RENTAL CAR ONLINE SYSTEM

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This thesis is submitted as partial fulfillment of the requirements

For the award of the degree of

Bachelor of Computer Science (Software Engineering)

Faculty of Computer System & Software Engineering

UNIVERSITI MALAYSIA PAHANG

MAY 2012

PERPUSTAKAAN
UNIVERSITI MALAYSIA PAHANG

No. Perolehan
068597

Tarikh
30 NOV 2012

No. Panggilan
QA
76.76
.A65
K43
2012
FS

ABSTRACT

Nowadays, there are online car reservations which give much benefit to user. A rental service is a service in which customers arrive to request the hire of a rental unit. It is more convenient than carrying the cost of owning and maintaining the unit. In Universiti Malaysia Pahang, there is also having a rental services which is the system is work manually and individually. There were several problems occur on student, which is student always got spam in memo system in UMP e-community portal regarding the advertisement of rental car. Moreover, the difficulties to find a rental car for student who want to rent a transport and the problems with publish an advertisement about rental car in UMP. The solution has been come out on solving the various problems that always occur on students. A web application is an application that is accessed over a network such as the Internet or an intranet. Therefore with this new method, the process will be more efficient and the safety of hiring car is secure. It's also the best way to increase the quality of management and can reduce the time constraints.

ABSTRAK

Dewasa kini, terdapat system atas talian berkenaan dengan penempahan kereta yang mana memberi banyak faedah kepada pengguna. Servis penyewaan ialah satu servis yang mana pelanggan hanya datang dan meminta untuk buat unit penyewaan. Ianya lebih mudah daripada mengeluarkan kos untuk memiliki dan mengekalkan prestasi kenderaan. Di Universiti Malaysia Pahang, terdapat juga servis penyewaan yang mana sistem itu dijalankan secara manual dan secara individual. Terdapat beberapa masalah yang timbul pada pelajar, yang mana pelajar selalu mendapat spam dalam sistem memo di UMP portal e-komuniti berkenaan dengan pengiklanan kereta sewa. Tambahan pula, pelajar mengalami kesukaran apabila mereka ingin mencari kereta untuk disewa serta masalah berkenaan dengan menyiarkan iklan kereta sewa di UMP. Di thesis ini ada menerangkan cara mengatasi permasalahan yang terjadi dalam kalangan pelajar. Aplikasi web adalah aplikasi yang diakses melalui rangkaian seperti Internet atau intranet. Oleh itu, dengan kaedah baru ini, proses akan menjadi lebih cekap dan keselamatan menyewa kereta adalah selamat. Ia juga cara terbaik untuk meningkatkan kualiti pengurusan dan boleh mengurangkan kekangan masa.

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LIST OF ABBREVIATIONS

PHP	PHP Hypertext Preprocessor
RCOS	Rental Car Online System
SRS	Software Requirement Specification
SDD	Software Design Description
RAD	Rapid Application Development
RUP	Rational Unified Process
UMP	Universiti Malaysia Pahang
SQL	Standard Query Language

CHAPTER 1

INTRODUCTION

This chapter briefly discuss on the overview of this research. It contains five sections. The first section is introduction; follow by the background. Next are the problem statement and the purpose solution for the problems. Then, the objectives where the project's goal is determined. After that are the scopes of the system and lastly is the thesis organization which briefly describes the structure of this thesis.

1.1 BACKGROUND

A car rental or car hire agency is a company that rents automobiles for short period of time for a fee whether in a few hours or a few days or week. It is an elaborate form of a rental shop, often organized with numerous local branches (which allow a user to return a vehicle to a different location), and primarily located near airports or busy city areas and often complemented by a website allowing online reservations.

Car rental agencies primarily serve people who have a car that is temporarily out of reach or out of service, for example travellers who are out of town or owners of damaged or destroyed vehicles who are awaiting repair or insurance compensation. Because of the variety of sizes of their vehicles, car rental agencies may also serve the

self-moving industry needs, by renting vans or trucks, and in certain markets other types of vehicles such as motorcycles or scooters may also be offered.

In campus, the situation had a bit different from the outsider agencies organize the car rental services. The availability of car rental is unpredictable and can't be sure by customer where the customer is student or staff in this campus. The situation here just like non-systematic process of renting car. For those who need to rent a car, like usual they must search whether in memo at campus portal or if there some published information about car rent or car hire in nowadays social network; facebook. They need to search the rental car in campus by using their own credit by texting the owner and also they need to waste their time to check on facebook's rental car group but there were unsuitable and unprofessional way to someone who love their precious time.

1.2 PROBLEM STATEMENT

In campus, there were several difficulties for student who dit not have any transport to go outside campus area such as they have difficulties to find rental cars in UMP. For those who want to advertise their rental car, they also have difficulties to publish it. The basic method have been used by UMP student's which they were using a manual system to do the process of renting and recording the rental activities. Furthermore, they will use UMP e-community portal as their medium to spread their advertisment which can give student's memo been full of spamming of advertisment of rental car.

1.3 PROPOSE SOLUTION

This system is develop to solve the problems that usually happen when student want to rent a car in University Malaysia Pahang, all activities is done manually which is no record have done on computerize or on mobile technology. So, they have many problems using this existing way of process.

A web application is an application that is accessed over a network such as the Internet or an intranet. Therefore with this new method, the process will be more

efficient and the safety of hiring car is secure. It's also the best way to increase the quality of management and can reduce the time constraints.

1.4 OBJECTIVES

1. To transform the manual process of hiring car in University Malaysia Pahang to a computerize system.
2. To validate the Rental Car system using user satisfaction test.
3. To produce the documentation such as Software Requirement Specification (SRS), Software Design Description (SDD) as system development references.

1.5 SCOPE

The system will be done according to the scope of Rental Car Online System (RCOS) which is state as below:

System:

1. Provide car catalog for users as an alternative for them to select car if they want to choose car by their own.
2. Allows admin to search user information from the database based on the user's ID card number or their name.

User:

1. All owner car at campus can advertise their car in the system.
2. All student in campus can access the system.

1.6 ORGANIZATION OF THESIS

This thesis consists of six (6) chapters. There are the descriptions on every chapter in this thesis:

Chapter 1: Introduction.

This chapter is the introduction about the project that had been developed. It consists of background, problem statement, objective, scope, and thesis organization.

Chapter 2: Literature Review.

This chapter explained the case study of the project. These are 2 general structures of this study, the technique that has been used and the former system that already created.

Chapter 3: Methodology.

This chapter discussed more close on the overall work flow in the development of the project. It justified the technique along with the equipment and the software.

Chapter 4: Implementation.

This chapter discuss on how Hire-Car System had been developed in development environment structurally and logically.

Chapter 5: Result and Discussion.

This chapter discussed on the results or output produced as expected and the result is further discussed.

Chapter 6: Conclusion.

This chapter concludes about the entire system.

CHAPTER 2

LITERATURE REVIEW

This chapter provided the literature review that is related with that will be developed later. This chapter comprises two sections: The first section reviews about the existence of other systems. The second section describes the review on method, equipment, and technology. The reference of source should be made merely taken from books, articles, journals, magazines, conference paper, thesis and also sources from Internet.

2.1 MANAGEMENT INFORMATION SYSTEM

The rapid growth of interactive Internet services has led to constantly increasing Web sites (Berners-Lee, T., et. al, 1992). We have also experienced an increase in their functionality, which, in turn, makes them more complicated to use (Nielsen, J., 2000). Thus, a useful web application should be based on traditional graphical user interface designs which rely on menu selection and navigation. But these interfaces require a considerable cognitive overhead. This may be tolerable to frequent users, but will in many cases deter casual users, especially those who are not yet used to computers. (Nielsen, J., 1993)

Management Information System is a system or process that provides information needed to manage organizations efficiently and effectively. Management information systems involve three primary resources: technology, information, and people. It's important to recognize that while all three resources are key components when studying management information systems, the most important resource is people. Management information systems are regarded as a subset of the overall internal controls procedures in a business, which cover the application of people, documents, technologies, and procedures used by management accountants to solve business problems such as costing a product, service or a business-wide strategy. Management information systems are distinct from regular information systems in that they are used to analyze other information systems applied in operational activities in the organization. Academically, the term is commonly used to refer to the group of information management methods tied to the automation or support of human decision making, e.g. decision support systems, expert systems, and executive information systems (Wikipedia, Online).

Meanwhile a web service is a collection of protocols and standards used for exchanging data between applications or systems. Software applications written in various programming languages and running on various platforms can use web services to exchange data over computer networks like the Internet in a manner similar to inter-process communication on a single computer.

Furthermore, the meaning of software engineering is the computer science discipline concerned with developing large applications. Software engineering covers not only the technical aspects of building software systems but also management issues such as directing programming teams, scheduling and budgeting. Software engineering has several documentation that must done with the development of the system. There are Software Development Plan (SDP), Software Requirements Specification (SRS) and Software Design Development (SDD).

2.2 EXISTING SYSTEM REVIEW

This section is to review the current system and the existing system that related to rental service.

2.2.1 SURIA CAR RENTAL & TOUR SDN BHD

Suria Car Rental & Tour Sdn Bhd, (SCR & TOUR) focus on customizes corporate incentive tour, corporate group outing, MICE and also individual group outing in Malaysia and Overseas. Our customize service in the travel industry has benefited our clients from government, large corporation, small and medium industries and individual clients SCR Travel & Tour, Online).

Figure 2.1 shows the home page of SCR Travel & Tour Website Graphical User Interface.

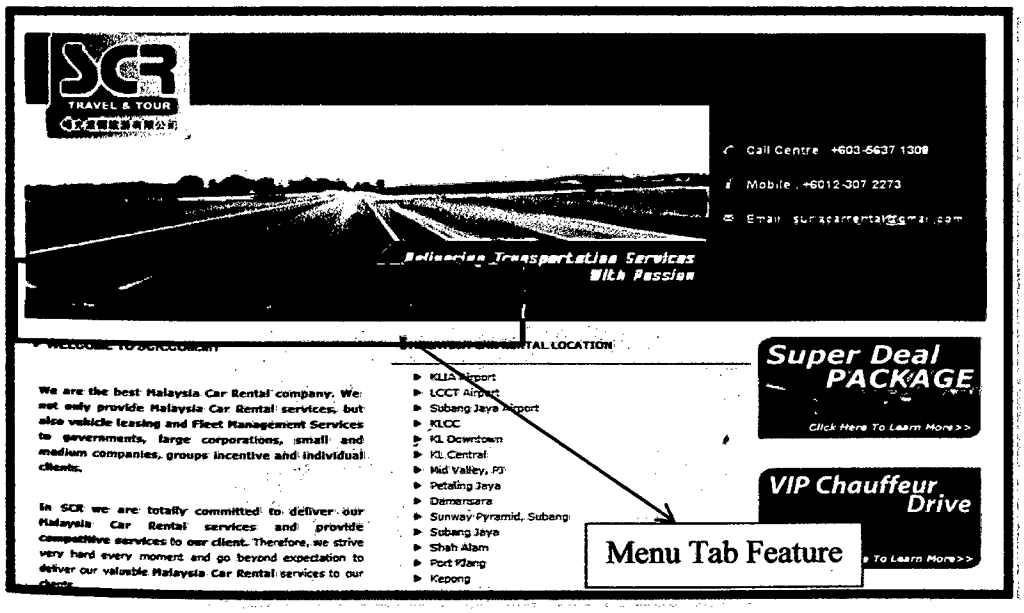

Figure 2.1: View of Homepage for SCR Travel & Tour Website

Figure 2.2 shows the booking form of SCR Travel & Tour Website Graphical User Interface.

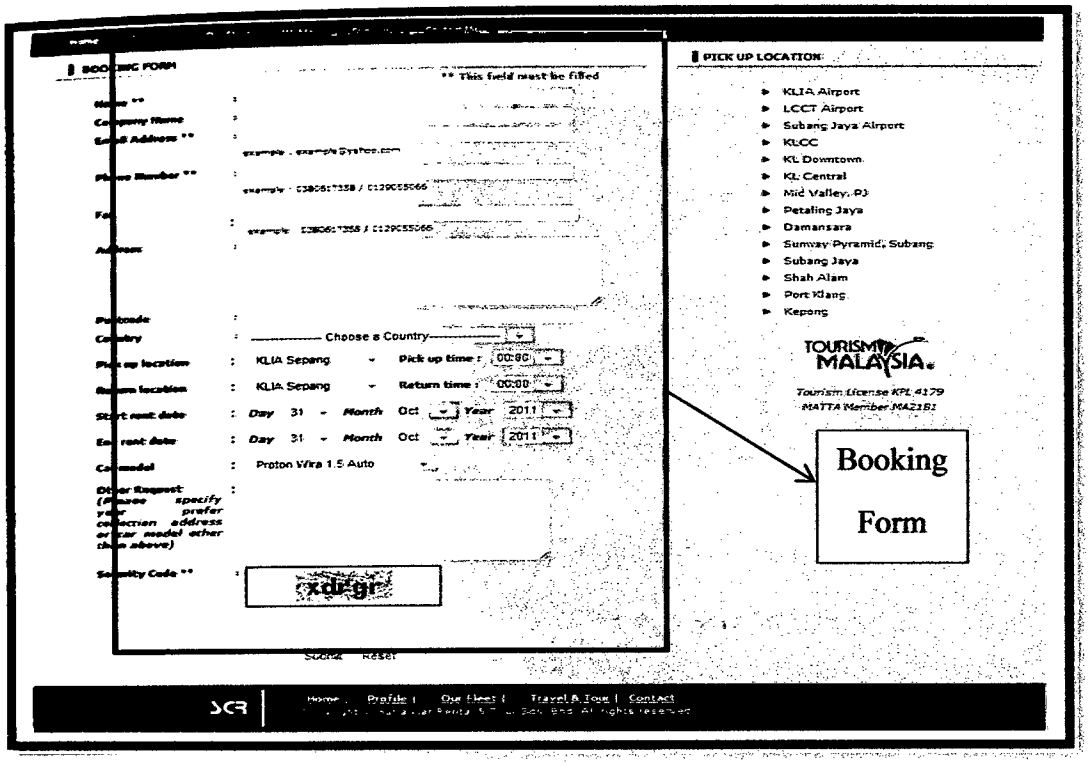

Figure 2.2: View of booking form for SCR Travel & Tour Website

2.2.2 NOVA CAR HIRE

Our focus is to save you time and money when it comes to hiring a car. We provide you with the cheapest deals as well as a friendly & helpful service (Nova Car Hire, Online).

In this website, there were user friendly which are the way they serve the service function is not difficult to user to understand. Besides that, they also provided the instruction to user to more understand to use this website. Furthermore, at Nova Car

Hire, they want to make user booking experience as safe & comfortable as possible. Figure 2.3 shows the booking part which use the simplest way for user to understand.

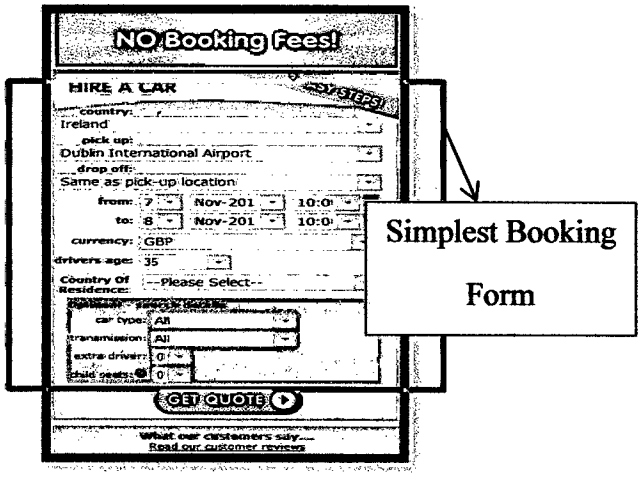

Figure 2.3: View of booking part Interface

Figure 2.4 shows the cancellation field interface which makes a user as safety as well.

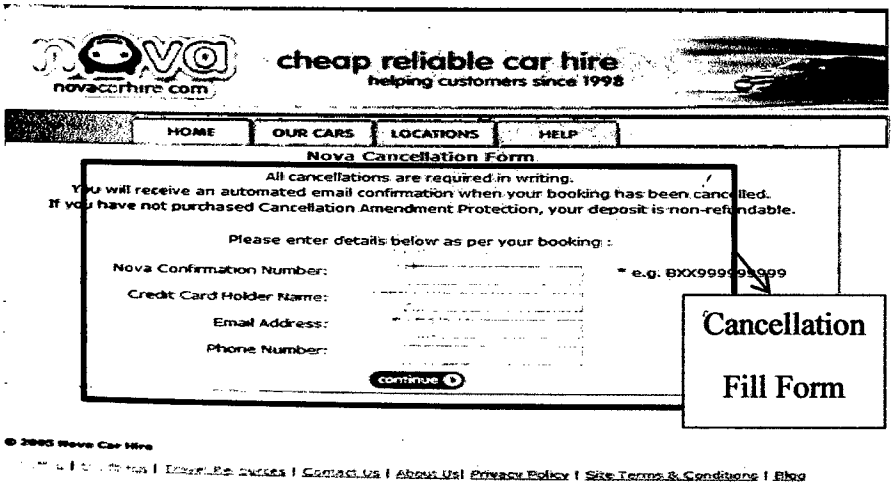

Figure 2.4: View of cancellation interface

Figure 2.5 shows the help interface that very helpful for user to refer.

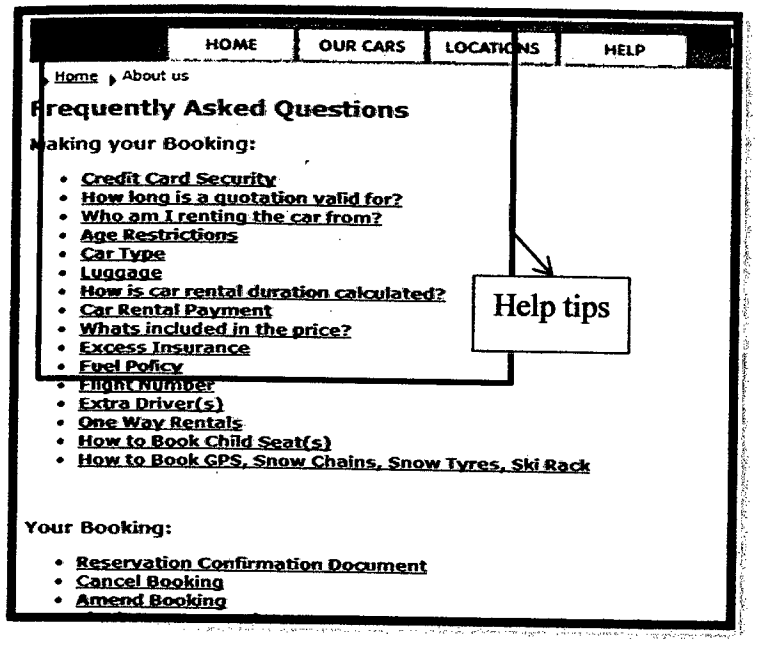

Figure 2.5: View of Help interface

2.2.3 WS RENT-A-CAR

WSRAC offers a wide choice of vehicles, and all the cars are well-maintained, ranging from economical to luxury cars, vans, MPVS, and 4 wheel drives, for you to choose the one most appropriate for your trip and traveling comfort. To help you on your way, all our rentals are competitively priced. WSRAC has also engaged the Kurnia Auto Assist's 24 hours Breakdown Service to assist its customers in the event of an unfortunate emergency situation. WSRAC also offers a variety of other services, such as, Chauffeur Drive Service, Airport Shuttle Service, Corporate Rate Program, Long Term Lease Program, Weekend Rate Program, Fleet Management and etc (WS Rent-A-Car, Online)

Figure 2.6 shows the home page of WS RENT-A-CAR Website Graphical User Interface.

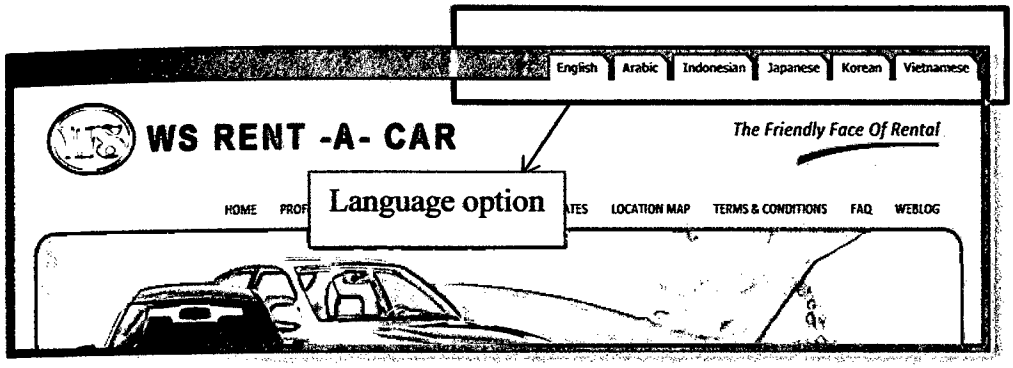

Figure 2.6: View of Homepage for WS RENT-A-CAR

Figure 2.7 shows the catalog for available vehicles of WS RENT-A-CAR Website Graphical User Interface.

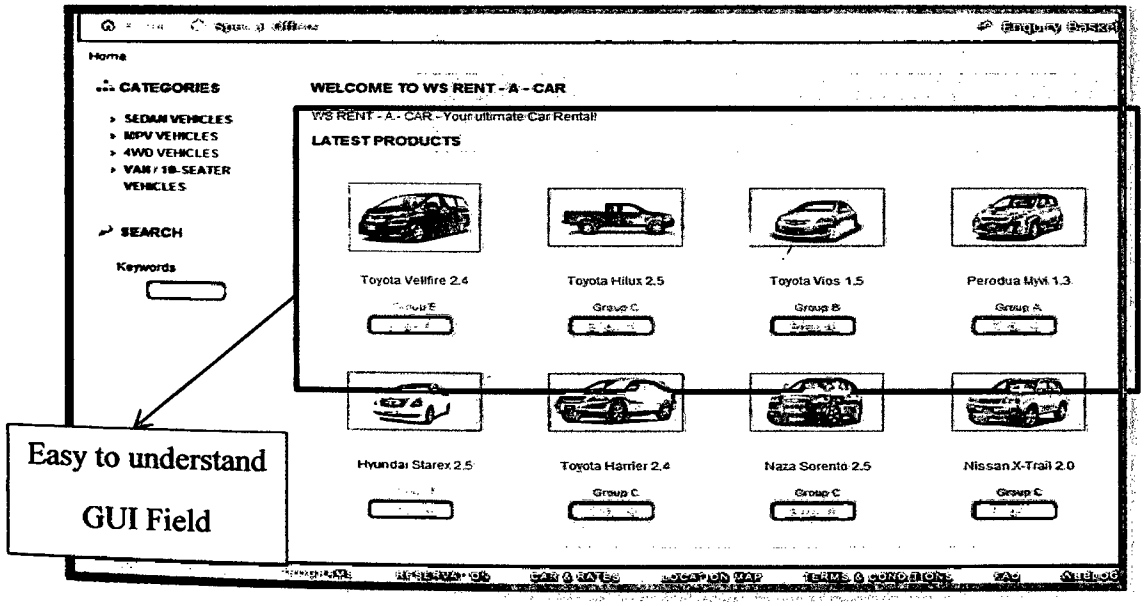

Figure 2.7: View of catalog for available vehicles

Figure 2.8 shows the interface for user submitted their feedback about this website services and enquiry question about this system.

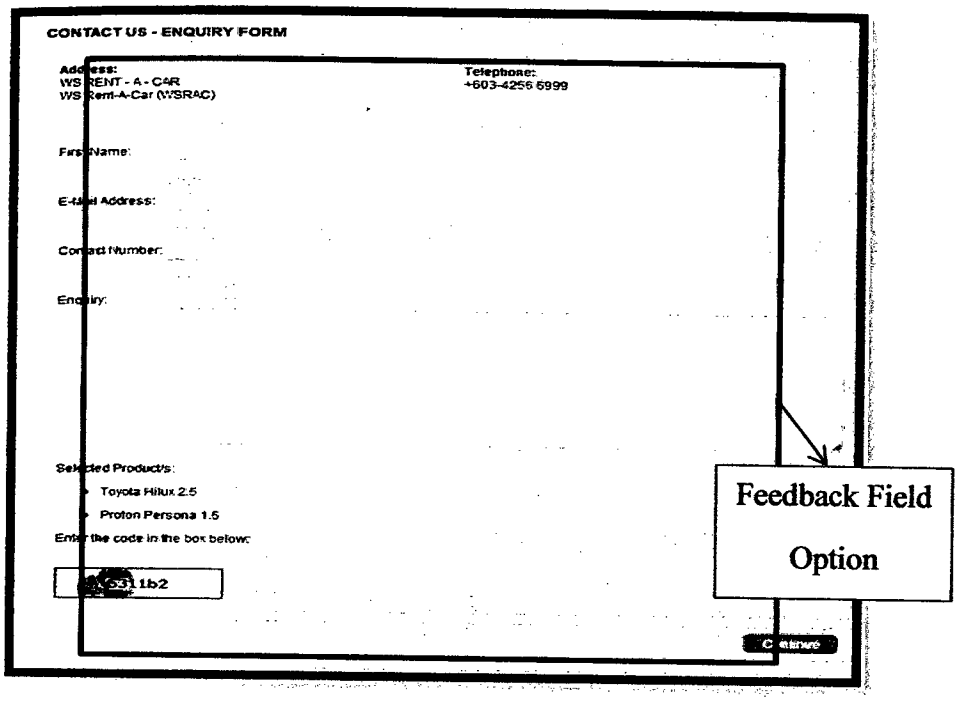

Figure 2.8: View of feedback form interface