Carpaint On-Line

by

Mr. Supornchai Rujikulkarn

A Final Report of the Six-Credit Course
IC 6997-IC 6999 E-Commerce Practicum

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
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content corrected

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The Graduate School of Assumption University has approved this final report of the Three-credit course, IC 6997, E-Commerce Practicum submitted in partial fulfillment of the requirements for the degree of Master of Science in Internet and E-Commerce Technology.
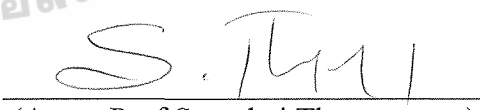
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ABSTRACT

www.carpaint.com is the first website shop in Thailand. For whom decorating his cars and making decision for orders through web site. Most companies which need to advertise their products by transportation can deal with Carpaint by website. They can save the transport cost and reduce the time to contact the shop.

The Carpaint is a website that provides a lot of types of painting (Painting, Wrapping, Sticker). The customers can open the catalog online in the Carpaint and can choose products to the basket for ordering. Carpaint has the link to access the partner link.

The visitors first time to Carpaint can register to become members (no charge) and the personal information is secret, nobody can see the information. The password of the user is encrypted with the security system. The webboard of this website can serve the need of user(Ex. Asking the question ,Answer the question , Selling the second accessory and sharing the experience of the decoration.

This website provides numerous benefits for the visitors. He can share the technical experience of painting. This project would be developed to build up online Carpaint shop for those who love the cars and the company needs to advertise by transportation. All database server of Mysql were accessed through the web server (Apache) on Microsoft windows 2003 Enterprise. This website is developed by PHP language that is flexible and uses low resources on the server.

ACKNOWLEDGEMENTS

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I. INTRODUCTION

1.1 Background of the Project

On-line car paint is the project that provides services such as car decoration like painting, wrapping, sticker through this on-line service. This project helps customers to reduce the time for designing.

They can use the special programs found in this website to design their car by themselves. In this website has the information and conditions of the service before they make a decision. We will be the first company to offer this kind of service through this channel.

When the customers would like to use this service, they can input their personal data through subscription or sign-up for free on a basic form. This system will then send an email to them to confirm their \login name and password. We will keep all their data on a secure database.

We consider many factors on the market segment, from people who choose our service for beautiful decoration purposes, for advertisement, or even for the purpose to compete with others. Target market are people who would like to decorate their cars for fashion and the agency or confirm representatives who use this channel to advertise.

This channel service adds more service besides from just decorating. With good quality accessories supported by business partners, they can sell their parts and accessories while we provide technical know-how for consultation on-line before the customer makes a decision.

The purpose of this project is to support car paint business and look for an opportunity to add new channel of services, which fulfill satisfaction for both on-line and off-line customers.

1.2 Objective of the Project

(1) To create website for e-commerce.

(2) To use the programming technical for create website.

(3) To promote the first on-line carpaint in Thailand.

(4) To create website for whom need order through website.

(5) To create the new channel way of this business type.

1.3 Scope of the Project

To study online marketing and content management system

(1) Online payment system.

(2) To design and develop website.

(3) Information Input-Output process

1.4 Deliverables

(1) The final project report in details covering the scope mentioned.

(2) The complete and applicable E-commerce website prototype consists the product information and other advantages information.

II. THE EXISTING SYSTEM

2.1 Background of the website

The project was started in 2005. The web administrator tried to develop the website to serve the need for those who love the car. In Thailand when the developer browse through the website he see most websites abroad do this business. The committee started the plan and met the teams. The committee concludes that we will create this plan in 2006.

In year 2006 the committee started to open a website Carpaint.com and tried to make a small team with only 3 staff doing multi work functions.

(1)   Web and system Administrator

(2)   Business Marketing

(3)   Web designer, Technical Support

In Thailand Car-painting is not famous for public because they don't see this type of decoration on marketplace. First time we hope that this website will promote the car – painting to the public. The second plan, we decided to create website of e-commerce system for serving those who need to decorate the car can surf on the net and make decision at home. They can get all information about the car. EX. Type of painting (Paint, Wrap, Sticker), prepare Budget and can plan which date he take the car to Carpaint shop.

The web designer decides to have an online register to make the connection between Carpaint and customer. They can tracking the old order or the old style of painting. For the company that need advertising through this channel by their buses vans or cars. They can should and make contact Carpaint for make decision. This case saves time and budget for dealing. The information of member is secret because who is

register to member has the password that generate by themselves and encrypt the password with MD5 system. Therefore nobody know their password to use this user login. On Database show the encrypt data on the "password" field which nobody can read. This website save for customer to use and order the product. Carpaint is separated into main 2 parts.

(1) Shopping area for members

(2) Marketplace where everyone can browse the website for ask the question and get the answer by Webboard and Also can post to sell and buy for his accessory on the Webboard.

2.2 Existing Computer System.

This website is developed under PHP language, Mysql lanquage and the existing computer system for this site were divided into:

Software

(1) Microsoft Windows 2003 Server Enterprise

(2) Apache

(3) Mysql language

(4) PHP language

(5) PHP Myadmin

(6) Javascript Language

(7) HTML

Hardware

Intel Pentium IV 2.8Ghz

(1) 1GB Ram DDR

(2) 2 Hard disk 36 GB Raid 1 (Mirror) Hotplug

(3) Gigabit Ethernet

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III. THE PROPOSED SYSTEM

3.1 System Specification

The way to implement this website could be divided in many ways.

Hardware

Carpaint uses Intel Pentium IV Processor that can support many transaction orders for customers. This server use 1 GB memory for process a lot of job order. This server use 2 Harddisks for backup.

Carpaint run the website on Apache that is stable web server for running PHP language. PHP language is the open sources language that develop very fast and flexible to design with the website. PHP is the Embeded Script (PHP can insert with HTML any time). The memory usage of PHP doesn't always call memory and uses low resource of the server system. Javascript language is used for validator to check the information that will save into the database because it runs on the client side and responds immediately on the client computer. Javascript can put small "snippets" of code into their HTML pages and can be used to detect the visitor's browser- depending on the browser-. Non expert users usually can't notice what is going on because the malicious code has no visible effect on their browsing experience.
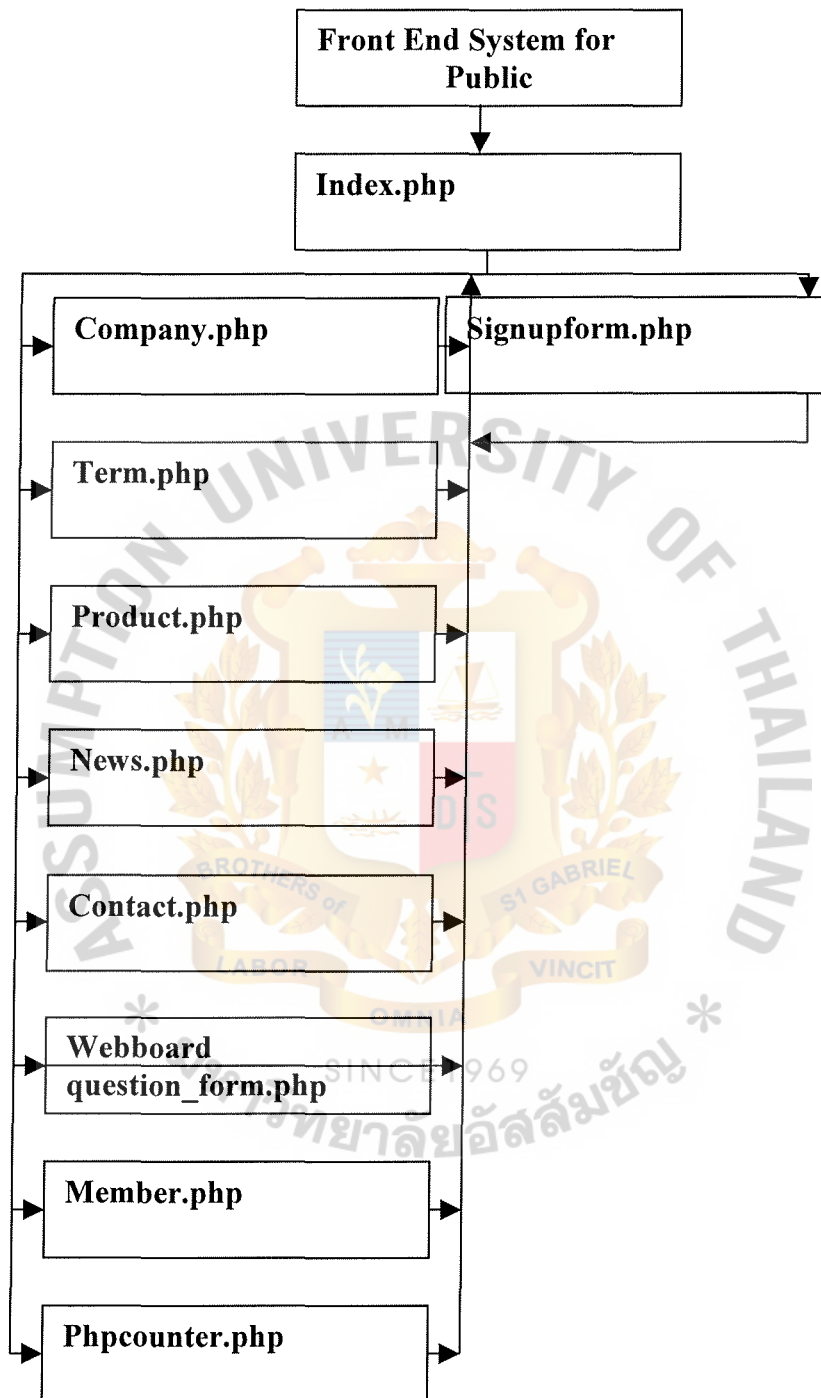
5

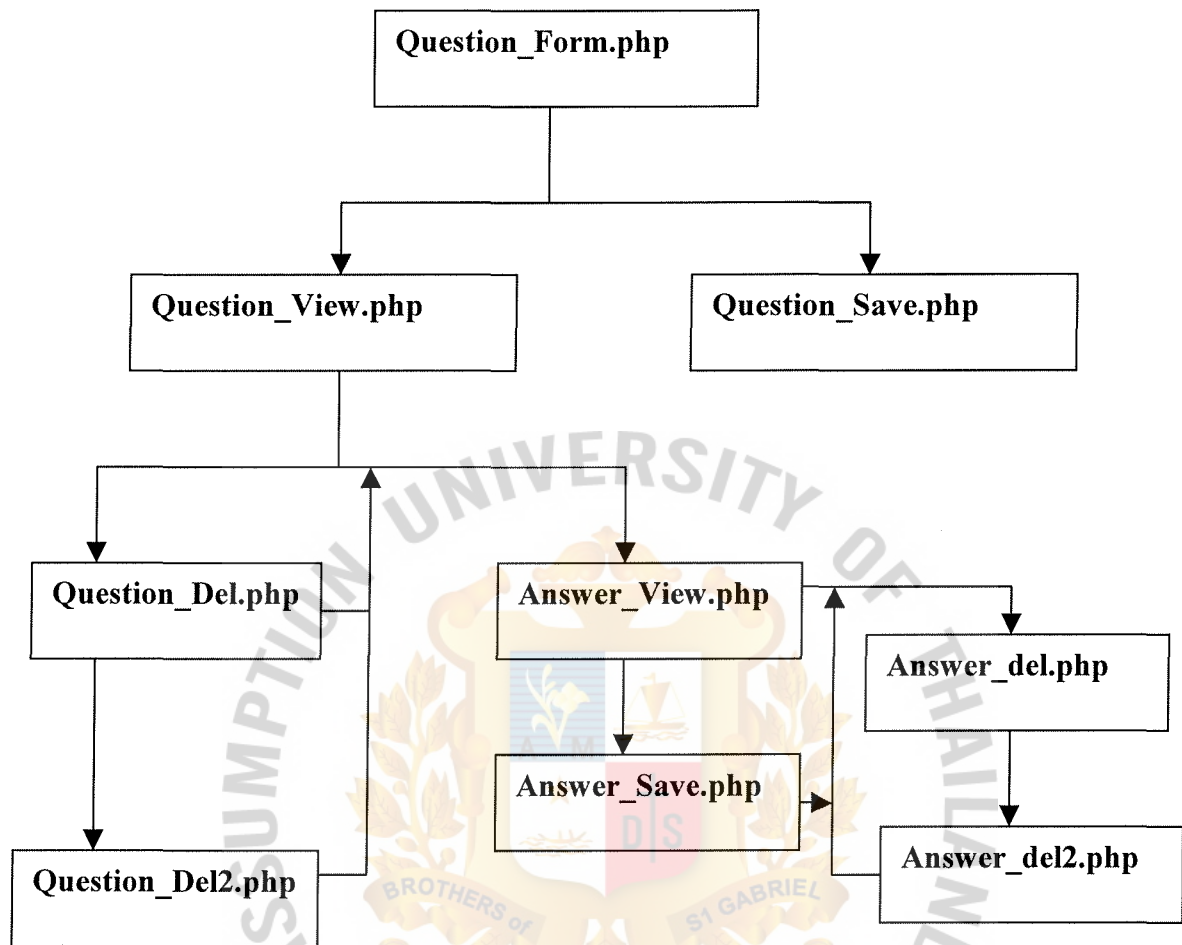## 3.2 System Design

Figure 3.1. Frontend System Diagram

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```
                        ┌─────────────────────┐
                        │  Question_Form.php  │
                        └──────────┬──────────┘
                    ┌──────────────┴──────────────┐
                    ▼                              ▼
        ┌───────────────────────┐      ┌───────────────────────┐
        │   Question_View.php   │      │   Question_Save.php   │
        └───────────┬───────────┘      └───────────────────────┘
          ┌─────────┴─────────┐
          ▼                   ▼
┌──────────────────┐  ┌──────────────────┐  ┌──────────────────┐
│ Question_Del.php │  │  Answer_View.php │  │  Answer_del.php  │
└─────────┬────────┘  └─────────┬────────┘  └──────────────────┘
          ▼                     ▼
┌──────────────────┐  ┌──────────────────┐  ┌──────────────────┐
│ Question_Del2.php│  │  Answer_Save.php │  │  Answer_del2.php │
└──────────────────┘  └──────────────────┘  └──────────────────┘
```

Figure 3.2. Webboard System Diagram

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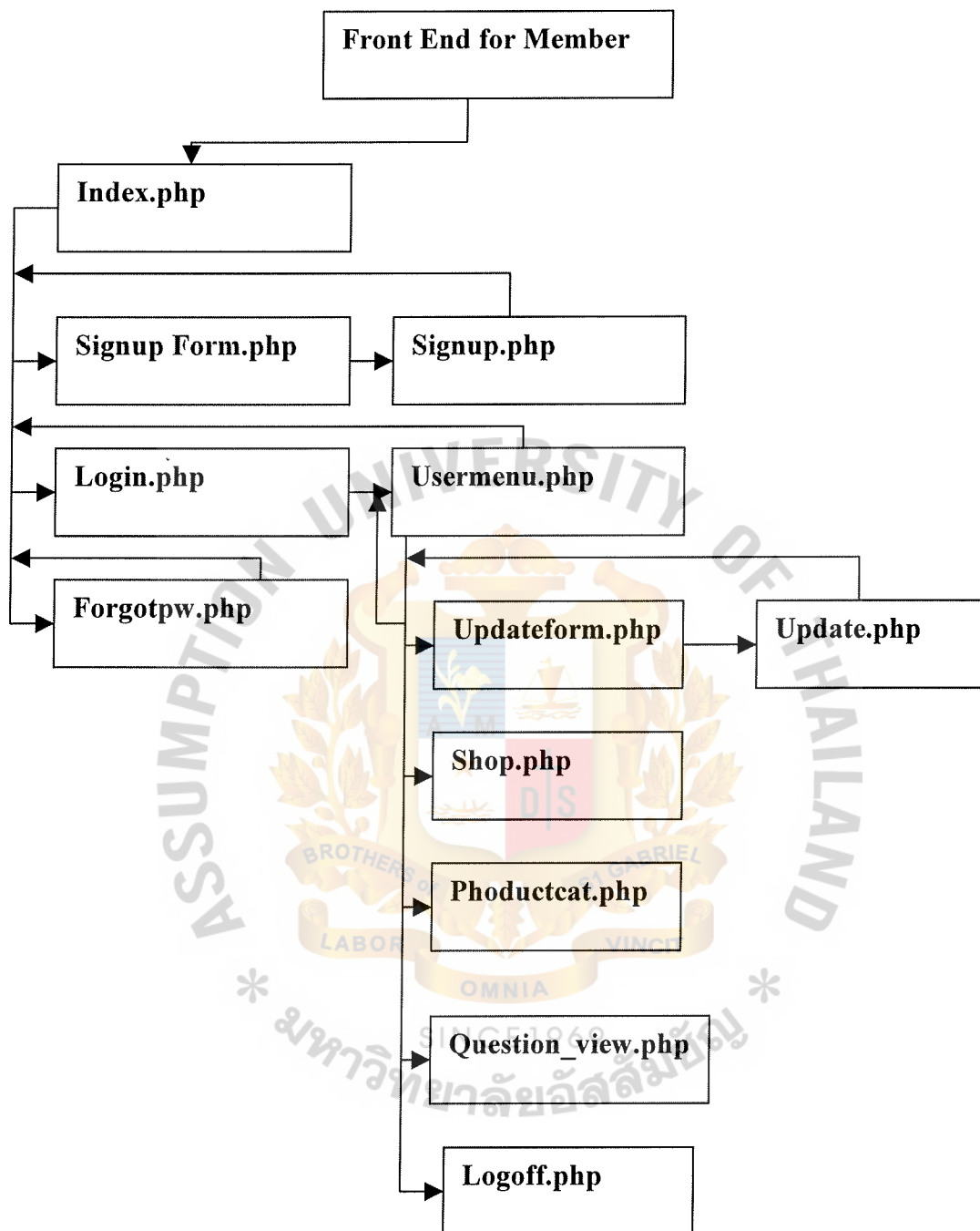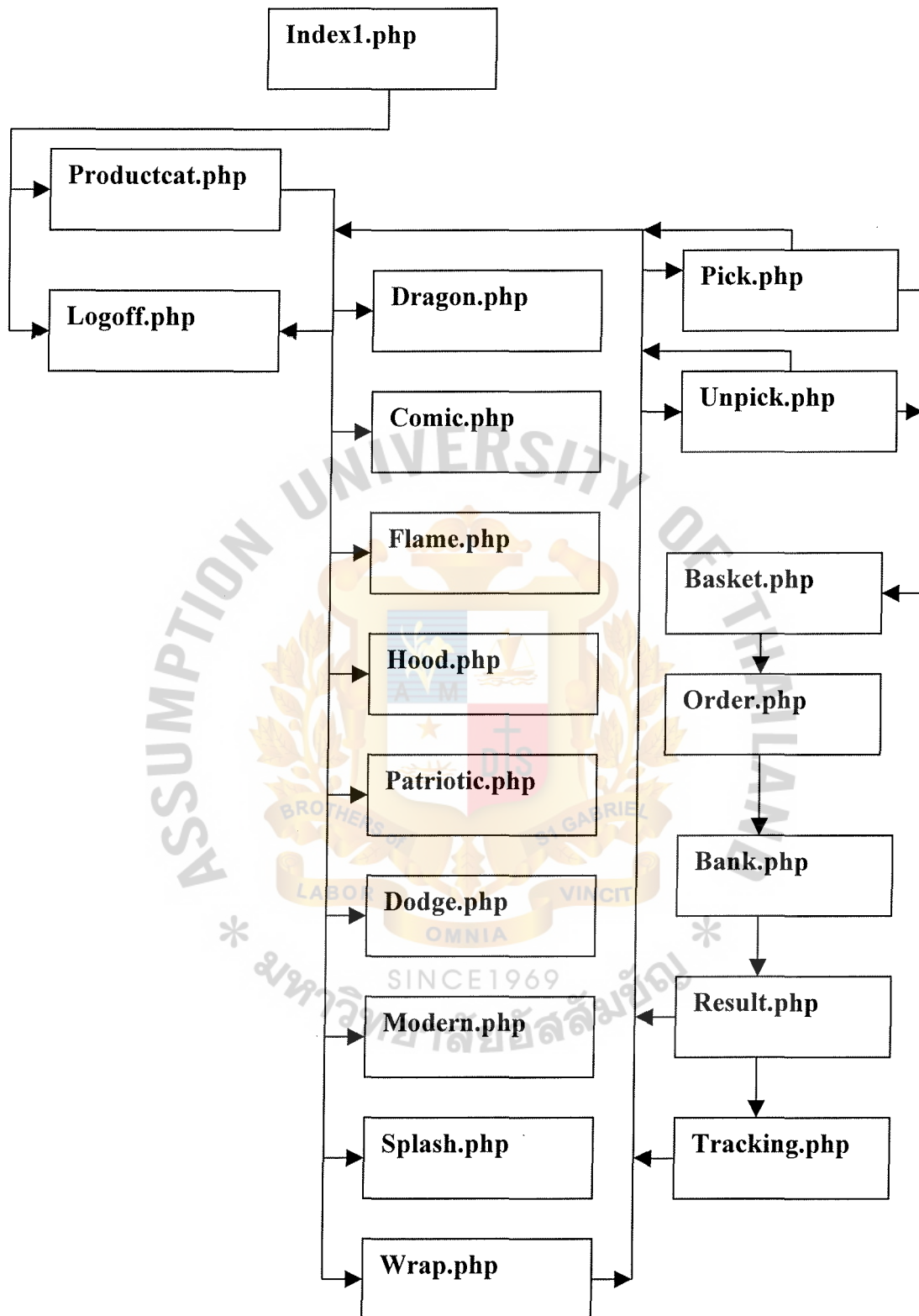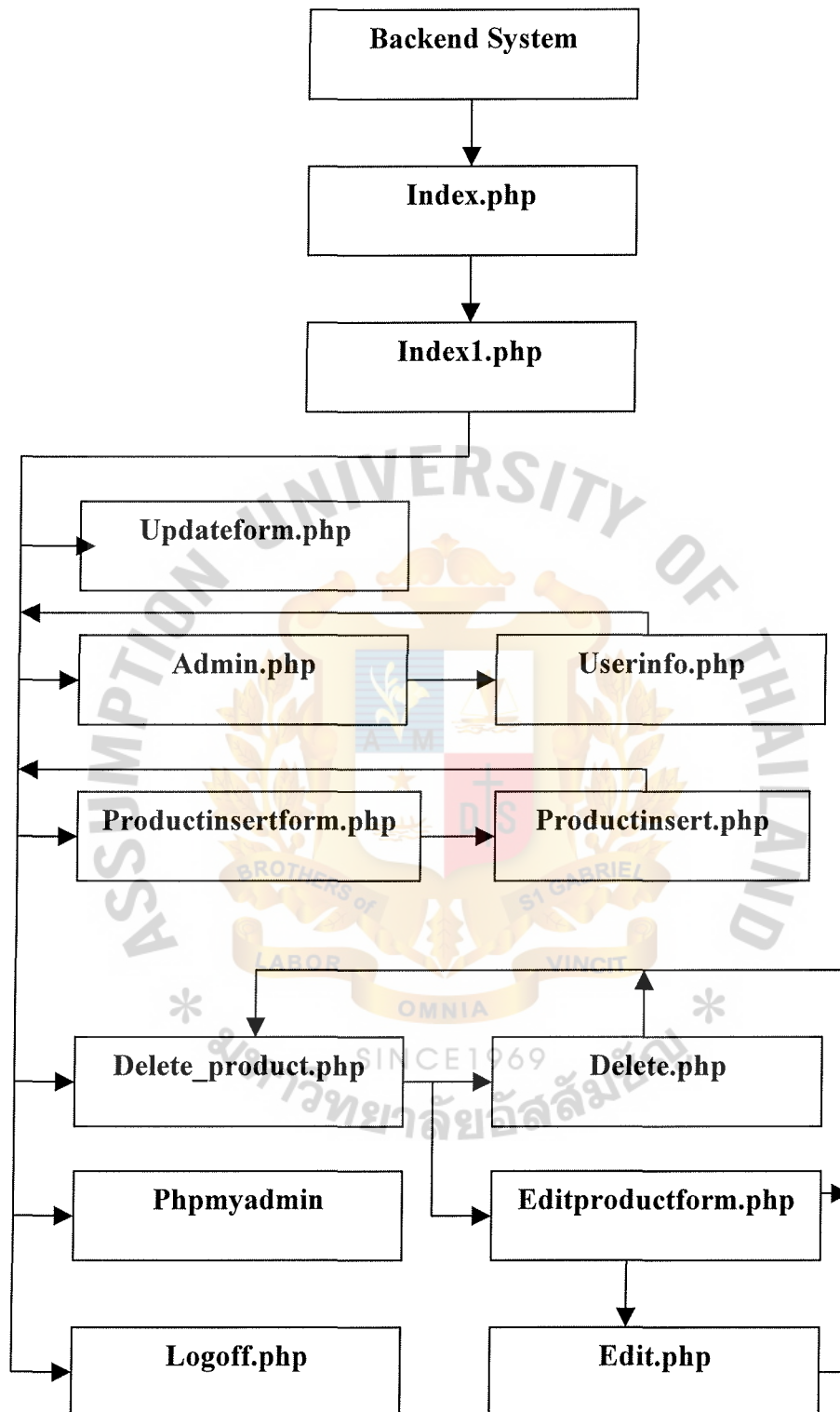Figure 3.3. Member System Diagram

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Figure 3.4. Order System Diagram

Figure 3.5. Backend System Diagram
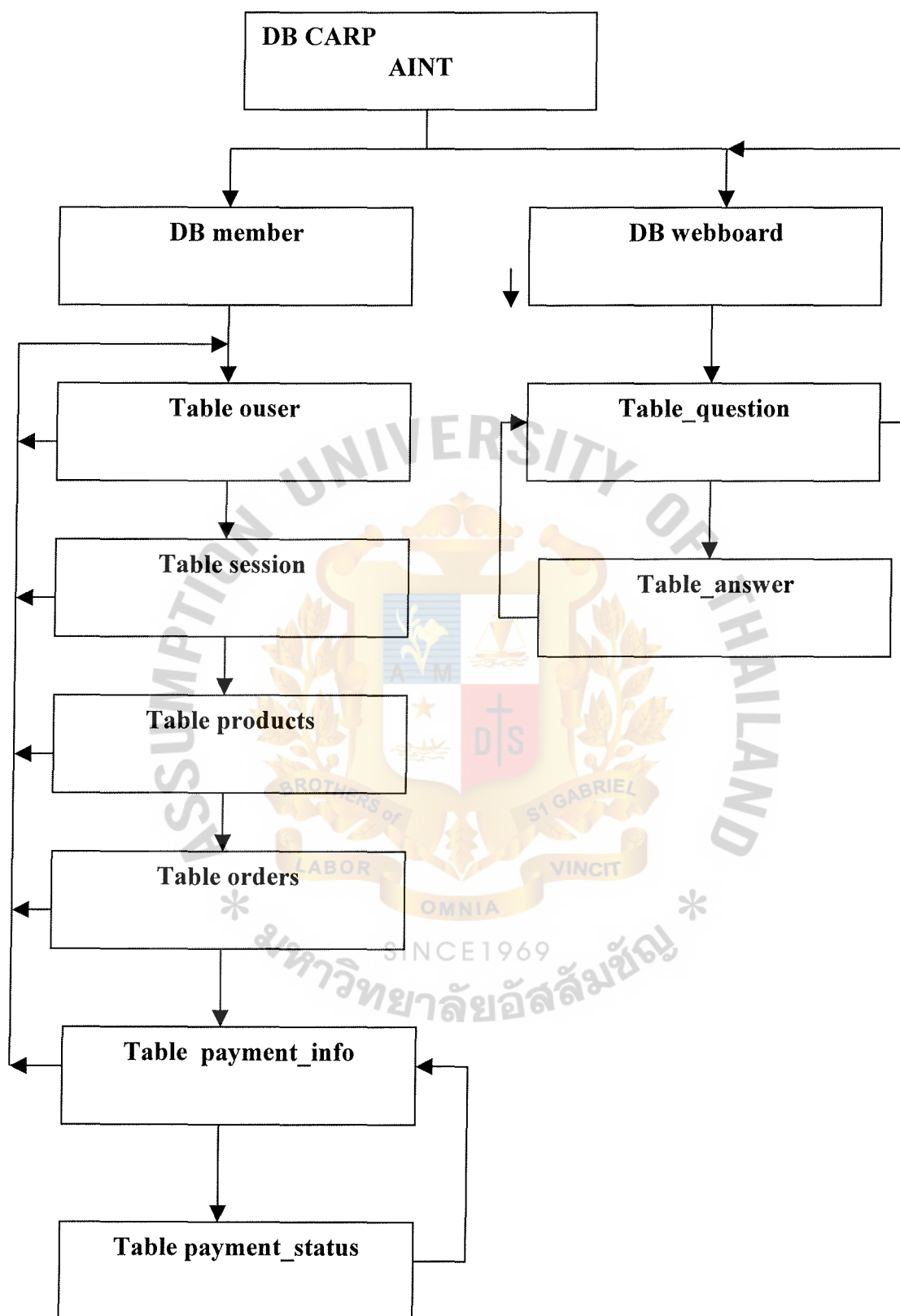
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3135 c 1

Figure 3.6. Database Diagram

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IV. PROJECT IMPLEMENTATION

4.1 Overview of Project Implementation

In the instant website package we separate into 3 parts as

4.1.1 Front-end for public of Carpaint online

4.1.2 Front-end for member of Carpaint online

4.1.3 Back-end of Carpaint online

4.1.1 Front-end for public

The Front end for public uses the basic HTML Coding and inserts php files on some module. The main menu is consistent and is easy to use. The web administrator designs the five menus for user. This front end can show the brief details of website. The webboard Module uses php Language and Mysql database. User can post information or data to ask some question and get the answer from the other person. They also can post the second hand accessory for selling. For some questions that are not good for posting, this module is managed by admin for deleting. Besides the Home page of this website has the counter to show how many persons browse Carpaint. This module uses php language and keeps the data count on .DAT file.

Front-end for public will have many module on this website

   (1)   Home

   (2)   About us

   (3)   Term of condition

   (4)   Product for public(show only)

   (5)   News

   (6)   Contact us

   (7)   Counter

(8)   Webboard

(9)   Member (this link to Front-end for member)

Figure 4.1. This is Homepage for Public.

(1)   Home page

Users can browse Carpaint site on this page. They can get information about this

site. This page has the webboard that supports everybody. The user can post the

technical item about the cars that he needs to know . Some time he can post the items

that he needs to sell. This page also has the Counter for counting the users who come in.

The membership module is standby on this page also. This page is designed with PHP

language and HTML Language. The User finds it easy and fast to access to this website.

If the website is very slow to show the browser the user will change to the another

website.
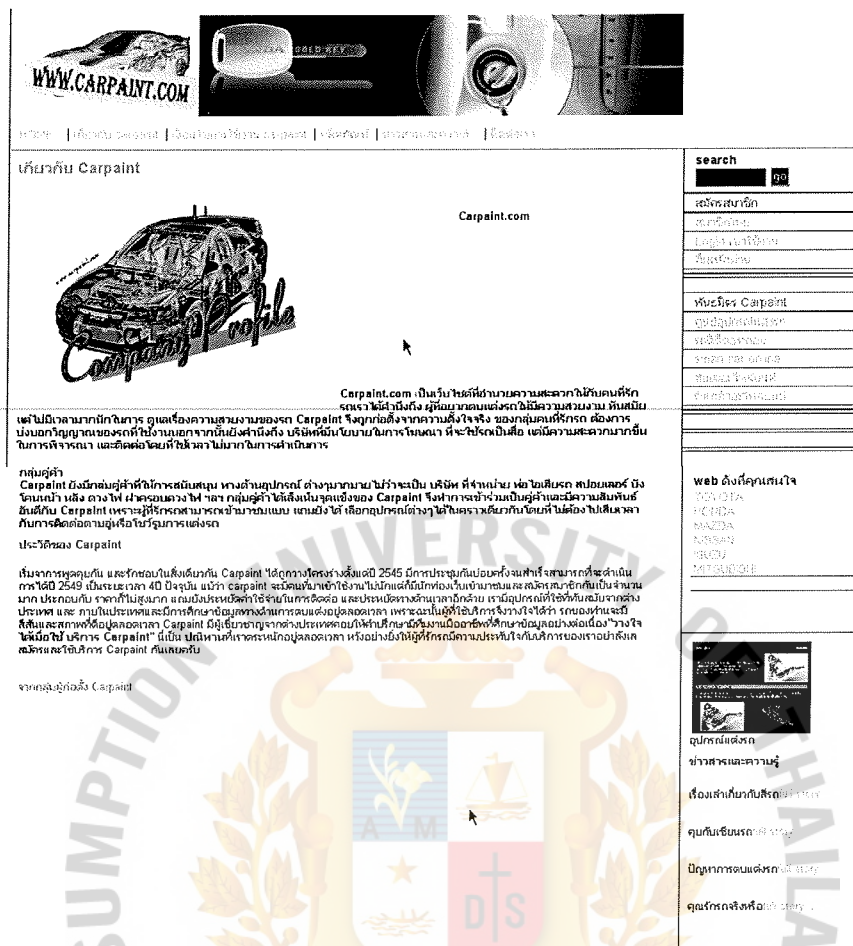
Figure 4.2. Company Profile Page

(2)   About us

On this page the user can see the company info. The design of this page is the same style as Home page. The banner on this page will change depending on the sponsor. The user can register on this page also. This link to the business partner website for the users who need the car accessories. This designation is proper with the object of using, because this public page needs to be fast and easy to read. From using research, Some website has a very beautiful home and public page but is very slow

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because the programmers design them with flash programming. When the user doesn't

need to wait for the page to show, he leaves away immediately.
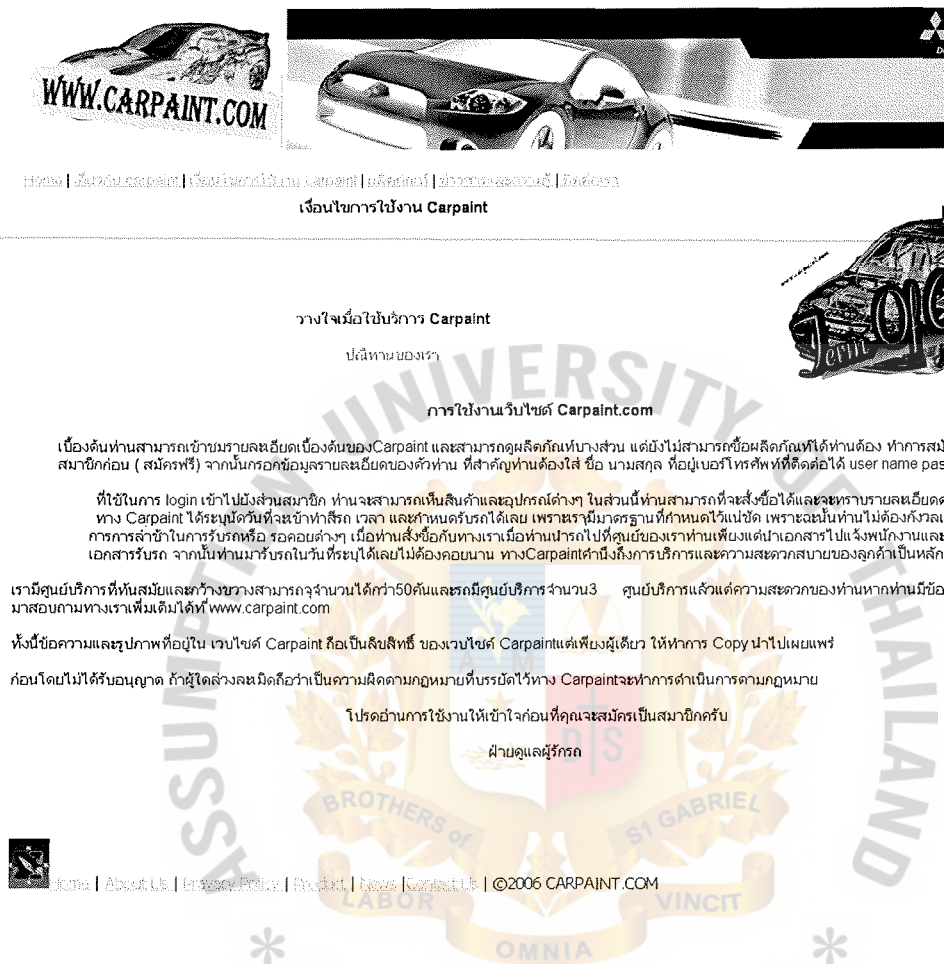
Figure 4.3. Term of Condition.

(3)   Terms and Conditions

The user who needs to order the product on this website, must register as member

and they are also need to read this page. This page is designed as easy to read and

access. This is very important , The programmer and web designer must think this case

because some users come to the website but doesn't know how to use the website.

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Carpaint would like the user that come to this website can use it. This page is designed the brief text to explain and put some pictures & banners to this page because some page has a lot of detail , a lot of link . The user may be confused from that website information.
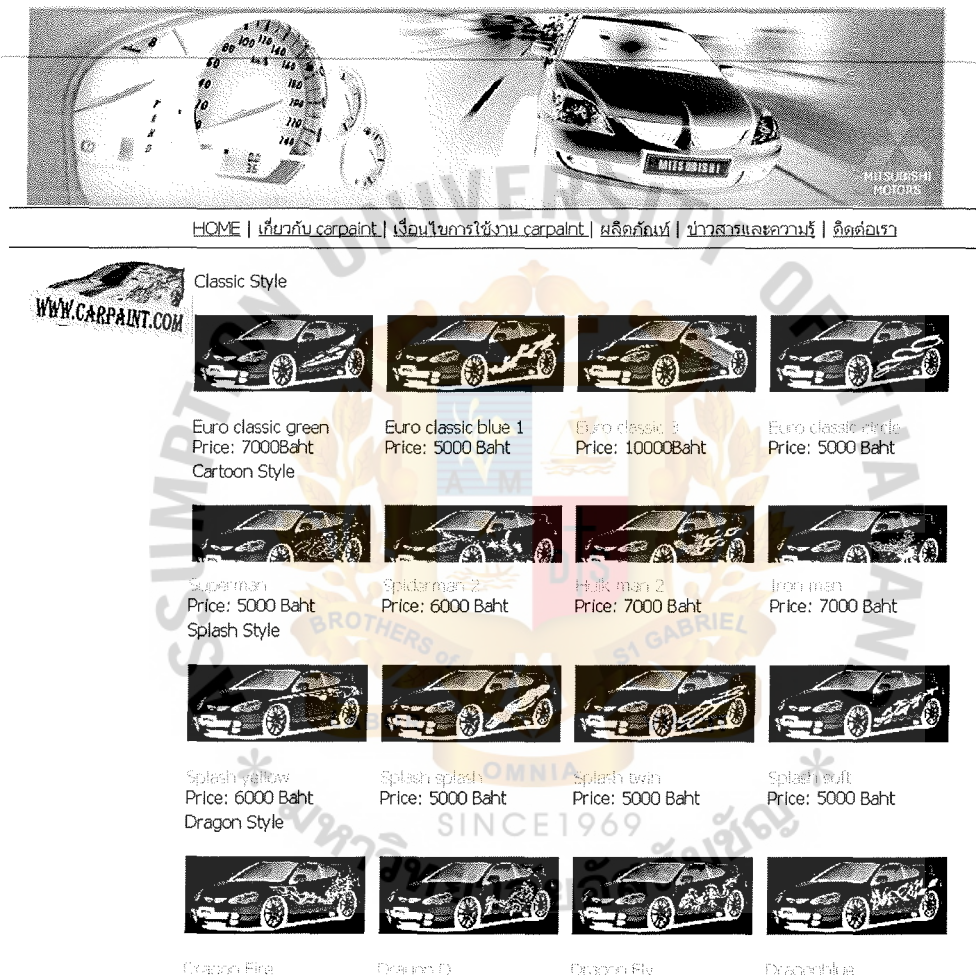
Figure 4.4. Product for public

(4)   Product For public

This page shows product to the users but they cannot order on this page. They must login to the private site for ordering. This page design use the table style and has

some text to show the name and the price. User will see the type of decorating roughly and can make decisions to register to look inside. After the user logs in he can make a decision on the type, color and price. Next the order transaction will occur.

Figure 4.5. News

(5)   News

The User can get the essential information and news with all around the car items. This page is designed same as the Product for public page. But each item will link to another page for showing the detail. Most of the programmers use this design for showing the user. This page can add the data from the programmer and design the input management system and this system can add the text and picture to show the web page

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by the adder doesn't know how to coding. This case of the system is planned to the future.

Figure 4.6. Contact us

(6)   Contact us

The users who need to comment this website, can send the comment to web master.

Figure 4.7. Counter

(7)   Counter

This page uses the PHP Language to put HTML coding, the "phpcounter.php" file use the variable keep the data on the "counter.dat" file. This file uses "$hitsfile"

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varialble keep the picture on the "counter.dat" file and shows the 6 digit on the page. After the user come in the program will plus one to the variable and variable call the picture is same as it.Ex. the result is 2 , the program compare is value with the name of picture and call to show on the page.

Figure 4.8. Insert Question on the Webboard.

รถสีอะไรถูกฉลากกับวันอังคาร

ช่วยอธิบายด้วยครับ

โดย : mag **อีเมล** : meg@hotmail.com **เมื่อ** : 19 ตุลาคม 2549 [Delete]

สีดำครับ เพราะเสริมบารมีให้กับเจ้าของครับ

โดย : min **อีเมล** : min@hotmail.com **เมื่อ** : 19 ตุลาคม 2549 [Delete]
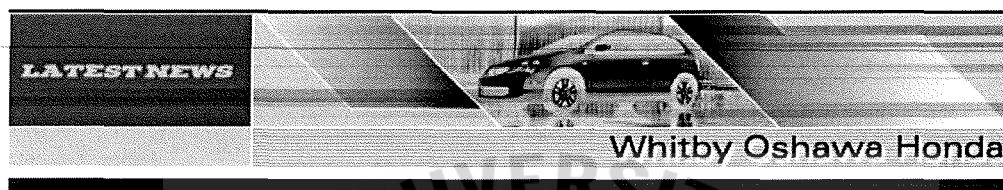
ร่วมตอบคำถาม

รายละเอียด : *

ชื่อผู้ตอบ : *

อีเมล : *

Submit   RESET

Figure 4.9. Show answer on the Webboard.

(8)   Webboard

On the Figure 4.8 ,the user can input the question on the webboard. This form uses the php language access to the " tb_question" table . This uses the question_form.php file input the data. And using the "question_view.php" file for save into the database. If Admin check the question wording is not proper. He can delete with his password immediately on that page. This page uses the question_del.php for check the password of admin before delete and the question_del2.php to delete the question.

The figure 4.8 shows that when some user answer on the webboard. I use the answer_save.php to save data into the database the user uses the answer_view.php for show answer with the question. In the same way as question, This page uses answer_del.php to check password of admin before deleting and using the answer_del2.php to delete the answer.

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The "answer_view.php" use The connect.php file use set as the database is "db_webboard" and the question_save file uses the function.php to check input for email that the user input the email format as correct or not.

(9)   Member

This module will link to the front-end for private. This module will explain on 4.1.2

4.1.2 FRONT-END FOR MEMBER

This part of Front-end , This module designs the session variable for use check the tracking of the user .the customer need the user login and password .The php coding generate the session id by random. The customer will use this session along this transaction when the customer logout off the system, the session variable is set as "NULL".

When the customer logs in to Carpaint order module, the menu will show 9 menus for ordering, edit password themselves, logout ,product viewing menu,etc. On the Product module, they see the category type picture for choosing type.They can choose the product to the basket. This module uses php language and products table keep the data for order . they can tracking the product on the basker icon and can clear the product if they change decision. The products table keep pid,name and price for preparing order.

This project uses the bank module for changing status after the order module sends the order transaction to bank website . This page simulated the bank website for approved, declined and cancel status for return to Carpaint admin for check order status.

The admin user (owner) can check this status from the return variable and prepares the job for this order no.

The front end for member has many modules as follows:

(1)   Member login

(2)   Order System

(3)   Payment System

(4)   Coding Design

(5)   Logout module

(1) Shop Online(System Outline) and Member Login
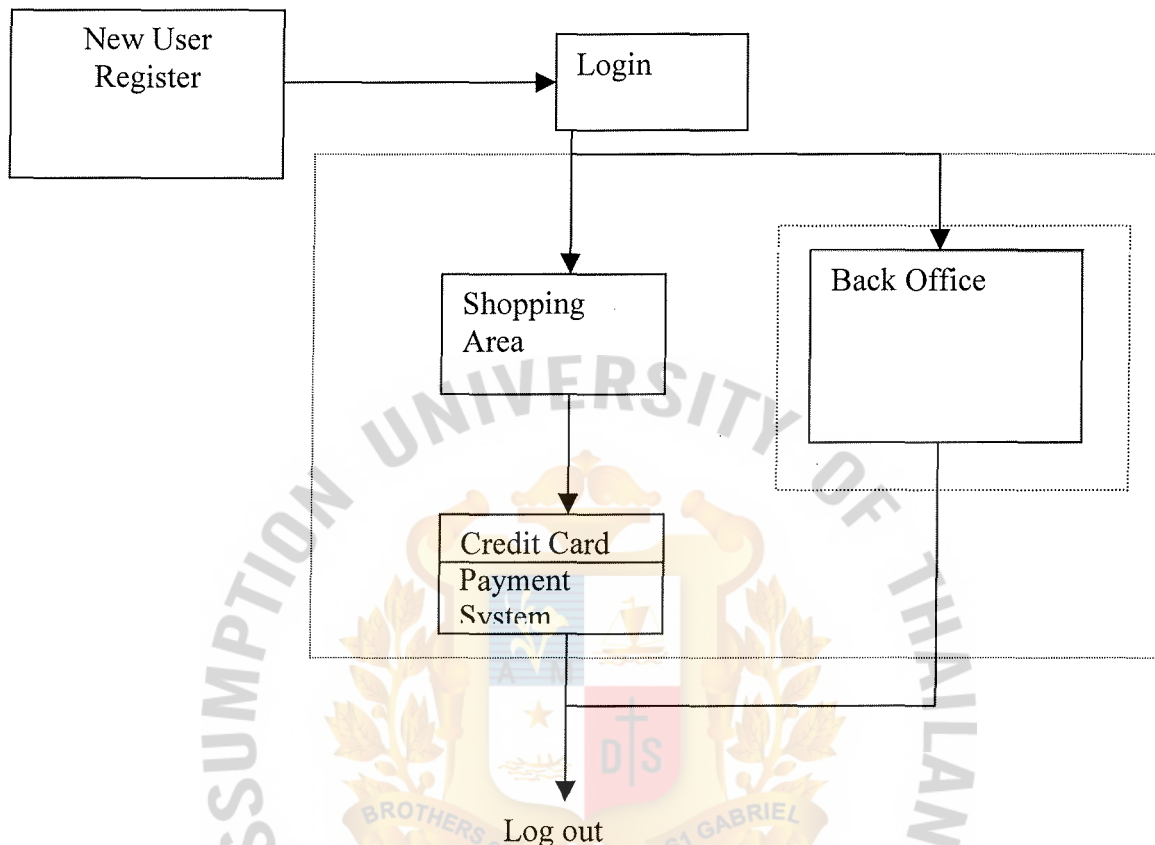
This outline shows the user to browse Carpaint.com, if he is new on this web site he must register to be member before he logs in to the website. The system will check this user is between client or admin. If this user is a client(member) he can connect to shopping area and can use order processing. But this user is admin, he can connect to the back end of the system .

First this module uses a table on the database keep the user info when he register. This module is encrypted by the security system call " MD 5".I use the "Varchar" variable for each fields on the table. Because the Varchar variable keep the real digit on the string and can vary to maximum that you assigned.

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Figure 4.1. "ouser" Table

This is the "ouser" table keep the client information when the user registers to member. The database programming set "id" is primary key for keep member code. On the Home page has the member module for the user. The new user must be registered to the new member module. This module shows on the picture below:
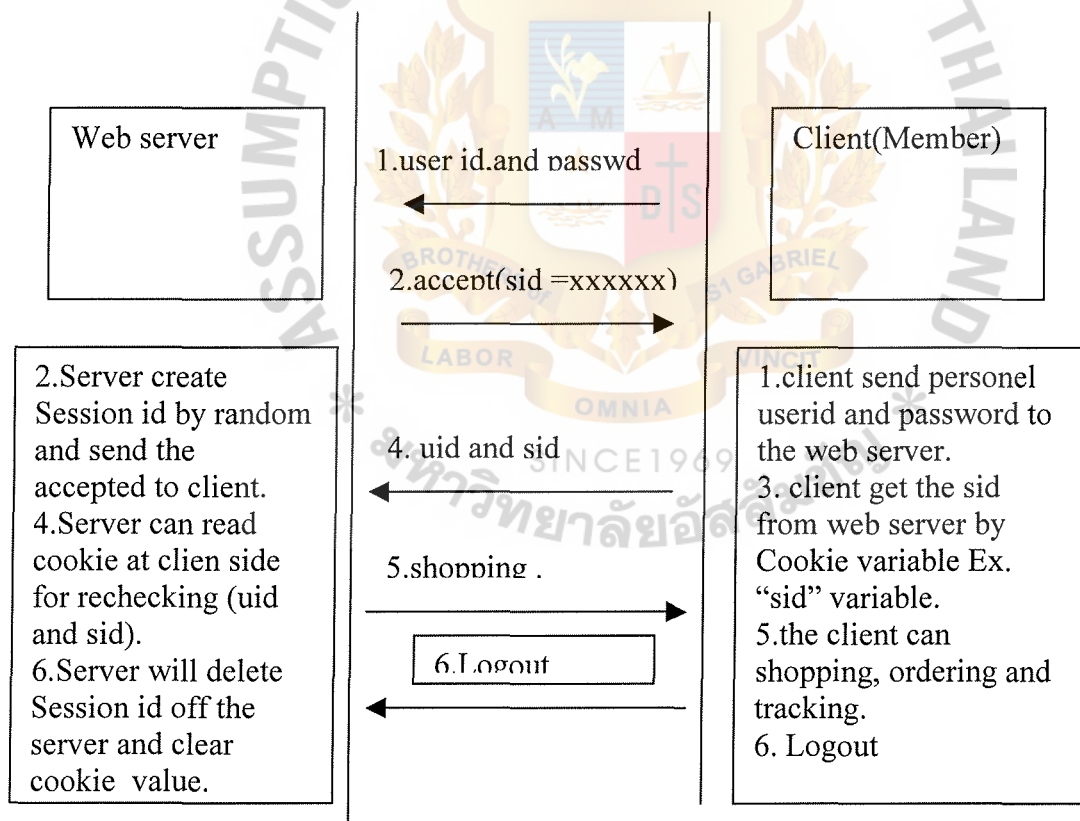
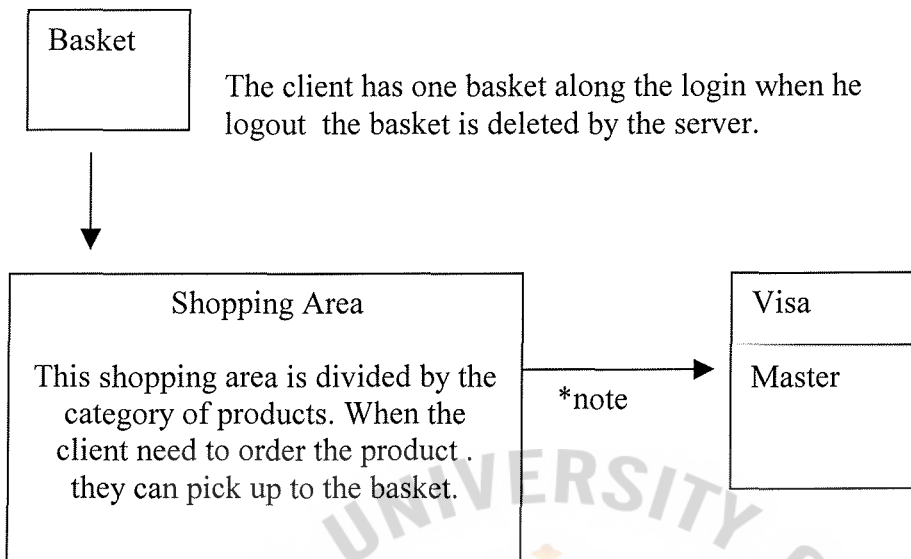

Figure 4.11.   New Member Page

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The user can input personal information to the system and use user login for ordering. This module has the secure system on the password. The password is encrypted with MD5 and the user must key the password 2 times. This page checks user's seeing by the user must key the 5 alphabets on the graphics page below.

The password of all users is protected from everyone. The administrator cannot see the user password too. When the user forgets the password they can use the forgot password module, this module will send email password to that user by decrypting the password from the table of user database.

When the user has the user login and password, now they can login and use the private module. This is the process of member login shown below :

Web server		Client(Member)

1.user id.and passwd
←

2.accept(sid =xxxxxx)
→

2.Server create Session id by random and send the accepted to client. 4.Server can read cookie at clien side for rechecking (uid and sid). 6.Server will delete Session id off the server and clear cookie value.		1.client send personel userid and password to the web server. 3. client get the sid from web server by Cookie variable Ex. "sid" variable. 5.the client can shopping, ordering and tracking. 6. Logout

4. uid and sid
←

5.shopping .
→

6.Logout
←

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This process has a few risks of ordering, when someone opens the cookie variable (user id and session id) , they can see and use this variable for ordering but this case occur very difficult. The second point of risk incase of the collision of session id .

The collision proability = 1/10,000,000,000 .Therefore this case is difficult to random session id . this is the session table is shown below:

Figure 4.12.   The session table

I set "sid" as the primary key because the session id cannot be used by the same user at the same time. This is "login page" show on Figure 4.13:

Figure 4.13.   Login Page

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(2) Order System

```
┌──────────────┐
│   Basket     │
│              │        The client has one basket along the login when he
└──────────────┘        logout  the basket is deleted by the server.
        │
        │
        ▼
┌──────────────────────────────┐              ┌──────────────┐
│        Shopping Area         │              │   Visa       │
│                              │              ├──────────────┤
│ This shopping area is divided by the │──────▶│   Master     │
│ category of products. When the │  *note     │              │
│ client need to order the product . │          └──────────────┘
│ they can pick up to the basket. │
└──────────────────────────────┘
```

* note : the order system will send the client order to the Bank Website.

This is the process of the order system, this module uses the basket as "Cookie" variable to keep order status along the user shopping. The database designer creates the product table to keep the product information . the product information can be shown on figure 4.14 and he sets product id (pid) as the primary key.the "cat" field is the category of product.

ฟิลด์	ชนิด	แอททริบิวต์	ว่างเปล่า (null)	ค่าปริยาย	เพิ่มเติม	กระทำการ
☐ pid	varchar(10)		ไม่			✎ 🗑 🔲 🔲 🔳 🔲
☐ pname	varchar(100)		ไม่			✎ 🗑 🔲 🔲 🔳 🔲
☐ price	varchar(10)		ไม่			✎ 🗑 🔲 🔲 🔳 🔲
☐ name_photo	varchar(40)		ไม่			✎ 🗑 🔲 🔲 🔳 🔲
☐ detail_photo	text		ไม่			✎ 🗑 🔲 🔲 🔳 🔲
☐ cat	varchar(20)		ไม่			✎ 🗑 🔲 🔲 🔳 🔲

⬑— เลือกทั้งหมด / ไม่เลือกเลย *ทำกับที่เลือก:* ✎ 🗑

Figure 4.14.   Product Table

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USER Menu	
เปลี่ยนที่อยู่, password	ส่งรูปภาพ images
รายการสินค้า	สั่งซื้อสินค้า
เข้าสู่เวบบอร์ด	Logoff ออกจากระบบ

Figure 4.15.   User Menu

When the users log into the system, they can use user menu for changing their information, ordering, Go to webboard , sending the picture to the system and Logoff. This is the Product Category of Carpaint page. This page shows on figure 4.16

Figure 4.16.   Product Category

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DRAGON S H O P

Shop | Basket | Tracking | Logout

เครื่องรวมของในตะกร้า

PRODUCT NO. 00000009
ชื่อสินค้า : DRAGON10
ราคา 5000 บาท
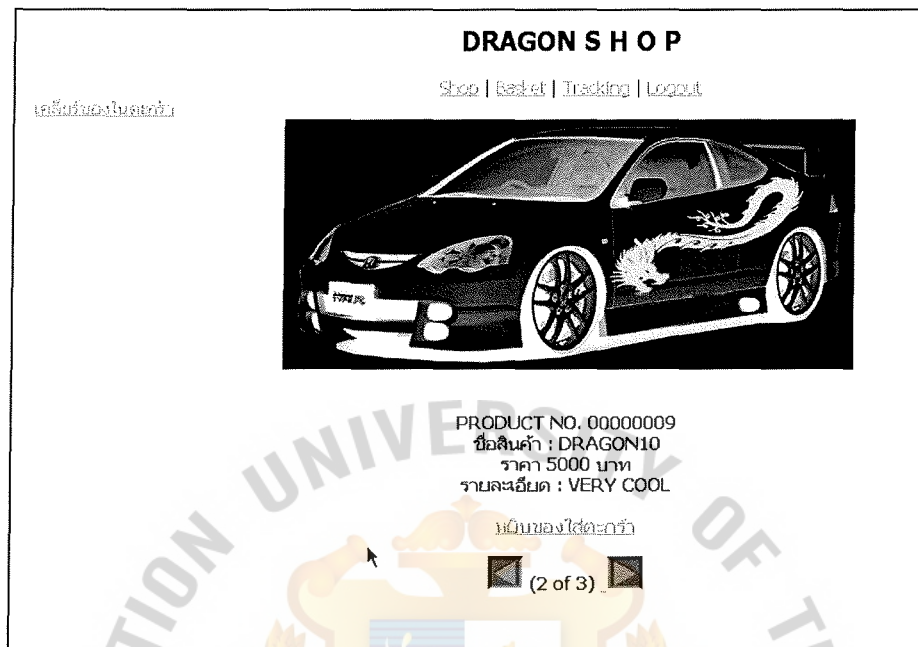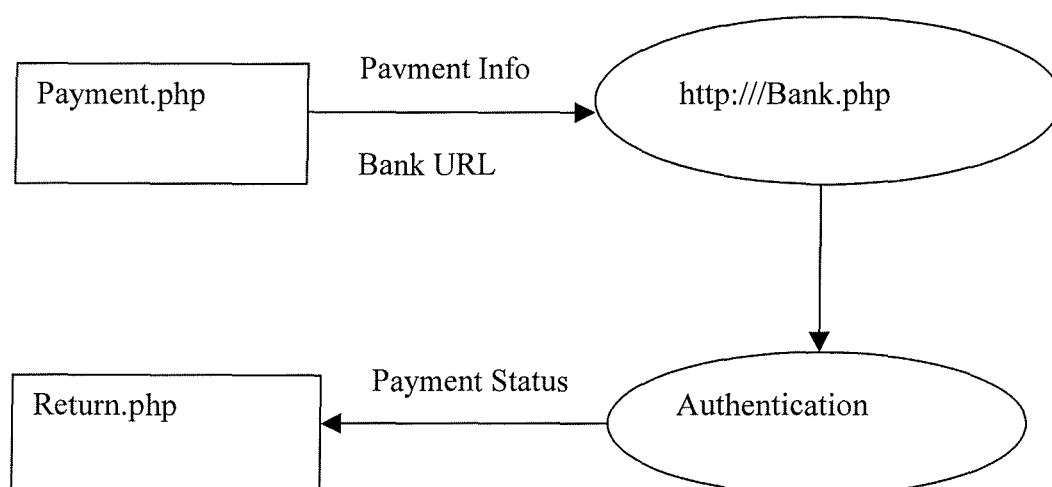รายละเอียด : VERY COOL

หยิบของใส่ตะกร้า

(2 of 3)

Figure 4.17. The Product on the Dragon Category

From Figure 4.16 is the product category when the client clicks some group. The product information will be shown. They can pick to the basket, clear the basket, choose the product.

(3) Payment System

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When the client click order the product on the basket page and click pay by credit card on the payment page. this system use the "payment.php" script   send payment information to Bank URL for check client status. Bank has the 3 stages for sending back to the Carpaint.com as Approved , Declined, Cancle. Bank will send the status by calling the return.php script.

Figure 4.18.   Payment info Table

Figure 4.19.   Payment status Table

Figure 4.20.   Order Table

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The "mid" is the merchant code that Banks will provide to the website. "oid" is the order code and "pid" is the product code .The one order no can has many product but the one product cannot show on many order number. This case is one to many condition. The order table use "oid" and "pid" as the primary key.

(4)   Coding Design

The new member page uses the php coding. This page uses the 'post' Method receive the information from variable insert data to the database. The uid, sid and basket is set to keep the client order at 1 hour per transaction.

The Login page will check User id and password. When the connection pass as the server will create the session id by random and delete all old data of session table. After that the new session data will insert into session table.

The shop page use mylib.inc for collecting the repeat called function Ex. Check Session () .The javascript is used for pick and clear product on the basket. The pick script use the cookie variable keep the product for order. The basket is set the one semicolon on the first time because the client can pick the product into the basket ,the basket will use the semicolon on the end of each product code for divided the product.

B A S K E T

Shop Basket Tracking Logout

รายการของในตะกร้า

รหัสสินค้า	ชื่อสินค้า	ราคา
00000020	FLAME1	5000 บาท
00000021	FLAME10	5000 บาท
	ราคารวม	10000 บาท

ทำใบสั่งซื้อ

Figure 4.21.   Basket Page

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This basket page will show product details that the client orders. After that the client clicks for order process. The order.php will clear basket and make the order id of this order.This script connects the database and save to the order table. The status of this table is set as " waiting".This means this order wait for Bank status.

ORDER

ใบสั่งซื้อเลขที่ 0984369876

รหัสสินค้า	ชื่อสินค้า	ราคา
00000020	FLAME1	5000 บาท
00000021	FLAME10	5000 บาท
	ราคารวม	10000 บาท

ชำระเงินด้วยบัตรเครดิต

Figure 4.22.   Order Page

When the client clicks pay by Credit Card , the system redirects to The Bank Website.The Bank.php is set as the simulated the bank URL for showing the process. The Bank.php use the "post" method for sending all information (hidden variable).The backurl variable is used to send back to the result.php.Nomally Bank charge 3% of each order from Carpaint.com.

If assuming Bank return Approved to Carpaint.com to the result.php script .This case update Order table by changing status field from "waiting" to "approve".

TRACKING

Shop Basket Tracking Logout

รายการสั่งซื้อ

รหัสสั่งซื้อ	รหัสสินค้า	ชื่อสินค้า	ราคา	วัน	เวลา	สถานะ
3486853556	00000009	DRAGON10	5000	22/10/2006	21:47:36	approved
3486853556	00000014	BATMANFLAMESIDE	5000	22/10/2006	21:47:36	approved
6801116163	00000009	DRAGON10	5000	23/10/2006	00:24:40	waiting
0984369876	00000020	FLAME1	5000	23/10/2006	01:13:20	approved
0984369876	00000021	FLAME10	5000	23/10/2006	01:13:20	approved

Figure 4.23.   Tracking Page for client

The tracking.php shows the old order and all order of the client for checking the process of transaction. The client needs to note or print this information to compare with Carpaint.com.This payment process has a few risks.Ex. someone would like to change this status but this case occurs very rarely. All websites need to check this status with the bank again.

(5)   Logoff Module

When the client logs out of the system , the system will delete session information from the session table and clear all cookie variables the system will wait for the next login transaction .

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4.1.3 BACK-END FOR ADMIN

This part is used for manage every resource by admin. They can login from Home page and use user login and password of admin. He can manage the customer module EX. Edit user and delete user. But he doesn't know user's password , on this case this website uses encryption of the password with MD5 security . this website keeps every information of customer is secret and safety. This module use PHP and "ouser" table and admin can look into the tracking module and order "complete" module for complete status. The owner will prepare job for customer and contact to customer by phone for reserve the date.

The back end has many modules as follows:

(1) Edit administrator information management

(2) Check client order tracking

(3) Product management system

(4) Database management system

(5) Logout Module

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(1)   Edit administrator information management

When the administrator login to the back end for website management, this module will check 'userid' , 'password' and 'session id'. The figure 4.24 shows the admin menu for management.

Figure 4.24.   Management Menu

This menu can link to edit the administrator information : admin login, password, name, email ,telephone. The figure 4.25 shows the administrator information.
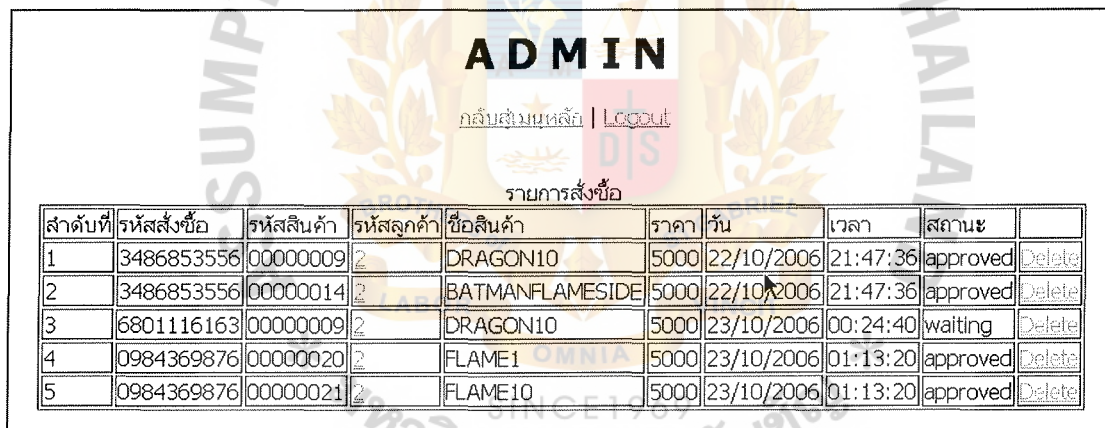

Figure 4.25.   Edit information form.

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This module links the user table and can update data to this table. I use the updateform.php for show the information and can edit admin information on this form. The update.php update this data to this table.

(2) Check client order tracking

This module checks 'order id' and 'product id' with the order table. The order information will show client order status on this form. The administrator can check this module anywhere anytime on the outside. Don't standby on the webserver for checking. The administrator can delete the old order or the order status is "declined" or "cancel". The figure 4.26 shows this module.

ADMIN

กลับสู่เมนูหลัก | Logout

รายการสั่งซื้อ

สำดับที่	รหัสสั่งซื้อ	รหัสสินค้า	รหัสลูกค้า	ชื่อสินค้า	ราคา	วัน	เวลา	สถานะ	
1	3486853556	00000009	2	DRAGON10	5000	22/10/2006	21:47:36	approved	Delete
2	3486853556	00000014	2	BATMANFLAMESIDE	5000	22/10/2006	21:47:36	approved	Delete
3	6801116163	00000009	2	DRAGON10	5000	23/10/2006	00:24:40	waiting	Delete
4	0984369876	00000020	2	FLAME1	5000	23/10/2006	01:13:20	approved	Delete
5	0984369876	00000021	2	FLAME10	5000	23/10/2006	01:13:20	approved	Delete

Figure 4.26.   Check order tracking

When the administrator checks the order and need to know who buy, he can click the client code the popup window will show client information. This show on figure 4.27

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Figure 4.27. User Info Page

The administrator checks client information and contacts the bank for rechecking and preparing service for the client. On the left side of the order form , you can click delete the order number that shop doesn't need to use, because there are many orders per day, and the shop will easy prepare and deal with the clients.

(3) Product management system

This module is divided to 2 parts: insertion of product and pictures to the database and deleting and editing product information. The Insertion module is provided for the administrator and he can insert the new products and pictures of the product on the database with the input form page. The figure 4.28 shows this module page.

Figure 4.28.   Insert product form.

The administrator can insert the new product information and the product picture to the database. This table is set the category field for dividing the products. The client can easy to search the product for shopping. This module link to the product table and copy the picture to the directory 'images' for linking with the page.

The figure 4.29 shows the delete and edit module , the administrator can delete or edit the information of product on this form.

Figure 4.29.   Delete and Edit Product Form.

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This form shows all products sold on this website. The right hand side has the delete button and the edit button. When the administrator clicks delete the popup page shows to confirm delete if he clicks ok, the system will delete this product out of the database. When the price of product needs to change , the administrator can click edit for updating the new price with the edit form module . the figure 4.30 shows this module.

Figure 4.30.   The edit Form.

The administrator can input the new data on this form and click the "ok" button to update the database. he uses the update command of SQL language for this module. This module limit someone who responds edit the product can change everything except the product no. Because sometime human error ,he change the product code wrong the system may occur error .this case may be effect the client order on the same time.

(4)   Database management system

On this module is used to link with the "phpmyadmin" program to manage database. This module is set for webmaster only. Because sometimes the website must

manage database with the database program. Carpaint uses this program backup

database daily and backup this to the tape backup. The figure 4.31 shows this program.
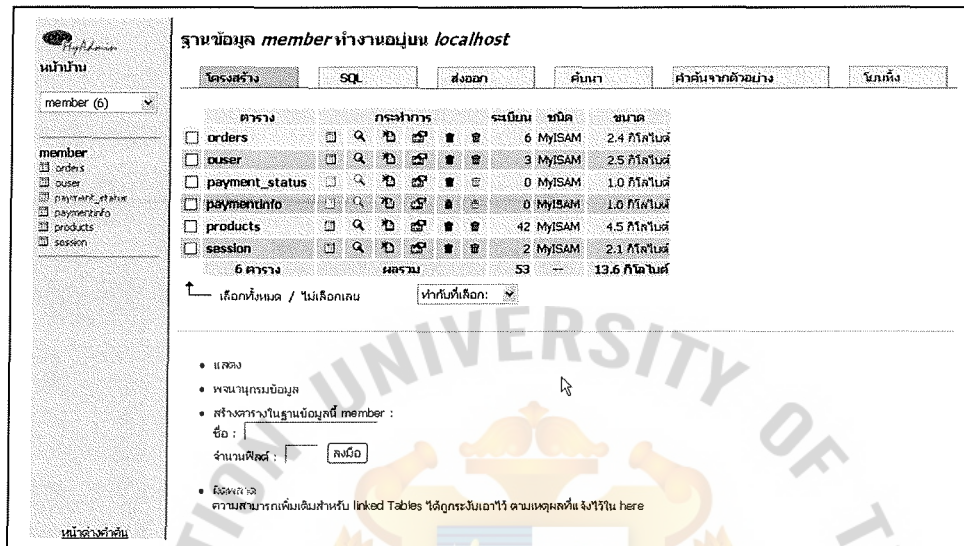
Figure 4.31.   Phpmyadmin Program.

(5)   Logout Module

The last module of the backend is Logout module. When the administrator clicks

logout off this module , the session is clear and the system delete information of the

session table.

4.2 SYSTEM VALIDATION

Hard Ware

Normally all web servers are open 24 Hr. a day. Hardware maintenance is very important for the web site. Carpaint used the Aopen software monitor hardware. This program can check all performance of the server such as CPU Fans, Voltage and temperature of the mainboard. If the hardware of server has errors it will give an alarm through the Hardware monitor to the administrator.

The peripheral that is used with the server (EX. UPS). The UPS is also very important because sometimes the electricity may be lost. The UPS can help the server become alive before the electricity is restored.

Figure 4.32.   Hardware Monitoring.

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We check the system that uses its memory resource. Normally SYSTEM IDLE PROCESS should take up at least 80 % of which process is taking up the time and terminate it using the End Process button, thereby cooling the process.

Performance of Task Manager shows information on system resources. CPU usage shows the amount of processor resources in use, next to graph of recent usage. If the CPU runs at 100% for a while, the system will be down to protect CPU from damage. We will focus at CPU usage History should not more than 60% to keep stable running web server for the future.
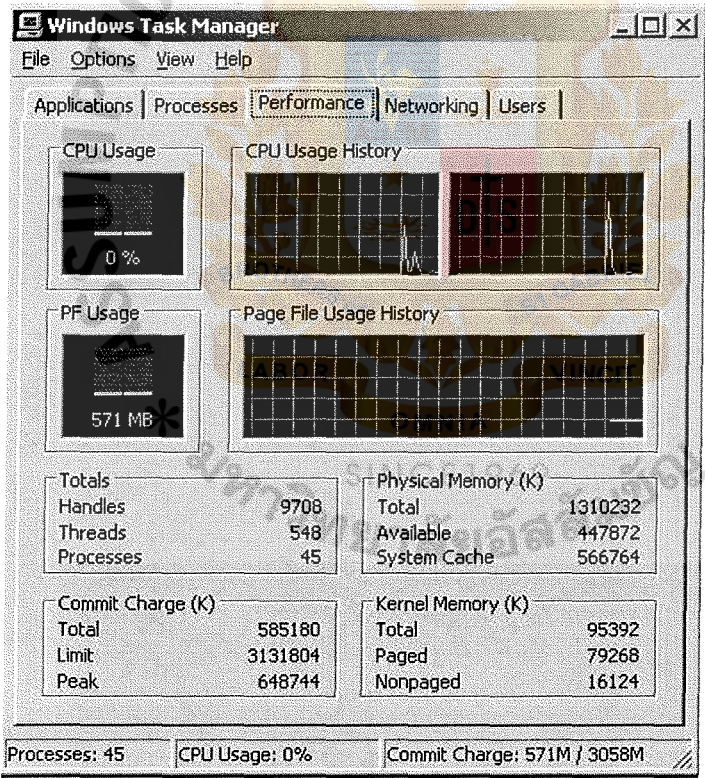

Figure 4.33.   CPU usage history.

Software

Using Javascript you don't use any server processor time. All the processing is done on the client computer. It often appears to work faster than CGI Validation. Since the form page has not changed, it is easy for the reader to fix the errors. Javascript disables, if your error checking doesn't get done. Validation form on the client site lightens the load on the server and allows for you to format data before it is sent for processing. There is no delay from the client contacting a remote server.

Using server-side validation, there is noticeable lay time when data the user submits contain an error. Form data must travel over the Internet and be examined by the server. Eventually the user will receive a response page only to discover that there was an error and that the submittal process needs to be repeated. Running a little preliminary validation of the user's form input before it is submitted eliminates the wanted time. Client-side validation is instantaneous because it doesn't have to transmit any data. Javascript catches any error data the user enters before it goes any where. Therefore this web site use Javascript coding in some parts.

The approach uses:

(1) A global error array that can be used for error trapping and reporting. Ex Session Variable for check status of user among the transaction page.

(2) Form fields that automatically reformat so users can enter their information in various ways and the Javascript will be able to interpret it.

(3) Java Script's regular expressions, which are a notation for describing sequences of characters, to simplify and reduce the size of the code.

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4.3 SYSTEM ANALYSIS

Hardware

Server Computer that Carpaint use to run Web Server and Database Server is.

(1) Intel Xeon 2.8Ghz CPU speed with bus 600Mhz

Support many transactions of users and support SQL process. This processor can work 24 Hour a day and be stable.

(2) 1 GB Ram DDR Ram

Support high loading and fast execution. Use page file as less as possible to make the website run fast and reduce tasks on the main storage.

(3) 2 Hard disk 36 GB Raid 1 Mirror

This type of backup help is always backup together in real time. Because the information of data and coding file is very important for the website. If one of two harddisk crash . another one will run and system of OS will send message to administrator to fix the problem.

(4) Gigabit Ethernet

The high speed internet in Thailand now grows very fast and expands to gigabit high speed to support all demands of users.

Software

(1) Microsoft Windows 2003 Server Enterprise

This Operating System is very famous and used to support the system management. This version expands more than the old version.

(2) Apache

This program is used by the programmer and developer of website because Apache is open source code and the programmer can share source to the another one.

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(3)   Mysql language

Mysql language is the database that supports php language to develop website. This language is used by programmer or the new one who need to learn the website. This program is a stable open source.

(4)   PHP language

PHP language is very popular language that is run on the server side. This program can download on the website and use to write the website for fee. This program can run on many platforms such as Microsoft Windows and Linux.

(5)   PHP Myadmin

PHP Myadmin is the database management that implements in Graphic User Interface(GUI) which runs very fast and is easy to use. Supports all function that is needed to manage the website. Easy to import and export database to many platforms. The backup method of this program easy to use and comfortable to manage the database.

(6)   Javascritpt Language

This program is very popular to run with PHP. Most programmers and developers use this program for coding the website on the client side. Javascript can control webpage and work very fast on the client side. The users who need to code the webpage don't need to know about Javascript in depth .

(7)   HTML and DHTML language

HTML and DHTML used in this website is to implement the design to make more attractive and interact with user as much as possible.

V. CONCLUSIONS AND RECOMMENDATION

5.1 CONCLUSIONS

Carpaint.com is the online website which provides the instant service for e-commerce. Instant service is very popular because it is easy to make decisions to order. Because this type of service must lose the time to make decisions. Normally the customers will go to the shop and choose the style, color, price. After that he will send the car to do it.

This website helps the customer more comfortably and easily to use. They can set up the time to do his car. The cost is very low because they don't have transportation cost. Carpaint provides the new channel of painting by e-commerce in Thailand.

Website runs very fast because we don't use the "big" flash file because the flash uses the resource very highly for open page. We use the database management such as MY SQL that is easy and runs very fast. We have the good team to support this service 24 Hours a day.

In the future, we need to add and expand the channel for order.

(1) PDA : Supports Palm and Pocket Pc user to service mobile wireless application online.

(2) WAP : Wireless Application Protocol to online marketing via mobile.

(3) PAYPAL : The payment method that is popular for use.

5.2 RECOMMANDATION

Success keys in this project consisted of many factors. Some factors could not be proved yet because some cases never happened in Thailand before. Although it might succeed overseas it did not mean to succeed in Thailand. To improve the performance of Carpaint Service will move to Linux server that is more stable than Microsoft

Windows and use low resources. For software Carpaint tied to improve coding and use more techniques such as Flash and Graphic Design. The challenge is how to make it use low resources to be as low as possible to make the server more stable and give high performance. To create the website is not difficult but to offer a high quality of website is difficult that is why Carpaint will improve this later.

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