

IFTMK MOBILE APPLICATION

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IFTMK MOBILE APPLICATION

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This report is submitted in partial fulfilment of the requirements for the Bachelor of
Computer Science (Media Interactive)

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2015**

DECLARATION

I hereby declare that this project entitled
IFTMK MOBILE APPLICATION

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

STUDENT:  DATE: 27/8/15
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DEDICATION

To my beloved parents, friends and supervisor

ACKNOWLEDGEMENTS

First and foremost, I would like to take this opportunity to express my highest gratitude and deepest appreciation to my dearest supervisor, Encik Wan Sazli Nasaruddin bin Saifudin for his constructive suggestion during the planning and development of this project. Thank you for all the encouragement, guidance and support from the initial to the final level enabled me to develop an understanding of this project.

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Last but not least, to all my beloved friends in BITM and family members, million thanks for all of your countless support and understanding during the completion of this project. You all have been giving me support and motivation throughout my project. Without all of the helps mentioned above, I would definitely not able to complete my final year project in time.

ABSTRACT

iFTMK is a mobile application specially develop for FTMK based on all the information of FTMK that are already existed. The main functionality of the mobile application is Career Test that is able to analyse and suggest the suitable career for users based on their personalities. The objective of this project is to study the information usability of potential career outcomes for each FTMK course and also to develop a mobile application consists of useful information about FTMK. Other than that, this project also aim to test the usefulness of a mobile application compare to the website and academic book that contain similar information. The target users of this mobile application are outsider that is interested in knowing more about FTMK and also the current FTMK students. All the information about FTMK are taken from FTMK website and FTMK guidance book. This mobile application can be convenient for users to browse through the information of FTMK. The methodology used to develop this project is Multimedia Mobile Content Development (MMCD). The testing of this project shows that the target users are satisfied with the product. And finally, the project meets all the objectives, which is able to combine the existing information of FTMK with Holland's Theory and developed a mobile application for FTMK. The final result also proved the usefulness of iFTMK Mobile Application in compare with FTMK website.

ABSTRAK

iFTMK merupakan satu aplikasi mobil dibangunkan khas untuk FTMK dengan menggunakan semua infomasi FTMK yang sedia ada. Fungsi utama aplikasi mobil ini adalah ujian kerjaya yang dapat menganalisis dan mencadangkan kerjaya yang sesuai untuk pengguna-pengguna berdasarkan personaliti pengguna. Objektif projek ini adalah untuk mengkaji maklumat kebolegunaan kerjaya untuk semua kursus FTMK dan juga untuk membangunkan satu aplikasi mobil yang mempunyai infomasi-infomasi FTMK yang berguna. Selain itu, projek ini juga bertujuan untuk menguji kebolegunaan aplikasi mobil berbanding dengan laman web dan buku panduan FTMK yang mengadungi maklumat yang lebih kurang sama. Sasaran pengguna aplikasi mobil ini ialah orang luar yang berminat untuk mengetahui infomasi FTMK dan juga pelajar FTMK. Metodoloji yang digunakan untuk membangunkan aplikasi mobil ini ialah Multimedia Mobile Content Development (MMCD). Fasa ujian projek ini menunjukkan bahawa sasaran pengguna sangat berpuad hati dengan produk ini. Akhir kata, projek ini sudah mencapai semua objektif, iaitu berjaya menggabungkan informasi FTMK dengan Holland's Theory serta berjaya membangunkan satu aplikasi mobil untuk FTMK. Keputusan akhir juga membuktikan kebergunaan iFTMK membandingkan dengan laman web FTMK.

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LIST OF ABBREVIATIONS

TERM	TITLE
FTK	Fakulti Teknologi Kejuruteraan
FTMK	Fakulti Teknologi Maklumat dan Komunikasi
GHz	Giga Hertz
HTML	HyperText Markup Language
iOS	iPhone Operating System
IoT	Internet of Things
MMCD	Multimedia Mobile Content Development
MMU	Multimedia University
PC	Personal Computer
PSM	Projek Sarjana Muda
RAM	Random Access Memory
RIASEC	Realistic, Investigative, Artistic, Social, Enterprising, Conventional
SPM	Sijil Pelajaran Malaysia
STPM	Sijil Tinggi Pelajaran Malaysia
U.S.	United States
UTeM	Universiti Teknikal Malaysia Melaka

CHAPTER I

INTRODUCTION

1.1 Introduction

Faculty of Information and Communication Technology (FTMK) consists of 7 courses with quite a number of subjects. FTMK redeveloped the website at 2014 which consists of useful information about FTMK, namely introduction of FTMK courses with learning outcomes and career prospects, admission, researches going on, details of faculty staffs, basic introduction of FTMK and also latest news updates for the students. Besides that, FTMK provided an academic book with very detailed information regarding the rundown of whole course and also admissions of the courses.

A mobile app is a computer program designed to run on smartphones, tablet computers and other mobile devices. With the massive growing of technology, almost all students own at least one mobile gadget. Mobile app has become a convenient tool for the students to get important information. A mobile app with the combination of the information from FTMK website and academic book will definitely going to make students' life easier.

Students that are interested in pursuing their studies in FTMK might want to get more information about it, from the courses available to environment. Potential careers after graduating in FTMK are also helpful information for students' reference. Instead of browsing the information through website, having a mobile application consists of all the information and career test is much more convenient.

1.2 Problem Statement

FTMK has an official website which consists of useful information. However, students and public are not able to access the information when they are out of internet. Solution of accessing these information freely is needed to overcome this situation.

Other than that, there are too much information on the website. Students especially those that are doing surveys about university to pursue their studies might hope to have specific and organized information so that they can easily access the information that they want. For example, students that are doing surveys about universities might want to specifically and directly know the courses and subjects offer by FTMK only.

On the other hand, there are also students that are confused about the career outcomes for the course they are currently studying. Or we can say, even though they are aware of the possible careers for their courses, they might also be wondering whether those careers actually suit them in the aspect of personality and etc.

1.3 Objective

- To study the information usability of potential career outcomes for each FTMK course.

Information in FTMK website and academic book will be referred to study about the potential outcomes for each course and it will be analyzed with user's personality and other possible factors that will affect the career choice.

- To develop a mobile application consists of useful information about FTMK.

A mobile application will be developed by reorganizing the information from FTMK website and academic book with suitable tools.

- To test the usefulness of a mobile application compare to the website and academic book that contain similar information.

Tests will be carried out to find out whether the mobile application or the existing website and academic book is more useful and convenient.

1.4 Scope

The mobile application can be run on multi-platform. It is a dynamic application because it involves user input that will analyze their data and show them the result. However, it will also not require the user to log in. The information that will be shown in the mobile app will be introduction of FTMK courses and subjects, basic facilities and environment and a career test. The target users of this mobile app are SPM or STPM graduates that are looking for Diploma or Degree courses and also FTMK students.

1.5 Project Significance

This project is going to create convenience for the students to access the information they need in fastest and efficient way. With massive development of technology, most of the students will own a smartphone, a mobile app downloaded in it is actually effortless and easy to carry around. The career test is going to point students a clear direction of what they can and what they want to work in the future.

1.6 Expected Output

- Value added product – Students able to access the information of FTMK anytime, anywhere.
- Commercial value product – Mobile application that is convenient and with organized information.
- Improvement of the existing system – Transfer and reorganize the information from FTMK website and academic book into the mobile application.
- New discoveries – Add in career test for each course considering personality and other aspects of the user.

1.7 Conclusion

Mobile application field is constantly improving and growing bigger and bigger. A mobile application can be developed consist of reorganized existing information and extra functions. Problems of students not being able to access information freely and be overcome by stuffing the information into a mobile application and carry around by the students. The existing information from website and academic book will be referred and study about how can they help in analysing the potential careers while considering one's personality and other aspects at the same time. Since it consists of fixed information of FTMK, the mobile application will not be having a database to store the data and user log in is not required. The project is expected to be easy to access the information and helpful in getting a clear direction of suitable career.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

A literature review is a text of a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature reviews use secondary sources, and do not report new or original experimental work. While methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge.

2.2 Domain

The domain of my project is mobile application. A mobile application is a computer program designed to run on smartphones, tablet computers and other mobile devices. Apps are usually available through application distribution platform, which began appearing in 2008 and are typically operated by the owner of the mobile operating system, such as the Apple App Store, Google Play, Windows Phone Store, and BlackBerry App World.

2.3 Existing System

This section discusses about the existing system in the market that can act as reference for this project. It can be an application, website or even a book.

According to John Holland (1973), job seekers are divided into six broad personality type categories: Realistic, Investigative, Artistic, Social, Enterprising and Conventional. All of the types stated have both positive and negative qualities and none better than the others. Holland Codes tests usually consists of 48 to 60 questions in order to calculate the result with highest score. According to the research, people that falls under category Realistic are generally more practical and physically strong. While for Investigative people, they are scientific orientated and analytical. Besides that, Social type of people is more sociable, responsible and like to work in groups. Enterprising wise, they have good verbal skill, persuasive and make a strong leader. Conventional category is more systematic and prefer numerical activities. Last but not least, people that falls under Artistic category generally likes art, music and other create interests.

Robert Reardon and Emily Bullock a research implicating Holland's theory for advising and career counseling in 2004. The research concluded with an explanation of possible academic advising and career counseling interventions together with various other applications that are based on Holland's theory. In the end, they presented a theory-based model for academic advising and counseling.

Holland Codes do make contribution towards a career exploration model (Crystal D. Green, 2010). According to her research, students that participated in the Holland Career Exploration Group project ended up being able to research and presented on a dream job that they were exposed from that particular career exploration experience.

Regarding the amount to users for the main mobile operating system, Carolina Milanese (2015), wrote a report in Kantar Worldpanel tracking smartphone sales in the United States indicated that phones that are running Apple's iOS may have passed those that are running Android in the aspect of market share. The report is being

referred to find out which operating system is more preferable to be designed for this project.

2.3.1 FTMK Website



Figure 2.1: FTMK Website

FTMK developed an official website (<http://ftmk.utem.edu.my/>) which contain a lot of information such as courses details, admission requirements, researches done by FTMK, details of lecturers and more. It is managed by FTMK. Therefore, the news and information provided are reliable.

The website is very useful for students that are looking for the FTMK information. It contains all the courses information that offered by FTMK, including course learning outcomes, career prospects and learning outcomes. By all the information provided, students are able to know more about the courses and be clear about the course they are interested.