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Auto buyer guide : based on budget / Salfarina Ahmad Shabri.

AUTO BUYER GUIDE : BASED ON BUDGET

SALFARINA AHMAD SHABRI

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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DECLARATION

I hereby declare that this project report entitled

AUTO BUYER GUIDE : BASED ON BUDGET

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

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DEDICATION

To my beloved parents, Ahmad Shabri bin Idris and Fauziah bt Tahir

To my supervisor, Hj Muhammad Suhaizan b Sulong

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ACKNOWLEDGEMENTS

During this period of completing the Projek Sarjana Muda II (PSM II), I have encountered many problems and obstacles. I am so lucky to have overcome it with the help of many people. Hence, I would like to express my highest appreciations to whom that have contributed to the successful of this PSM II.

Firstly, I would like to thank The Greatest Allah because of giving me the strength and spirit to overcome the problem and finally complete this PSM II.

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ABSTRACT

The title for this Projek Sarjana Muda II (PSM II) is Auto Buyer Guide : Based on Budget (ABG). It is a web-based system which is will develop by using web-based concept application. It means this system will be use and be able to access by user/public (home user) from anywhere at anytime. The problem of current system is it couldn't guide or help user in order to make a decision on which new car to buy. The solution of current problem is by developing a new system with the web-based concept to facilitate the user to make a decision. This system is develop in order to give more understanding other than user can gain details information about car and price that they need to know before make a decision to buy it and also based on their budget(in terms of downpayment), needs and desire. The ABG need to achieve it scope and adhered to the user requirement. The proposed system has become a reality and looking forward to see the system to work in a real time environment. This report of PSM II of seven chapter as Introduction (I), Literature Review and Methodology (II), Analysis (III), Design (IV), Implementation (V), Testing (VI), and Conclusion (VII). By completing this report, it was using the OOAD (Object-Oriented Analysis Design) as approach to design the high level design in Chapter IV (Design).

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ABSTRAK

Tajuk yang dipilih untuk Projek Sarjana Muda II (PSM II) ini adalah Auto Buyer Guide : Based on Budget (ABG). Projek yang akan dibangunkan ini adalah web-based sistem dengan mengaplikasikan konsep web-based di mana ia boleh dicapai dari mana-mana destinasi/tempat dan bila-bila masa oleh pengguna awam terutamanya dari rumah atau pejabat. Masalah yang menjurus kea rah pembangunan system ini adalah kerana system yang sedia ada tidak sepenuhnya dapat membantu pengguna untuk membuat pilihan atau keputusan yang berkenaan. Untuk menyelesaikan masalah yang timbul ini, maka satu sistem yang baru akan dibangunkan untuk memenuhi kehendak dan keperluan pengguna dalam membantu mereka membuat keputusan berdasarkan kehendak dan kemampuan mereka. Tujuan sistem ini dibangunkan adalah untuk memberikan maklumat yang lengkap dan padat mengenai kereta terutama harga kereta yang terbaru dan lain-lain maklumat berkenaan yang perlu diketahui oleh mana-mana individu yang ingin membeli kereta baru tetapi masih tidak dapat membuat pilihan yang terbaik berdasarkan kehendak, keperluan dan bajet(dari segi bayaran pendahuluan) mereka. Setakat ini, pembangunan ABG adalah untuk mencapai skop yang memenuhi kehendak pengguna. Sistem yang dicadangkan ini akan menjadi sistem yang realiti apabila dibangunkan kelak dan ia akan menjadi satu sistem yang berguna kepada seluruh pengguna yang menggunakannya nanti. Laporan bagi sistem ini mengandungi tujuh topik utama iaitu Pengenalan (I), Kajian Literature dan Kaedah Penyelesaian (II), Analisis (III), Rekabentuk (IV), Perlaksanaan/Pembangunan (V), Ujikaji (VI), dan akhir sekali adalah topik Penutup (VII).

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LIST OF ACRONYMS

ACRONYMS	DESCRIPTION
KUTKM	Kolej Universiti Teknikal Kebangsaan Malaysia
OOAD	Object-Oriented Analysis and Design
UML	Unified Modeling Language
ICT	Information and Communication Technology
ABG	Auto Buyer Guide : Based on Budget

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CHAPTER I

INTRODUCTION

1.1 Project Background

Auto Buyer Guide : Based on Budget is applying the web-based concept which is means this system will be used and be able to access by user/public (home user) from anywhere. This system is develop in order to give more understanding other than user can gain details information about car and price that they need to know before make a decision to buy it and also based on their budget, needs, and desire. This system needs user to select options provided based on their needed such as car makes, transmission option, interior color, exterior color and budget which is user can select from the options provided.

This system is a new innovative web-based system which is will use by user in order to gain details information about car details info such as car specification an car features. This system is general system which is capable to access by user/public from anywhere as it applies the web-based concept. This system has an interactive function as options selection make by user which is already provided in this system and it will match with appropriate car based on selection made and at last user will views by the results about suitable car based on standard car specification options select by user.

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Finally, this system will views the appropriate car and the price based on the selection makes by user and gives suggestion on which new car is suitable for them based on their budget, needs and desire. This system also gives the related dealer information such as address and contact number to facilitate the user to buy the car after makes their decision.

1.2 Problem Statement

Nowadays, the communications revolution has arrived. The technology application especially Internet facilities is the most important medium used by people to gain any information about anything that they need to know in fast and easy.

In this case, it is easier to user gain related information by using an Internet as it can access from anywhere at anytime either at office or at home.
Usually, a person who wants to gain information about car will get it from magazine or catalogue that they get from the car dealer. Time management is very important. By using that approach, people may need to go several shop or need more than one magazine and finally they still didn't get the accurate information and will waste of time.

Other than that, most of people still can't decide on which new car to buy. They encounter a problem in choose the car based on their budget.
In this project, the development is based on how to solve those problems.
For the first problem which is time management, by develop this web-based system, user can access it from anywhere and surely it can reduce the time consuming.

User also is able to get more understanding and details information about car especially the features, prices, and specification based on their desire. User can select the options provided from the related pages.

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Then, from the budget problem, this system will helps user to get the car on their budget range. User need to select the budget range and the system will match the options select by user and as finally, it will views some results and also gives a suggestion where they can get the car as they can get the dealer information on related pages.

1.3 Objectives

The objectives of this system are :

- To facilitates user that want to access the information they need from anywhere especially at home which is they can have a good time management
- To give more understanding and provide the latest details information about car specifications and features from the information provided in this system
- To allow user make a selection on type of car they want based on car specification, budget and desire
- To give suggestion and guide user on which new car to buy based on budget and desire
- To allow user make any choice from solutions views by this system at the end of the process

1.4 Scope

The scope of this system are :

- It only consist car as vehicle type, not includes van, minivan and etc
- It will consist local and imported car
- For the local makes, it will includes Proton and Perodua while for the imported makes, it will includes Hyundai, Honda, Toyota, BMW, and Mercedes
- For every car makes, it will includes four type of model only
- This system is going to be use by public around Peninsular of Malaysia only

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1.5 Project Significant

This system will benefits to the public especially who wants to buy a new car which is they still can't decide on which new car to buy. This system is general, it is not belong to one company but it is used for public view.

At the end of this system, it wills helps and guide user on making a decision on which new car to buy based on the budget and desire.

This project is important because it will facilitates the user, help user to have good time management, give more understanding and related details information that need by user, and also help and guide user to make a decision as the system will act as guide to help them on it.

1.6 Expected Output

Actually, as this system is will guide on make a decision for the user, firstly it needs some input from the user such as standard car specification and budget range which is user can select from the options provided.

After that, the system will give an outputs/results and suggestion on which new car is appropriate for them based on budget and desire. The results will also views the details information about that particular car such as car price, car model, fuel, cc, and etc. It will view some choices of results to let people choose from it and also they can go to the related linkage.

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1.7 Conclusion

This system is a new innovative which is will apply the web-based concept, means it can be access from anywhere at anytime. This system can be access by public (home user) in order to gain more related information about the car other than helps and guide them to have and choose the best car based on their budget, needs and desire.

This system also will give the related contact number (car dealer). The next activity needs to be develop is Literature Review and Project Methodology.

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CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

Literature review is a searching, collecting, analyzing and drawing conclusion from all debates and issues in relevant body.

Project methodology is a way to use all available, tools and approaches used in order to achieve predetermined objectives of the proposal project.

2.2 Fact and finding (based on topic)

The finding for this topic can be found from many sources as book, Internet and magazine as well. Extraction, analysis, and drawing conclusion from these sources will present the result of literature review.

Based on this project, we can found that there are reasons that cause the development of this system to solve the existence problems.

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In a new era of modernization, there is much products, devices, software or process with technology based was already exist based on people or any organization needs and desire.

"Ahli-ahli organisasi kini bekerja atau melaksanakan tugasan mereka secara automasi dengan bantuan computer dan pelbagai eranti atau system elektronik"
(Syarifah Akmam Syed Zakaria (April 2005).Majalah Perniagaan dan Pengurusan – Dewan Ekonomi. Karangkrat Pp 51)

"Teknologi computer juga menjadi pemangkin kea rah pembangunan Negara secara keseluruhannya. Tambahan pula era globalisasi ini telah menuntut agar manusia bergerak seiringan dengan kemajuan sains dan teknologi bagi mencapai kemajuan dalams ektor ekonimi, politik dan sosial"
(Syarifah Akmam Syed Zakaria (April 2005).Majalah Perniagaan dan Pengurusan – Dewan Ekonomi. Karangkrat Pp 51)

"Resources – Ever – growing number of websites: according to the Online Computer Library Centre in 2002 there were 8.7 million uniqe sites, about 3 million of them where most or all of the content is public; this is a growth of 111% since 1998 in public sites (through their statistic show little growth in public sites since 2001).."
(Deborah Healey. Jan 2003. Advantages and Limitations of Computer and the Internet for Classroom Teachers [online].
http://www.onid.orst.edu/~healeyd/upc/advdisadv.html
[Access 21 April 2005])

It means that how important it is to apply the technology approach on any process of activity.

Other than that, this project also stress on the transportation that is one of the most important needs by needs by people. In this case, we can say that car is one of the

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best solutions for transportation problems. Other than it is easy to get, it is also not too expensive and many of people are able to have if based on their affordable.

"Should you buy a car and, if so, what kind is right for you? What kind of financing arrangement is the best for you?"

(Robert S.Rosefsky (1996). Personal Finance Sixth Edition. Canada: Copyright by John Wiley & Sons Inc. Pp 145)

"Imaging walking up and actually feeling good about your financial future? You can with a plan. Well make sure your plans evolve as your life does. Because we focus on making you feel good about it"

(Money. (Dec 2004). Pp 21)

"Our exclusive survey identifies six common errors that could cost your family. Stop making them"

(Jean Chatzky (Dec 2004). The biggest Money Mistakes [And How to Avoid Them]. Pp 93)

Based on above quote, we can simply say that in order to have and owned car by themselves, they still can't decide what type of car is suitable for them other than have not enough information about how to have a good financial management on that.
So, because of these all things, this system is a good solution as one of the best approaches to help people especially the public to have a good management on their financial.

By using this system, user can gain more understanding other than it will help and guide user to manage their financial in order to have their own car based on their needs, desire and budgets.

Other than that, we cannot deny that people always encounter a problem especially in decision making in order to make a right choice in any decision they need to make.

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Based on the case study of decision making below, we can conclude that people always needs some medium or guide to make sure that the decision that they choose is the right one.

Case study 1 :

Example:

A windsurfing enthusiast is about to replace his car. He needs one that not only carries a board and sails, but also that will be good for business travel. He has always loved open-topped sports cars. No car he can find is good for all three things.

His options are:

- A four wheel drive, hard topped vehicle
- A comfortable 'family car'
- An estate car
- A sports car

Criteria that he wants to consider are:

- Cost
- Ability to carry a sail board at normal driving speed
- Ability to store sails and equipment securely
- Comfort over long distances
- Fun
- Nice look and build quality to car

Firstly he draws up the table shown in Figure 1, and scores each option by how well it satisfies each factor:

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