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### **RESEARCH ARTICLE**

# AN ANDROID APPLICATION FOR UNIVERSITY ONLINE COUNSELING

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**Abstract:** The growing impact over smart phone increases the development of mobile application for educational Guidance and Counseling (GC) at university that called “UOC”. The application is used for Guidance and Counselling services that run on mobile devices. The application is designed specifically for college and university student. The methods are a combination of interactive multimedia approaches and educational psychology. Hence, the design process is carried out with processes of digitizing the material educational GC services, visualizing wisely and making interactive. The application provides an effective interaction of online counselling among a student and a counselling staff regarding a student’s academic and personal success, drawbacks, problems and feedbacks.

**Keywords** — Guidance and Counseling, mobile application, online counseling, smart phone

## 1. INTRODUCTION

Android, is a Linux-based operating system that is designed primarily for touch screen mobile devices such as smart phones and tablet computers. Initially developed by Android that is Google backed financially and later bought in 2005. Android was unveiled in 2007, with the founding of the Open Handset Alliance; a package of hardware, software and telecommunication companies devoted to advancing open standards for mobile devices.

Android is open source and this open source code and permissive licensing allows the software to be freely modified and distributed by device manufacturers and enthusiast developers (Google releases the code under the

Apache License) [1]. And Android has a large community of developers for writing applications (apps) and these extend the functionality of devices, written primarily in customized version of the Java Programming language.

There were approximately 700,000 apps available for Android, and the number of applications downloaded from Google Play - Android's primary store, was 25 billion in October 2012. A developer survey found that Android is the most popular platform for developers, used by 71% of the mobile developer population in April–May 2013.

These factors have contributed making Android, platform, and the software of choice for technology companies. Hence, despite being primarily designed for phones and tablets, Android has additional applications with televisions, games, digital cameras and other electronics. The open nature of Android has further encouraged a large community of developers and enthusiasts to use the open-source code as a foundation for community-driven projects, and this add new features for advanced users or to bring Android devices officially released running on other operating systems.

Android's share of the global smart phone market, led by Samsung products, was 64% in March 2013. There were 11,868 different models of Android device, crores of screen sizes and eight OS versions simultaneously in March 2013 for use. The Android's success has made it a target as part of the so-called "smart phone wars" between technology companies. By May 2013, 48 billion apps have been installed from the Google Play store, and at September 3, 2013, there have been 1 billion Android devices activated.

Since when Smart Phone was commercialized and distributed in 2009, which may commonly used the mobile App and also, under which all Internet services are expected to be modified and provided to App when the computing market moves from PC to Smart phone. Anyhow each request on developing and distributing mobile App occurs additionally. And students being interested with such applications and smart phones [2], the guidance counselling for a student in their academic and personal related problems could make an effective interaction between a student and a counselling staff.

## **2. PRODUCING AN APP: COST AND OPTIONS**

When delivering content digitally, there are wealth of options. Producing an app can be done by any one of the following three steps:

- Developing the code for app in-house using native tools and programming languages for the chosen app market places.
- Using an outside developer that is specialized in app development.
- Take advantage of “build your own app” WYSIWYG soft-ware that don't require coding skills to use.

The up-front costs of these options vary greatly, that estimates on external developers ranging from a few thousand dollars into the six figures, based on the developer's rate and the size and complexity of the app. Depending on the in-house capabilities and tools, we can also take on the design and programming our self, either developing using the native OS or via a framework that leverages other sources, such as Web code-bases or Adobe DPS files. Thanks to a robust app developer community and a growing number of cross-platform developer tools, there is clear knowledge in developing and delivering content on more than one platform.

### **2.1. FREEMIUM APPS**

A final alternative to relying on direct sales revenue is the so-called “freemium” approach, where both a free and a paid version of the app are made available. This model is excellent for new entrants to the app market, as it will allow to quickly attracting a large user base by providing a free app and then converting some into paying customers by offering a paid version with premium features and content. A potential pitfall of this approach is the difficulty in maintaining an appropriate balance between the free and paid versions of an app if there are no features or content that would entice a user to pay after trying a free version, profits will be limited. An alternative that circumvents this issue is to offer a free version of the full app with ads, as well as a paid version that eliminates ads.

The model of revenue generation that is most appropriate for app depends heavily on its content and features. The in app sales model has proven highly lucrative, but its success has primarily been limited to games, and it has limited potential for other types of apps [3]. Direct sales revenue, depending solely on single-unit sales and the price of an app, is a reliable means of generating revenue and one that half of the developer market still uses. It limits the potential market for app, however, because free down-loads still greatly outnumber paid ones by a

significant margin. The final alternatives, in-app advertising and “freemium” content for paying users, provide the greatest flexibility, allowing an app to attract a larger user base by providing a free version, and guaranteed revenues in the form of ads and paid down-loads by users who were pleased with the free version of the app.

## **2.2 FINAL THOUGHTS**

As the mobile landscape evolves, the one constant is the wealth of options available to those who wish to deliver content digitally. The rapidly growing user bases and competitive app markets for both Apple and Android devices make it a wise decision to develop cross-platform wherever possible. The ideal mode of development is ultimately dependent on the type of content to be delivered – identifying whether you need complex interactive features, or if an existing Web code base can be leveraged will go a long way to minimizing the cost of developing app and maximizing ROI. Finally, choose care-fully when monetizing app – free or “freemium” apps are downloaded at much higher rates than paid apps and can be effectively monetized with ads, but unique, high-value services can be well suited to the pay-to-download model and still develop a large user base. Identifying the most appropriate route to monetization will be instrumental in the success of app on the marketplace.

## **3. UNIVERSITY ONLINE GUIDANCE AND COUNSELLING**

University Online Guidance and Counselling (UOGC) service is an effort in helping learners to develop education and academic results, personal life, social life, learning activities, as well as planning the career development. Teaching staffs or Faculties try to help the development of learners, according to their needs, talents, interests, developments, conditions and opportunities they have. This service also helps overcome the obstacles and problems faced by learners [4].

GC Services at the universities include areas educational, personal, social, learning and career. GC is a service specifically support / services provided to students so that students can find / understand the self, to know the society, develop themselves in academic results, and plan future.

### **3.1. FIELDS OF GUIDANCE AND COUNSELLING**

GC is a service to help students, to be able to independently and develop in their private life, social life, learning, and career planning, by various types of services and support activities, based on the norms applicable [5]. GC service in the university is an attempt to help learners in the development of personal, social, academic, and planning the career development. This study covers five areas and that is followed below.

1. The educational guidance for the student helps them to gain a good results, the drawbacks that they suffer with the university are known and the student need with the education system are satisfied.
2. The Field of Personal Guidance, which aims at helping students to discover and develop self-confident, independent, responsible, have self-concept, accept and appreciate the unique characteristics and abilities, in physically, healthy and spiritual.
3. The Field of Social Guidance aimed at helping students to recognize the surrounding society communication, social ethics which is based on the noble character and social responsibility.
4. The field Tutoring aimed at helping students to recognize and develop the attitudes and good study habits to master knowledge and skill in accordance with the program of study in university to prepare, continue the level of higher education.
5. The field of career guidance aims to help students recognize and develop your own potential through the mastery of knowledge and skills, understand the environmental education and environmental sectors as an effective job, and develop the values of a positive attitude to prepare them to participate in community life.

This service also helps overcome the weaknesses and obstacles and problems faced by the learners. GC of Service Unit is concretely formulated through the steps as shown in Figure 1.

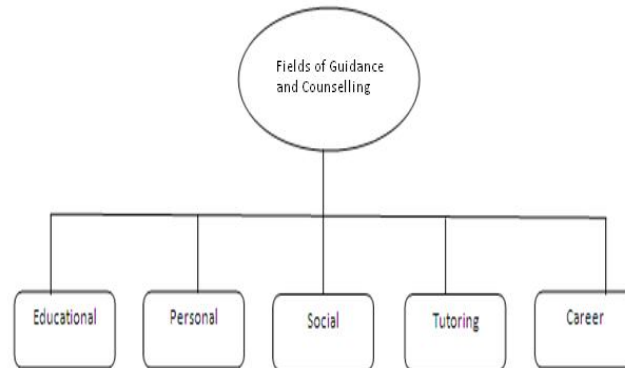


FIG 1: University Guidance and Counselling

Referring to the five service areas of GC (Figure 1), we have developed UOC application as content for the field of career guidance. Career guidance is of particular importance to students because this group of students is at the significant cross roads of their lives-encountering the challenge of University-to-work transition.

### 3.2 DEVELOPING THE UNIVERSITY ONLINE COUNSELLING APPLICATION:-

The application holds the database of information about students and counseling staffs, stored in it. The database has the detail of every student such as roll number, register number, contact information, mail id, marks, attendance, and their results. The information about counseling staff and their contact details are also provided. The administrator only has been given permission to access the database information and make changes to this information.

The administrator, student and counselling staff are given an own username and password for their access to the application. The administrator, staff and student logs in to the application in their smart phone with the id provided and makes use of it to view the information provided and interaction between a student and staff, staff and administrator, and student and administrator are made easy.

The counselling Staff on logging into the application are allowed to view the details of the students those who are been allotted for the particular staff to counsel. The details like student name, roll number, register number, contact number, address, mail id, attendance percentage, and marks about every student are given. A single tap or touch with the contact number or mail id, the staff could mail, send a sms (Short Messaging Service) or make a call to the student. The remarks column provided for the counselling staff helps to add text for the message or mail.

The student on logging gets the contact detail of the counselling staff that helps to make a call, send a sms or mail to the staff. The remark column for the student helps to add text to the staff. The remark column could be used for academic and personal related problems too [6, 7, 8, 9, 10]. The student could give a suggestion related to their educational improvement, feedback regarding subjects and problems with their personal and social life. The student are given a good counselling regarding their issues and stress with academic, educational, institutional, personal, social and career.

The staff and student are allowed only to make use of the application and details provided where only the administrator has permissions to access and modify the database and its information, and the application. The update of attendance, marks and university results are updated by the administrator regularly. The student and staff are added and removed from the application by the administrator only. The username and password for the student and staff are created, modified or removed only by the administrator.

The counselling for the student in the fields of guidance and counselling with the factors are provided with the table following in Table 1.

### 4. FUTURE WORKS

A student's mental health has a direct impact on their academic performance, on their experience at an institution and on the relationships they foster during this time. It is not only in the best interests of an institution to invest in a student's mental wellbeing, but it is in fact their responsibility.

Medical and other healthcare for students with mental health problems - Students are expected not only to achieve factual knowledge and technical competence, but to develop and demonstrate conduct that is responsible and informed by the highest ethical principles. This assigns responsibilities to professional students which do not apply to other students. Those who are responsible for the education of engineering professionals are required to ensure that students not only acquire the requisite knowledge and skills but also that their conduct meets acceptable standards.

This process of assurance may involve assessment of psychiatric well-being. Students are expected to be aware that their own poor mental health may put their academic and their profession career at risk.

They are expected to seek medical health advice, if there is a concern about their mental health. They should also be aware that they may not be able accurately to assess their own health and be willing to be referred for treatment, and in any recommended treatment programmes if advised to do so.

Personal guidance	Social guidance	Educational Guidance	Career guidance
Understanding of self (strengths and weaknesses). Manage daily activities. Learning is responsible for daily life. Acceptance of yourself physically and develop your own potential. The rules and credit points	Relationship within university. Relationships with the society. Ethics interactions with fellow friends, parents and teachers.	Overview :How to Study  Method of reading SQ4R ( <i>Survey, Question, Read, Recite, Record &amp; Review</i> ).  studying effectively and efficiently: <ul style="list-style-type: none"> <li>• How to register</li> <li>• How to memorize.</li> <li>• Increasing the concentration over study.</li> <li>• Reviewing the results of tests / value of the semester report cards and ways to improve it.</li> <li>• Motivation to learn</li> </ul> Facing the Tests: <ul style="list-style-type: none"> <li>• Preparation faces test</li> <li>• When faced with a test</li> </ul>	Reviewing the results of tests, interests and abilities.  Guidance regarding their future opportunities.  Make decisions about the job, higher studies and future plans.

Table 1: Fields and Factors of Guidance and Counseling

## 5. CONCLUSIONS AND RECOMMENDATIONS

In the current economic climate, the education sector is likely to face financial pressures. In the face of funding cuts, universities and colleges may need to decrease spending and consider where their priorities lie in terms of spending. It is believed that student support and welfare should not be targeted in such a situation. The study highlights the many factors which can affect a student's mental well being throughout their time in education. It is believed that institutions and the education sector as a whole needs to do more to support students through their academic journey to ensure that they are producing graduates who are not only knowledgeable in their subject area but well rounded, balanced individuals. It seems universities and colleges are not providing enough, or the right form of support in their academic structures.

Whether it is ensuring academic mentors are knowledgeable in mental health issues or ensuring that the curriculum and examination structures are flexible to the needs of those with mental health concerns, changes need to be made to ensure that students with mental ill health or those that develop mental health problems while studying are given the experience at university or college that they deserve.

Student counselling, advice and support in whatever model, are fundamental to the student experience at an institution and should not be closed as a method of cost cutting. The GC is in the interests of the education sector

and society as a whole to support students facing mental health difficulties and create environments which are open and free of stigma.

Universities and colleges have the opportunity to lead the way in eradicating stigma and changing attitudes towards mental ill health. Education is not only for the purpose of a qualification, it is a time when individuals broaden their horizons and learn more about themselves. If universities and colleges were to invest in creating graduates with expertise not only in their specific fields but also graduates with a liberated and open minded view of their world, they would be setting the wheels in motion for a step change in the societal attitude towards mental ill health.

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