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MMS APPLICATION

" MOTOR PLANET MMS"

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TITLE : **MOTOR PLANET MMS APPLICATION**

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ABSTRACT

This report covers the overall specifications development of *MOTOR PLANET MMS* application. The main objective of this project is to develop a WAP sites that user can download images and animated gif directly to their mobile phones. This proposal consists of 7 parts.

The first part contains the project overview, objectives, scopes and limitation of project. It is then following by the second part; a through review of similar existing system is done earlier. This part is to better understanding regarding the project include requirement for developers, tools available, strengths and weakness, software such as scripting language and hardware. Chapter three, will discuss the V-model where have been used to develop this application. Chapter four focussed on the system design, how the architecture can be implemented in the project and data flow. The last part here will cover the implementations, application design and system testing.

This system needs special development tools and languages such as Macromedia Dreamweaver, Microsoft Internet Information Server (IIS), Client / Server three–tier system architecture, Microsoft Access Database, ASP, WML, WML script, Windows XP Professional as development platform, Microsoft SQL Server 2000 and Cascading Style Sheet (CSS).

ACKNOWLEDGEMENT

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CHAPTER 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

1.0. INTRODUCTION

In today's world, wireless technologies become a hottest technology in world today especially in Malaysia. This technology not only for communication but also for browser the Internet, pictures message, multimedia and audio clips. Many company and organizations use this technology to exchange information, trade, activities and so on via a network or Internet connection.

The most popular technology is Wireless Application Protocol (WAP). WAP is a global standard to support and bringing Internet content and services to mobile phones and other wireless devices such as PDA. In June 1997, WAP standards are maintained by an industry consortium known as the WAP forum which was founded by Motorola, Nokia, Ericsson and phone.com. WAP is to provide web and access Internet on portable devices. Now, GPRS (General Packet Radio Services), WAP 2.0 and Bluetooth is other application is introduced after WAP.

Multimedia Messaging Services (MMS) is the one of many other applications that offers from WAP. MMS is more advanced than SMS which user can bring a multimedia data through the mobiles phones and PDA. MMS applications are built on all open standards and are designed to generating MMS messaging and contents services that enhance standard deployments. MMS allows users to send graphics, video clips, audio clips plus text messages over wireless network. MMS is transmitted over GSM (Global System

Mobile) communication that transmits at 9.6 Kbps and GPRS at 115 Kbps. But in Malaysia, the mobile telephones network technology is using GSM.

The reason for developing the *MOTOR PLANET* application on MMS is to offer user into the new experiences about cars. Users will enable to view and downloading a graphical images and animated graphics and load into mobiles device. They can also find information such as models, types, modern or classic cars. *MOTOR PLANET MMS* application provide a services to all user not only for user who have car on their own but to all user who crazy about car world picture. They can have option to choose the information of cars because it easy to access and explore which means only car specification is presented to user. Compare to other application, *MOTOR PLANET MMS* application only focus on cars not likes other applications which provide users too many options like cartoons, animal, games, footballer, trucks, and poster.

1.1. OBJECTIVES PROJECT

This is a main objective for the project:

- Provide an MMS application that is user-friendly.
- More specific on car's world included a models and types of car.
- Download an animated graphic, favourites wallpaper images/screen saver via mobile phone or PDA.

1.2. SCOPES

Project scopes means the coverage of the project include a module and limitations of project and what are the boundaries set upon the system. The development of Motors Planet on MMS will basically focus on providing users to finds their favourite's models pictures of cars while they are on the move. WAP and GRPS is the best available option because most of the wireless devices have this future.

The other consideration is the limitation or an issue like network reliability, quality of data, size, bandwidth and displays to accomplish this project. This limitation has to be determined by developer to make sure everything is in progress.

1.3. TARGET USERS

Generally, MOTORS PLANET on MMS is designed to all users who excited in car worlds but do not access to an Internet linked computer. For example, users can download a new model or a future model of cars in anytime and be able to send the picture to others through the wireless devices. In this application, *MOTOR PLANET* MMS also known as WAP sites. Offers user to downloading many pictures and animated graphic through the mobiles phone and other wireless devices such as PDA. There are two types of module in this application:

i. User Module:

- Information services such as news, cars information about models, types and classic car.
- Help index contents about guided to use this application.
- Download an animated graphics, wallpaper/screensaver to mobile devices.

ii. Administrator module:

- Updated database.
- Add and delete option.

1.4. PROJECT LIMITATIONS

To develop this system is very time consuming, there a lot of issues to be considered. Those considerations are:

- Types of protocol to be supported such as WAP and GPRS.
- Speed of data transmission rate.
- Types of devices need to be supported such a mobile phones or PDA.
- A limitation of WAP enables devices. Not every mobile phone has a WAP application.

The issues of Internet standards have to be considering because there is no standard to define how the Internet content should be.

1.5. PROJECT SCHEDULE

A project schedule is planned to manage the time that needs to accomplish this project and to archive the objectives.

	Task Name	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	System Analysis									
2	System Modelling									
3	System Design									
4	Implementation									
5	System Maintenance									
6	System Delivery									
7	Documentation									

TABLE 1.1: Gantt chart explaining project runtime

Description of each task;

1. System Analysis :

   The main purpose of analysis is to determine the requirements of user .To gain an in-depth understanding of the system and access its strengths and weaknesses in meeting current and future requirements. It also identifies constraints such as hardware, software, cost a so on.

2. System Modelling :

   In this phase .must capture both the functional non-functional and requirements of the system. From these, the specifications of the project can be determined and used to for system development.

3. System Design :

   The system design phase is concerned with synthesizing or putting all the parts together into the workable system. The Design will include the functions (process) that the system must perform using database design, data flow diagram and Object diagram.

4. Implementation :

   System implementation includes coding, testing and documenting the system plays the major role.

5. System Maintenance :

   It refers to changes performed in to a system after it has been released and test when the project is done.

6. System Delivery ;

   It is the final state of the development process. The system will be fully tested.

7. Documentation ;

   Describes the complete documentation of each task thoroughly from start to the end of project.

CHAPTER 2

LITERATURE REVIEW

CHAPTER 2: LITERATURE REVIEW

2.0. INTRODUCTION

Literature review is the one of most important process in the development of an application. It is crucial in order to provide application developers with understanding of the process as a whole before really start developing an application. It also essential as medium to convey the initial idea of the system. That is being developed to the users, so that they will have the right expectation on the system.

As a developer of *MOTOR PLANET* MMS application, literature review is about to find how to send MMS included process, maintains, what technology are used and the way to provide a good MMS application that used to all user who have a technology of MMS in their mobile devices. The developer must find what advantages and disadvantages form earlier existing technologies.

In this chapter, the developers must know the strengths and weaknesses of the application and it will help to produce a better MMS application in future. This includes a research for tools like what coding to used, a hardware and software, examples such what MMS can do and research for other existing technologies. The developers also need to understand the concept of the MMS application process.

2.1. MULTIMEDIA MESSAGING SERVICE (MMS) ARCHITECHURE

Multimedia Messaging Service (MMS) is system for mobile phones that allows users to send and receive rich multimedia content such as images, video, and sounds.

The Multimedia Messaging Service (MMS) is extended to provide non-real-time messaging services to consumers unitizing WAP technologies. It is an application level service that fits into the current WAP architecture. The following figure 2.1 shows the general MMS architecture.

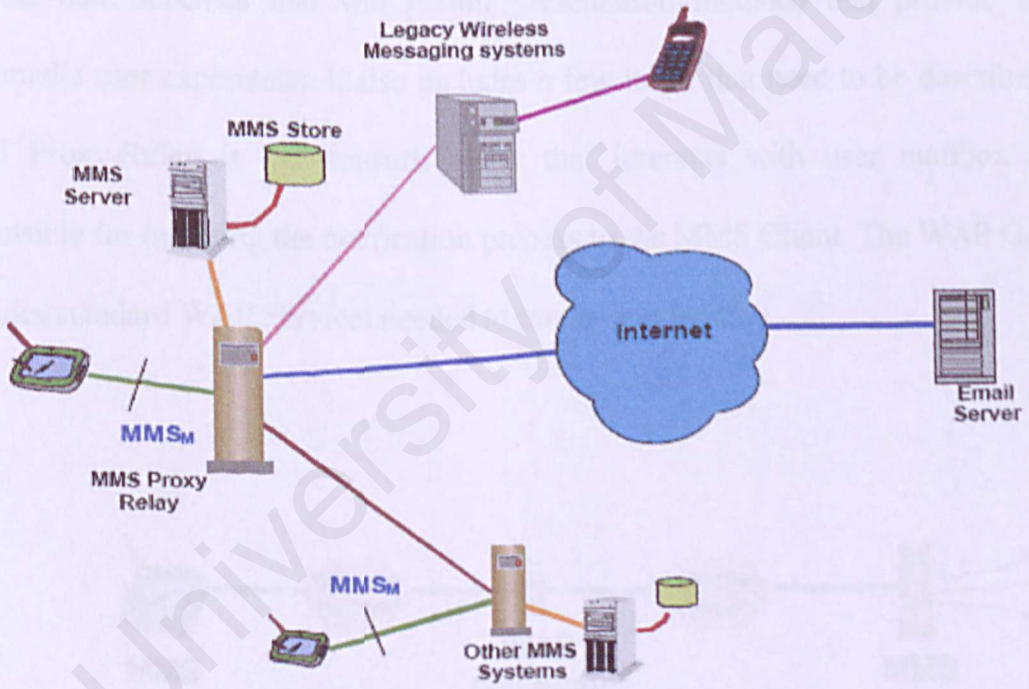


FIGURE 2.1: MMS Network Diagram with MMS Client to MMS Proxy-Relay Link Highlighted

MMS is a system application by which a WAP client is able to provide a messaging operation with variety of Media's types. The service is described in terms of actions taken by WAP Client and its service partner, the MMS Proxy –Relay, a device that operates as WAP Origin Server for this specialized service. This specification defines operational flow of the messages that transit between the MMS Client and the MMS Proxy-Relay.

The figure 2.2 is to view of the MMS Link. It is built on top of the WAP architecture as known as application. MMS provides for the delivery and services related to messaging and the data schemes that will permit presentation methods that provide for the multimedia user experience. It also includes a few items that need to be described. The MMS Proxy-Relay is the network entity that interacts with user mailbox and is responsible for initiating the notification process to the MMS Client. The WAP Gateway provides standard WAP Services needed to implement MMS.

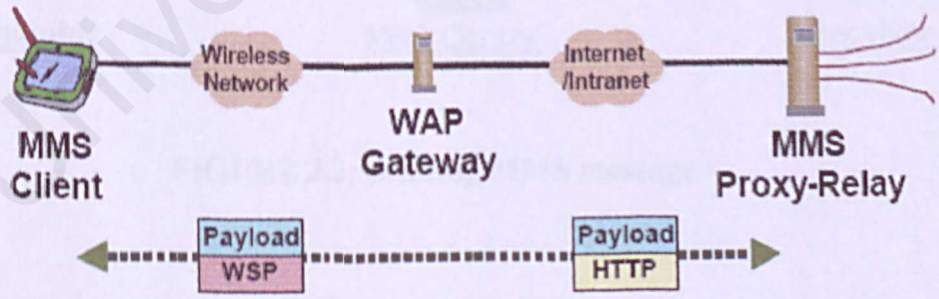


FIGURE 2.2: WAP Implementation of MMS Interface

2.1.1. Sending an MMS message

The basics concept of sending MMS message is:

- The message originator addresses the short message to the receiver.
- The phone contains information about MMSC (Center) and the message is sent there.
- MMSC attempts to forward the message to the receiver.

If the receiver is unreachable, the MMSC stores the message for a time, and if possible, delivers the message later. If the message cannot be delivered within a certain time frame, it is eventually discarded.

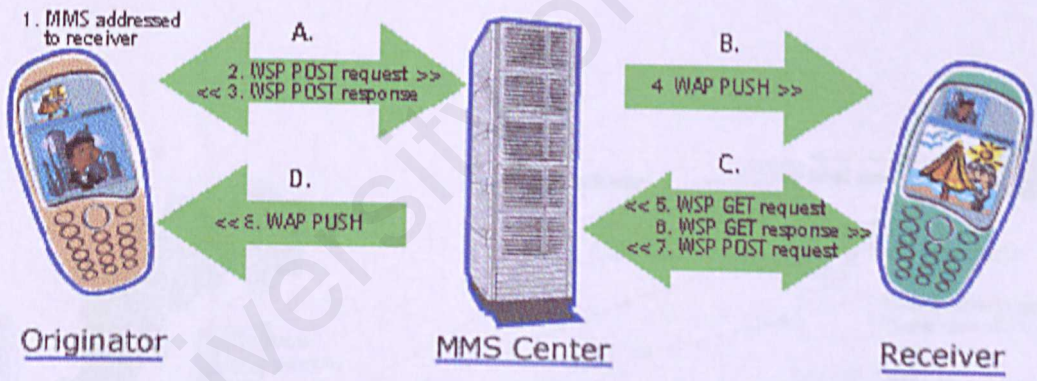


FIGURE 2.3: Sending MMS message

The MMSC does not directly try to send the MMS message to the receiver, but instead sends a notification telling the receiver there is a message waiting. Depending on the terminal setting, the receiver's terminal tries to fetch the message immediately, postpones retrieval until the user wants, or simply discards the notification altogether.

Note that in an "immediate retrieval", the user is not notified of an incoming message until it has actually been delivered. The terminal itself handles the retrieval and only then indicates to the user with "message received".

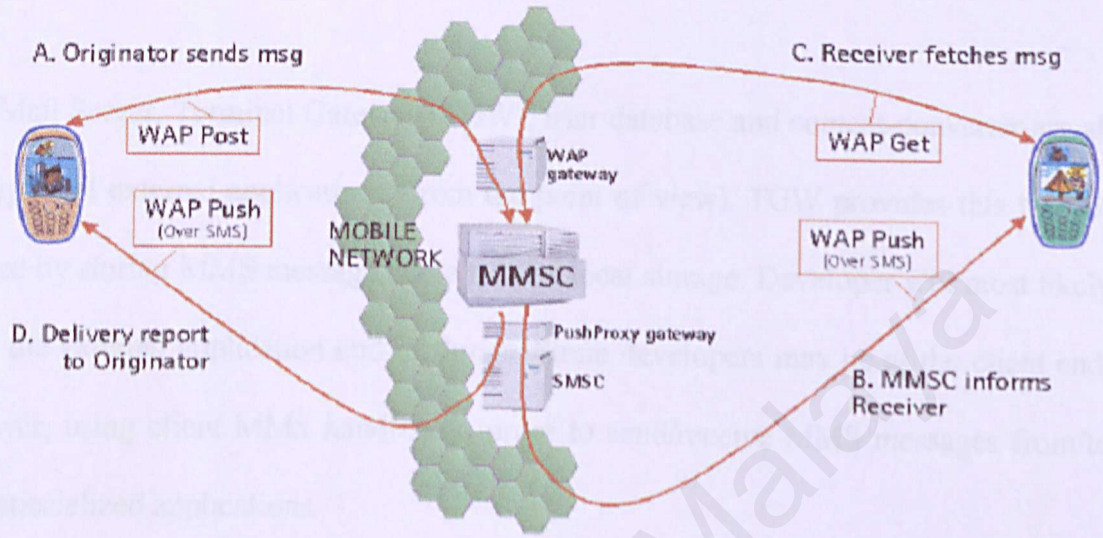


FIGURE 2.4: MMS message delivery with network included

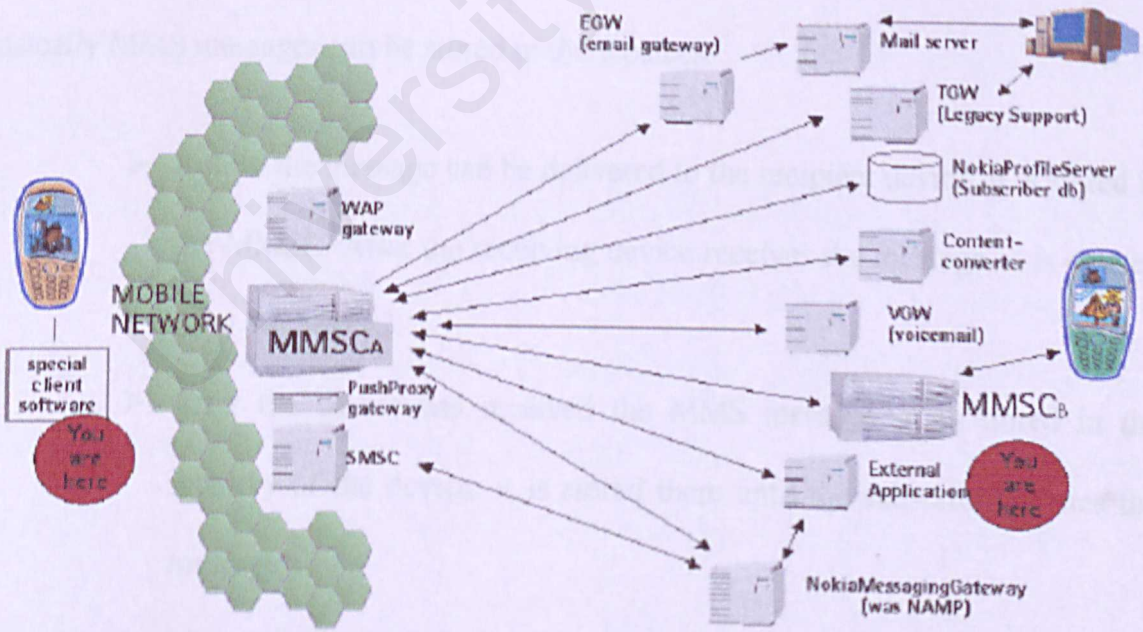


FIGURE 2.5: Possible elements in a Multimedia Messaging System (MMS)

2.1.2. Where is the Developer?

Some other elements that may become involved in MMS issues and how they fit into the scheme of things.

The Mail Server, Terminal Gateway (TGW), user database and content-converter are all examples of external applications (from the point of view). TGW provides this type of service by storing MMS message content in its local storage. Developer will most likely be at the external application end of things. Some developers may be at the client end, however, using client MMS handlers in order to send/receive MMS messages from/to their specialized applications.

2.1.3. Storage

Basically MMS messages can be stored in three places.

- Before the message can be delivered to the recipient device, it is stored in the MMSC. After the receiving device receives the message, it is deleted from the MMSC.
- After the device has received the MMS message, it is stored in the memory of the device. It is stored there until the subscriber deletes the message.
- Moves the message from the device memory to a permanent storage place (for example, to a separate storage server in the network).

The MMS messages are normally deleted from the memory of the mobile device. There may also be messages that the subscriber wants to store for later use, for example, a message containing a special picture. The messages can be uploaded to a storage area and downloaded from the storage area to the device when needed.

E-mail messages are usually stored for some time, if they are perceived as having high value. The e-mail messages are stored on the e-mail server until the user deletes the message from the server. In some cases the e-mail messages can also be stored in the e-mail client. Each time the user reads an e-mail message, it is retrieved from the e-mail server to the e-mail client.

2.2. WIRELESS APPLICATION PROTOCOL (WAP)

WAP stands for Wireless Application Protocol, a general term used to describe the multi-layered protocol and related technologies that bring Internet content to mobile devices such as PDAs and cell phones.

Such devices are referred to as thin clients because they have one or more constraints in the form of display, input, memory, CPU, or other hardware or usability limitations. The platform constraints and the slower (and more expensive) bandwidth of cellular and related networks make standard Internet protocols difficult to utilize. Using the growing set of WAP tools and protocols, however, the mobile Internet is quite a capable tool.

2.2.1. How Does WAP Work?

WML contents are delivered to mobile devices over a cellular or related technology network. However, the delivery of many protocols and technologies takes the same route-namely, through a proxy server that bridges the gap between the wired Internet and the wireless service provider's network.

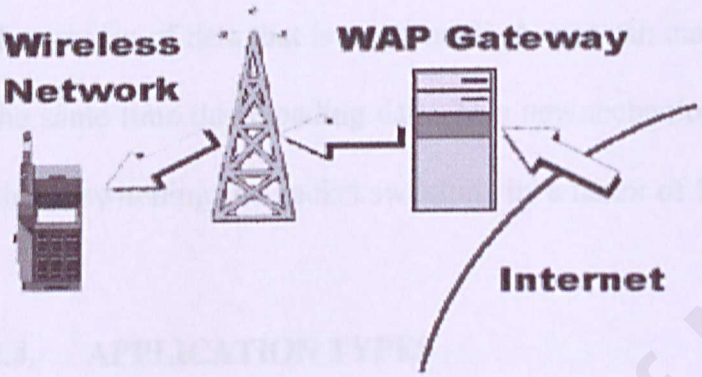


FIGURE 2.6: The WAP Gateway provides wireless networks with Internet access and optional content translation and filtering.

This proxy server manages the communication between the wireless client and the Internet server(s), acting as a gateway to the wired Internet. It caches content and in some cases even translates raw HTML into WAP-compatible protocols such as WML.

2.3. GENERAL PACKET RADIO SERVICE (GPRS)

A packet-switched wireless system protocol with transmission rates from 115Kbps-171Kbps. It will require new handsets to support the higher data rates. It will be the first service available to offer full instant wireless access to the web.

The main benefit is that users are always connected online, and will be charged only for the amount of data that is transported. A user can make and receive voice calls while at the same time downloading data. This new technology will increase data rates of both circuit switching and packet switching by a factor of 10 to 15 times.

2.4. APPLICATION TYPES

MMS also supports:

- Information services - local content such as traffic, finance, weather, e-mail delivery.
- Entertainment and personalization services – animated wallpaper images, collector cards, games, music and video sample.
- MMS as conduit – sending various media over MMS.

2.5. TOOLS AVAILABLE

Nokia will provide several tools and emulators so that content providers and developers will be able to create MMS content and applications. Tools and emulators will enable simulation of Nokia products before they are actually shipped to the market place and they will be available during the first half of 2002. The degree of tool sophistication will vary depending on different development needs and application purposes. Consumers will be able to create their personal messages with a simple Web-based tool allowing combination of different media types into one message entity. A more advanced tool including an emulator will be available for service developers.

2.5.1. Nokia MMSC Emulator, Nokia Mobile Server Services (NMSS) Emulator

As a developer, need to interface such as GUI with the MMSC. This is probably happen over an interface designated in the 3GPP speculation as MMS. The Nokia MMS Center provides an External Application Interface (EAIF) that developers can use to communicate with the Nokia MMSC. This interface is proprietary. Now that 3GPP has finished specifying MM7, and Nokia's MMSC. The EAIF interface will continue to be available in the Nokia MMSC for some time to give existing developers backward compatibility.

The NMSS Emulator allows you to developed applications for several different Nokia products. On the MMSC side it provides more in-depth information than other tool about the messages that are sent and received and also allows you to change the number

of recipient online. It helps you to test the functionality of your applications without needing to have access to full MMSC.

Its includes emulator for Nokia MMSC, Delivery Server, Terminal Management Server, iGML and Presence Server. Either tool will help to test the functionality of your applications without needing to have access to a full MMSC.

2.5.2. Nokia MMS Java Library, Nokia Mobile Server Services (NMSS) API and Library

Another of Nokia's original MMS tool is the JAVA library for handling MMS messages. Like the EAIF Emulator, it is no longer supported but still available for download. The earlier version has no limitations, so we do not recommend using it as the primary tool for creating MMS services.

The newer version of this tool is the NMSS API and Library. This is the library that is supported and it has been built in such a way that developers can create their applications using EAIF interface and then switch to MM7 interface later without having to change their code. This should be the primary tool used for creating MMS services.

NMSS API and Library can be used to construct an MMS message out of various bits and pieces, and to encapsulate the resulting message. They can then add HTTP headers to the message so that is ready for sending to the EAIF or an EAIF Emulator. Received MMS messages can be "decapsulated" a disassembled into their separate parts. Both

libraries come with example applications, source code for the classes and documentation.

2.5.3. Nokia's Developer's Suite for MMS

The Nokia's Developer's Suite (NDS) for MMS is a tool that integrates seam like Adobe Golive 6.0. Content can be created using Adobe Golive and the NDS allows effortless encapsulation of the content into the MMS message ,then send the MMS message to a server, EAIF Emulator or MMS terminal emulator.

This tool is stand alone and can be used to build an MMS message based solely on a SMIL file or import one that has already been created, and then push it to a terminal emulator to see the result.

2.5.4. Series 60 Content Authoring SDK for Symbian OS, Nokia Edition

If you don't need the full power of the Nokia Series 60 SDK for Symbian OS but still like to see what your MMS messages will look like on a Series 60 terminal, can install the Series 60 Content Authoring SDK.

2.5.5. Nokia Series 60 SDK for Symbian OS

If you creating applications for the Client-side, you will want to get the Series 60 SDK. It includes a Series 60 Emulator, so example, someone developing content for Nokia 3650 or other terminal that uses the Series 60 Platform will find it very useful for seeing how content looks in an actual MMS terminal.

2.5.6. Nokia Mobile Internet Toolkit

Nokia Mobile Internet Toolkit is to support for MMS message testing. It can be used to easily piece together a message from the various content that the user has ready made. Create a presentation part for you in SMIL, which can be tweaked afterwards to get exactly the result desired. After this, message can either be pushed to one of the terminal emulators that support MMS or saved for use (as encoded, .mms file) with other tool.

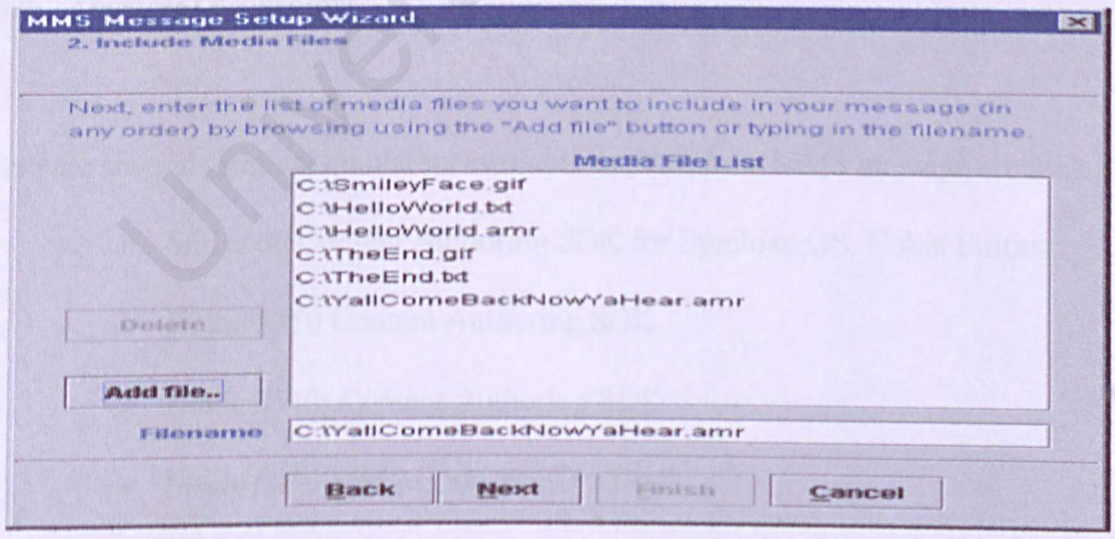


FIGURE 2.7: Using the MMS Message Setup Wizard

The wizard automatically includes necessary headers. The user can decide and edit which headers are included in the message. Header values can be changed or new ones added for each part of the MMS Message. Next figure is shows the when the MMS wizard is done.

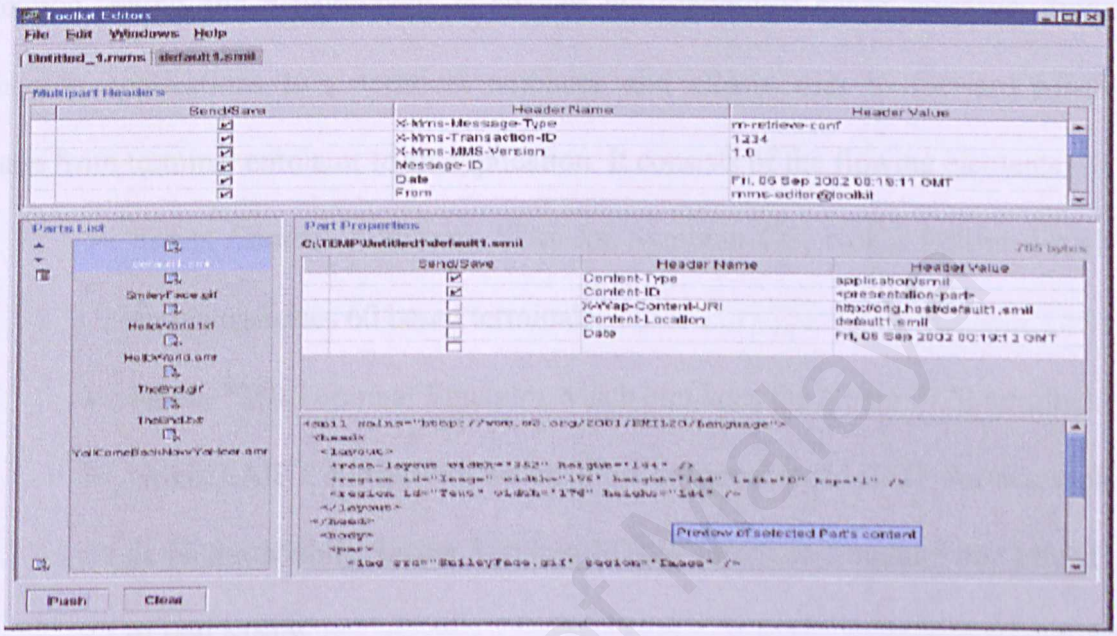


FIGURE 2.8: MMS message as seen by the Nokia Mobile Internet toolkit

2.5.7. Terminal Emulators

There are several terminal emulators available to show how MMS message are look like:

- Series 60 Content Authoring SDK for Symbian OS, Nokia Edition
- Nokia 7210 Content Authoring SDK
- Nokia 3510i Content Authoring SDK
- Nokia 6650 MMS Concept SDK Beta
- Nokia SDK Beta

2.5.8. MMS Terminal Emulator Support for Nokia Mobile Server Services (NMSS) SDK

The MMS Terminal Emulator Support provides terminal emulator connectivity for application testing and development. It enables the sending of MMS messages from Server-side applications to a terminal emulator and allows user to forward MMS message from terminal emulator to an application. It consists of the flowing elements:

- Series Content Authoring SDK for Symbian OS, Nokia Edition which emulates Series 60 based terminal.
- Nokia 7210 Terminal Emulator which emulates the Nokia 7720 terminal.
- Nokia EAIF Connectivity which allow connectivity to EAIF Service such as Nokia Mobile Server Services SDK's Interface Emulator for MMSC or real MMSC.
- Nokia connectivity Framework, which provides the messaging environment between Terminal Emulator and Server Emulators.

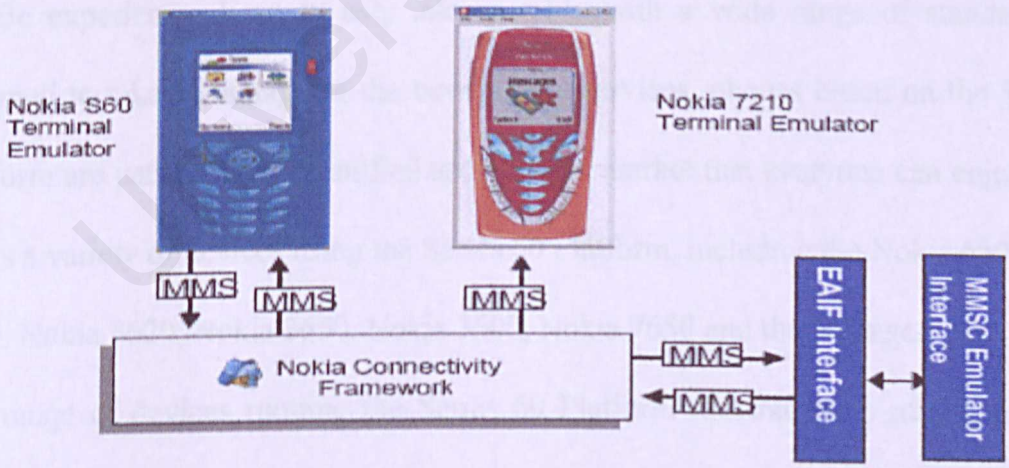


FIGURE 2.9: Diagram to show how the NMSS is work

2.5.9. The Symbian OS Platform

Symbian OS provides a secure, reliable operating system for mobile information devices. Being specifically designed for mobile devices - with low power consumption and small memory footprint, Symbian provides a stable platform for the telecommunications industry and technologies such as GPRS, Bluetooth, SyncML, and ultimately 3G. Symbian OS is not only an operating system but actually a full software and communications platform. As an open platform, virtually anybody can develop software for Symbian-powered devices. This means more applications to choose from, and a larger market for developers.

The Series 60 Platform is a terminal software product available for licensing by terminal manufacturers (seven vendors, Lenovo, LG Electronics, Sendo, Samsung, Siemens, Panasonic, and Nokia Mobile Phones have already licensed the software). It enables terminal manufacturers to create application-driven phones that provide users with a rich mobile experience. Easy to use, interoperable with a wide range of standards, and designed to take advantage of the new mobile services, phones based on the Series 60 Platform are part of a larger unified applications market that everyone can enjoy. Nokia offers a variety of devices using the Series 60 Platform, including the Nokia 6600, Nokia 3660, Nokia 3620, Nokia 3650, Nokia 3600, Nokia 7650 and the N-Gage.

The range of devices running the Series 60 Platform illustrates the robustness of the platform, with the same base powering devices for imaging, business applications and high-resolution, multi-player gaming.

Symbian OS is also being used in the new Series 90 Platform, which is being introduced in the Nokia 7700 phone. With a pen input user interface, a horizontal screen and an optional television tuner, the Nokia 7700 brings mobile multimedia to a new level.

Finally, the Symbian OS is also used in the Series 80 Platform. The Nokia 9500 Communicator, like other members of the communicator family, is a rational, efficient business tool. Seamlessly integrated into the corporate IT systems, the communicator facilitates decision-making, information transfer, customer response, and logistics at a cost that appeals to corporations and individual users. E-mail and a suite of office applications are complemented by content and applications provided by ISPs and portal operators. The communicator is the most powerful platform, with optimum size-ergonomics ratio.

As the wide variety of phones running Symbian OS illustrate, the versatility of the Symbian OS is only matched by the opportunity for developing innovative applications for every market. And since all of the Series 60 and Series 90 phones feature MIDP Java, colour browsers and multimedia messaging clients, developers can choose whether they want to build a native C++ application of use one of the other core technologies for their applications.

2.6. HARDWARE AND SOFTWARE

In this section, hardware and software requirements are important to design and implementation the project. The requirements like tools used to design interface, coding and devices. This specification will be discussed below:

i. Hardware requirement:

- Any WAP enabled Mobile Phone with MMS Services
- 500 MHz Intel Pentium and above.
- 64 MB or more.
- 65,000 colour or better display card.
- Operating system Windows 98, Windows 2000, Windows 2000ME, Windows N.T 4.0 and Windows XP.

ii. Software requirement:

- SMIL
- J2ME
- WML and WML Script
- ASP

2.6.1. Synchronization Multimedia Integration Language (SMIL)

Synchronized Multimedia Integration Language (SMIL) is a proposed specification of the World Wide Web Consortium (W3C) for a powerful way of choreographing rich, interactive multimedia content for real-time delivery over the World Wide Web, even over low bandwidth connections. SMIL was developed by a group representing the CD-ROM, interactive television, Web, and audio- and video-streaming industries. The companies involved include Digital Equipment, Lucent, Microsoft, Netscape, Philips, and real networks, as well as research organizations such as Columbia University, CWI, and INRIA.

SMIL is a layout language that allows easy creation of multimedia presentations consisting of multiple elements of compelling music, voice, images, text, video, and graphics in a common, synchronized timeline. As a simple but powerful markup language, SMIL is easy to learn because it does not require a programming language and can be authored using a simple text editor. Visually, SMIL is strikingly similar to HTML in its syntax and constructs. An example of an SMIL multimedia layout file consists of a news video, emphasizing specific news stories with text headlines, and displaying, for example, a stock ticker at the bottom of the screen.

For images, these are baseline JPEG with JFIF exchange format, GIF87a, GIF89a and WBMP. The image size that should be supported by all terminals is 160 X 120. Not all terminals are on that size but there have some way to present the images in this size.

FIGURE 2.10: Example of SMIL presentation

Now MMS's developers can prepare a single MMS message template that will be useable on several screen formats. It allows the content developer virtually endless possibilities. Another advantage is overlapping of regions, using the z-index attribute which can be used to layer images and text on top of one another to create new effects.

2.6.2. Java 2 Platform, Micro Edition (J2ME)

The Java 2 Platform, Micro Edition (J2ME) is platform and functional like emulator. The advantages may be more than emulator because in this platform, developers can create image, graphics and 3D graphics and present through mobile devices which have Java Technologies. This specification defines the Mobile 3D Graphics API (M3G) for J2ME. The specification was defined within the Java Community Process ("JCP") under Java Specification Request 184 ("JSR-184").

The Mobile 3D Graphics API (Application Programming Interface) is an *optional package*. An optional package can be adapted to existing J2ME *profiles*. A profile of J2ME defines device-type-specific sets of APIs for a particular vertical market or industry. The main target platform of this optional API is J2ME/CLDC, used with profiles such as MIDP 1.0 or MIDP 2.0. However, the API can also be implemented on top of J2ME/CDC or any Java platform in general.

Technical details of the API can be found in the package overview and the individual class descriptions; see especially the **Graphics3D** class. This API, document has pages corresponding to the items in the navigation bar, including Interfaces, Classes, Expectations, and Errors.

2.6.3. WML and WML Script

WML (Wireless Markup Language) is the dominant language in use with wireless devices today. Essentially, WML is a subset of HTML, but has its roots in XML. Those developers with a solid base in XML should have a relatively easy time coding WML. The current WML standard is 1.3, although many mobile devices in use today support only the WML 1.1 standard. Therefore it's prudent to stay away from 1.3-specific features, unless you know that your target market's devices are 1.3-ready.

WML is to WAP and its handheld devices what HTML is to the web and browser such as Netscape and Internet Explorer. Content is presented to the wireless device, allowing one to display information, present input options and tell user agents. WML is based on

the World Wide Web Consortium (W3C) guidelines for wireless access and works similarly to HTML to deliver Web text using simple markup tags.

WML subset of XML and because WAP uses a similar model as the Internet, it allows content developers to quickly become proficient with this relatively simple tag-based language while allowing a clear development path.

WAP gateways provide the Interface between the network and Intranet services. From this gateway, WML content is access over the Internet using the standard HTTP mechanism. WML also has a client-side scripting language, WMLScript, to help automate particular tasks, validate input, and so on. WMLScript is a subset of JavaScript.

2.6.4. Active Server Pages (ASP)

ASP is a technology used for building interactive web pages. In ASP we build server-side scripts that dynamically create and modify HTML pages and return those pages to the browser. Because of the integration between ASP technology and Windows databases, ASP facilitates the integration of data from Windows-based databases with your web site. Use the default language of VBScript to write the ASP documents. Topics include ASP architecture, ASP basics, creating custom response pages, working with query string and form collections, and building a database web application.

2.7. SIMILAR EXISTING TECHNOLOGY

This section is comparison and the advantages or disadvantages between *MOTOR PLANET* MMS and existing technology.

2.7.1. www.Mobilebackgrounds.com

Mobilebackgrounds.com offer users to downloading the picture from web site to mobile devices. The services included many types of picture like transport, animal, cartoons and so on. All mobile devices which support the technology can access this web site.

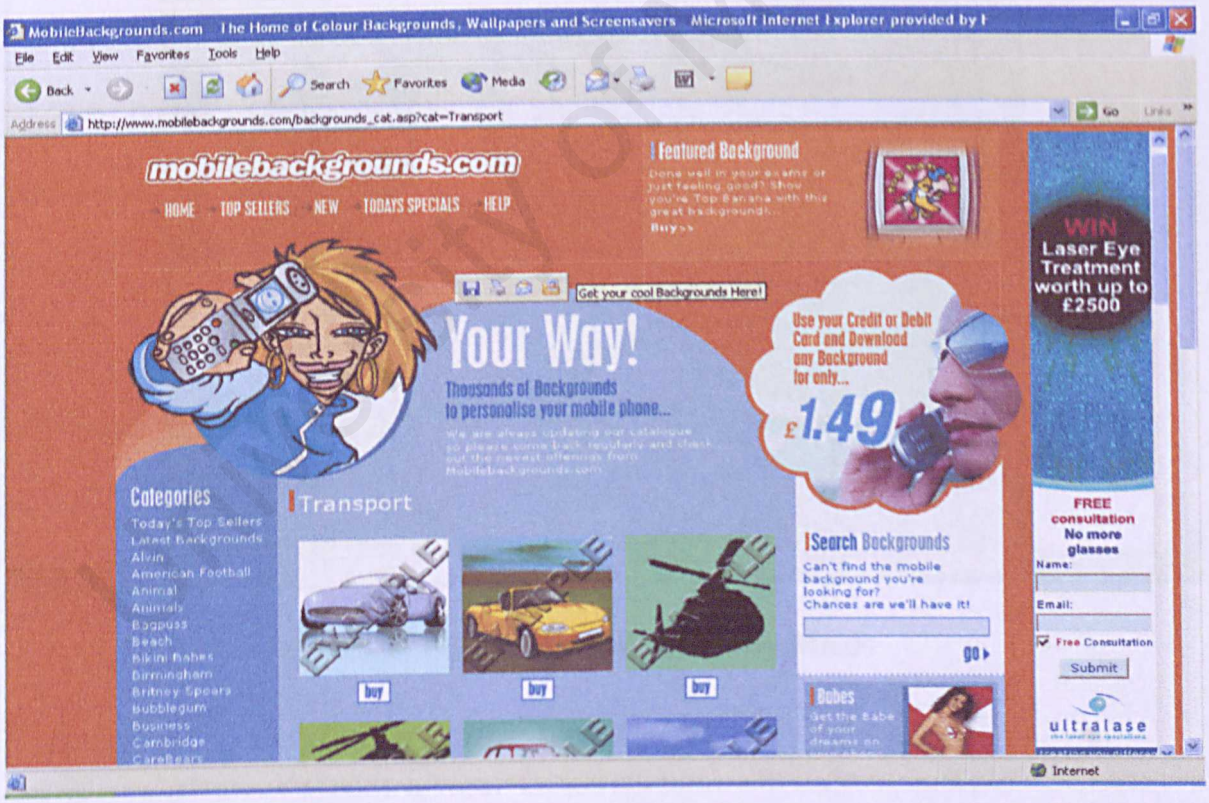


FIGURE 2.11: Mobile Backgrounds interface

2.7.2. www.maxis.com

Maxis are company of communication in Malaysia. In this site ,they offer user to download picture and animated graphic to mobile devices. All connected using WAP and GPRS technology. All Maxis's user who has these technologies can access this service.

FIGURE 2.12: MMS technology by Maxis

2.7.3. Vodafone.com

Picture messages to multiple addressees and to any Vodafone phone. Vodafone Telecel customers will be able to send simultaneous multimedia messages to multiple addressees, both mobile phones and e-mail addresses, up to a maximum of ten at one time. It will thus be possible to share that special photo with a number of friends and family members at the same time.

This will allow Vodafone customers that do not have colour phones with MMS capability to receive picture messages. Vodafone Telecel is thus able to guarantee to all its customers that they will be able to view picture messages sent to them, regardless of the type of phone they may have.

Vodafone was the first operator to launch MMS in Portugal, on 8 May 2002. MMS (Multimedia Messaging Service) is a major advance on SMS (Short Message Service), allowing as it does messages containing images, colour, long text and audio to be sent to mobile phones and e-mail addresses.

2.7.4. Comparison between *MOTOR PLANET* MMS and existing technologies

MOTOR PLANET MMS	EXISTING TECHNOLOGIES
Offer more to car's fanatic user.	Offer to all user who have MMS technologies on their mobile phone.
Focus only for types of car's models.	Various types of MMS liked animal, transport, cartoons and etc.
Simple and easy to explore.	Too many services option.
Download wallpaper and animated graphic.	No an animated graphic on www.Mobilebackgrounds.com.
All users.	Only certain countries can used this application.
Offer free rate.	Not free of charge.

TABLE 2.1: Comparison *MOTOR PLANET* MMS and existing technologies

2.8. CONCLUSION

MMS presentation is different than e-mail presentation. MMS presentation provides layout and timing for multimedia content in the messages. This is not provided while opening an e-mail message as there is no inbox in MMS and the messages are not stored in a network mailbox. Next chapter 3 is methodologies that will be briefly in details and It used to make this project success.

CHAPTER 3

METHODOLOGIES

CHAPTER 3: METHODOLOGIES

3.0. INTRODUCTION

A methodology is about engineering software which is both a creative and a step-by-step process, often involving many people producing many different kinds of products. The procedures, techniques, tools and documentation aids help the software developer to speed up and simplify the software development process. A methodology may consist of phases that in turn may consist of sub-phases. The phases guide developer in the choice of the techniques that are appropriate. A methodology also helps the system developer to plan, manage, control and evaluate information systems projects. Different methodologies have different objectives. The objectives of methodologies include the following:

- Record accurately the requirements for information the system.
- Provide a systematic method of development so that progress can be monitored.
- Provide an appropriate time limit and an acceptable budget.
- Produce a system that is well documented and easy to maintain.
- Provide an indication of needed changes as early as possible in the development process.

3.1. PROCESS MODELS

In this phase, process models that used to build *MOTOR PLANET* MMS Application are V model. This model is more flexible than other model to build a new system. There are many types of model likes waterfall model, prototyping model, spiral model and transformational model. Issue if we use other model is when the phase comes to the highest stage which can't be problem because other part of model cannot be done and confuses. The V model is answer for this problem which every stage activities is more specific.

The V model is variation of the waterfall model that demonstrates how the testing activities are related to analysis and design (German Ministry of Defence). As shown in Figure 3.1, coding forms the point of V, with analysis and design on the left ,testing and maintenance on the right. Unit and Integration testing addresses the correctness of programs. The V model suggests that unit and integration testing also be used to verify the program design. That is during unit and integration testing, the coders should ensure that all aspects of the program design have been implemented correctly in the code. Similarly, system testing should verify the system design, making sure that all system design aspects are correctly implemented.

The model's linkage of the left side with the right side of the V implies that problems are found during verification and validation, then the left side of the V can be executed to fix and improve the requirements, design and code before the testing steps on the right side are re-enacted. In other words, the V model makes more explicit some of the

iteration and rework that are hidden in the waterfall depiction. Where the focus of waterfall is often documents and artefacts but the focus of the V model is activity and correctness.

The advantages of V model are:

i. Easy to understand each phases of model.
ii. Testing stage is more correctness.
iii. Implementation can continued without goes to early stages of model.
iv. Make sure that some part of waterfall model hidden can be done.
v. Problem or troubleshooting are easy to specify
vi. Acceptance testing, which is conducted by the customer rather than the developer, validates the requirements by associating a testing step with each element of specifications. That means, the developers gets a objective of the system.

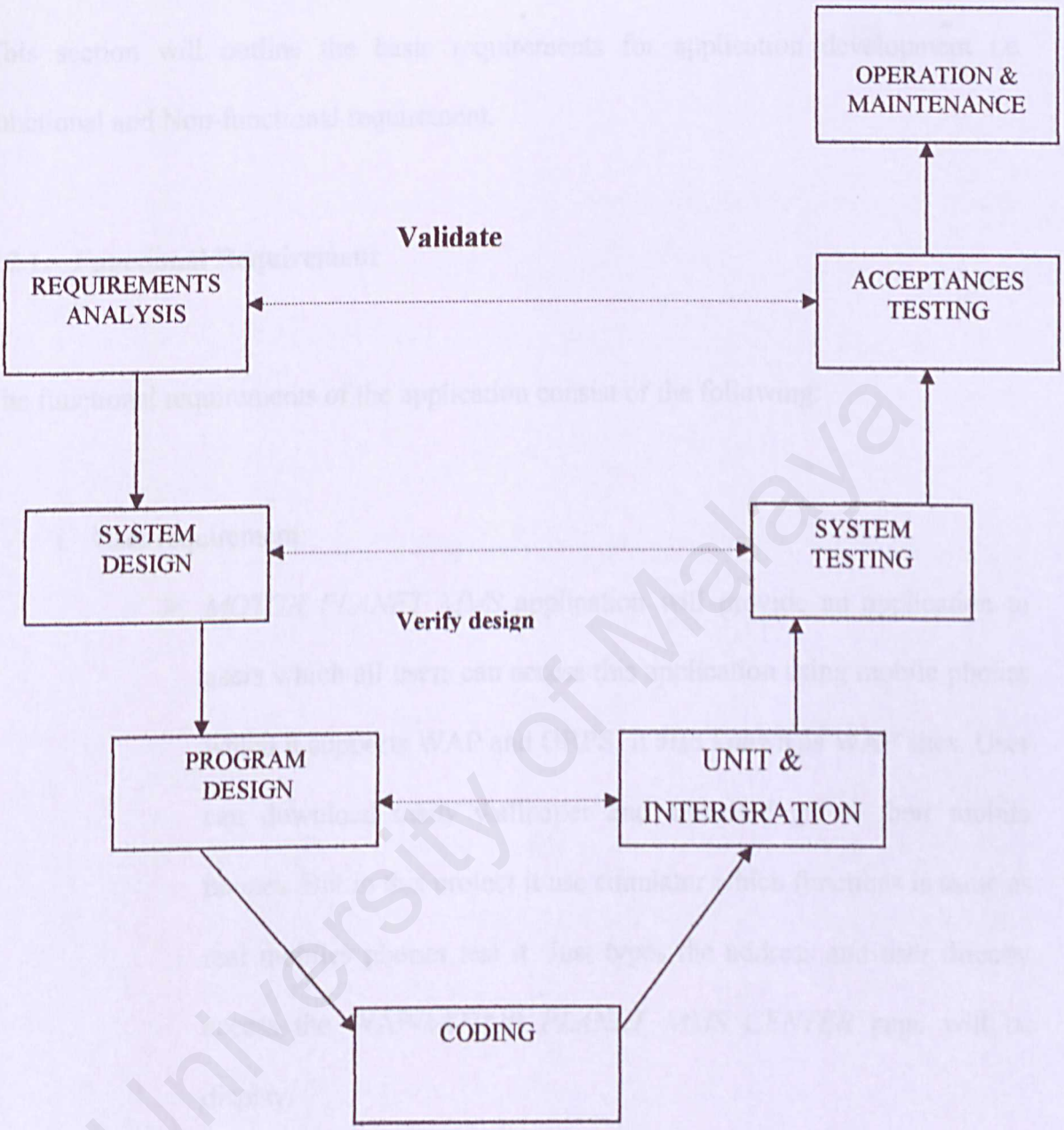


FIGURE 3.1: The V-Model

3.2. FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

This section will outline the basic requirements for application development i.e. functional and Non-functional requirement.

3.2.1. Functional Requirement

The functional requirements of the application consist of the following:

i. User requirement:

- *MOTOR PLANET MMS* application will provide an application to users which all users can access this application using mobile phones which it supports WAP and GRPS. It also known as WAP sites. User can download many wallpaper and animated gif to their mobile phones. But in this project it use simulator which functions is same as real mobiles phones test it. Just types the address and user directly access the WAP-*MOTOR PLANET MMS CENTER* page will be display.

ii. Administrator requirement:

- It capable to update the database example like put new picture in page or check whether it has an error during the operation. Administrator also can add or delete item which not offer to customer.

3.2.2. Non-functional Requirement

i. Security:

- Only an authorized person is allowed to change contents or data on *MOTOR PLANET* MMS. Data privacy and data integrity issue not be taken lightly. Admin are responsible to secure data in database.

ii. Reliability:

- An application should be easy to maintain and trusted. If the problem occurs, it should be detected easily and debugged.

iii. Performance:

- The application should be able to send MMS to mobile devices. User should be able to view the selected option in fraction of time after submitting their request.

iv. Efficiency:

- An application should be fast to perform for every user request. Users should be able to view their request without much delay.

3.3. DEVELOPMENT TOOLS

Hardware and software specifications are shown as below which needs to build this application:

i. Hardware:

- 500 MHz Intel Pentium and above.
- 64 MB or more.
- Mobile phone or wireless devices.
- 65,000 colour or better display card.
- Operating system Windows 2000, Windows 2000ME, Windows N.T 4.0 and Windows XP.

ii. Software:

- Macromedia DreamweaverMX (*editor and interface creation tools).*
- Platform
  - Windows 2000 and above.
  - Windows XP
- WAP Development Toolkit
  - Nokia WAP toolkit.
  - Openwave V7 simulator.
- Microsoft SQL Server 2000 (*Database*)
- Microsoft Internet Information Server (IIS) *(Web Server)*

3.3.1. **Macromedia DreamweaverMX** *(editor and interface creation tools)*

Dreamweaver includes an HTML editor that performs all the basics of other HTML editors, plus allows you to manipulate and control HTML code directly using the Quick Tag Editor. Also learn how Dreamweaver allows the customization of web sites by creating Cascading Style Sheets, JavaScript, DHTML, ASP, and XML. Other topics include the Timelines inspector, behaviors, and Dreamweaver's full-fledged FTP client.

In the design category, the macromedia DreamweaveaverMX, there are certain new futures such as improve workspace layout, predefined sample page layouts and code, Cascading Style Sheets (CSS) support an enhanced dream weaver templates.

3.3.2. **Nokia WAP Toolkit** (*WAP Development*)

The Nokia Mobile Internet Toolkit is an excellent tool that should be kept in every wireless developer's toolbox. It allows developers to remain a step ahead of the general market by being able to build and test tomorrow's features—such as MMS, WTAI, and XHTML—today.

3.3.3. Openwave V7 Simulator.

Openwave® Phone Simulator is a free software development kit that makes creating innovative mobile applications even easier. This flexible and powerful programming tool features the latest versions of the Openwave® Mobile Browser and Openwave® Mobile Messaging Client, as well as documentation and sample code for authoring wireless applications using XHTML/CSS and MMS-SMIL.

The Openwave Phone Simulator Version 7.0 is now available for download. This version of the Phone Simulator contains the latest version of the Openwave Mobile Browser and MMS client, and should be used for designing/testing applications that are targeting phones with the Openwave Mobile Browser version 6.2.3 and higher. Phone Simulator V7 has a "dual stack" configuration, meaning that the single executable contains both the WAP and HTTP versions of the browser. Some things to note:

3.3.4. Microsoft SQL Server 2000 (*Database*)

Microsoft SQL Server is a scalable, high-performance database management system. Designed to meet the requirements of distributed client-server computing, SQL Server is tightly integrated with the Microsoft BackOffice family of servers to enable organizations to improve decision-making and streamline business processes.

Selecting a database platform is one of the most important decisions your company will make. Microsoft SQL Server is your solution to complex business problems. SQL

Server's built-in Internet integration gives organizations the ability to build Active Web sites, conduct business on the Internet and build corporate Intranet sites using open, high-performance solutions. Reduced complexity for users, administrators and developers means quicker, easier-to-use business solutions at lower costs.

3.3.5. Microsoft Internet Information Server (IIS) *(Web Server)*

IIS is an internet file and application server included in the Win NT option pack. IIS is user-friendly because it is easy to configure and can be used alone as web server. It also guarantees the same security, networking, and an administrator and user functionality because in inherits all Windows NT futures. IIS also can help admin secure websites and develop and deploy server. It can support a variety of application such as Common Gateway Interface (GUI), ASP, and Socket Secure Layers (SSL).

3.4. CONCLUSION

In this chapter, the methodology has been discussed in detail including system requirement and tools for the project selected. Next chapter 4, system design will be discussed.

CHAPTER 4

SYSTEM DESIGN

CHAPTER 4: SYSTEM DESIGN

4.0. INTRODUCTION

This document contains the complete design description of the *MOTOR PLANET* MMS. This includes the Data Flows Diagram (DFDs) design of the system down through details of what operations each code module will perform and the database layout. The primary audience for this document is the administrator who is implementing all features *MOTOR PLANET* MMS.

The design specification is the key document that should be circulated to and agreed by everyone associated with the project before the main design process begins. It is to be expected that changes to the design specification will have to be made as the design process proceeds. The importance of preparing a design specification sometimes referred to, as a product specification or target specification or design brief, cannot be overemphasized.

4.1. PROCESS MODELLING

Process modeling refers to modeling business process or the functional or aspects of the system. These include reading data into a process, processing or transforming the data into information, writing data to a data store, and printing reports. In other words, process modeling refers to these processes that business needs to read input data, transform data into useful information, and output the information in the form of report.

Processes in a system are depicted using Data Flow Diagrams (DFDs). The DFDs are drawn at different levels to represent different levels of details. At the highest level the internal details are omitted, only input to the system and the entities that supply the data, and the output from system to the entities that need the data shown. The lower level is more detail on highest level.

4.2. DATA FLOW DIAGRAM (DFDs)

A Data Flow Diagrams (DFDs) is a technique used to show graphically the flow of data through a business system and the processes performed by the system. The DFDs gives the overview of the system inputs and outputs, processes and the flow of data through each system.

The advantages using DFDs are:

i. It easy to use and understand since only four symbols is used.
ii. It enables the system to be structured into independent units of a desirable size and helps the analysts to better understand the relationships between the systems and their subsystems.
iii. It is used as a communication tool between the analysts and the users.
iv. Its helps the analysts to identify the required data and processes of the proposed system and making sure that they have been defined.
v. It gives the analysts freedom from committing to the technical implementation of the system too early.

4.2.1. Notations

DFDs are drawn using four basic symbols to present processes, data flows, data stores, and external entities.

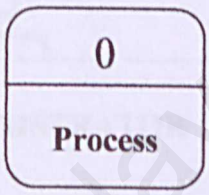
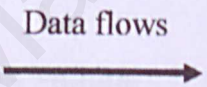
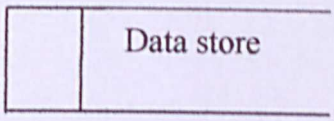
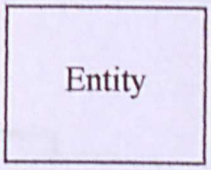
SYMBOL NAME	SYMBOL USED
Process	
Data flows	
Data store	
Entity	

TABLE 4.1: Data Flow Diagram Symbols

4.3. THE MOTOR PLANET MMS APPLICATION MODULE

In this section, *MOTOR PLANET MMS* application has two modules which each of the module presented a process or services that offer on this application.

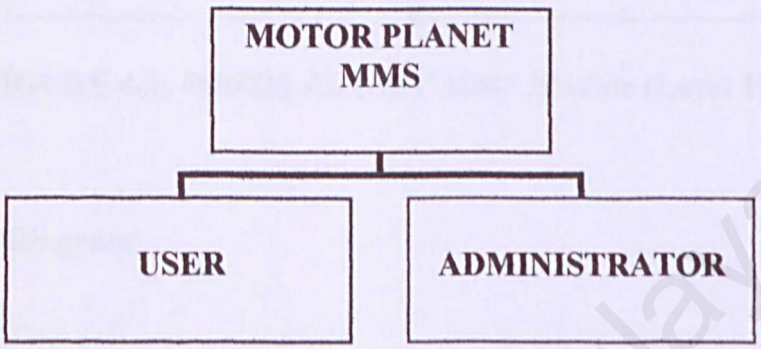


FIGURE 4.1: *MOTOR PLANET* MMS Module

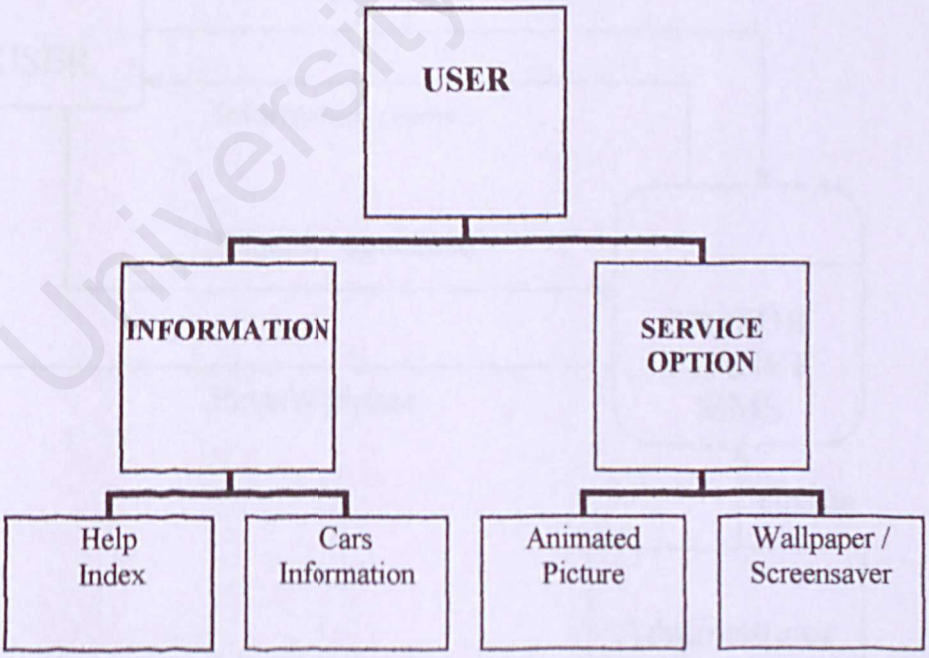


FIGURE 4.2: *MOTOR PLANET* MMS Module (Level 1)

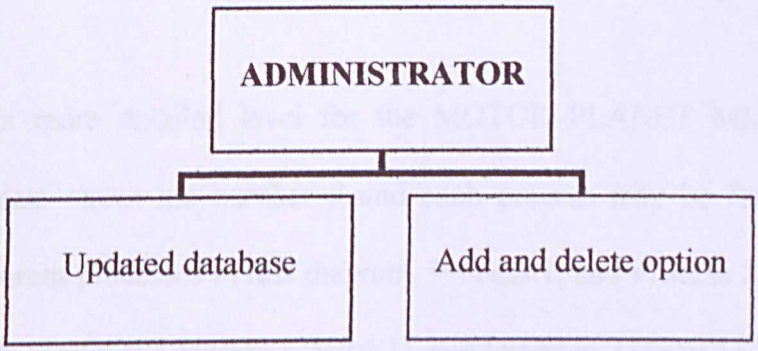


FIGURE 4.3: *MOTOR PLANET* MMS Module (Level 1)

4.3.1. Context Diagram

This is the context diagram for the MOTOR PLANET MMS APPLICATIONhomepage. There are three external entities for this system, namely User, and Administrator. There are child diagram on processing the MOTOR PLANET MMS.

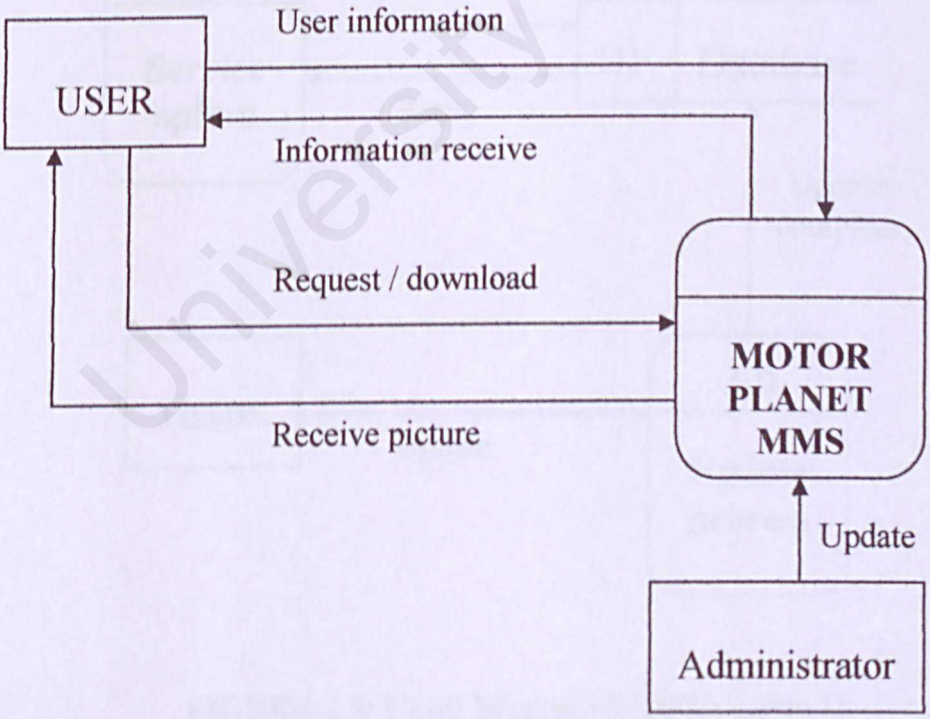


FIGURE 4.4: Context Diagram

4.3.2. Diagram 0 (Level 0):

This diagram is more detailed level for the MOTOR PLANET MMS application. Processes and data stores are numbered and each process may be further exploded. There are two parent processes in this diagram, Process 1, and Process 2 and the details for this process is shown in Diagram 1 (level 1), and Diagram 2 (level 1).

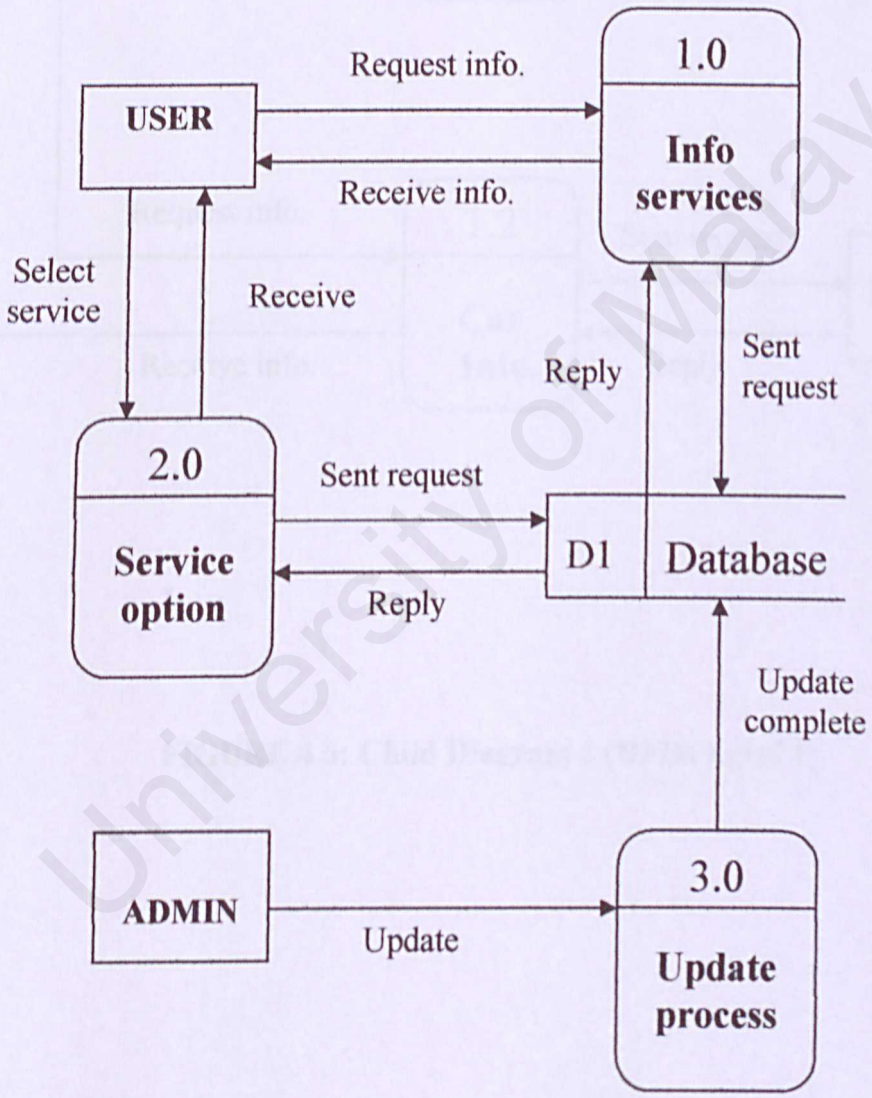


FIGURE 4.5: Child Diagram 0 (DFDs Level 1)

4.3.3. Child Diagram 1 (Level 1):

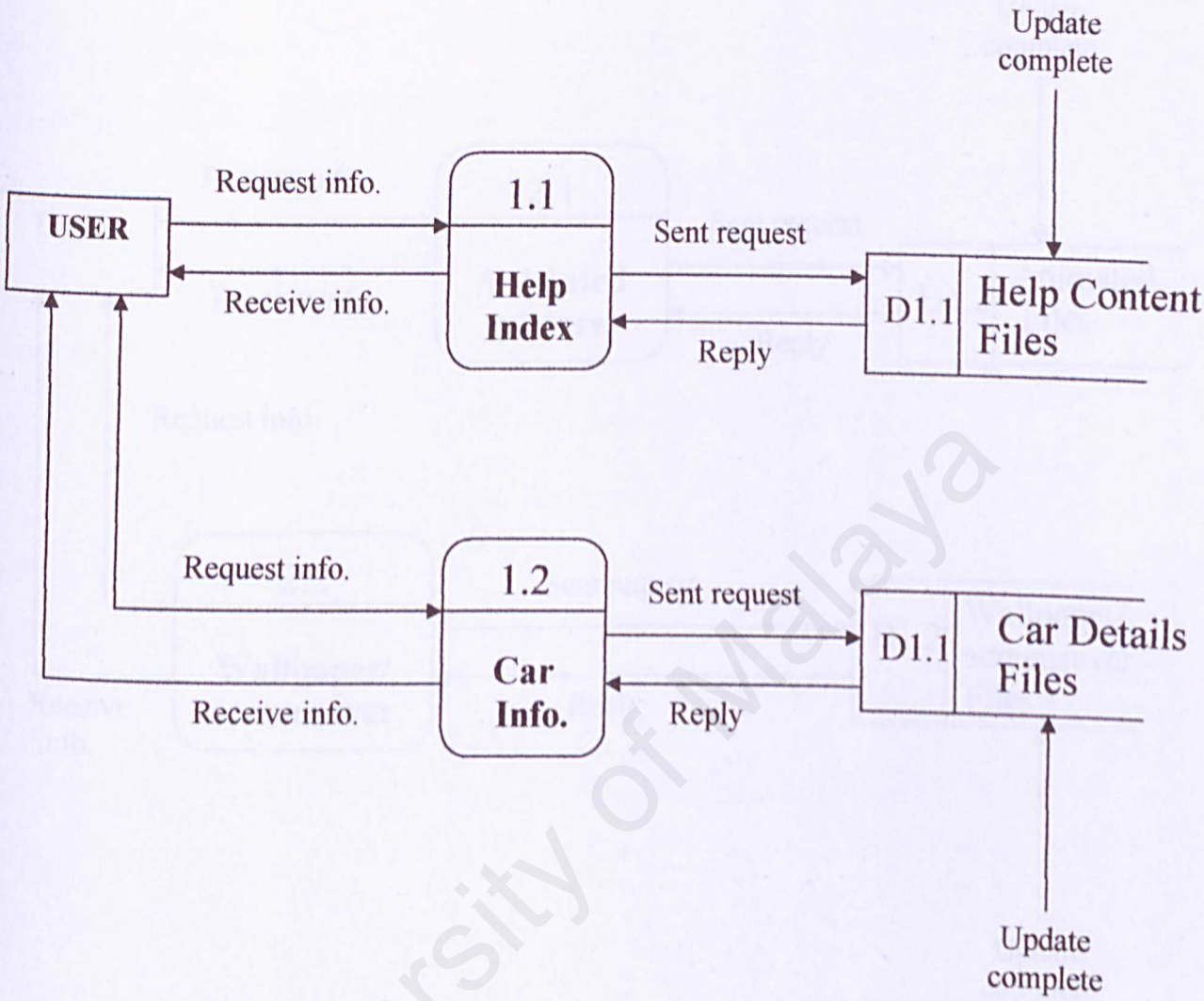


FIGURE 4.6: Child Diagram 1 (DFDs Level 1)

4.3.4. Child Diagram 2 (Level 1):

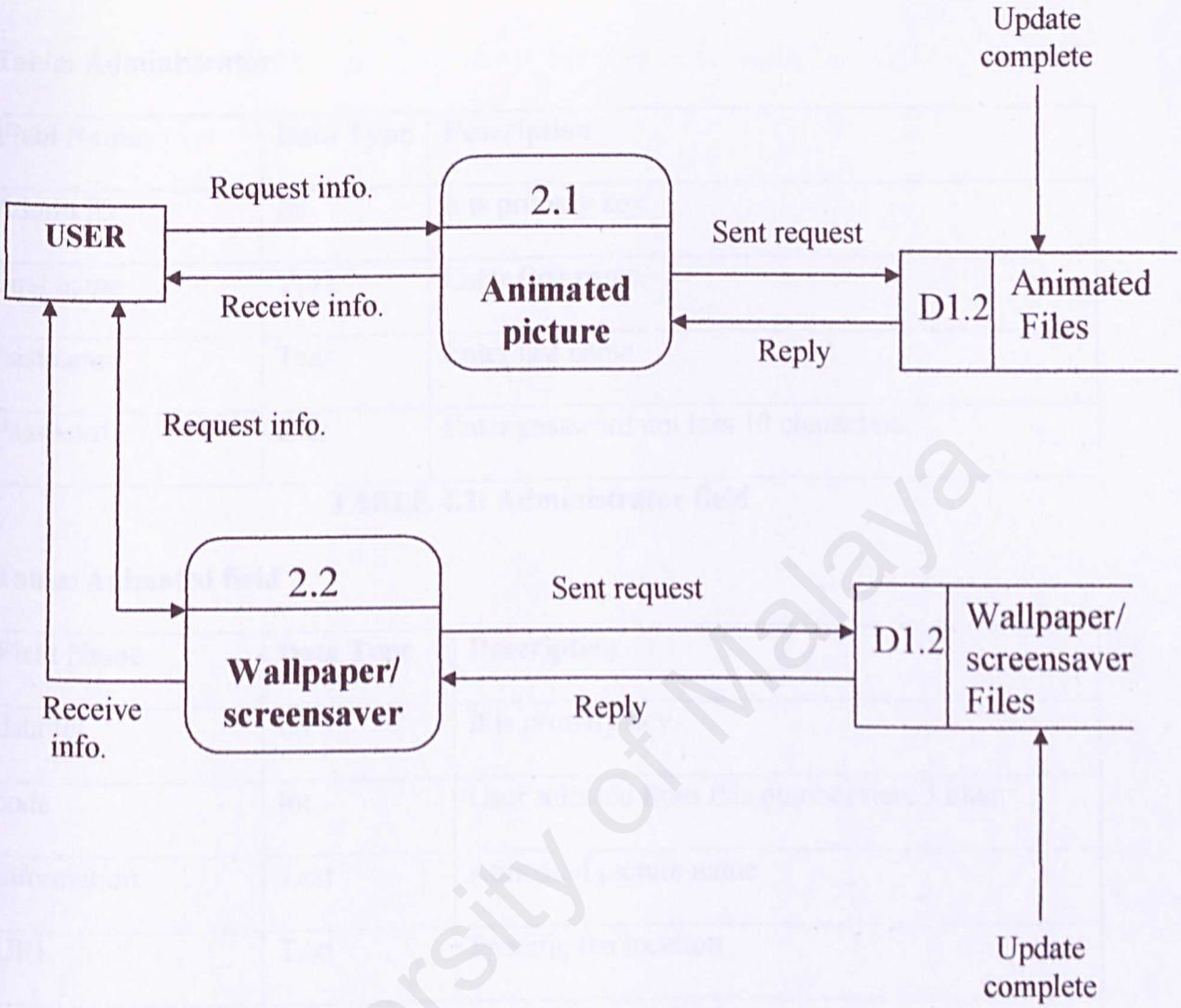


FIGURE 4.7: Child Diagram 2 (DFDs Level 1)

4.4. DATABASE DESIGN

Table: Administrator

Field Name	Data Type	Description
Admin ID	Int	It is primary key.
First name	Text	Enter first name.
Last name	Text	Enter last name
Password	char	Enter password not less 10 characters.

TABLE 4.2: Administrator field

Table: Animated field

Field Name	Data Type	Description
data ID	Int	It is primary key.
code	Int	User selected from this number max 5 char
information	Text	Animated picture name
URL	Text	Specific the location

TABLE 4.3: Animated field

Table: Wallpaper field

Field Name	Data Type	Description
data ID	Int	It is primary key.
code	Int	User selected from this number
information	Text	Wallpaper picture name
URL	Text	Specific the location

TABLE 4.4: Wallpaper field

4.5. CONCLUSION

System design is important to be taken into account before any implementation is done in order to get the overall system, flows and to show clearly the idea on how an application is to be develop.

CHAPTER 5

SYSTEM IMPLEMENTATION

CHAPTER 5: SYSTEM IMPLEMENTATION

5.0. INTRODUCTION

The system implementation stage revolves around stages in development environment. In this phase, the system requirements and design are being implemented and convert into program code. All plans of the modules and interface design that have been suggested before will be implemented with using the suitable programming codes and software tools. Design characteristics such as low coupling and high cohesion, should also be program characteristics, so that the algorithms, functions, interface and data structure can be traced easily from design code and back again.

The main objective for development phase is actually to ensure that the system that we built have fulfilled all the plan and target that have been mentioned and agreed in the previous phases before. However due a certain limitations on the programming languages, selected Database Management System, development platform which contradicts to the actual system design and therefore certain modifications are needed in order to develop the system in accordance to the limitations of the development tools chosen to develop the system.

5.1. DEVELOPMENT ENVIRONMENT

5.1.1. Hardware Used

- Any WAP enabled Mobile Phone with MMS Services
- 500 MHz Intel Pentium and above.
- 256 MB or more.
- Operating system Windows 2000 above, and Windows XP.

5.1.2. Software Used

- Internet Information Service (IIS) 7.0 - web server
- Microsoft Access 2003 - database
- Internet Explorer 6.0 - web browser
- Microsoft Frontpage 2003 – 1st code and interface editor
- Macromedia Dreamweaver MX – 2nd code and interface editor
- Adobe Photoshop 7.0 - image editor
- Microsoft Word 2003 - thesis documentation
- Openwave V7 Simulator
- WAP Drive Waptor 2.3.

5.2. DEVELOPMENT OF PROGRAMMING LANGUAGE

5.2.1. HTML (Hyper Text Markup Language)

HTML tags are used to mark-up HTML elements. HTML tags are surrounded by the two characters < and >. The surrounding characters are called angle brackets. HTML tags normally come in pairs like and . The first tag in a pair is the start tag; the second tag is the end tag. The text between the start and end tags is the element content. HTML tags are not case sensitive; means the same as <B>.

5.2.2. ASP (Active Server Page)

Active Server Pages (ASP) makes it easy to generate dynamic content for the Web and to build powerful Web applications. Whether you are a Web designer or a Web developer, this introduction explains how ASP can help you.

For the HTML Author

If you are an HTML author, you will find that server-side scripts written in ASP are an easy way to begin creating more complex, real-world Web applications. If you have ever wanted to store HTML form information in a database, personalize Web sites according to visitor preferences, or use different HTML features based on the browser, you will find that ASP provides a compelling solution. For example, previously, to process user input on the Web server you

would have had to learn a language such as Perl or C to build a conventional Common Gateway Interface (CGI) application. With ASP, however, you can collect HTML form information and pass it to a database using simple server-side scripts embedded directly in your HTML documents. If you are already familiar with scripting languages such as Microsoft VBScript or Microsoft® JScript® (JScript is the Microsoft implementation of the ECMA 262 language specification), you will have little trouble learning ASP. If you want to get started right away with ASP, see the ASP Tutorial. You can then return to these topics for more detailed information on writing server-side scripts.

For the Experienced Web Scripter

If you are skilled at a scripting language such as VBScript, JScript, or PERL, you already know how to use Active Server Pages. What more, in your ASP pages you can use any scripting language for which you have installed a COM compliant scripting engine. ASP comes with VBScript and JScript scripting engines, but you can also install scripting engines for PERL, REXX, and Python, which are available through third-party vendors.

For the Web Developer and Programmer

If you develop back-end Web applications in a programming language, such as Visual Basic, C++, or Java, you will find ASP a flexible way to quickly create Web applications. Besides adding scripts to create an engaging HTML interface for your application, you can build your own COM components. You can

encapsulate your application's business logic into reusable modules that you can call from a script, from another component, or from another program.

The Active Server Pages Model

A server-side script begins to run when a browser requests an .asp file from your Web server. Your Web server then calls ASP, which processes the requested file from top to bottom, executes any script commands, and sends a Web page to the browser. Because your scripts run on the server rather than on the client, your Web server does all the work involved in generating the HTML pages sent to browsers. Server-side scripts cannot be readily copied because only the result of the script is returned to the browser. Users cannot view the script commands that created the page they are viewing.

5.2.3. SQL Statement (Structured Query Language Statement)

An SQL query is a query you create by using an SQL statement. You can use Structured Query Language (SQL) to query, update, and manage relational databases such as Microsoft Access. When you create a query in query Design view, Access constructs the equivalent SQL statements behind the scenes for you. In fact, most query properties in the property sheet in query Design view have equivalent clauses and options available in SQL view. If you want, you can view or edit the SQL statement in SQL view. However, after you make changes to a query in SQL view, the query might not be displayed the way it was previously in Design view.

Some SQL queries, called SQL-specific queries, can't be created in the design grid. For pass-through, data-definition, and union queries, you must create the SQL statements directly in SQL view. For sub queries, you enter the SQL in the Field row or the Criteria row of the query design grid.

Where SQL statements are used

You can use SQL statements in many places in Access where you can enter the name of a table, query, or field. In some cases, Access fills in the SQL statement for you. For example, when you use a wizard to create a form or report that gets data from more than one table, Access automatically creates an SQL statement that it uses as the setting for the Record Source property of the form or report. When you create a list box or combo box with a wizard, Access creates an SQL statement and uses it as the setting for the Row Source property of the list box or combo box. Without using a wizard, you can generate an SQL statement for the Record Source or Row Source properties by clicking the Build button next to either of these properties, and then creating a query in query Design view. You can also use SQL statements programmatically in:

- The SQL Statement argument of the RunSQL macro action.
- Code as a literal string, or as an SQL statement that includes variables and controls.
- The SQL property of a QueryDef objects to change the underlying SQL statement of a query.

You can type an expression in an SQL SELECT statement, or in WHERE, ORDER BY, GROUP BY, or HAVING clauses. You can also type an SQL expression in several arguments and property settings. For example, you can use an SQL expression as a:

- Where Condition argument of the OpenForm or ApplyFilter action.
- Domain or criteria argument in a domain aggregate function.
- Setting for the RecordSource or RowSource property in forms and reports.

5.2.4. JavaScript

JavaScript was designed to add interactivity to HTML pages. JavaScript is a scripting language - a scripting language is a lightweight programming language. JavaScript is lines of executable computer code. A JavaScript is usually embedded directly in HTML pages. JavaScript is an interpreted language (means that scripts execute without preliminary compilation). Everyone can use JavaScript without purchasing a license. JavaScript is supported by all major browsers, like Netscape and Internet Explorer.

5.2.5. WML (Wireless Markup Language)

WML (Wireless Markup Language) is the dominant language in use with wireless devices today. Essentially, WML is a subset of HTML, but has its roots in XML. Those developers with a solid base in XML should have a relatively easy time coding WML. The current WML standard is 1.3, although many mobile devices in use today support only the WML 1.1 standard. Therefore it's prudent to stay away from 1.3-specific features, unless you know that your target market's devices are 1.3-ready.

WML is to WAP and its handheld devices what HTML is to the web and browser such as Netscape and Internet Explorer. Content is presented to the wireless device, allowing one to display information, present input options and tell user agents. WML is based on the World Wide Web Consortium (W3C) guidelines for wireless access and works similarly to HTML to deliver Web text using simple markup tags.

WAP gateways provide the Interface between the network and Intranet services. From this gateway, WML content is access over the Internet using the standard HTTP mechanism. WML also has a client-side scripting language, WMLScript, to help automate particular tasks, validate input, and so on. WMLScript is a subset of JavaScript.

5.3. DATABASE COMPONENT

5.3.1. Component Diagram 1

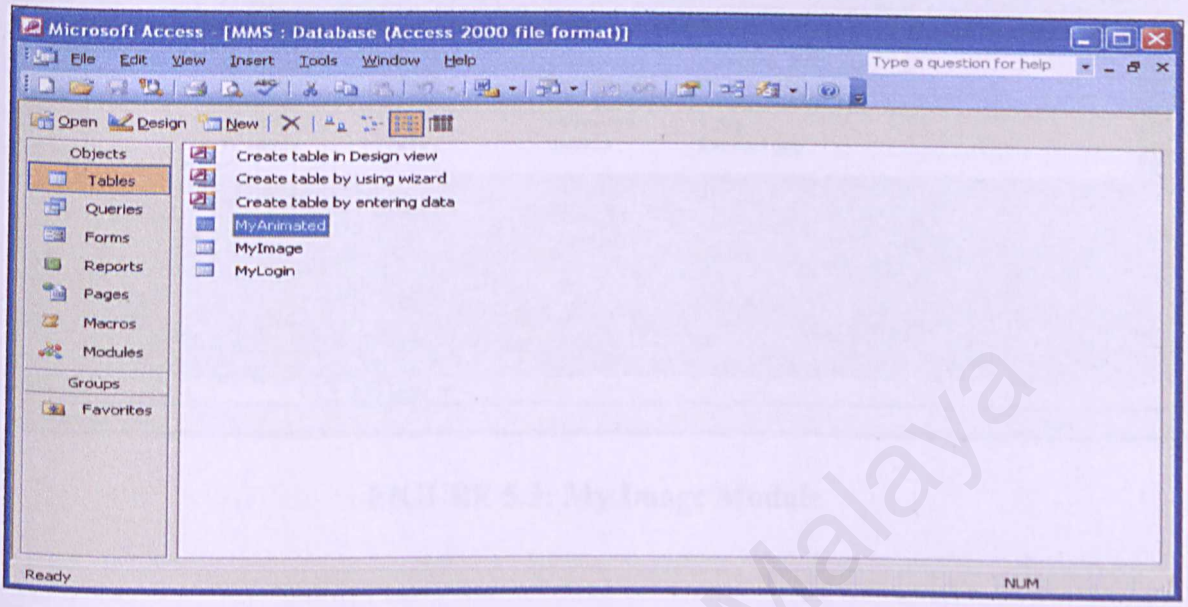


FIGURE 5.1: List of Table

5.3.2. Component Diagram 2

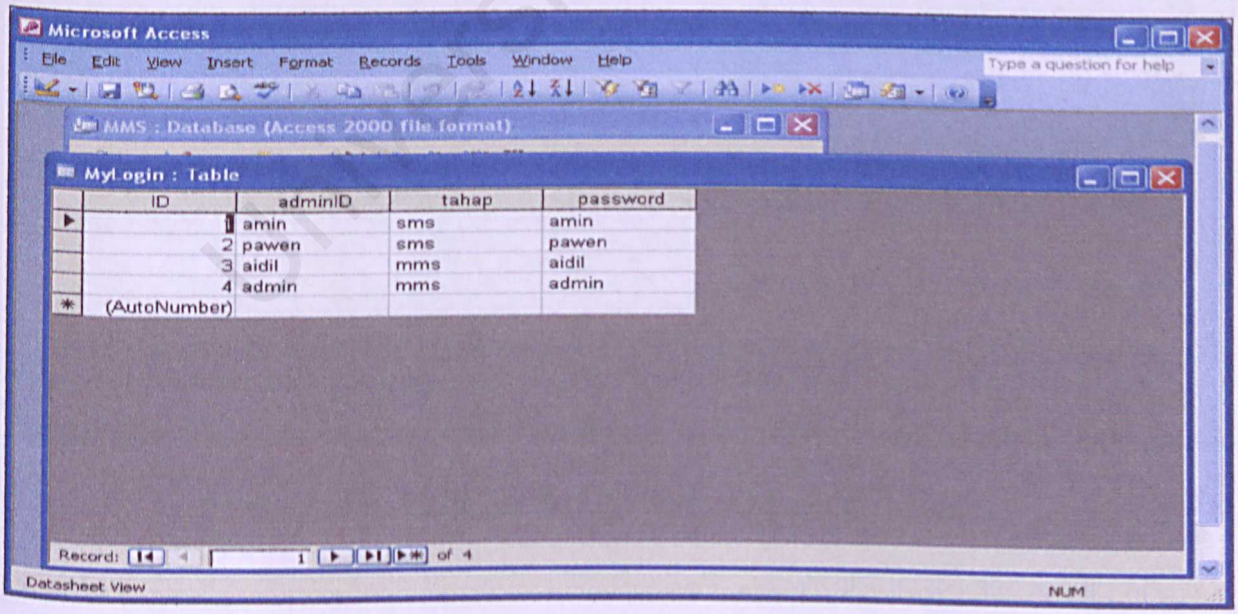


FIGURE 5.2: My Login Module

5.3.3. Component Diagram 3

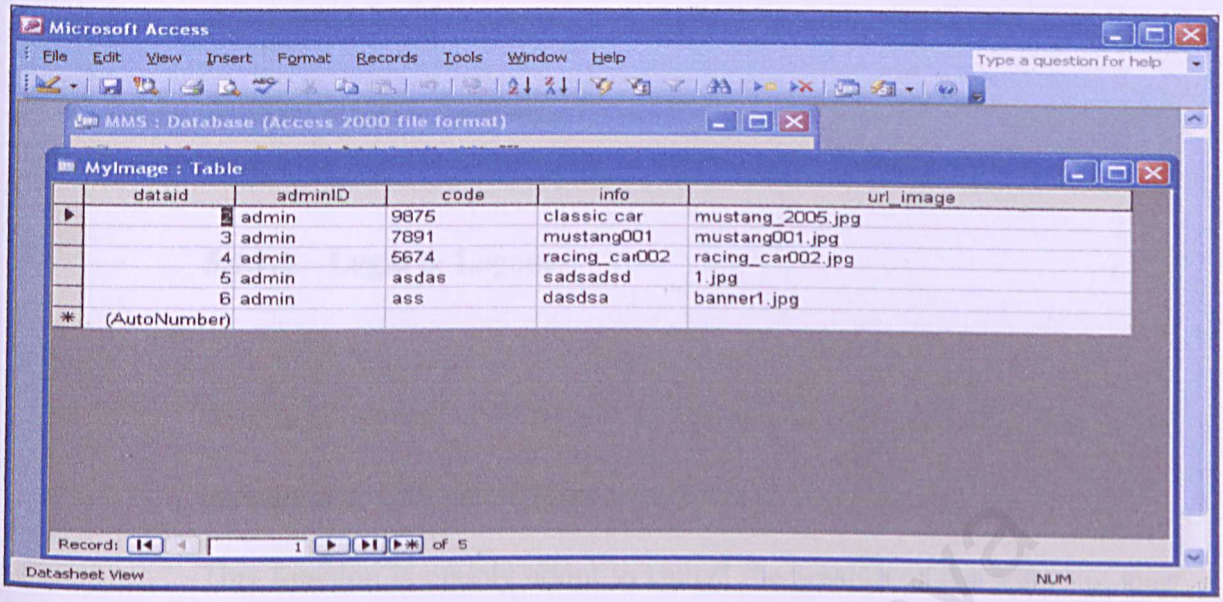


FIGURE 5.3: My Image Module

5.3.4. Component Diagram 4

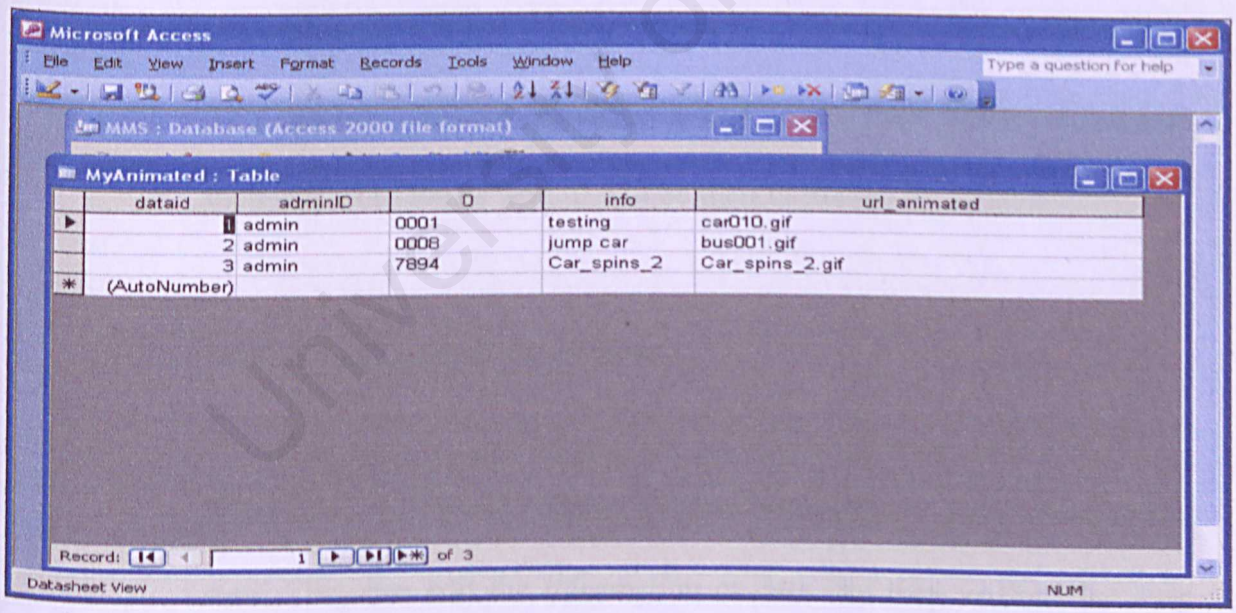


FIGURE 5.4: My Animated Module

5.4. MODULE IMPLEMENTATION

5.4.1. Administration Module

5.4.1.1. Login & Logout

This function will perform the username and password checking before the admin or staff can log into the system.

This function is mainly about to cancel the session of the admin or staff after they have finish their works in the system.

5.4.1.2. Profile & Password

This function allowed the admin or staff to edit their profile and change their password too as well. It will be their username by default.

5.4.1.3. Add, edit & delete item

Some of the information listed here can be modified by the admin or the staff. They can edit the information or data that they or the other user have entered. They can also add some information that they might want to. And, they can also delete certain information for example the unwanted registered user. Images upload is also available in this function.

5.4.1.4. Status

This function is allowing user to view data in database management. It also views data details and information.

5.4.2. User Module

5.4.2.1. Services Offer

This function offer user to download wallpaper, animated gif, contact info and link search.

5.4.2.2. List of Images

This function allow user to select or choose the images to download.

5.4.2.3. Download Images

This function allow user to download images and save to their mobile phones.

5.5. CONCLUSION

During system implementation, system requirements and designs were converted into program codes. Besides, it also involves development of the environment setting such as the operating system and the database server. Several software tools were used to deploy the design into machine-readable language and then, turn them, in order to produce the required applications.

CHAPTER 6

SYSTEM TESTING

CHAPTER 6: SYSTEM TESTING

6.0. INTRODUCTION

After the program had been coded, it is the time we need to test the program. Testing is one of the vital parts of the system development. During this stage, the system is tested for errors and bugs. The main purpose of doing testing is to detect errors that may exist. After found any bugs or errors, the process of fault remover are runs to remove any bugs before the system runs in the real time or ready to be implemented. Besides the system is tested to discover errors and bugs, it is also aims to find out if system's requirements have been met.

In developing a large system, testing is usually involving several stages. Therefore the testing proposed for the system can take as many as 3 stages:

- Unit Testing
- Integration Testing
- System Testing

6.1. UNIT TESTING

The primary goals of unit testing are to confirm the unit is coded correctly and it performs the function and logic what it is supposed to perform. This stage of testing verifies the component functions properly with types of input expected from studying the component's design.

The first step can be done in unit testing is to examining the code. The code for each component is reviewed and is compared it its documentation for misunderstanding, inconsistencies and other fault. This process is also known as code review. Secondly, we can use the Control Object Testing technique to do the unit testing. Command buttons are clicked to test their functionality and text boxes are tested with different data types and also null value to make sure invalid data will not cause any fault.

After we test on different data types like numbers, characters or date is used to test certain function because some control objects will only accept certain data type, invalid data type can be traced by the system without causing any error.

Lastly, we can select the test case. Test case is developed to ensure that the input is properly converted to the desired output. So, to test a component, input data and condition are chosen. Then the component is allowed to manipulate the data and output is observed.

6.2. INTEGRATION TESTING

When the unit testing meets the objective, all are working correctly and no error found, it is the time to combine them I a working system. This integration is planned and coordinated so when a failure occurs, the failure can be found easily. There are a few techniques can be perform in the integration testing. Bottom-up integration, Bid-Bang Integration, Sandwich Integration and Comparison of Integration Strategies.

The approach had been taken to the system's integration testing was Bottom-up Integration. This is one of the popular approaches that merge components to test the larger system. When this method is used, each component in the lower level of the system is tested individually first. Then the next components to be tested call the previous test ones. This approach is followed repeatedly until all until all components are included in the testing.

6.3. SYSTEM TESTING

This system testing is target to ensure that the system meets the user requirements. There are several steps in testing system:

- Function Testing
- Performance Testing
- Acceptance Testing
- Installation Testing

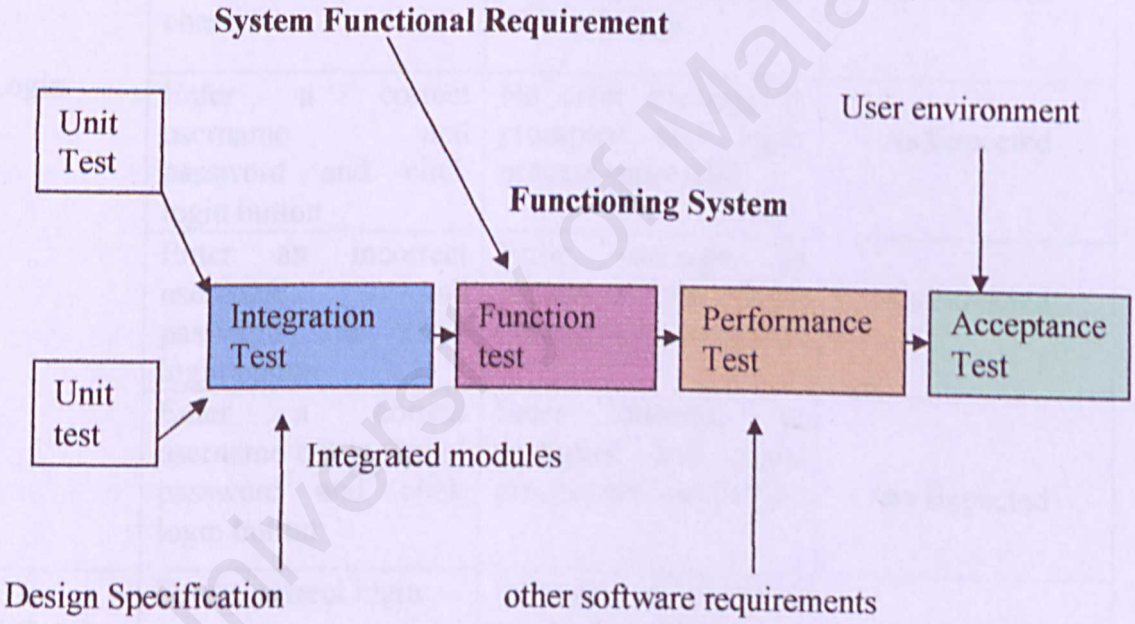


FIGURE 6.1: System Testing Diagram

6.3.1. Function Testing

A function testing checks that the integrated system performs its function as in the requirements. Therefore, use cases can be used as guild for the function testing.

- Use Case in Administration Module

Use Case	Activities Tested	Expected Result	Result
Login	Enter nothing and click button	Cannot be submitted. JavaScript prompted error message.	As Expected
	Enter non-alphabet and non-numeric character.	Cannot be submitted. JavaScript prompted error message.	As Expected
	Enter a correct username and password and click login button	No error message is prompted and login process successful	As Expected
	Enter an incorrect username and password and click login button	Error message is prompted and login process not successful	As Expected
	Enter a correct username but incorrect password and click login button	Error message is prompted and login process not successful	As Expected
Authentication	Do the correct login	Username will appear on the page after login successful	As Expected
Logout	Click logout	No error message and logout is successful	As Expected
	Click previous page or secure page after logout	Page login will come out to prevent un-authorize user	As Expected

TABLE 6.2: Use Case in Administration Module

6.3.2. Performance Testing

After have convinced that the function work as specified, the performance test compares the integrated components with the non-functional requirements. These requirements, including user-friendliness, correctness, functionality, reliability, flexibility, efficiency constrain the way in which system function are performed.

6.3.3. Acceptance Testing

Acceptance testing is done to make sure that the system meets customer understanding of the requirements, which may be different from the developer. This testing will be done only when the system is delivered to the customer.

6.3.4. Installation Testing

Installation testing is the stage for the system testing. The testing required the whole system delivered to the customer and install the system at customer site. The installation testing performs testing on the integration of the software which had been developed and hardware on the customer site. The testing is required because we need to make sure after the system integrate with the hardware, has perform properly on the customer site.

6.4. CONCLUSION

Testing on the system had been done successfully. Testing is important for ensuring the functionality of the system has run correctly follows the user requirements.

CHAPTER 7

SYSTEM EVALUATION

CHAPTER 7: SYSTEM EVALUATION

7.0. INTRODUCTION

System evaluation will document the result which had been developed (*MOTOR PLANET MMS*). This chapter will cover the problems encountered during the development process from the beginning till the end of the project, the solutions to the problems, the benefit or strength and the limitation of the system being develop and the future enhancement for the system. Lastly, conclusion will conclude based on the whole project.

The documentation for the system evaluation of *MOTOR PLANET MMS* application will cover some topic as listed below:

- Problems faced and the solution applied to it
- The strengths and limitation of the system
- Future enhancement for the system in the future
- The conclusion of the whole project

7.1. PROBLEMS FACED AND THE SOLUTION APPLIED TO IT

During the process of developing any kind of project, there must come with some difficulty to the developer. It is the same situation when I developing the system, which is facing many difficulty from the scripting language of this system. I have listed some of the main problems that occur and solutions to overcome it:

7.1.1. Lack of Experience in Developing Huge System

The main problem for a developer when developing a complete system is the experience. There are difficulty for us to define the project scope and the logic flow of the system. In order to obtain the experience of developing a complete system, it cannot just read the information we get either form the internet or from the books. Plus, I don't have the real concept of how actually a real system runs at first.

I had visits a lot of web sites trough the internet to find a useful for me to develop a suitable for my MMS applications. Beside that, I also asked help for my friends to give their opinion about system that I make.

7.1.2. Lack of Experience in programming Language

As we can see on this system, there are many programming language that had been implemented in the system. As we knows, no matter what the programming languages that we are use, there are always problems to me to handle and implemented those programming languages while finished develop this *MOTOR PLANET MMS* applications especially on user side. In the *MOTOR PLANET MMS* application, I have implemented programming languages such as:

- HTML (Hyper Text Mark-Up Language)
- ASP (Active Server Page)
- JavaScript
- VBScript
- WML and WMLscript (for view in mobile phones)

For those that had been familiar with all the programming languages that I had listed above might noticed the problems using these programming languages. There are many thing that have to take a close look, monitor the syntax, careful with the variable and most important thing is well knowledge of the programming languages that currently being used.

This problem have been solve very soon because I have study and a lot of research about basics requirements in order to use programming languages. Discussion had been made with my partner and friends to understand better about the language.

7.1.3. Lack of Technique in Designing Interface

This subsystem is mainly developed for the user side (more on client side). Lack of the techniques to design an interactive interface is a main problem. As developing for user needs very beautiful and dynamic web pages that can attract customer or user to visit the Webpage. It also a problem to use and choose the simulator that used to view WAP site on user side.

7.1.4. Time Constraint

The time constraint becomes one of the main problems that I need to overcome. Besides need to develop the system, the developer which is me also needs to concentrate on my study. Mainly, this was due to the lack of experience in developing system and causing used too much of time in doing the research and development phase.

Therefore I had rescheduled my time for study and time for develops the system. There are few periods that I used to develop the system at the time I have to concentrate on mid-term exam. Only during the holidays, I can put more effort on the system compare to during the study week.

7.2. STRENGTHS

There are some strength that can be found from the system if compare with other existing system. There are:

7.2.1. Interesting Interfaces

This system has an interactive interface. It has design suitable and easily effects the user's attention. The menu or function was exactly clear and easy for the users to find. And it is page view in mobiles phone which not in computer.

Overall, the interface of this system is quite fine. It promised that will not arise a bad impression by the user. The consistent design of each page will make the navigation easier to the user. Hyperlinks in this web page are arranged accordingly based on its purposes. These arrangements are provided to facilitate supportive browsing.

7.2.2. Free Download Wallpaper Images and Animated Gif

We have the main powerful unique future that provide by *MOTOR PLANET MMS* application is free to download many car wallpaper images and animated gif without using computer. Just type the URL on mobiles phones and it ready to be used. This ideal is similar to a user who downloads free ring tones, screensaver and wallpaper images using mobiles phones or PDA.

7.2.3 User Friendly and Easy to understand

The list of menus that I have provided in this system was easy to understand. It is because it had already arranged all its function and item simply to increase the user's comfort ability. This will increase the user's understanding about this MMS application and furthermore it will help in the navigation. It easy to get info and download images such as wallpaper and animated gif abut a car world. User can choose there favorite car images that offer to them.

7.2.4 Request From Provided

This future is special design for those who are looking for car images and car animated gif that allow user to browse from mobiles phones which is support WAP and GPRS. Just go to the URL and the *MOTOR PLANET MMS* application WAP site will appears at their mobiles.

7.2.5 Easy Administration Modules

This system has provided an easy-to-manage administration module. With this module, the administrator can easily manage the to add, edit and upload images and upload animated gif. There also find and add an information about a cars include model.

7.3. LIMITATIONS

7.3.1. Security

The password is not encrypted when it posted from log in form or stored in database and this will result in high vulnerability of password.

7.3.2. No Rules and Regulation

There are no any rules and regulation in the system. Anybody who has mobile phone which is support WAP and GPRS is allowing to access as a user side.

7.3.3. No Database Backup

There is no database backup service provided from this system. This wills reduce the reliability and integrity of the *MOTOR PLANET MMS* application when the database corrupted.

7.3.4. Less Download Future

There is less download future. User only can download wallpaper an animated gif only.

7.4. FUTURE ENHANCEMENT

In this project, even the project is fulfilled the user requirements and the functionalities of the system, but it can still keep on enhanced in order to have a better system. Following are some of the enhancements that can be done to the system in the future:

7.4.1. Increase the Security

Encrypt and decrypt of sensitive information such as password. Password should be encrypted as it is send to server and stored in the database.

7.4.2. Database Backup

Backup the database periodically to increase the reliability and integrity of the data store in the *MOTOR PLANET MMS* application database.

7.4.3. Add More Future Download

In the future we can add more download like video of car, ringtones and data information or news updated.

7.5. PROJECT CONCLUSION

After a few month of the development of the *MOTOR PLANET MMS* application it can be said that it is successfully done even with more module. The system is considered as meet all the define objective. The system also has fulfill all the functional requirement, non-functional requirement, software requirement and hardware requirement and the methodology that are chosen has gives a lot guide to the developer so that the system can be done without facing any big problem.

The creation of this types of project has bring a lot of benefits, it bring a lot of meaningful experiences especially in developing a huge system, experience of how to communicated and cooperated with other people on doing a big project. It is also carried out many useful experiences on using the IT technology especially on the developer future. On the other hand the project also give the chance to the developer to practice the programming skills like the developer learned how to install the required software and hardware and the configuration on the software it self. This kind of experience sure will let the developer had the job easier on the next day.

Lastly although the system had been done successfully, there is still a lot of limitation on the system. after consider the time constraint, the developer has to believe the limitations to the future enhancements to improve it so that the system can perform better functionality in the future overall, to the developer discover that the personal, analysis and other related skill within are still need to be improved for better performances in the future project.

REFERENCES

REFERENCES

1. Dr. P Sellappan (2000) Management and Method: Software Engineering. Sejana Publishing.

2. Srdjan Vujosevic, Robert La Berge (2001) WAP Intergration: Profesional Developer's Guide. John Wiley & Sons.

3. Theodore.S.Rappaport (1991) Wireless Communications Principles Practice: Prentice-Hall.

4. Jeffrey L. Whitten, Lonnie D. Bentley (2001) System Analysis and Design 5th Edition: Methods. McGraw-Hill Irwin.

5. Shari Lawrence Pfleeger. Theorey and Practice 2nd Edition: Software Engineering. Prentice-Hall.

6. Getting Started with Nokia MMS Tools. http://www.forum.nokia.com/

7. Aneesha Bakharia, Premier Press: Macromedia Dreamweaver MX 2004.

8. Openwave simulator development kit.

9. *Creating Database Web Application with PHP and ASP* / Jeanine Meyer. *1st ed.* Hingham, Mass : Charles River Media, c2003

WEB SITES REFERENCES

1. http://www.forum.nokia.com
2. http://www.w3schools.com
3. http://developer.openwave.com
4. http://java.sun.com
5. http://www.hotscripts.com
6. http://www.palowireless.com
7. http://www.slackerhtml.com
8. http://www.wirelessdevnet.com

APPENDIX

APPENDIX A: INSTALLATION GUIDELINE

1. HARDWARE AND SOFTWARE REQUIREMENT:

i. Hardware requirement:

- Any WAP enabled Mobile Phone with MMS Services
- 500 MHz Intel Pentium and above.
- 256 MB or more.
- 65,000 colour or better display card.
- Operating system Windows 2000 above, and Windows XP.

ii. Software requirement:

- Internet Information Service (IIS) 7.0 - web server
- Microsoft Access 2003 - database
- Internet Explorer 6.0 - web browser
- Microsoft Frontpage 2003 – 1st code and interface editor
- Macromedia Dreamweaver MX – 2nd code and interface editor
- Adobe Photoshop 7.0 - image editor
- Microsoft Word 2003 - thesis documentation
- Openwave V7 Simulator
- WAP Drive Waptor 2.3.
- WML and WML Script
- ASP
- XML

2. GUIDELINE:

i. Add MIME types:

- Go to Control Panel > Administrative Tools >Internet Information services (IIS).
- Then go to local computer>click>website>Default web sites.
- Click right at Default web sites and go to properties.
- At properties find HTTP Headers>click File Types.
- Now add this types:
  - text/vnd.wap.wml wml
  - application/vnd.wap.wmlc wmlc
  - text/vnd.wap.wmlscript wmls
  - application/vnd.wap.wmlscriptc wmlsc
  - image/vnd.wap.wbmp wbmp
- Click ok
- This adds is to run .WML in simulator. ***(example: index.wml)***

ii. Install Openwave V7 simulator

- Download Openwave V7 simulator.

  http://developer.openwave.com/dvl/tools_and_sdk/openwave_mobile_sdk/phone_simulator/
- Save>run Openwave_v70_Simulator.exe
- Save at c:\program files\

- To run simulator Start>All Program>Openwave V7 simulator>click.
- Run simulator>Setting>Server Profiles>select http-direct>Active
- Now it ready to access the WAP sites.

  Example: ***http://localhost/myplanet/mpwap/index.wml***

- Openwave V7 use for user to downloads images such as wallpaper and animated gif.
- It's like real mobiles phones function's.

iii. Open MOTOR PLANET MMS application

- Make sure your files are saving at local server.

Example: C:\Inetpub\wwwroot\myPlanet \MMS

Example: C:\Inetpub\wwwroot\myPlanet \mpWap

- To Admin Log in open internet and types URL>go

  Example: ***http://localhost/myPlanet/mms/default.asp***

- This site is for administrator only where admin can easily make changes or edit data and add data.

APPENDIX B: SOURCE CODES

1. WIRELESS MARKUP LANGUAGE (WML)

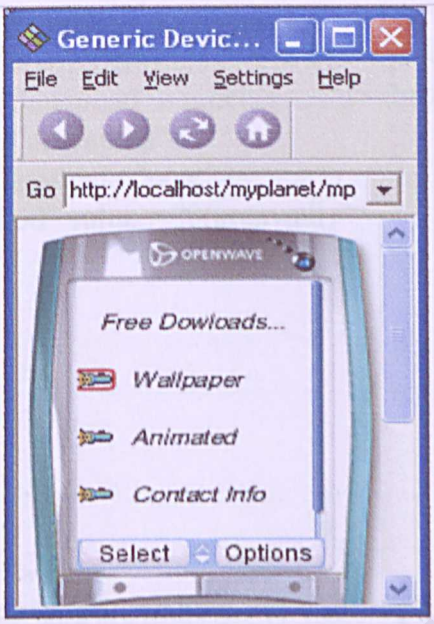
- WAP coding *(see user manual to show output in Openwave V7 Simulator)*
- Waptor 2.3 platform.

Home First page


```
<card id="card1" title="myPl@net"> 
<p align="center"> <b>WAP-Motor Planet MMS
Center</b></p>  <br/><br/>
<p> <br/>
<p align="center"><a href="#card2"><small>More...</small></a>
</p></p>

</card>
```

Second Page




```
<card id="card2" title=""> 
<p align="center"><b><i>Free Dowloads...</i></b></p><br/>

<p><a href="#card3">
<img src="" alt=" wallpaper" localsrc="130"/>
</a>  <i> Wallpaper</i></br></p> 

<p><a href="#card4">
<img src="" alt=" animated" localsrc="130"/>
</a>  <i> Animated</i></br></p> 

<p><a href="#card5">
<img src="" alt=" contactInfo" localsrc="130"/>
</a>  <i> Contact Info</i></br></p> 

<p  align="center"><a  href="#card7"><small><i>Link..</i></small></a>  </p>
        </p>
</card>
```

Link to Wallpaper page

```
<card id="card3" title=""><br/>
<b><p align="center"><i>Top Download..</i></b></p><br/> 
<p align="center">Click download to proccess..</p><br/>
<do type="accept" label="download">
<go href="list_wall.asp" method ="post">
<postfield name = "wallkod" value = "$(areawall)">
</go>
</do>
</card>
```

Link to Animated Page

```
<card id="card4" title=""><br/>
<b><p align="center"><i>Top Download..</i></b></p><br/> 
<p align="center">Click download to proccess..</p><br/>
<do type="accept" label="download">
<go href="list_anime.asp" method ="post">
<postfield name = "animekod" value = "$(areaanime)">
</go>
</do>

</card>
```

Contact Info Page

```
<card id="card5" title="">  
<do type="prev">
<prev/>
</do>
<p align="center">
<big>myPl@net</big>
<br/><i><small>Contact :</small></i>
<br/>+60126577034
<small><i>illusion_567@yahoo.com</i></small>
</p>
</card>
```

Link Page

```
<card id="card7" title=""> 
<p align="center"><big><i>search</i></big>
<p><br/>
<p                                                    align="center"><a
href="http://wapsearch.google.com"><small><i></i>wapsearch.google.com</sm
all></a><br/></p>
<p>
<p                                                    align="center"><a
href="http://store.maxis.com.my"><small><i></i>store.maxis.com.my</small></
a><br/></p>
<p>
<p                                                    align="center"><a
href="http://www.yahoo.com"><small><i></i>www.yahoo.com</small></a><br
/></p>
<p>
<p                                                    align="center"><a
href="http://www.digi.com"><small><i></i>www.digi.com</small></a><br/></
p>
           
 <p><br/>
<p align="center"><a href="#card1">back..</a></p></br>

</card>

</wml>
```

2. SQL SCRIPT

Connection

```
<%
 Set Conn = Server.CreateObject("ADODB.Connection")
 Connstring = "DRIVER={Microsoft Access Driver (*.mdb)}; "
 Connstring = Connstring & "DBQ=" & Server.MapPath("MMS.mdb")
 Conn.Open(Connstring)

%>
```

User Session

```
<%

Dim Apples
Set Apples = Server.CreateObject("ADODB.Connection")

ConnStr = "Provider=Microsoft.Jet.OLEDB.4.0;" & _
      "Data Source=" & Server.MapPath("MMS.mdb") & ";" & _
      "Persist Security Info=False"

Apples.Open(ConnStr)

SQLtemp = "SELECT * FROM MyLogin WHERE adminID = '" &
Request.form("username") & "' "

Set rs =Server.CreateObject("ADODB.Recordset")
rs.Open SQLtemp,Apples,3,3
while not rs.eof

dim username
username = rs("adminID")

response.cookies("passes") = username

      If Request.Form("username") = trim(rs("adminID")) AND
Request.Form("password") = trim(rs("password")) Then
            Session.Contents("tahap") = rs("tahap")
            Session.Contents("ID") = rs("adminID")
            Session("allow") = True
```

```
            Response.redirect("response.asp")
    Else
            Response.redirect("default.asp")
        End If

rs.MoveNext
Wend
OnError Response.redirect("default.asp?msg="&"Log+Masuk+Tidak+Berjaya")
'OnError Response.redirect("default.asp")
rs.Close
Apples.Close
set Apples = Nothing
%>
```

Get Data From Database

```
<%
Set Conn = Server.CreateObject("ADODB.Connection")
Connstring = "DRIVER={Microsoft Access Driver (*.mdb)}; "
Connstring = Connstring & "DBQ=" & Server.MapPath("mms.mdb")
Conn.Open(Connstring)

Set rs = Server.CreateObject("ADODB.Recordset")
sql = "Select * From [MyImage] where [dataid] = " &request.querystring("id") &
" "
rs.Open sql, Conn, 3, 3

  If Not rs.Eof Then
        dataid=rs.Fields("dataid")
        data1=rs.Fields("code")
        data2=rs.Fields("info")
        data3=rs.Fields("url_image")
  End If
%>
```

3. JAVA Scripts

Alert Message


```
<script language="JavaScript">
<!--
function check(){

var err_msg, msgstring, err;

 err_msg = "Enter : ";
 msgstring = "";
 err = false;

        if (document.form1.elements.username.value == "" )
       {
                err = true;
                msgstring = "Username";
        }

        if (document.form1.elements.password.value == "" )
       {

                if ( err == false )
                {
                    err = true;
                   msgstring = "password";
                }
          Else
                {
                msgstring = msgstring + " ,Password ";
                }
        }
```

```
if ( err == true )
{
        alert(err_msg + msgstring);

   }else
        {

        var errors="";
        if (errors!="") {
        alert(errors);
        return false;
        }

        Else
        {

document.form1.action = "login1.asp";
document.form1.submit();
}
}
}
function back(){

        history.back();
}
//-->
</script>
```

USER MANUAL

USER MANUAL A

STRUCTURE OF MOTOR PLANET MMS HOME PAGE (*admin only*)

HOME PAGE *(example: http://localhost/myplanet/mms/)*

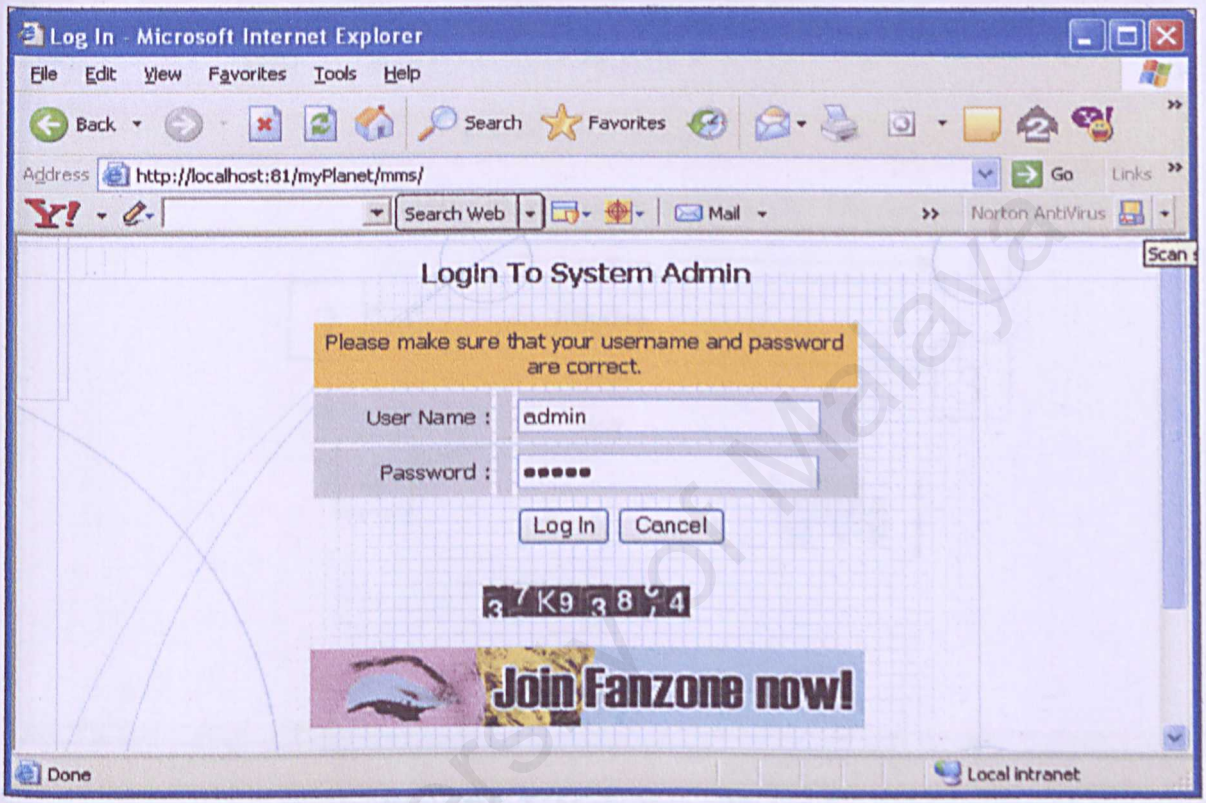


FIGURE 1: Log in Screen

Descriptions of the Figure 1:

- To start enter user name and password.
- The password must be the valid.
- Click log in to enter the administrator main page.*(see figure 2)*
- Example :

  User name: ***admin***

  Password: ***admin***

ADMINISTRATOR MAIN PAGE

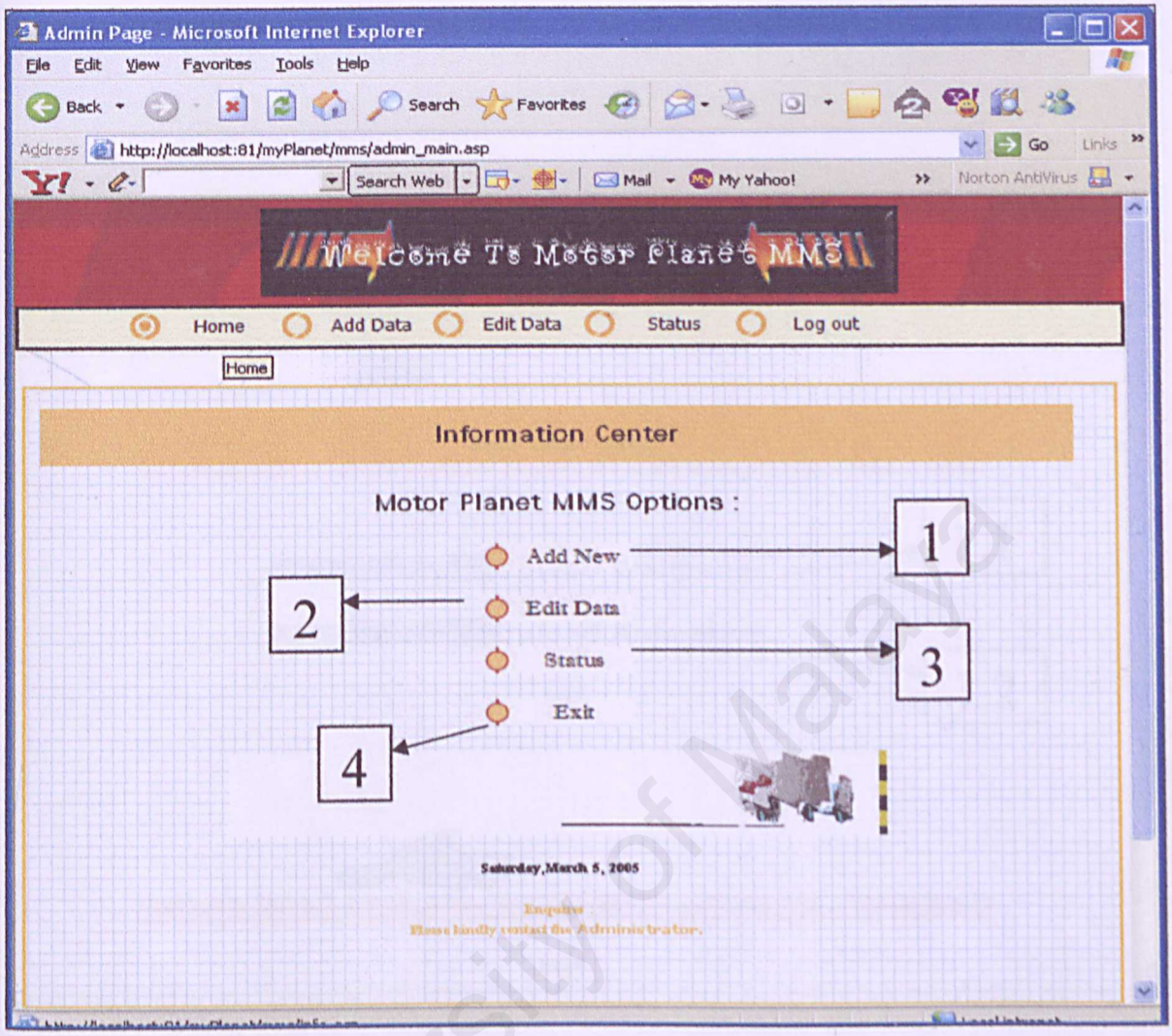


FIGURE 2: Main Pages Screen

Descriptions of the Figure 2:

- List of services:

  1. Click Add New to process add data to database.
  2. Click Edit Data to edit or make changes or delete data.
  3. Click Status to see data information and details.
  4. Click Exit to log out.

1. Add Data

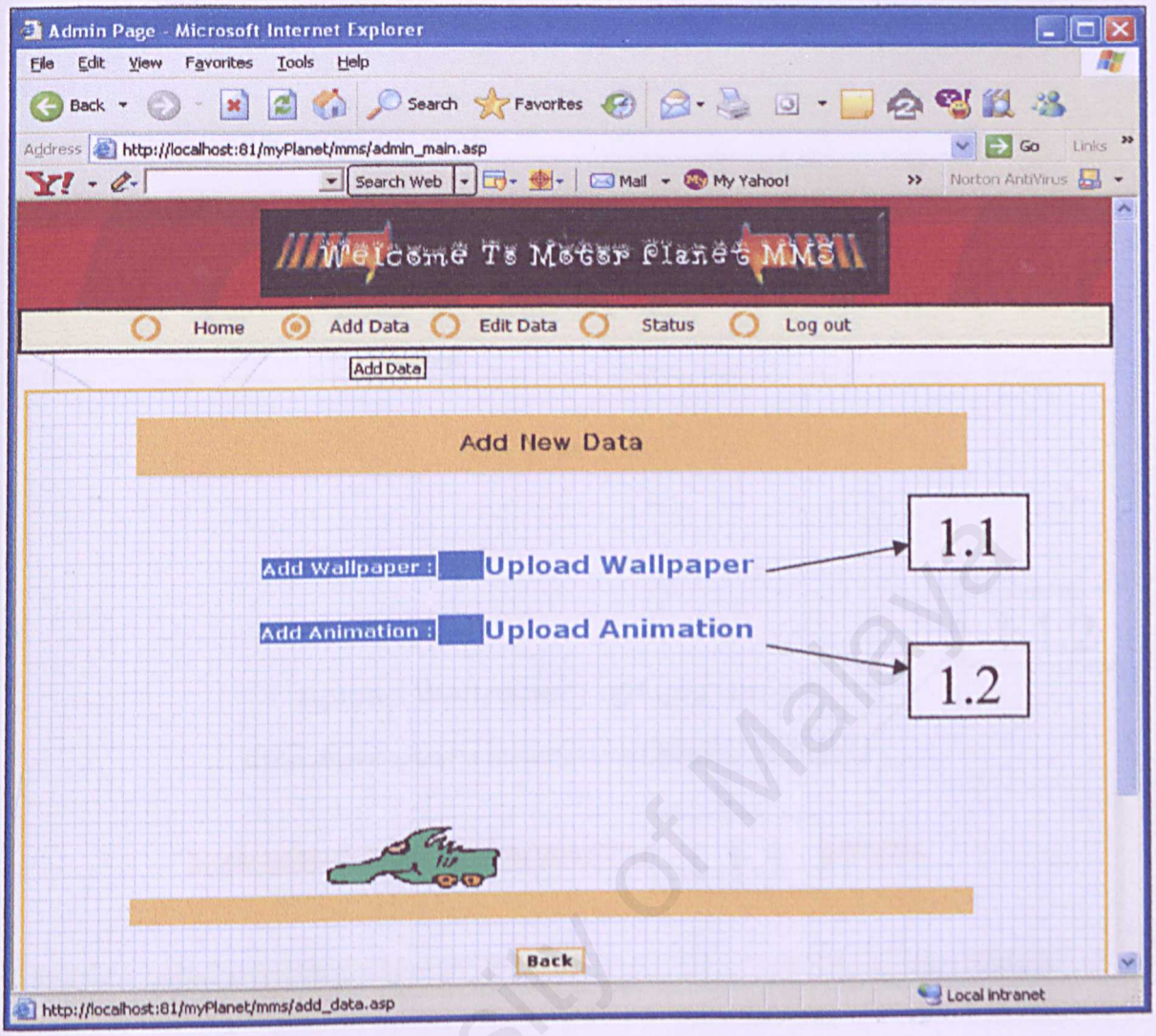


FIGURE 3: Add New Data Screen

Descriptions of the Figure 3:

- Add data options :

  1.1 Upload Wallpaper-click to add new wallpaper image and data details.

  1.2 Upload Animation-click to add new animation image and data details.

- 1.1 And 1.2 is the same process but save in different database folder.
- To see the result click at Status button.

1.1. Upload Wallpaper

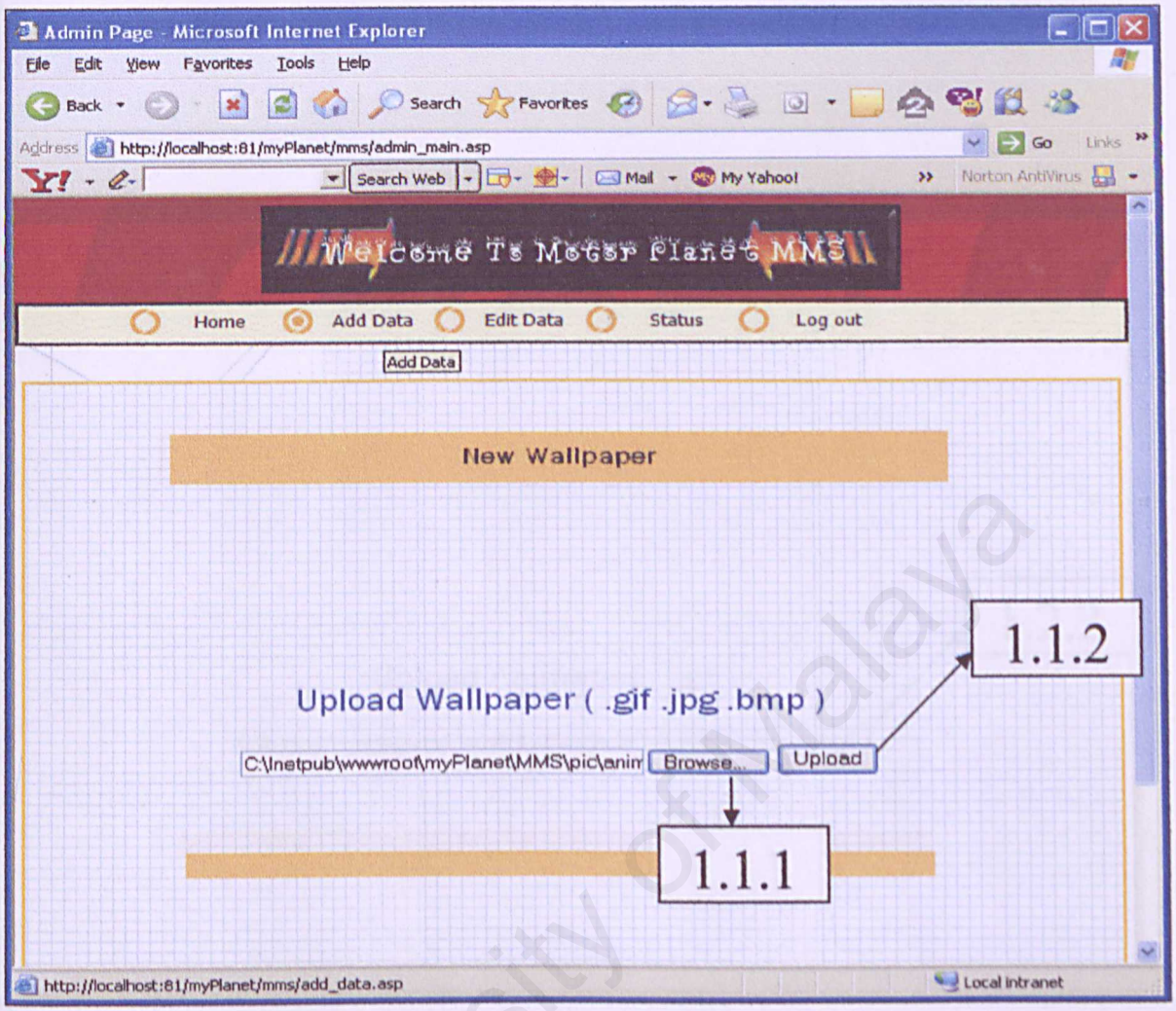


FIGURE 4: Add Wallpaper Process Screen

Descriptions of the Figure 4:

- Wallpaper image only support ***(.gif .jpg .bmp)*** files.

  1.1.1 Click Browse to upload image. ***(see Figure 6)***

  1.1.2 Click Upload button to save and enter data details. ***(see Figure 7)***

- Example : ***car_animated.jpg***

1.2. Upload Animation

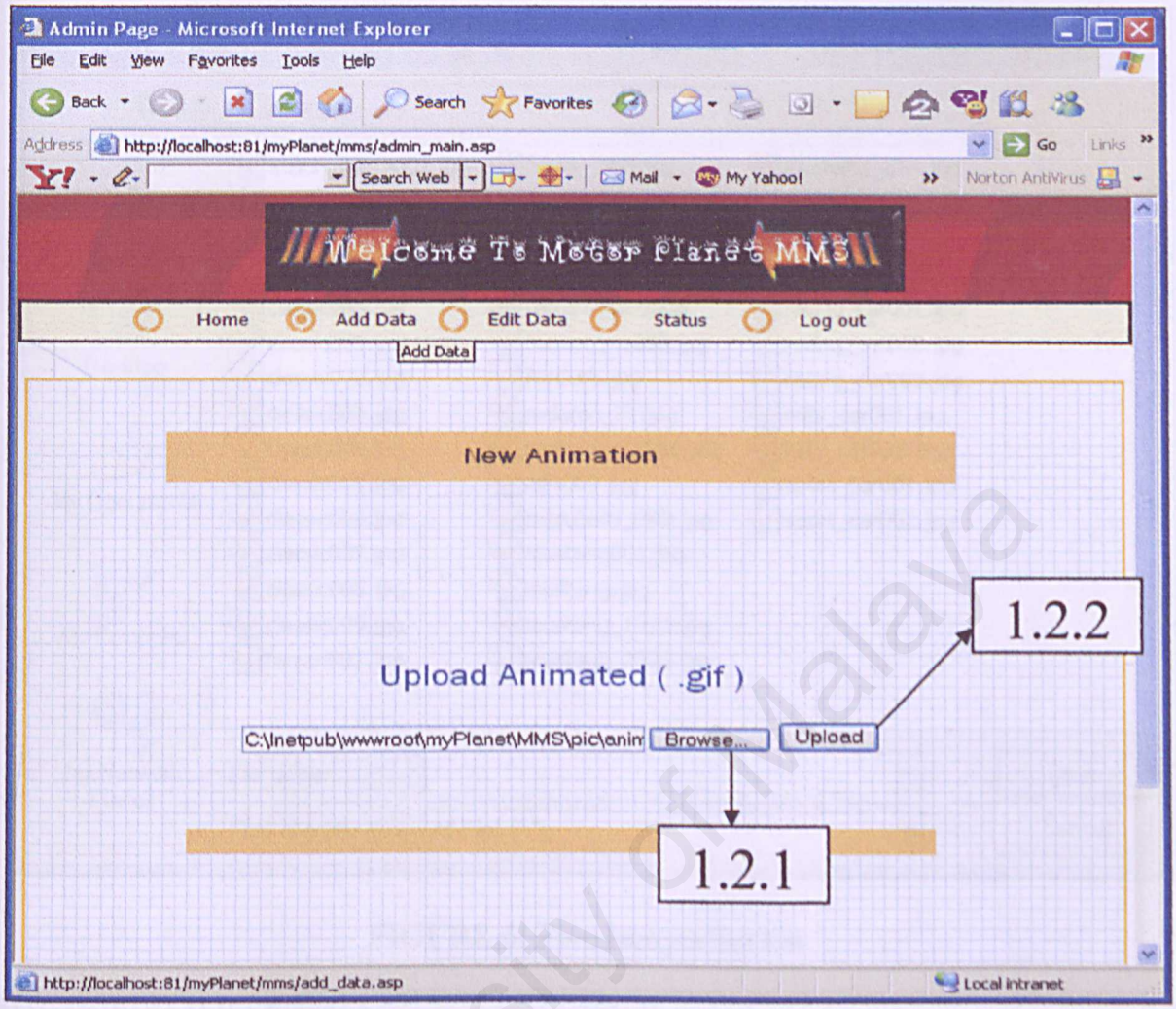


FIGURE 5: Upload Animations Process Screen

Descriptions of the Figure 5:

- Animated images only support ***(.gif)*** files.

  1.2.1 Click Browse to upload image. ***(see Figure 6)***

  1.2.2 Click Upload button to save and enter data details. ***(see Figure 7)***

- Example : ***car_animated.gif***

1.2.1 Choose File to Get Wallpaper and Animation Images

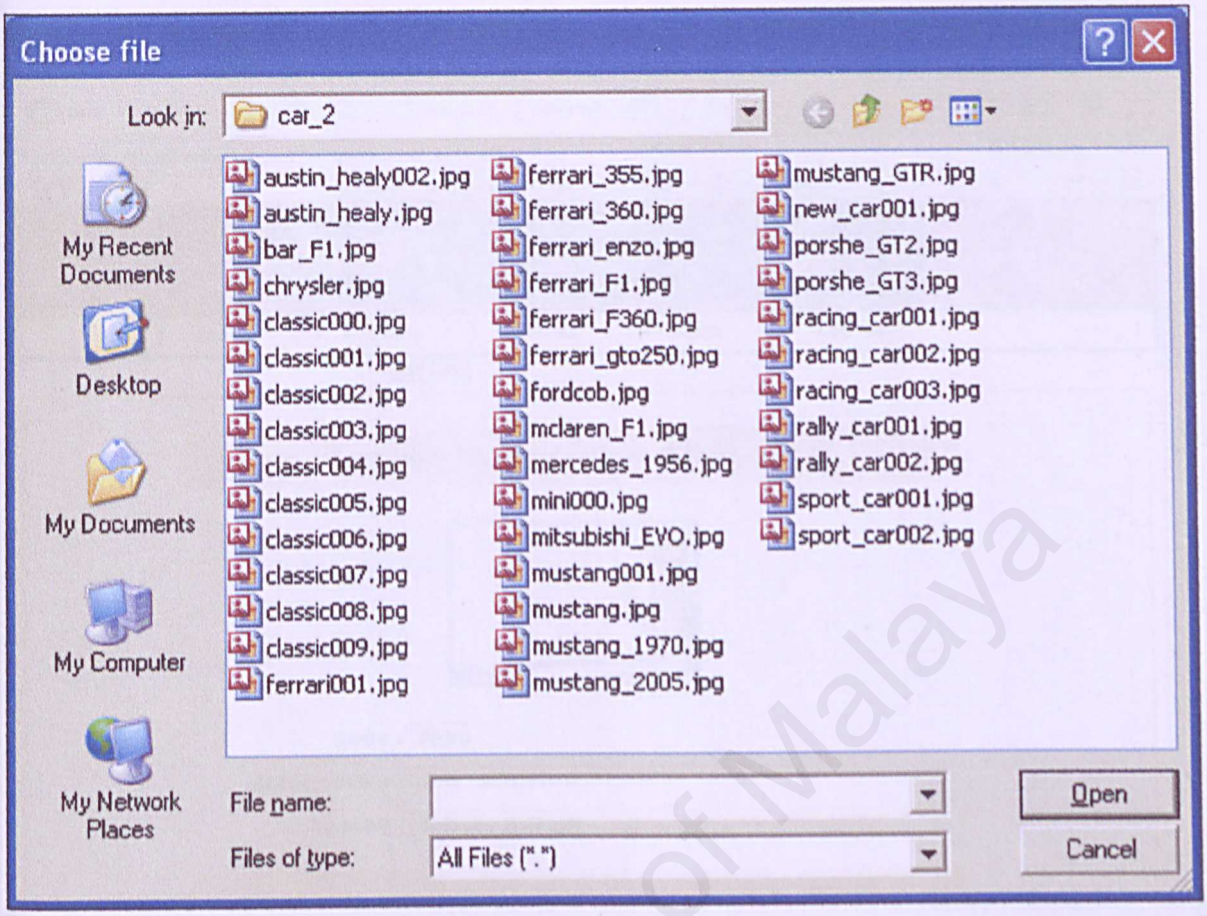


FIGURE 6: Fine Images Screen

Descriptions of the Figure 6:

- Select name file is like ***mustang.gif***
- Then click open to upload process.
- Fine wallpaper images or animations at any place on your computer.
- Click Open button and return to the previous page.

1.2.2 Add New Data Details *(from 1.1 and 1.2 Go to this form)*

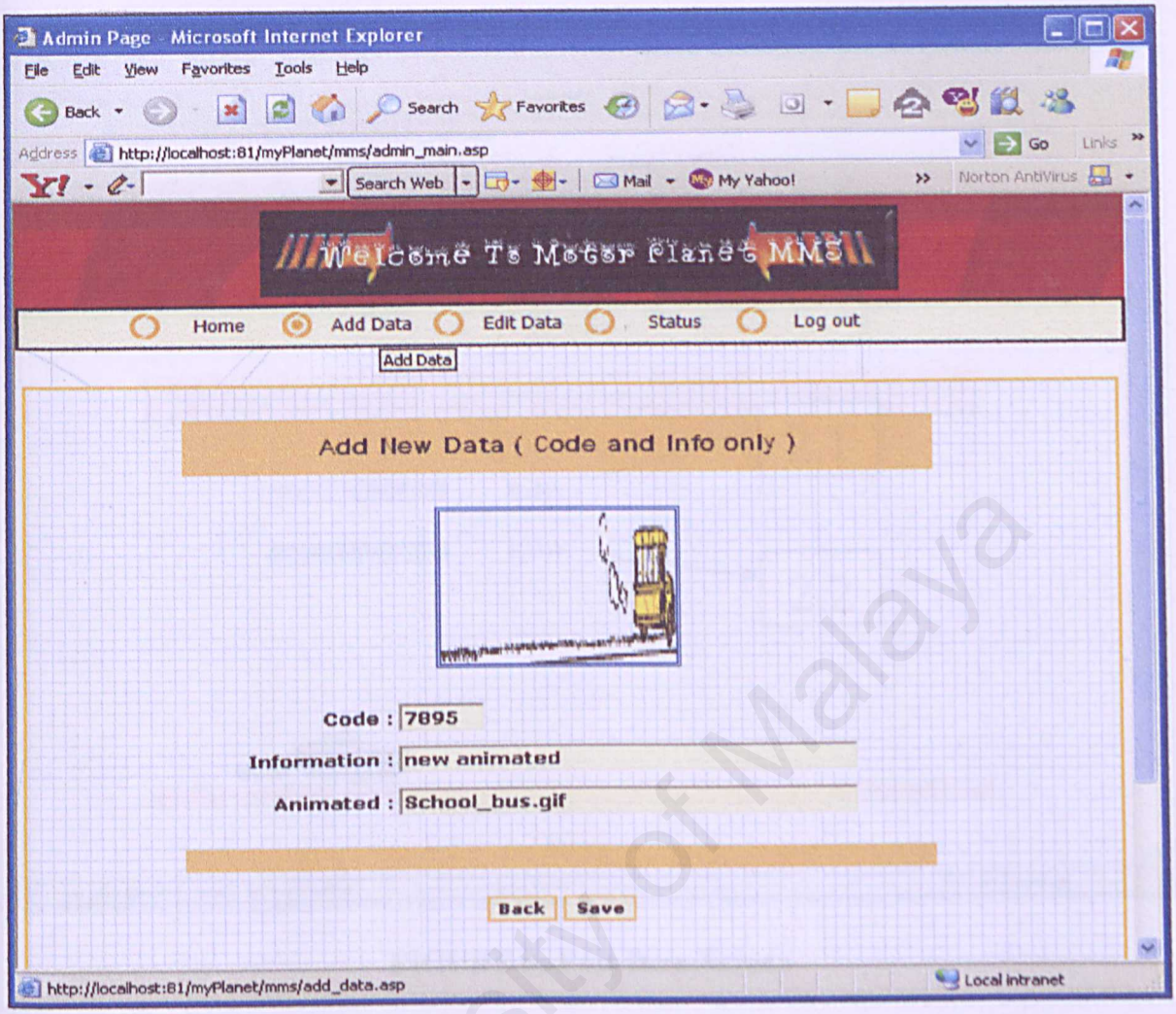


FIGURE 7: Add Data Process Screen

Descriptions of the Figure 7:

- In this form, admin can add code and info only because images cannot edit.
- Enter data at code field and information field.
- In Code field enter only maximum 5 characters. If enter over 5 character the add process can't be done.
- Click Save and new data is added to database.
- To see the result click at Status button.

2. Edit Data

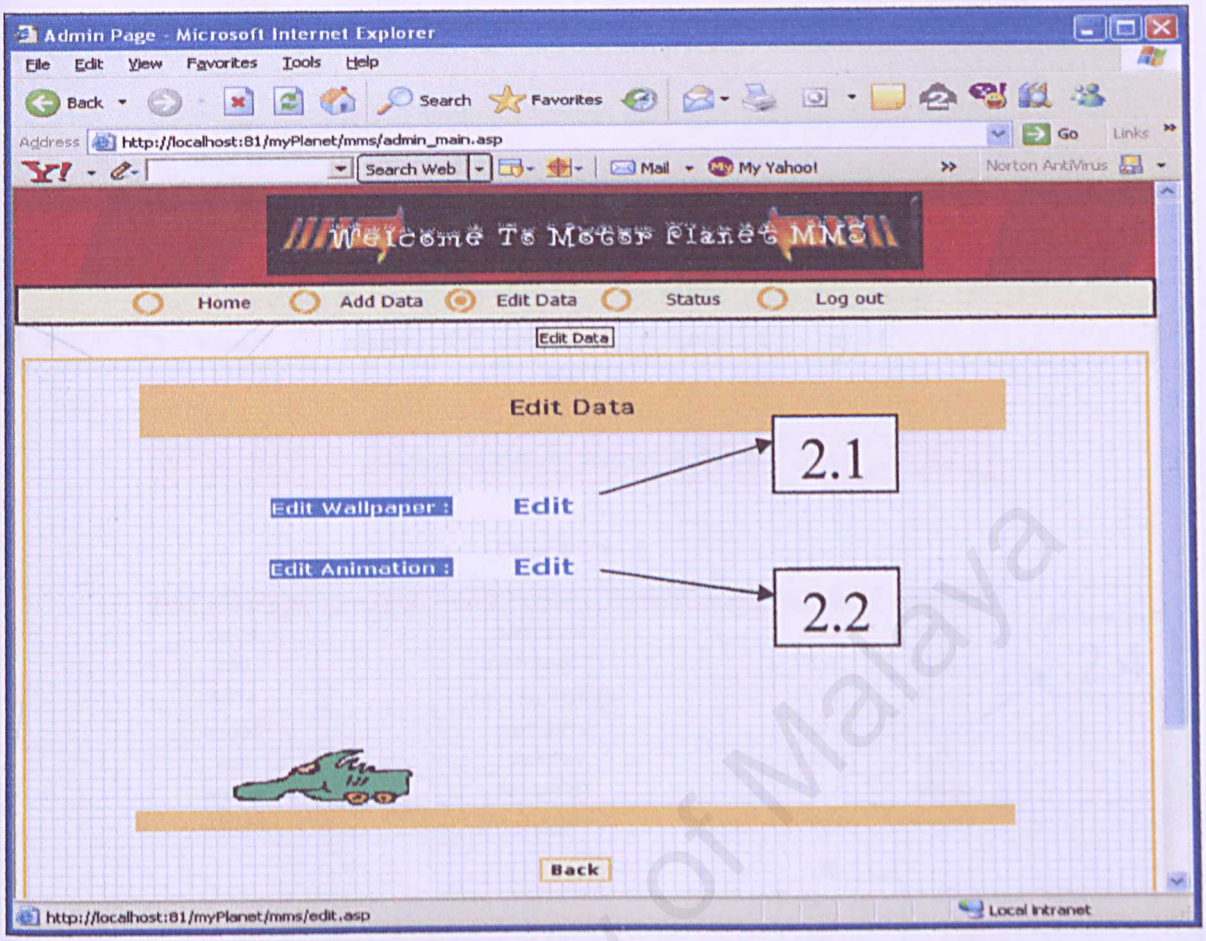


FIGURE 8: Edit Data Screen

Descriptions of the Figure 8:

- Edit data options :

  2.1 Click Edit to edit details, make changes or delete process for wallpaper.

  2.2 Click Edit to edit details, make changes or delete process for wallpaper.

- 2.1 And 2.2 is the same process but save in different database folder.
- See Figure 9.
- To see the result click at Status button.

Edit And Delete Option. ***(from 2.1 and 2.2 go to this form)***

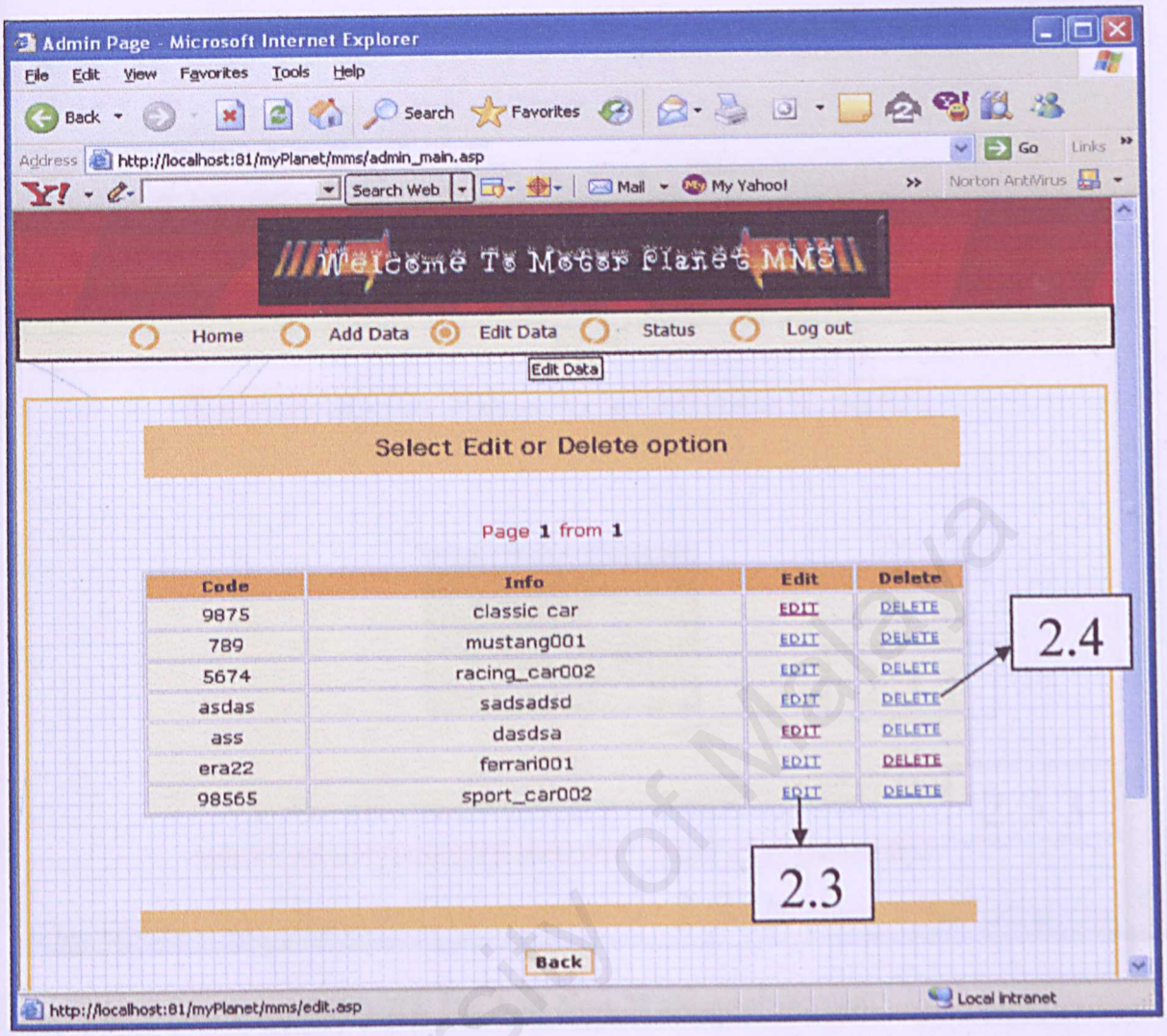


FIGURE 9: Edit Data Option Screen

Descriptions of the Figure 9:

- In this form admin can display a list, which contents a data details.
- Click or selected the process that admin want to do.

  2.3 Click Edit to edit data and changes images. ***(see Figure 10)***

  2.4 Click Delete to delete data at database memories.

- To see the result click at Status button.

Add new wallpaper ***(if selected edit wallpaper form)***

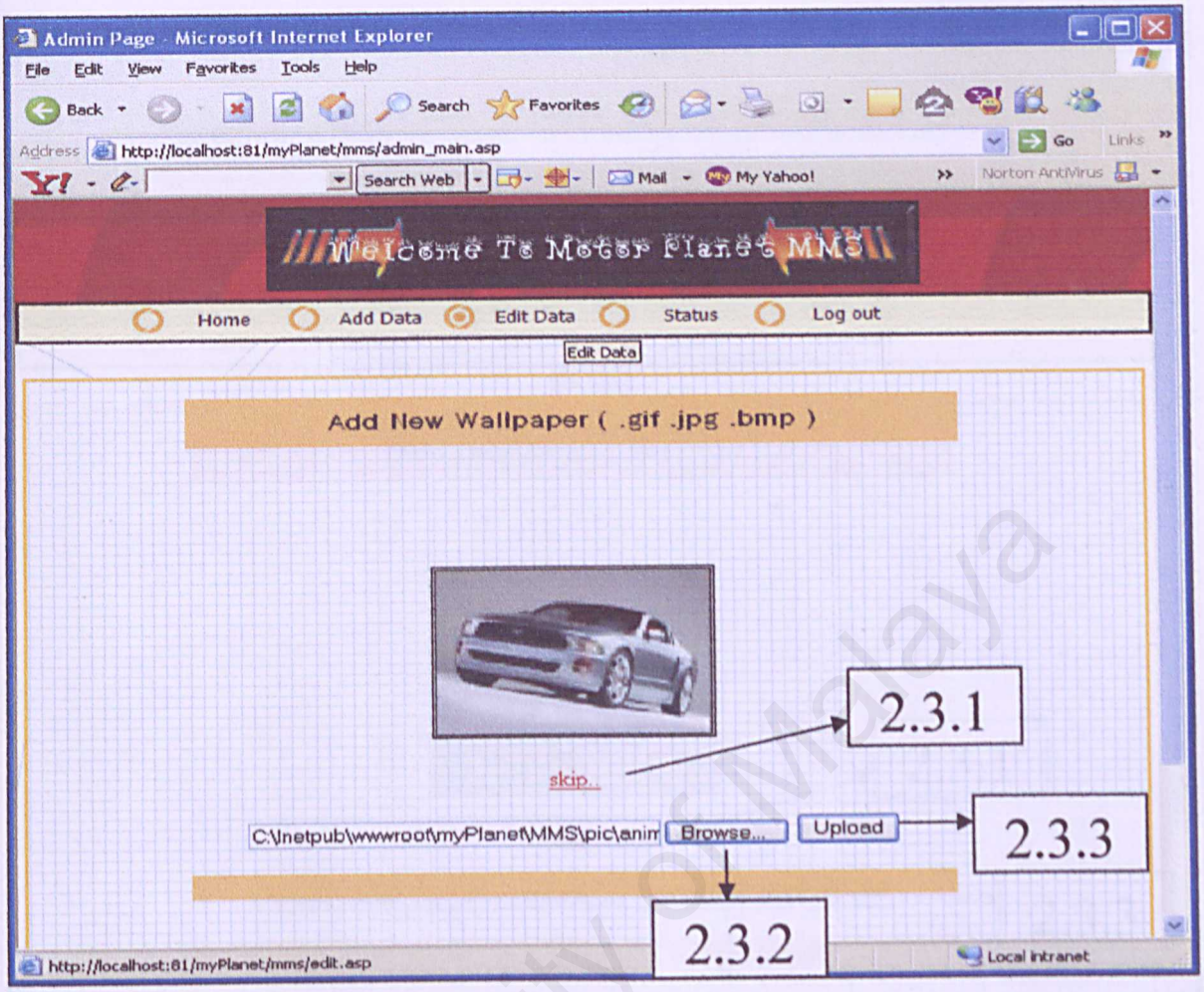


FIGURE 10: Add New Wallpaper Screen

Descriptions of the Figure 10:

- Wallpaper image only support ***(.gif .jpg .bmp)*** files.

  2.3.1 Click skip if use the same wallpaper image.

  2.3.2 Click Browse to upload new wallpaper image. ***(see Figure 6)***

  2.3.3 Click Upload button to save and edit data details. ***(see Figure 12)***

- Example : ***car_animated.jpg***

Add new animation ***(if selected edit animation form)***

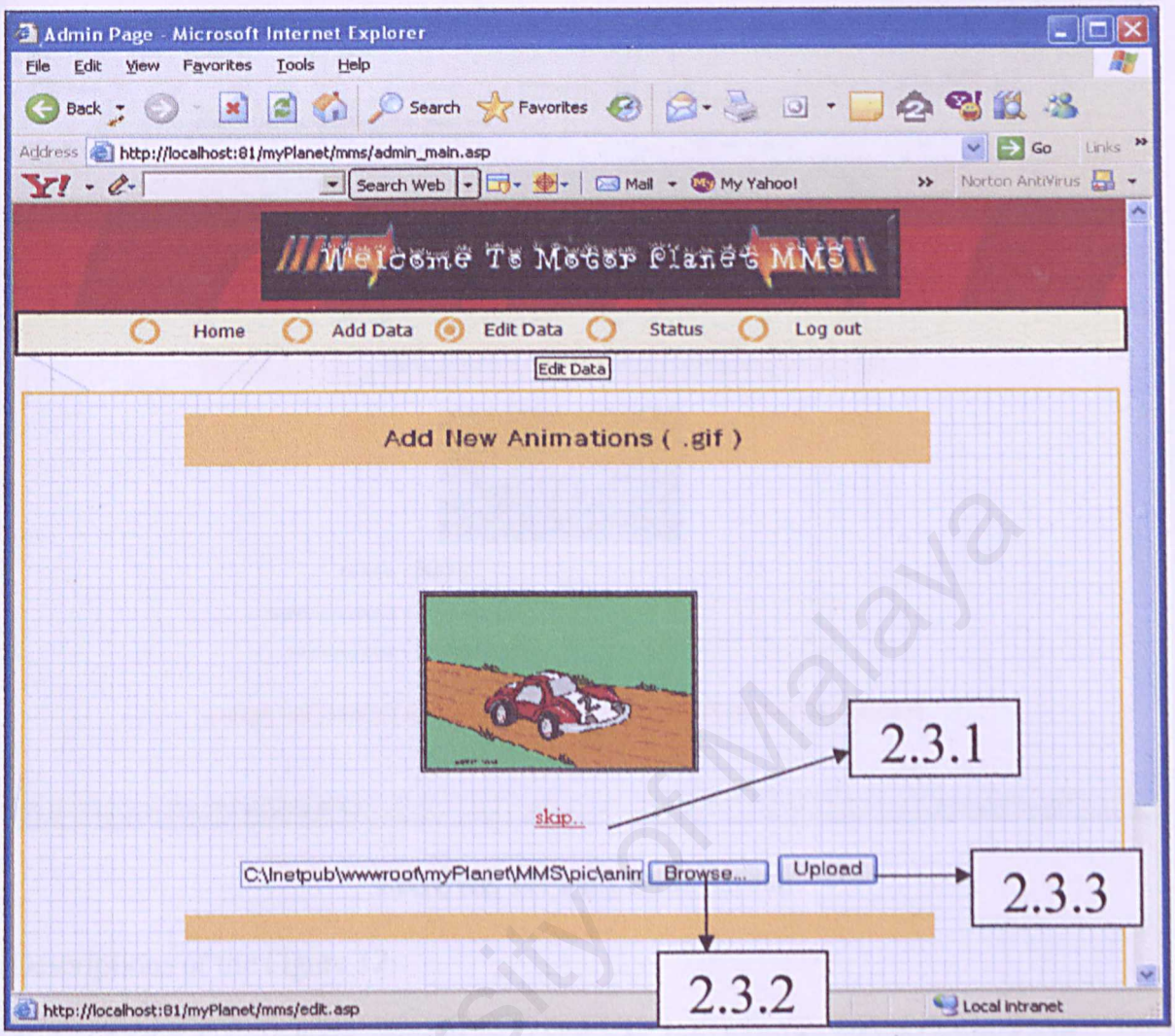


FIGURE 11: Add New Animation Option Screen

Descriptions of the Figure 11:

- Animated images only support ***(.gif)*** files.

  2.3.1 Click skip if use the same animation image.

  2.3.2 Click Browse to upload new animation image. ***(see Figure 6)***

  2.3.3 Click Upload button to save and edit data details. ***(see Figure 12)***

- Example : ***car_animated.jpg***

Edit data ***(same form use for edit wallpaper and edit animation)***

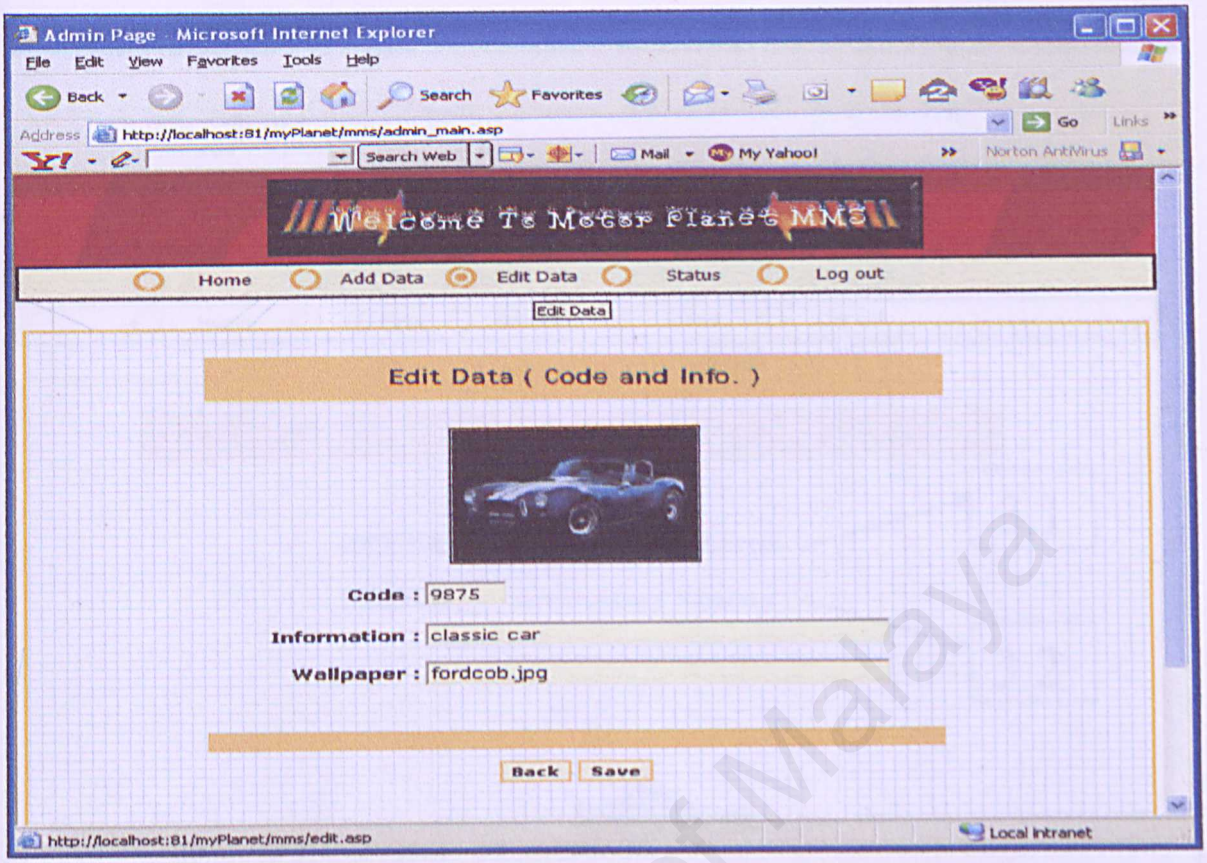


FIGURE 12: Edit Data Screen

Descriptions of the Figure 12:

- In this form, admin can edit code and info only because images cannot edit.
- Enter data at code field and information field.
- In Code field enter only maximum 5 characters. If enter over 5 character the add process can't be done.
- Click Save and the code and information changes save at database.
- To see the result click at Status button.

3. Status

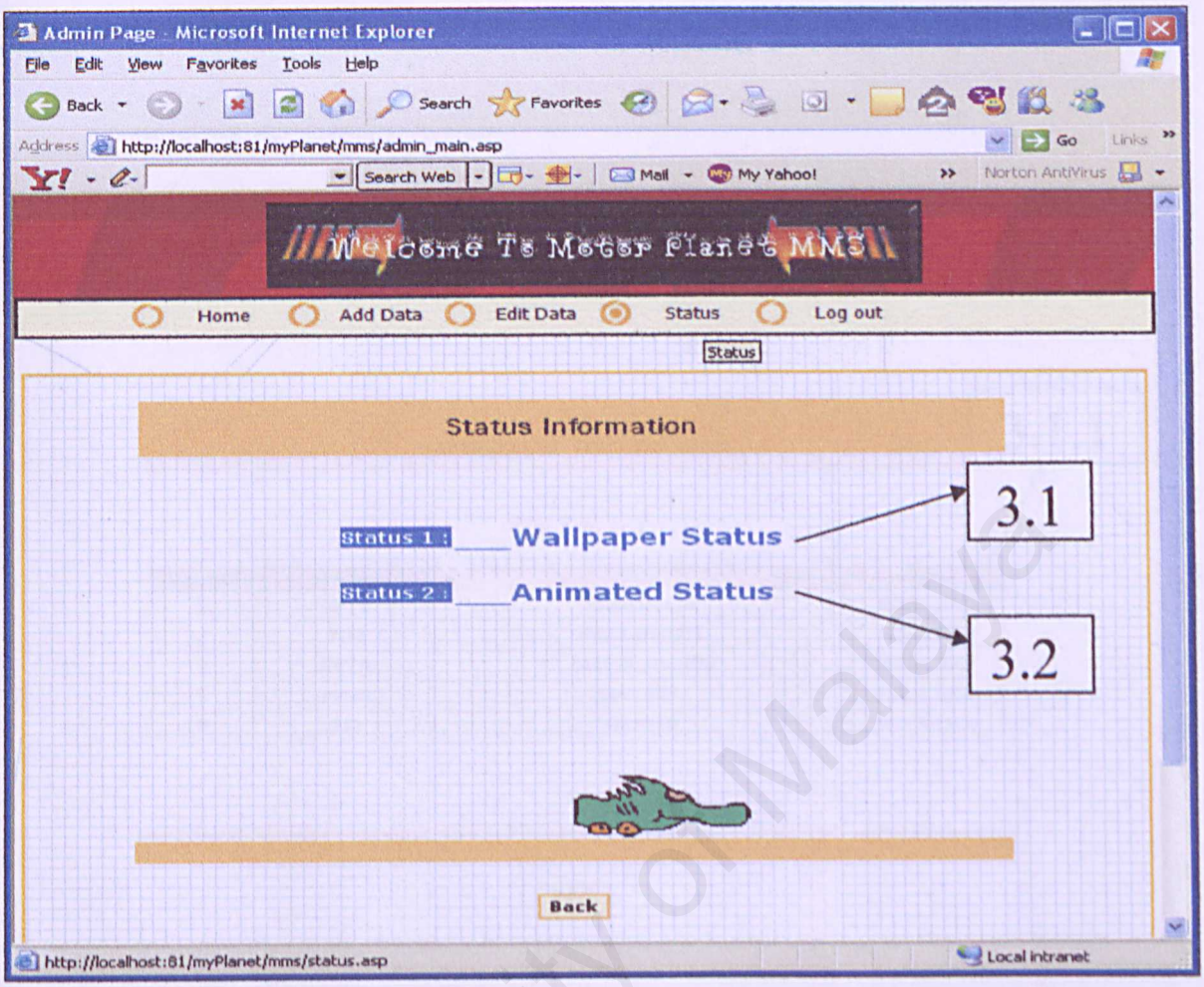


FIGURE 13: Status Screen

Descriptions of the Figure 13:

- In this form, all information details include add and edit.

  3.1 Click Wallpaper Status to see wallpaper data details.

  (see Figure 14) .

  3.2 Click Wallpaper Status to see wallpaper data details.

  (see Figure 15) .

- Also see the changes that made at edit data.

- See if add new data have made.

3.1 Wallpaper Status

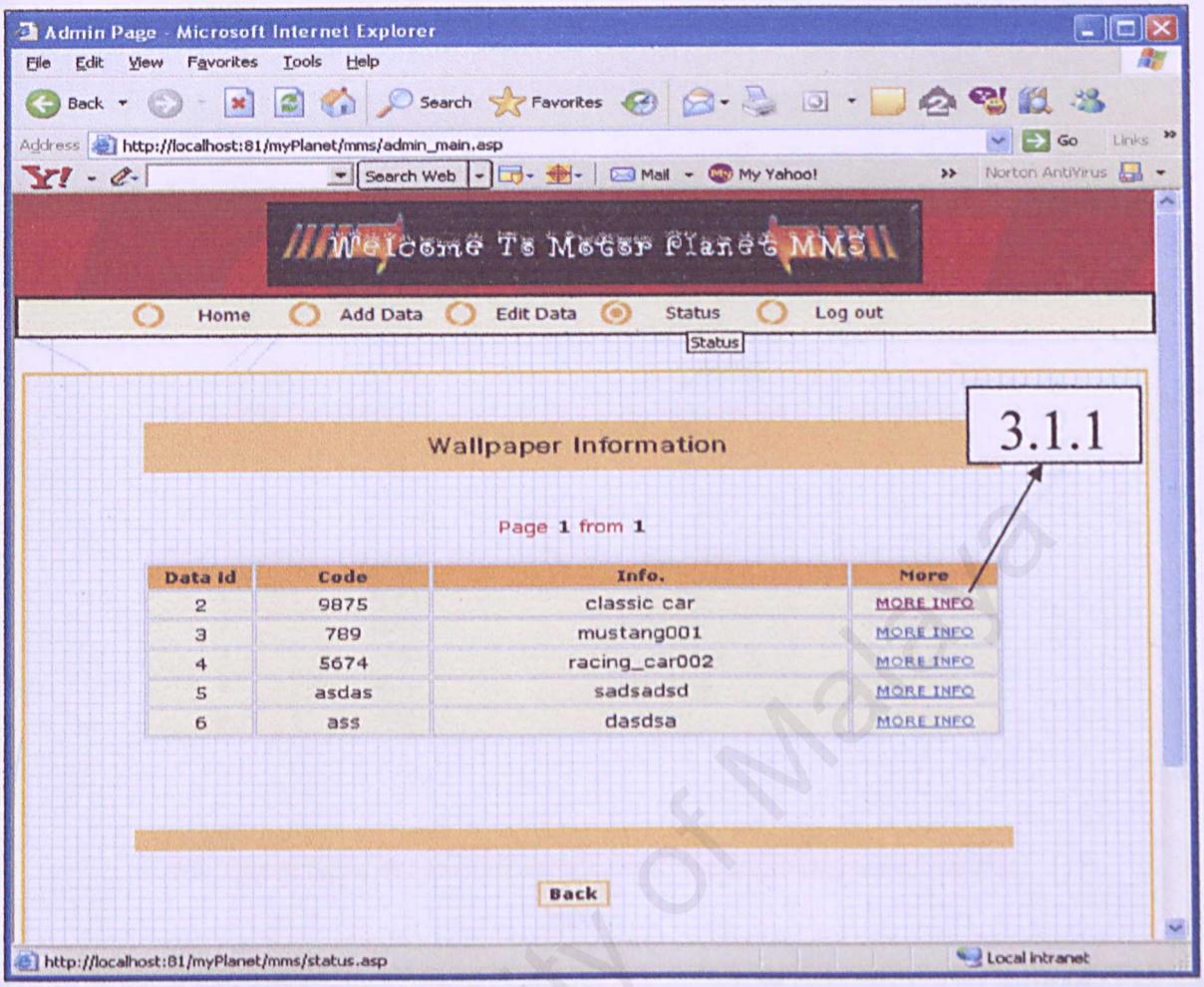


FIGURE 14: Status Screen

Descriptions of the Figure 14:

- All add and edit data display at this form.

  3.1.1 Click MORE INFO to see data details. ***(see Figure 16)***

- Data include data id, Code and information.

3.2 Animation Status

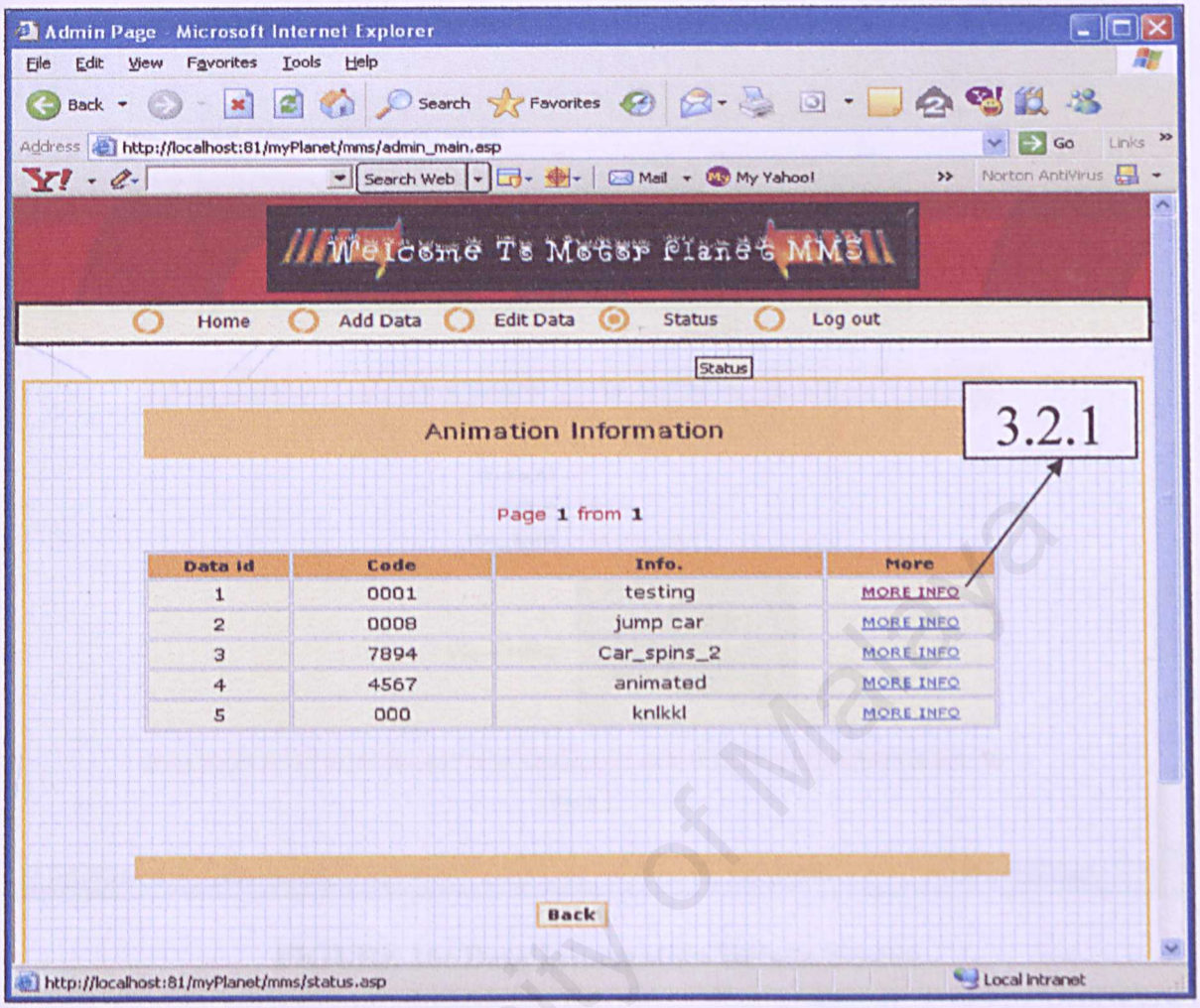


FIGURE 15: Status Screen

Descriptions of the Figure 15:

- All add data and edit data display at this form.

  3.2.1 Click MORE INFO to see data details. ***(see Figure 17)***

- Data include data id, Code and information.

3.1.1 Wallpaper Data Details

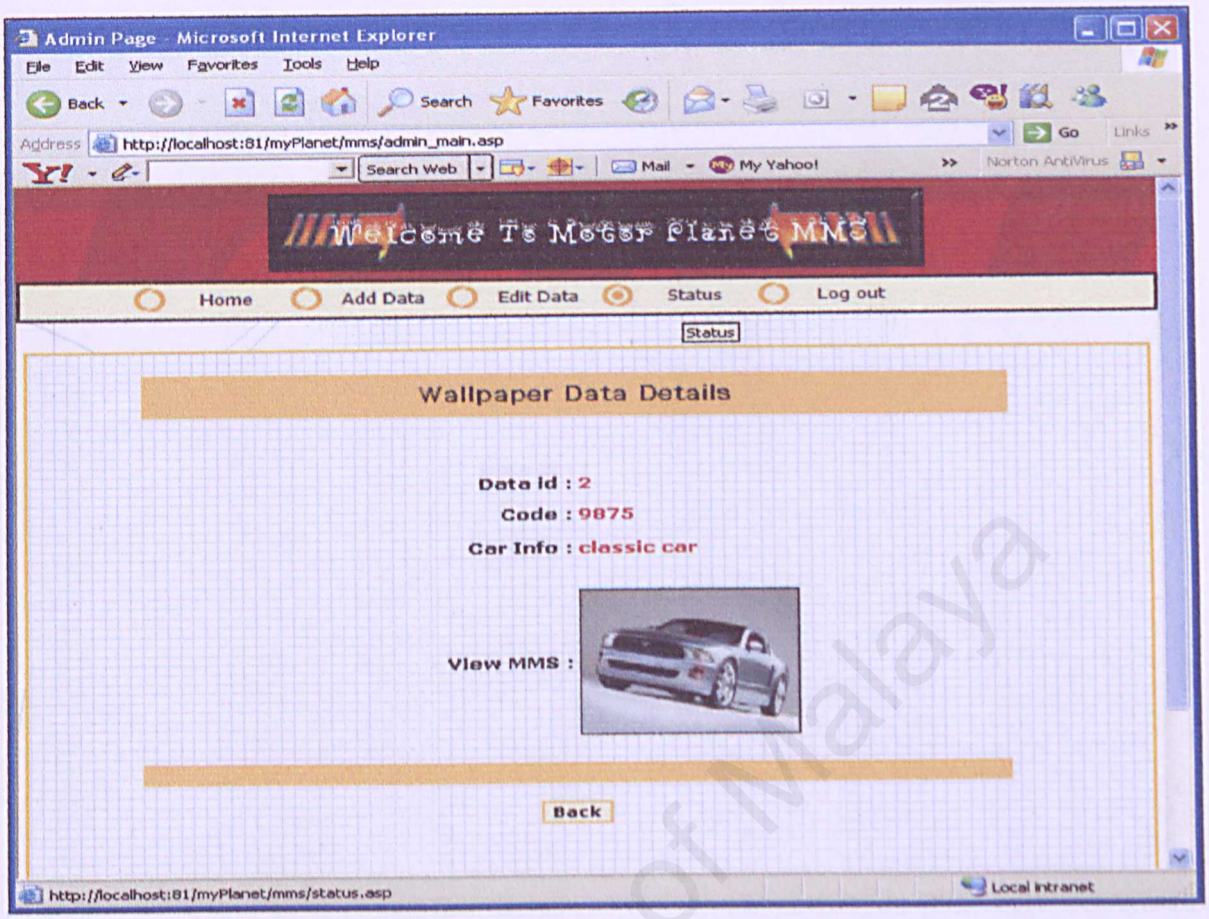


FIGURE 16: Data Information Details Screen

Descriptions of the Figure 16:

- All add data and edit data display at this form.
- Data include data id, code and information.
- Also view wallpaper image.

3.2.1 Animation Details

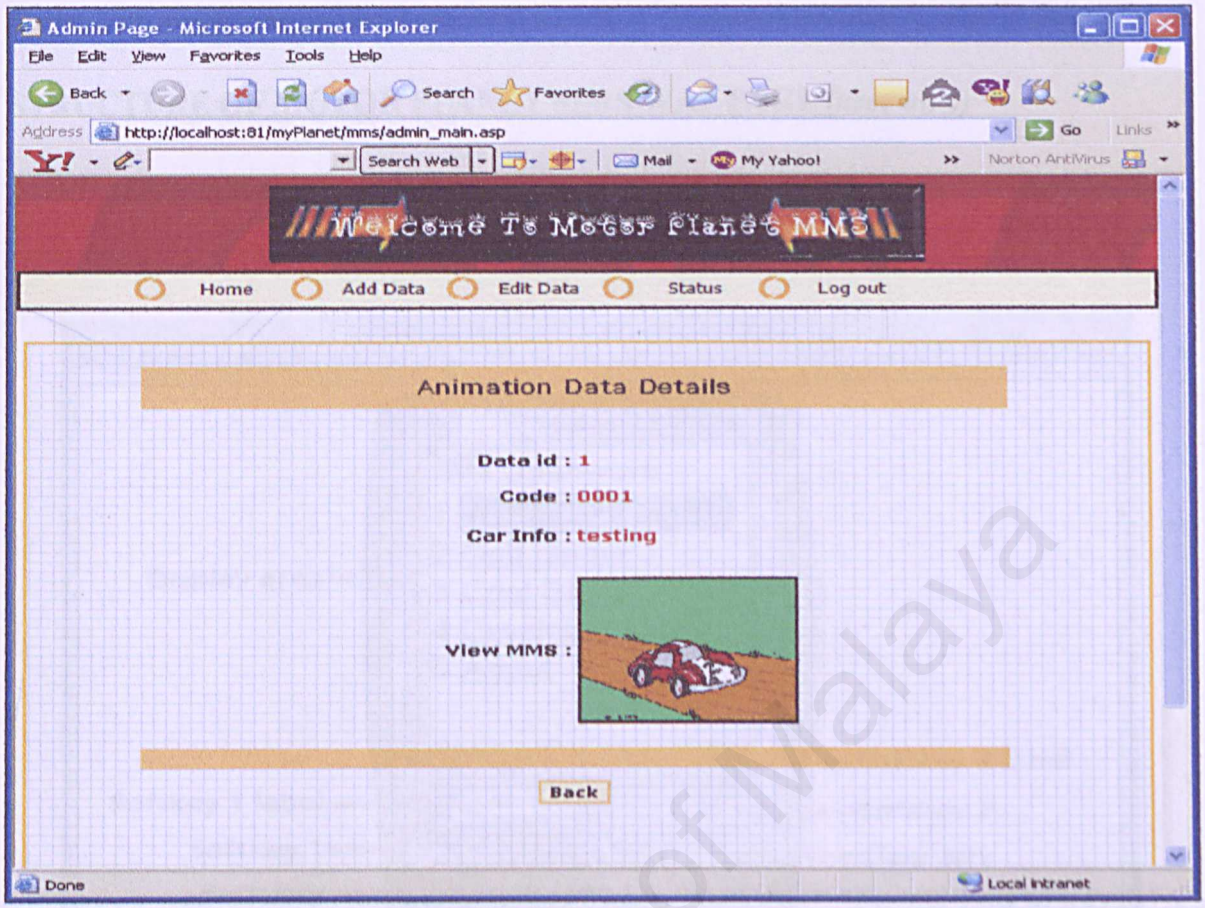


FIGURE 17: Data Information Details Screen

Descriptions of the Figure 17:

- All add data and edit data display at this form.
- Data include data id, code and information.
- Also view animation image.

USER MANUAL B

STRUCTURE OF MOTOR PLANET MMS WAP PAGE *(user only)*

OPENWAVE V7 SIMULATOR USER GUIDELINE.

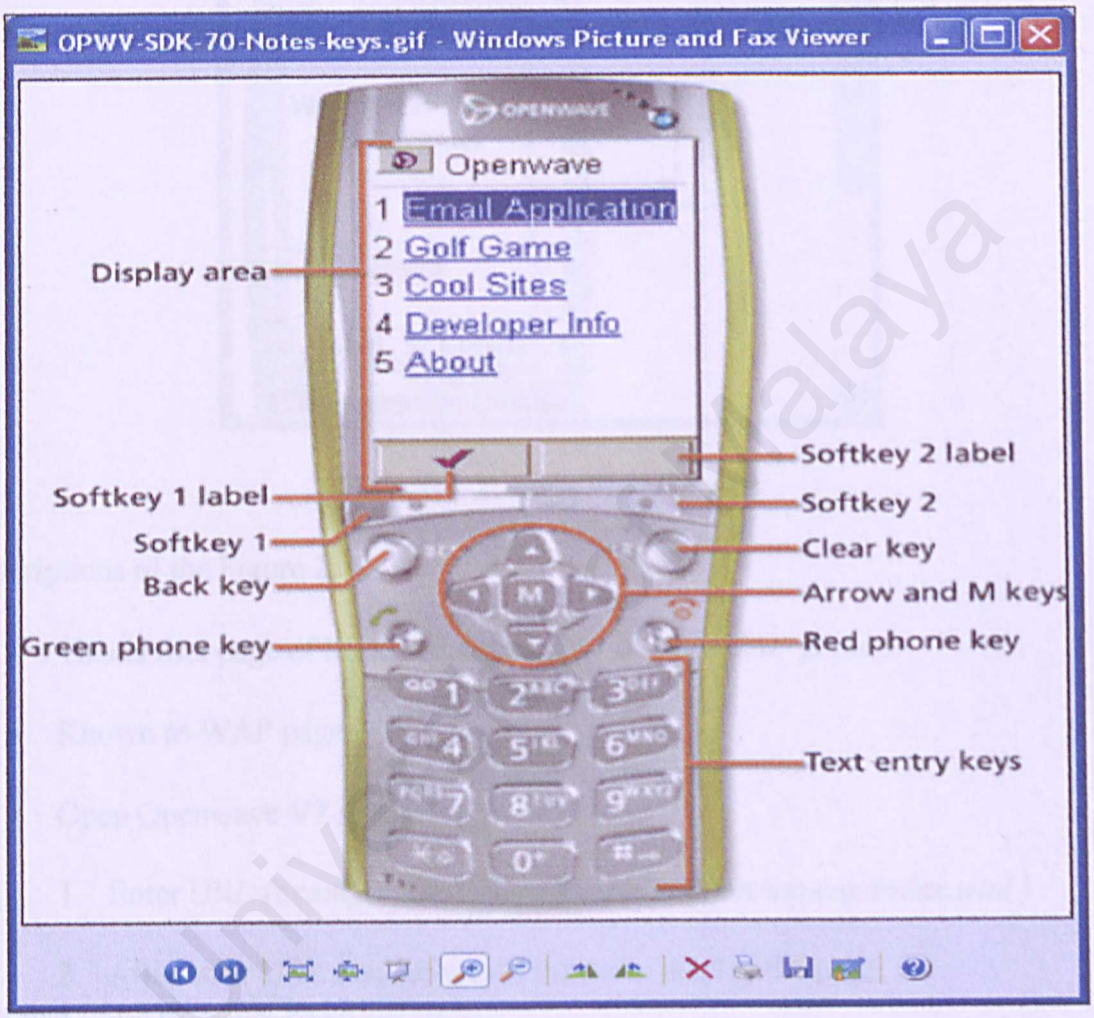


FIGURE 1: Hot keys screen

Descriptions of the Figure 1:

- This figure shows you what Openwave V7 simulator is.
- Describe the hot key same as real mobile phone.
- Functions are same as real mobile phone.

START OPENWAVE V7 SIMULATOR FIRST PAGE.

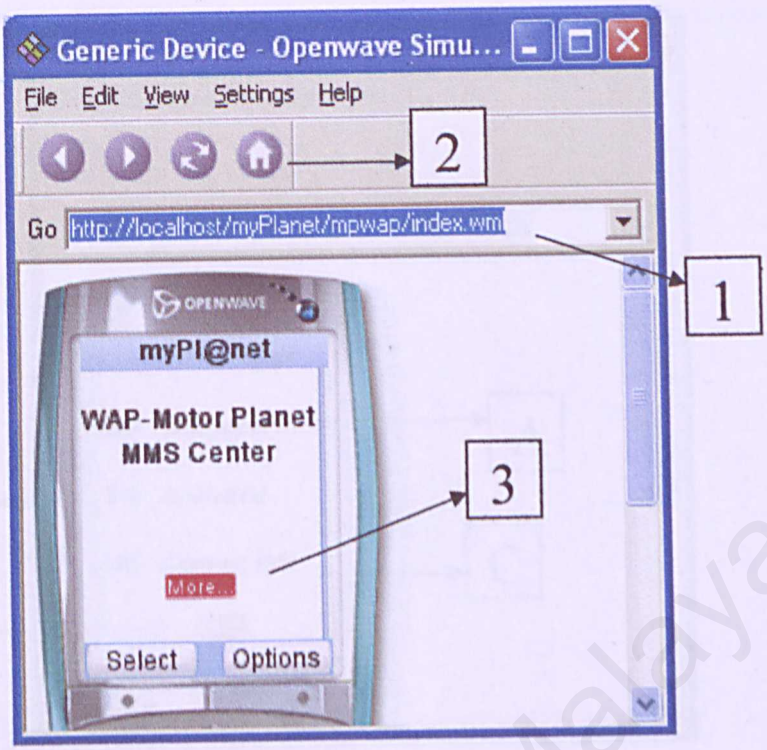


FIGURE 2: First Page Screen

Descriptions of the Figure 2:

- This is first page of Motor Planet MMS view in mobile phone.
- Known as WAP page.
- Open Openwave V7 simulator:
  1. Enter URL ***(example :http://localhost/myPlanet/mpwap/index.wml)***
  2. After enter URL click at reload button to display the page.
  3. Click Select to enter second page.***(see Figure 3)***

ENTER SECOND PAGE

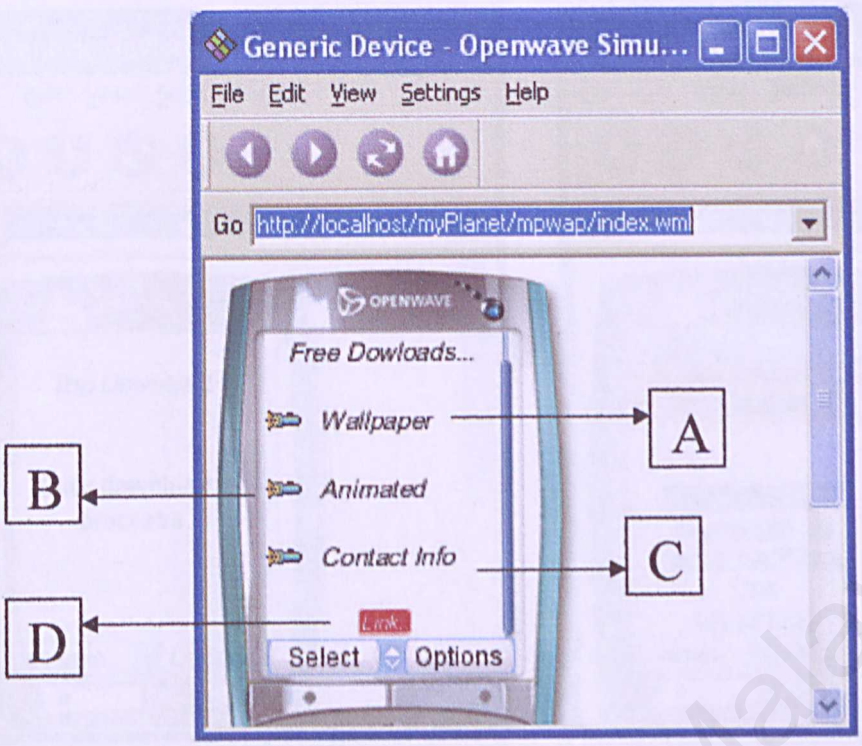


FIGURE 3: Second Page screen

Descriptions of the Figure 3:

- This is second page is an offer on Motor Planet MMS.
- Free downloads offer:
    A. Offer wallpaper downloads.
    B. Offer animated downloads.
    C. Contact info profile.
    D. Link to other related sites.
- Click Select to enter an offer.

A. Wallpaper Download

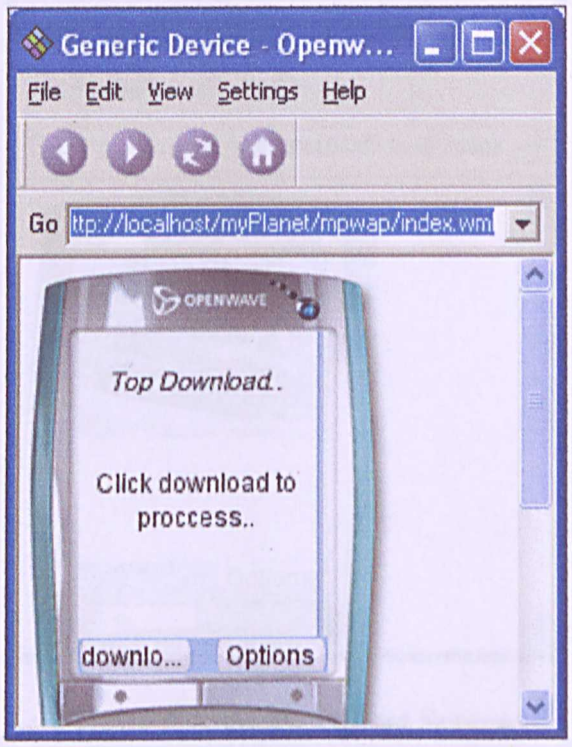


FIGURE 4: Download Screen

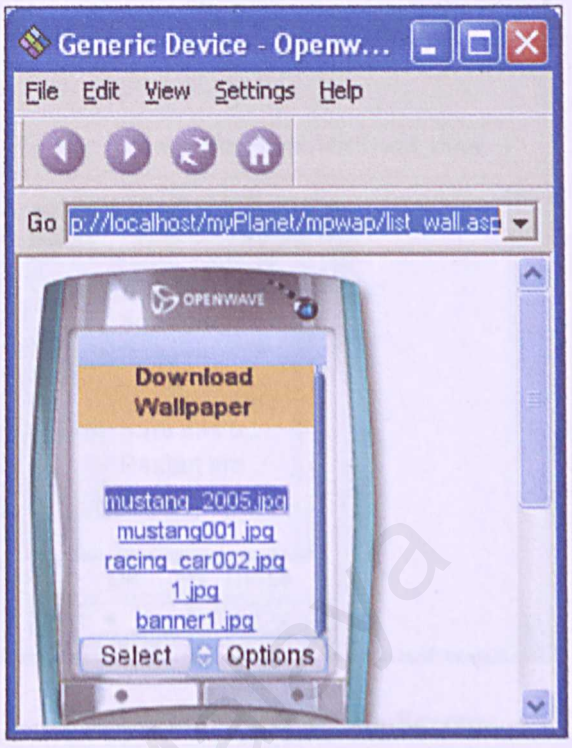


FIGURE 5: Wallpaper List Screen

Descriptions of the A ***(Steps):***

1. Figure 4 is download screen:
   - Click downloads and goes to find wallpaper images.
2. Figure 5 is list wallpaper to download:
   - Select wallpaper image you want and Click select then an object is shows. ***(see Figure 6)***

FIGURE 6: Show Object Screen

FIGURE 7: Save Items Screen

3. Figure 6 is showing you what object you select at Figure 5.
4. Figure 7 is to download and save item into your mobile phone.
5. Click ok to download image and save on your mobile phones.
6. Now your item is save at My Files on your phone.
7. To see an object click my Files and go to photo. ***(see Figure 8)***
8. Figure 8 is your phone profiles>Select>My Files>click Open.
9. Figure 9 is inside My Files>Select>Photos>click Open.
10. Figure 10 is Photos>Select>Image>click Open.
11. Figure 11 is to display image.

FIGURE 8: Home Screen

FIGURE 9: My Files Screen

FIGURE 10: Photos Screen

FIGURE 11: Image Viewer Screen

B. Animation Download

- Click Animated and follow the same steps at wallpaper download.

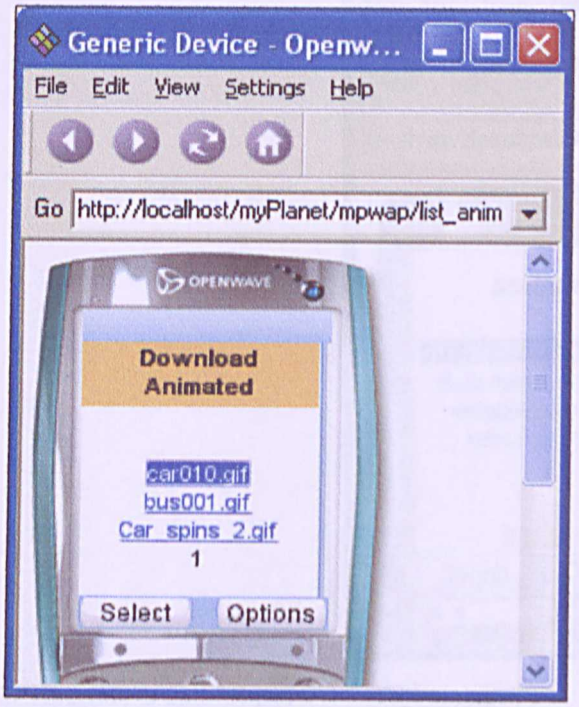


FIGURE 12: Animated List Screen

FIGURE 13: Show Object Screen

C. Contact Info *(see contact info profiles)*

FIGURE 14: Show Contact Info Screen

D. Link

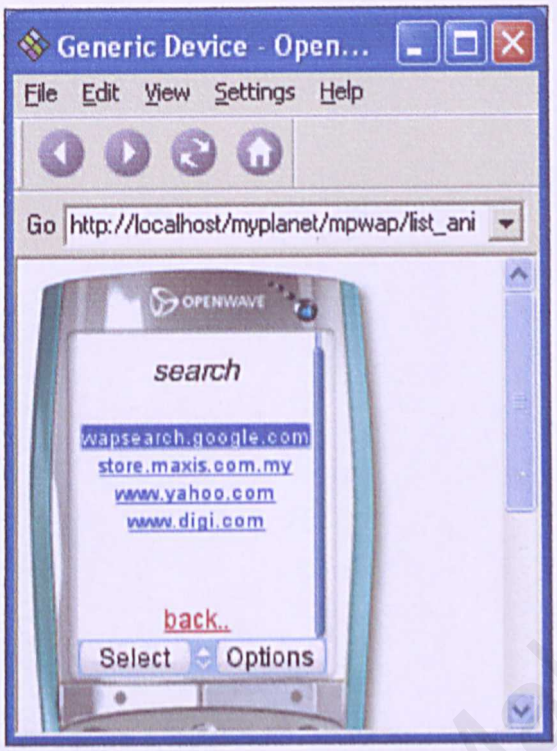


FIGURE 15: Link Screen

Descriptions of the B ***(Steps):***

- Choose the website your want to enter
- Click Select to enter the sites.
- Choose back and return to home page. ***(see Figure 2)***