BORANG PENGESAHAN STATUS TESIS*

JUDUL : KNOW YOUR COURSE ANDROID APPLICATION

SESI PENGAJIAN : 2012 / 2013

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KNOW YOUR COURSE ANDROID APPLICATION

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This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Software Development)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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2013

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DECLARATION

I hereby declare that this project report entitled

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is written by me and is my own effort and that no part has been plagiarized without citations.

STUDENT : _____ Date : 29 / 8 / 13
(SHAZREEN BINTI MOHD ASRAP KHAN)

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DEDICATION

I would like to thank to Allah for giving me opportunity and ability to finish this project. Then, I would like to thank my loving parents, Mohd Asrap Khan bin Mohamed Sidek and Khalsom binti Muhammad Ibrahim and also my supportive siblings, Sharinah binti Mohd Asrap Khan, Nafees Ahmad bin Hannif Baba and Mohd Najib Khan bin Mohd Asrap Khan who had helped a lot in giving me motivation and inspiration in finishing this thesis. Then, I would like to thank my supervisor for the guidance along the way in the making of this thesis. Next, I would like to thank my best friend, Mohamed Shahrul Anwar bin Abdul Alim Siddique for all the support given in the making of this thesis. Then I would like to thank my course mates who had helped in the technical part of this project. Last but not least, I would like to thank Universiti Teknikal Malaysia Melaka, Faculty of Information and Communication Technology and lecturers who help me in the completion of this thesis.

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ABSTRACT

This project is an application which will be used by the students who had just finished their Sijil Peperiksaan Malaysia (SPM) to know their personality types and course suitable with their personality types. The application consists of personality test and course information. The personality test is made up of 6 main parts, which covers the 6 codes of RIASEC codes. Each part consists of 7 questions. The student will have to tick on statements that corresponds them well. The application will calculate the result and the student will have to click on the code with the highest score. The application will show the personality type descriptions and let the students view the course according to the specified personality type. This application is built by using Adobe Flash Builder software. This application will be distributed through the Android market.

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ABSTRAK

Projek ini adalah sebuah aplikasi yang akan digunakan oleh pelajar-pelajar yang baru mengambil Sijil Peperiksaan Malaysia (SPM) untuk mengetahui jenis personaliti mereka dan kursus yang sesuai dengan jenis personaliti mereka. Aplikasi ini terdiri daripada ujian personaliti dan maklumat kursus. Ujian personaliti terdiri daripada 6 bahagian utama, yang merangkumi 6 kod RIASEC. Setiap bahagian ini mengandungi 7 pernyataan. Pelajar perlu tandakan pada pernyataan-pernyataan yang menggambarkan diri dan personality mereka. Aplikasi ini akan mengira dan memaparkan keputusan dan pelajar akan perlu klik pada kod yang mempunyai skor tertinggi. Aplikasi ini akan memberi penerangan mengenai jenis personaliti yang dipilih dan memberi paparan kursus mengikut jenis personaliti tertentu. Aplikasi ini telah di bangunkan menggunakan perisian Adobe Flash Builder. Aplikasi ini akan diedarkan melalui pasaran Android.

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LIST OF ABBREVIATIONS

KYC	-	Know Your Course
XML	-	Extensible Markup Language
MXML	-	Macromedia Flex Markup Language
IPTA	-	Institut Pengajian Tinggi Awam
SPM	-	Sijil Pelajaran Malaysia
RAD	-	Rapid Application Development
SCM	-	Software Configuration Management
JDK	-	Java Development Kit
SDK	-	Software Development Kit

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CHAPTER I

INTRODUCTION

1.1 PROJECT BACKGROUND

Nowadays, most of the students are having problems in deciding the choice of course they would like to pursue their studies in, especially the SPM leavers as they have less experience in the tertiary education system. Therefore, this system is build in order to assist them to make an informed decision of course to pursue their studies. Even though many SPM-leavers were accepted to further their studies in the local public universities, but not all of them were awarded programs that are suitable for them. Insufficient information about programs that have been offered made them choose wrongly. They tend to disregard their results as well as neglecting the field they are interested to further their studies. This project will try to solve this imbalance by giving the applicants a better alternative to choose some of the offered programs in the local universities based on their results and their interest simultaneously.

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1.2 PROBLEM STATEMENT

The students have problems in choosing the right course to pursue their studies in the tertiary level. They tends to choose without knowing the field of studies they are actually interested in. There are also students who do not follow the result requirement of the course when applying for it. Some students have problems in identifying their strength in respective field of studies and recognizing competence in those field. This causes them not getting selected in any universities as they choose the unsuitable courses.

1.3 OBJECTIVES

These are the objectives of the project :

1) To provide sufficient information for the students who wants to choose courses to further their studies
2) To assist the student in making decision on field of studies to pursue their studies
3) To suggest alternative of courses in the same fields with different names, requirement and subjects of studies

1.4 SCOPES

- The system is developed for the usage of the student and school-leavers who wants to ensure their interest to further their studies in the public universities
- The system is developed for android device which can connect to the Play Store or the Android Market to get the application installed

1.5 PROJECT SIGNIFICANCE

Based on the objectives of this project, this application is expected to give benefits to students who want to apply for courses to pursue their studies after SPM in public

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universities based on their interest and strength. This application will also assist in providing sufficient information of courses based on specified fields. This application will assist the students in making decision of fields to pursue their studies in the tertiary level and also suggest alternatives or substitutes courses which they can choose, inclusive the requirements and subject of studies.

1.6 EXPECTED OUTPUT

The application developed will consist of the personality test and the course listing. The application is aimed to benefit the students in assisting them choosing the correct course to pursue their studies. This application will be on the Google Apps Store and can be downloaded and installed.

1.7 CONCLUSION

As a conclusion, this application will simplify the student's task in searching the best course which suits their personality and view the requirements and information about the course together with the field of studies and subjects in a particular course. Students will no longer have to search for information from multiple web pages and confusing existing websites.

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CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 INTRODUCTION

This chapter will discuss about the researches and readings from the secondary research method which is by referring to studies and journals for this project. Topics for the research are based on the application to be developed which is the KYC application.

All the information regarding this project can be getting through journal, articles, book and internet research. The articles that have been reviewed are based on android applications, personality tests researches such as the Holland Code (RIASEC test) and decision support applications and systems.

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2.2 FACT FINDING

2.2.1 ANDROID APPLICATION

Android is a Linux-based operating system designed especially for touch-screen devices such as smartphones and tablet pc's. Android has many versions which include Cupcake, Donut, Eclair, Froyo, Gingerbread, Honeycomb, Ice Cream Sandwich, and Jelly Bean. The latest version is the Jelly Bean 4.2.An article by Chung, M. (January, 2011), "Android tops the iPhone in terms of number of users for the first time", discovered that most of the fist-timers prefer Android than iPhone when choosing smartphone to mingle around.

> **"In November 2010 it has been reported by comScore MobiLens that 26% of smartphone users owned an Android device, while 25% owned an Apple device" (Chung, 2011).**

Its' applications are open-source and allows it to be modified, developed and distributed across by any unknown developers and users. it is mainly written and debugged using Java and Android SDK. Most of the people these days, prefer to use Android because it needs no certification to become an Android developer, ability of Google Play to provide free distribution and monetization of applications. Creating an Android application is easy and it could also be done without using an Android phone, where an emulator is used to run and view it, Ed Burnette (2009).

Any Android application can simply be used by downloading it from the Google Play Store or by downloading the APK file and install it manually into the device. Certain applications are not free and need to be paid to download and install it. The Play Store has its own filtration which filters and gives information on compatibility of a certain application to the installing device.

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2.2.2 PERSONALITY TEST

There are many types of personality test to describe people's personality for particular purposes such as individual and relationship counseling, career planning, and employee selection and development. While an articles written by Melissa Korn (2012) titled "True or False: These Tests Can Tell if You Are Right for This Job" states that.

> **"An applicant's handshake may be crucial at a job interview. But a personality test can tell a company what's behind that handshake".**

This shows how the companies nowadays agree with personality test's results to judge their candidates for employment during an interview.

> **"Companies as varied as electronics retailer HH Gregg Inc. , rental-car agency Avis Budget Group Inc. and Sprint Nextel Corp. all uses personality tests to help assess job applicants for conscientiousness, extroversion or other traits that may be useful in forging a successful career or, alternatively, derail one" (Melissa Korn, 2012).**

This statement shows that most of the large business association also gives personality tests to test their candidates during interviews. According to Alison Doyle in an article "Career Tests, Personality Tests and Aptitude Tests",2012 types of personality test which is suitable to determine career and field of studies are:

a) Birkman's Method: A 298-question personality assessment

   This assessment acts as a non-clinical measurement of human behavior and occupational strength. The two major perceptions emphasized by the Birkman's method are how we see ourselves and how we see others from our eyes. There is no

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right or wrong answers and the questionnaire is a survey one's perception of their selves, others and the job that they enjoy the most.

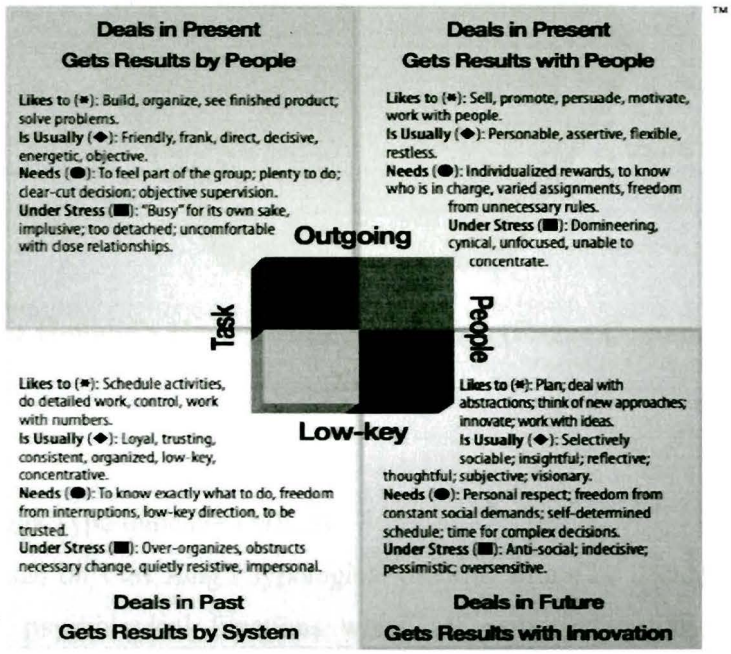

Figure 1 Birkman's answer model. (V.Maltoni, 2012)

b) Holland Codes

It is a personality test developed by John L. Holland who came up with an idea that people's personality is analogous to the type of career of their choice. He also came up with the hexagon of personality types which then was broken down into RIASEC test.

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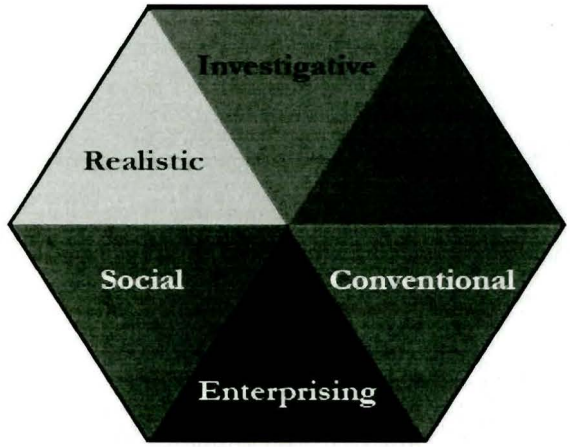

Figure 2 The Holland's Hexagon of Personalities. (Rogue Community College, 2008)

c) Myers-Briggs Type Indicator (MBTI)

This test is based on Carl Jung's typological theories where he decides that there are four principal psychological functions which are sensation, intuition, feeling and thinking. Robert Kaplan and Dennis Saccuzzo in Psychological testing: Principle, applications, and issues (2009) believed that "The underlying assumption of the MBTI is that we all have specific preferences in the way we construe our experiences, and these preferences underlie our interests, needs, values, and motivation". The MBTI sorts some of these psychological differences into four opposite pairs, or dichotomies, with a resulting 16 possible psychological types. The Myers-Briggs model of personality is based on four principles:

- E or I (Extraversion or Introversion) – Where do you direct energy?
- S or N (Sensing or intuition) – How do you prefer to process information?
- T or F (Thinking or Feeling) – How do you prefer to make decisions?
- J or P (Judgment or Perception) – How do you organize your life?

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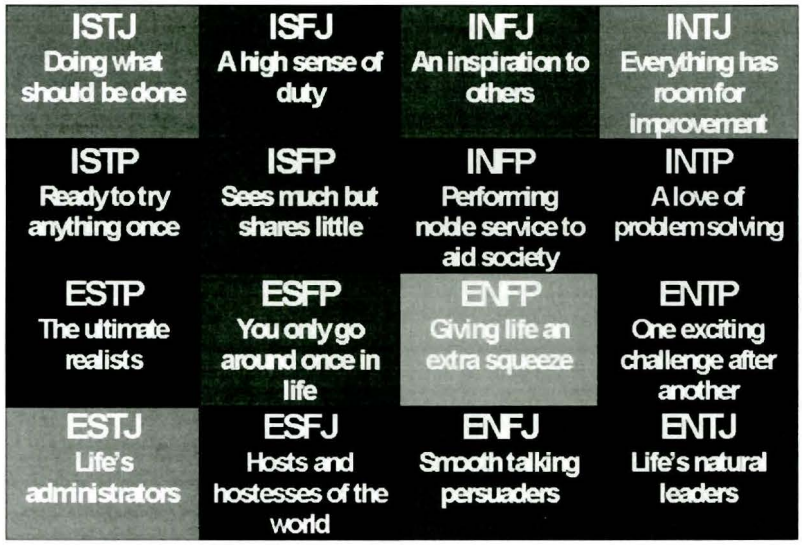

Figure 3 Myers-Briggs Personality Model. (Work-Stress-Solutions, 2010)

d) RIASEC test

This test is the enhanced version of the Holland Codes test which determines all the 6 main personalities in a better way together with its career field. In comparison to Holland`s Code, which consists of over 200 questions to be filled, this RIASEC method only consist of 7 questions per personality type. The letters in RIASEC stand for:

- Realistic - practical, physical, hands-on, tool-oriented
- Investigative - analytical, intellectual, scientific, explorative
- Artistic - creative, original, independent, chaotic
- Social - cooperative, supporting, helping, healing/nurturing
- Enterprising - competitive environments, leadership, persuading
- Conventional - detail-oriented, organizing, clerical

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