS and Windows also produce smartphone powered by Android. There is also possibility that some BlackBerry smartphones will use Android.

Android provides various applications that can satisfy most of our daily needs. One application that falls in this category is an application for college. This application includes various options to learn and to know about the college and its events.

Mobile Learning (m-learning)

Mobile Learning means Mobile E-Learning. Education and training is the process by which the wisdom, knowledge and skills of one generation are passed on to the next. Two forms of education and training: conventional education and distance education. "M-Learning", offers modern ways to support learning process through mobile devices, such as handheld and tablet computers, MP3 players, smart phones and mobile phones.



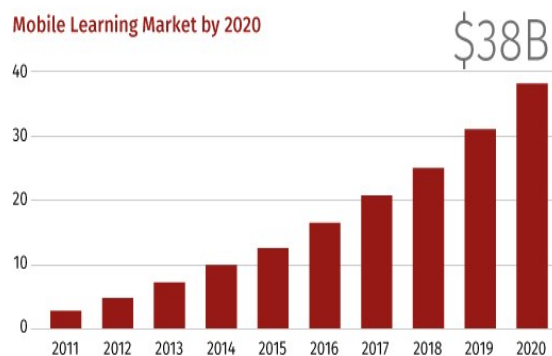
Study showed that M-Learning as a Distance learning brought great benefits to society including Training when it is needed, at any time, place. In other words, with the use of mobile devices, learners can learn anywhere and at any time (*Crescente and Lee, 2011*).

Over the past ten years mobile learning has grown from a minor research interest to a set of significant projects in schools, workplaces, museums, cities and rural areas around the world.

Importance of m-learning

The study found that after children had used the app every day for two weeks, the vocabulary of Title 1 children between three and seven years old improved by as much as 31 percent.

The worldwide market for mobile learning is predicted to grow from US\$7.98 billion in 2015 to US\$37.6 billion by 2020 at a compound annual growth rate of over 36 percent. Based on research conducted by Ambient Insight, in 2014 the top buying mobile learning countries in terms of expenditure were, in order, the U.S., China, India, Japan, and South Korea. The U.S. remained the top purchaser of mobile learning technology in 2014, with a stable growth rate of 5.3 percent. China, the second-largest mobile learning buyer in the world, accounted for 26 percent of total mobile learning revenues in Asia. India is also viewed as one of the biggest mobile learning markets in Asia.[5]



* Source: Transforming learning through mEducation, McKinsey

II. EXISTING SYSTEM OF COLLEGE

At present our college has an website (www.aubit.edu.in), maintained by the department of Computer Application. It provides various information about the college, updates information about the news and events, details about placement etc.,

Existing System

The college has a website that is common to the whole campus and it gives information related to events,

updated news, photo gallery, details about admission and exam, fees procedures and several others. It is not for a specific department and it is not related to the curriculum of a particular subject.

III. LITERATURE SURVEY

“Mobile Learning for Education : Benefits and Challenges”[1] the paper addresses four key areas as follows analysis of mobile learning, differentiating e-learning from m-learning, values and benefits of m-learning, challenges and barriers for m-learning. It explains the scenario of education at present and how it will be in future. The values, benefits and difficult task in mobile learning is discussed “Research and development of Mobile Application for Android Platform”[2] it gives a brief introduction about android, its architecture, and experimental methods to implement components like video player and audio player using eclipse for java programming and xml file for interfacing several modules and activities are used to extract and play the files in the player. Sina Weibo client provide an interactive forum that allows to login authenticate and view the posts and comments.

IV. PROPOSED SYSTEM

The proposed system is an application that provides various details about the college like

- News, Events, Schedules for exams
- About college
- Link to website

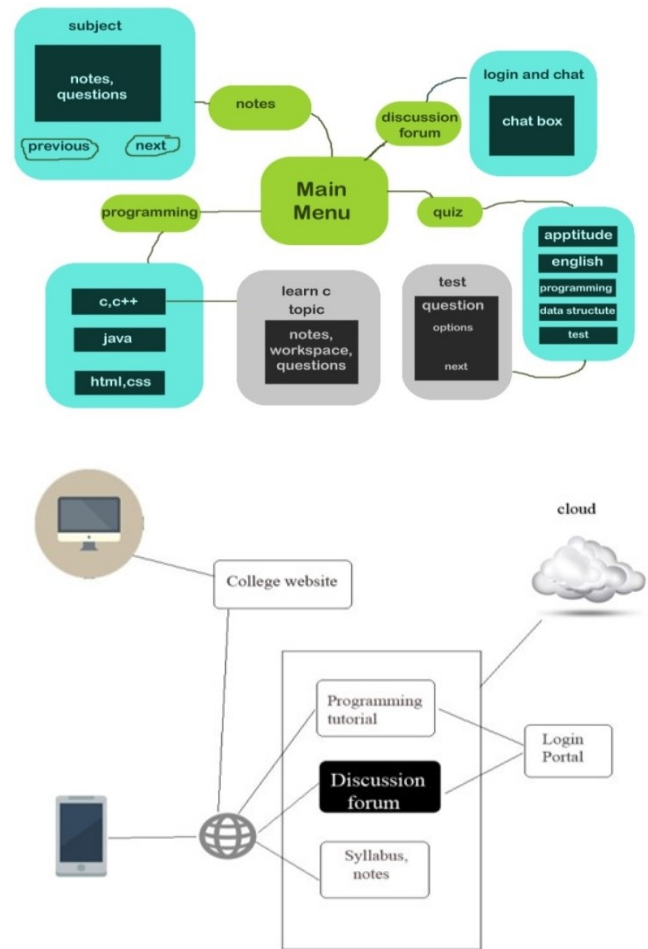
This application is specially designed for the department of MCA, to provide the students with more knowledge in academic wise and training for placements.

It provides an open discussion forum that helps the students to clear their doubts and express the views academically

Advantages

- ✓ Friendly interface
- ✓ Gain knowledge anywhere
- ✓ Ask the doubts immediately
- ✓ Quiz tests to test ourselves
- ✓ Unit wise notes according to syllabus

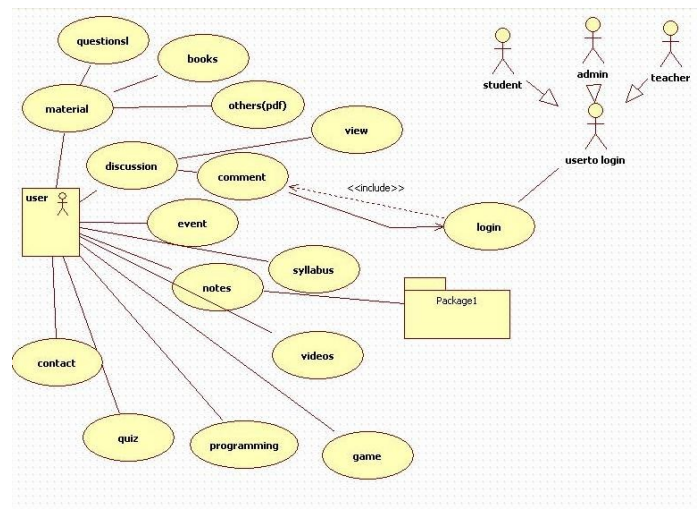
V. ARCHITECTURE



UML Diagrams

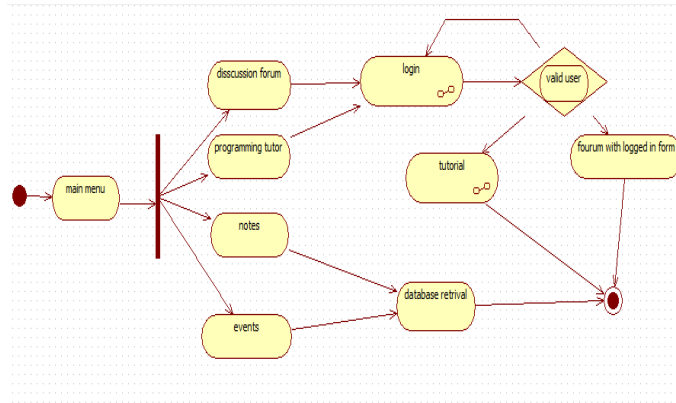
1. Use Case Diagram:

Use case diagram gives the detailed view of the system with all modules.



2. Activity Diagram

Activity diagram gives the detail about the modules related to the department of Computer Application.



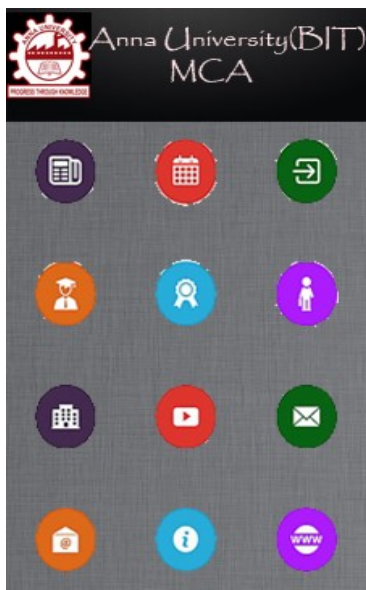
SYSTEM IMPLEMENTATION

It is an android based application and free of cost. Several IDEs can be used to develop an android application in many languages, most of them are open source and easily available. The IDE used for this application is Android Studio. The application is based on java, it helps to add several classes and to get the expected result easily.

OBJECTIVE

The main aim of the application is to make the students get updated about the recent happening in the university and to develop their knowledge related to the department.

VI. RESULT



Menu of the application

VII. CONCLUSION AND FUTURE WORK

AUBIT MCA is a very useful application that helps the students to get more information about the college and the department. In future it can be enhanced to have tutorials with the working platform and get frequent notifications about jobs and updated technology information.

VIII. ACKNOWLEDGEMENTS

I would like to express my special thanks of gratitude to my teacher who helped to do this project AUBIT-MCA, and finalizing this project within the limited period, which helped me in doing a lot of Research and to know about so many new things.

IX. REFERENCES

- [1]. Mehdipour, Hamideh Zerehkafi, "Mobile Learning for Education : Benefits and Challenges" International Journal of Computational Engineering Research vol, 03| Issue, 6. June 2013
- [2]. Li Ma, Lei Gu, Jin Wang, "Research and development of Mobile Application for Android Platform" International Journal of Multimedia and Ubiquitous Engineering 9(4):187-198 • April 2014
- [3]. A. Gow, Richard K. Smith Mobile and Wireless Communications: an introduction chapter 3: going mobile - <http://www.brophy.net/PivotX/?p=john-francis-mitchell-biography#CELLPHONEINVENTOR>
- [4]. <http://www.idc.com/promo/smartphone-market-share/os>
- [5]. <http://www.emerging-strategy.com/article/learning-on-the-go-the-rise-of-mobile-learning-across-the-globe>