



Database Driven News Online

by

Mr. Adisorn Ratanamanit

A Final Report of the Six-Credit Course
IC 6998 E-Commerce Practicum

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
in Internet and E-Commerce Technology
Assumption University

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Project Title Database Driven News Online

Name Mr. Adisorn Ratanamanit

Project Advisor A. Pornpong Vatanaromya

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
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(A. Pornpong Vatanaromya)
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(Prof. Dr. Srisakdi Charmonmar.)
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ABSTRACT

In the traditional news online will be presented, which is posted at the head office by the system administrator only. The result is the time delay, from the beginning as the news reporters must be on the site of events, either up-country or abroad, unit come back to the head office.

In this present day, the visitors who are the customers of the news online need the latest updated news before the other media such as television, radio etc. But the traditional method is not available for the news reporters to update and post the news on the site of events as the same time as the events happen. They must have delay in time and expense to come back to the head office and give the updated news to the system administrator of website to manage it.

This subject of the Database Driven News Online is to create the program as a tool for the news reporters to update the news online on the sites of events. It is the solution tool to save the time delay for uploading the updated news and less expenditure. This tool is the concept of internet marketing in marketing communication for the news reporters to update the latest news for the visitors. While this tool also have the search engine system to search the interesting keywords easier and quicker in internet that the news reporters can access it and can manage the update news by themselves, without the HTML and FTP or any the Database Management System knowledge and the latest news is automatically saved to the web server while the system administrator can also manage the system as Administrator Center from the head office.

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I. INTRODUCTION

1.1 Background of the Project

At present, a faster and more effective way of communication and information conveyance to both internal and external organization is becoming more important. It has become one of the main factors in deciding the success or failure of a particular organization, especially in the world of internet which is very competitive. By providing news and information system to the visitors might probably become the main image to a certain organization, or as the information in the decision making on implementation of a certain organization.

One example is when a large-scale organization with branch offices scattered in the country or even in the world. When using the conventional method of communication in distribute the information to all people of the organization, usually through hard copies such as documentation which might be too troublesome by circulation from the head office to the branches of the organization. However, this way is slow and costly in the delivery, copying and filing. While some information which is origin issue from the branch offices has to be firstly approved by the head office before going to other branches; this way of communication will further delay the process and is more costly.

In certain cases, an organization might use the internet as a way of information system to and communication. However, it was found that most people, who concerned were graduated from courses such as humanities, social science, economics etc. They have not much knowledge about information system on the internet. They are just the end users who can only use the browser in visiting various web sites. The lack of skills and knowledge in presenting information system on the internet were due to the lack of

knowledge in writing homepage languages and/or lack of knowledge of HTML and other languages to the web server. Only a few portion of the people being interviewed were able to write web page and had used the FTP program before for files upload and download.

Some of them were able to write web page on their own in an easy manner. If a complex web page is required to be created, it is necessary to send the related information to the IT department in the organization which is time delay and costly. To train the people in making their own web page, is doubtful after the training, as they are still unable to make their own web page. They might still supply the material to the IT department as usual.

From the questionnaires, it was also found out that the frequency in using the web browser for searching on the internet is:

Almost everyday	84.9%
2-3 times a week	13.2%
2-3 times a month	1.9%
Less than 10 times a year	0%

84.9% of the persons have the knowledge and capability of using web browser. Hence, it created the idea that we could develop a system enabling the persons to convey the information through the web based application, without the necessity of learning in writing web page. The requirement of basic knowledge in using web browser which most related persons are capable, will bring more benefit to the organizations.

1.2 Objectives of the Project

The main objective of this project is to create the tool of information system that the news reporters are able to present and modify the news online by themselves,

without the necessity on write HTML and FTP files of the web server through the web based application. On the other hand, the system administrator is able to manage the various databases of the information system directly through the web page while the traditional method must manage and post the update information at the head office.

It is anticipated that this would be helpful to the organizations in upload the information in a quicker way while the cost is reduced. This is due to the people can submit the information instantly on the internet, no matter of where he is. As long as the internet and web browser is available, the information could be supplied instantly. It is not necessary to have much knowledge in writing a web page.

1.3 Scope of the Project

The development of Database Driven News Online consists of:

- (1) The development of database system in the collection of data and information which were being posted from the web site.
- (2) The development of web application so that the users are able to post the data and information through the web site and write down the data and information in the web site directly.
- (3) The development of search engine for the interested key word to search for data and information.
- (4) The development of security system for editing and posting.
- (5) The development of system to allow the system administrator to improve and edit information already posted.
- (6) The development of system to enable the system administrator to manage the database through the web page.

1.4 Anticipated Benefits

This project will be concentrated in the news online on the internet. Hence, they are 4 parties who concerned as below:

- 1) The system administrator who will be control all the administration of this web site.
- 2) The editors who is the manager of all of the news reporters of the organization and manage the news of the news online on public
- 3) The news reporters who are the people in the organization of news online. They will be updated and posted the news on web site.
- 4) The visitors who are the customers of the news online of the web site to consume the information on the internet.

All the benefits of this project are following:

- (1) The news reporters are able to modify or delete the news online through the web page.
- (2) The editors are able to improve and edit the news online and manage the web site, develop or delete the unsuitable news of the news reporters through the web page.
- (3) The system administrator is able to manage the various database systems through the web page.
- (4) The visitors are able to view the latest news at any time, and to search for information by topics and/or by sections interested.
- (5) This system assists in cost reduction and time saving in terms of data management and updated news.
- (6) This system will bring satisfaction to both the visitors as well as the news reporters, who could convey the news in a more convenient and faster manner.

II. METHOD OF DEVELOPING DATABASE DRIVEN NEWS ONLINE

2.1 Existing Technology in Developing News Online

A web site collects all the data and information documents and multimedia which publicized on the internet network. A web site consists of the main page or index which shows the directions to link other documents in the web site, this acts as the front door of a house, thus called the home page. The other page in the web site are called the web page. In the initial stages of the internet, web sites were built in a simple way, being restricted by various limitations at that time. In later stage; with the development of related technologies on the internet, the past limitations has been gone. More choices were available in building up to web sites, which becomes more flexible. The type of information to be presented in a web page is no longer limited to text alone, but in terms of graphics, voice, motion pictures or video too. Further, the information in the web page is able to change according to the actual data existing inside the system at a particular time. This enables the visitors to get the correct information and news in a quicker manner. From the way various web sites present and manage information and data within the web sites, the styles of various web sites on the internet's network could be divided further. The web pages could be divided into two groups.

2.1.1 Static Web Page

The Thai news web sites such as the Thairath, Matichon, Daily News, as shown in Figure 2.1 has not arranged all the news in a systematic manner. All the news were being divided by the published dates, or merely divided in category terms of the newspaper's individual pages, similar to the news paper, and no search engine is present. This has caused difficulty in searching for news and information being published before. Most webpages are static web pages

The main characteristic of this type of web page is; the contents of a static web page will not change until it is being amended by system administrator in head office, or not able to change the contents automatically. It is a basic web page being built by HTML file and the news online being buried together with the HTML code, causing it difficult to alter the web page. Even just a little alteration of the news information would need a continuous update from the system administrator. This could be classified into two types:

- (1) A web page which will not have any update to the information. This type of web page has static information which would not change automatically. Its construction is easy. The system administrator does not need to have much knowledge in IT and programming, as long as he has the knowledge about HTML language, that is enough.
- (2) A web page which will not change in data, but have fill up form exists. This type of web page is quite similar to the previously mentioned type. The only difference is, this type of web page would have a form for the collection of various information from the visitors. This type of web page is not being considered a software or web application because there is no feedback from the web page, due to the information being filled up in the form by the visitors would not be analyzed and feedback to the visitors. This types of web sites are look like publications. If certain data edit or additions were to be made upon the web page by the programs or software which acts as a helping tool would become necessary to edit the original web page.

2.1.2 Dynamic Web Page

Foreign news web sites such as CNN or BBC has group news classifications and search engines which assist in searching the required information easily. An example of the dynamic web page is shown in Figure 2.2 This type of web page might also be called Database Driven Web Site as which contain information which are able to change automatically inside the web page. Most are having classifications of various information into the database and programs are being written up to display these collected information. The information being displayed are always the most favorites and updated. Any modification of the information will not affect the main structure of the web page, but only affect the internal information. This could be divided into two types, according to the application tool in their web sites.

- (1) A web page which receives and transmits information and interactive actions. The application of this type of web page relies on a database of various information, which is being used as a background support for the display on the web page. This enables the visitors to communicate in a interactive box with the web site, as the visitors might request various information needed through the blank form in the web page.
- (2) A web site which keeps changing according to the visitors. These are mostly specific application web sites for response to the news reporters or visitors who need to change the news of presentation of the information really needed. In the alteration of the style of presentation of the information, the user has to save the information of the style which needs to be recorded in the database. This type of web sites are usually being classified as software instead of publication.

CNN.com - Microsoft Internet Explorer

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Figure 2.2. The International News Web Site of CNN.

This type of web site has the nature of a mixture of multimedia publication and software. The creation of this type of web site will have to rely on the system administrator who has the knowledge of writing programs to develop it. There are quite a few programming languages available for selection in building this web site, such as ASP (Active Server Page), PHP (Professional Home Page) or Perl. It is necessary to have the ability in writing codes by various Script languages in the web page too, such as VBScript, JavaScript, Jscript or Perl Script, in order to alter the contents or style of the presentation. Apart from the specific type of application mentioned above, this type of dynamic web page could generally be divided into 3 groups according to the estimated outcome.

- (1) The coded type is being interpreted at the browser of client-side script, which the visitors of the web site are able to see the source codes, because this is being interpreted at the browser. The outcome is mostly related to the DHTML (Dynamic HTML) technology, which helps in the creation of a tricky and attractive web page in communication with the user, both the news reporters and their editor. The basic principle of application of DHTML is related to the application of the object, collection, property, method and event. The DHTML will bring in a set of various objects and collections which are mutually related, and this is the DOM (Document Object Model). DHTML has 5 advantages.

- (a) Dynamic Styles applies the ability of DHTML to assist in changing the styles of result presentation for the elements of the web page.
- (b) Dynamic Positioning applies the ability of DHTML to assist in changing the position of the elements of the web page.

- (c) Dynamic Content applies the ability of DHTML to assist in changing the content and elements of the web page.
 - (d) Data Binding enables the users, both the news reporters and their editor, to search for information, changing elements and getting the best results without the necessity of returning back to the web server.
 - (e) Downloadable Fonts allow the news reports to choose fonts that are needed and loaded into the web page in order to make presentations according to the news reporters requirement.
- (2) For the coded types which were being interpreted in the web server as Server-Side Script, in this respect, the visitors would not see the Source Code. This is because the related codes were being interpreted in the web server before sending the results as Stream HTML together with the Client-Side Script to the browser.
- The benefits and limitations of both the Client-Side and Server-Side on comparison could be concluded in general as follows:
- (1) It is necessary to let the application work together with other applications such as the database, the Server-Side Script would be more convenient.
 - (2) The news reporters would not see the source code at Server-Side Script, enabling the terms and conditions of business or various functions being kept in confidence.
 - (3) The codes to contacting with the news reporters, such as the building of menus, using the Client-Side Script would be faster because the codes are found in the browser, and is not necessary to contact the web server as in the case of Server-Side Script application.

- (4) The writing of Client-Side Script helps in reducing the work burden of the web server, thus being able to absorb the increased applications.

2.2 Necessary Things in Designing Web Application

With the increasing ability of internet and technology, the evolution of software and various tools has been developed rapidly in response to the development of the web application, which means any of the job systems created and being stored in the web server, and being called up through the browser programs whenever it is needed. In general, the basic design of web application is quite similar to the application development of distributed application type, or the type of Multi-tiers n-Tiers or 3-Tiers Application. On the other hand, this increase in ability has caused the users to expect a better performance from the system, for a better quality of service in response to requirement. In this system development, the system developer should consider the following:

- (1) Performance, as related to the measurement of performance according to a determined standard, and the users' expectation regarding to the system's performance.
- (2) Reliability, as related to the reliability of every element in the system, to consider if any error or damage exists, and to what extent.
- (3) Availability, as related to the duration of application of the system, including the external effect such as the retardation of the internet in general, or the retardation of the internet service provider.
- (4) Scalability, as related to the system's ability in accepting the increased amount of work by increasing the resources or accessories, but not necessary changing the system's basic design.

- (5) Security, as related to the system's security as well as the system's ability in controlling and system checking.
- (6) Manageability, as related to the difficulty in following and control, the anticipation, the performance and defects of the system, the difficulty in changing the control and the controlling of system from other areas.
- (7) Accessibility from every group of users, as related to the ability to provide service to every group of users in terms of different ability, languages or accessories being used by the users.
- (8) Interoperability, as related to the system's ability in operation together with other applications, or the ability in adding other parts into the system.



III. THE STRUCTURE OF DATABASE DRIVEN NEWS ONLINE SYSTEM

3.1 Database Driven News Online System

There are 2 main structures of Database Driven News Online System, First is the front page is the results which interacts with the users through internet, thus enabling the users to post, edit and search for news being stored in the database portion from worldwide. The second is the database system, which is the important of the system, stores the data from the system's operator, and news data as shown in Figure 3.1. The development of this system uses the Active Server Page (ASP) programming for results displaying and connection with the database. The database being used in this system is the Microsoft SQL Server version 7. In the creation of database, once the two technologies were being brought together, the dynamic web page is being created, where the results being displayed on the web browser will keep changing according to the change of information in the database. This display of results will only be changed according to the determined individual rights of application of each users and each system administrator.

3.2 Characteristics of Database Driven News Online System

- (1) There are 2 main sections in the news online page for the visitors and the news reportors, i.e.
 - (a) Headline presentation starting with the latest news in the system, and the display includes the news title, news summary, date of presentation, reporting unit and reporter. There are links connecting to the page with the news detail, information on contacts with the news reporter, and the visitors are able to vote for their level of satisfaction

to that particular news, and able to send their comments through the web site too.

(b) As search engine, the visitors are able to search for information by using keywords both in Thai and English. All related information out of all the units in the system are available for searching, or the visitors is able to limit the search to the specific units required in the system, no matter how many units. The search results in display will start by showing the latest news.

- (2) In presenting the news, the news reporter could login into the system through the internet in order to amend the personal information, to edit the past news or to present the latest news. In presenting news, the news reporter is able to specify the news title, news summary and keywords used in searching, as required. Regarding the details of the news, the news reporter could type directly into the system, or he could copy it from the text file without typing it up again. If some parts are in the form of HTML, he is able to copy it into the system. Thus the news presentation will be exactly in the same form as what was being written before.
- (3) The editor could login into the system to create, delete and edit information of the news reporters under his supervision, and able to amend and delete news, or order the system not to display the unethics or the unsuitable news.
- (4) The system administrator could build, delete and edit the information of the system administrator, the editor, and of all the reporters, and to manage the database through the internet.

3.3 The Structure of Database Driven News Online System

The basic structure of Database Driven News Online System consists of 4 main sections as shown in Figure 3.1.

- (1) The Search and Display News is the main display screen for the general users to search for various news information. The important sections are the news headlines, news content, readers' comment page, search engine for news and information searching in the system, and the page showing the search results.
- (2) The Add and Modify News section is for the news reporter to update the latest news and to modify the previous news inside the system through the web page.
- (3) The Administration is the section for the system administrator to manage the news and information of the news reporters which are to be added to suit the organization in the system through the web page.
- (4) The News_dB is the Database Driven News Online System which stores up all the information and data in the system.

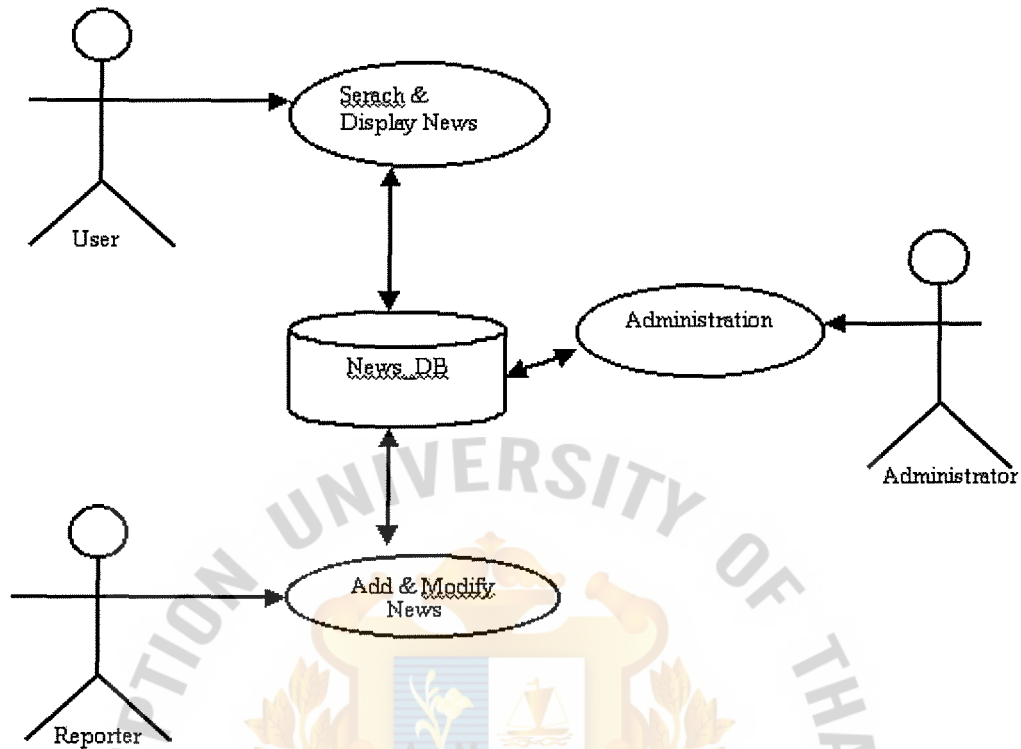


Figure 3.1. Basic Diagram of Database Driven News Online System.

A brief structure of the web site of the system administrator is shown in Figure 3.2 This is a page for the system administrator to login into the Administrator Main Page. The User ID will determine the entry being allowed for those entering the system. The front screen to be used will be different according to the level of the news reporter and the editor. For a user at the level of an editor, he is able to modify, add, delete and edit only the personal information of the news reporters under him. However, if the user is at the level of a system administrator, he will be provided a menu which could link to the pages for adding, deleting, and modifying the information in the various database such as the system administrator's data, the reporters' data, the news data, and other related fields. The Administrator Main Page is able to change

according to the status of the users because the active server page receives information from the database advising about the level being allowed for a user login, thus the system would be shown the display which front screen. The user will not know that other front screens are available. If there is a change in the database on the authorised user, the user will instantly acquire the news rights accordingly.

The Administrator Main Page is being linked to 3 other Web Pages, i.e.

- (1) The Administrator Manager Page which consists of 2 sections. The Add Administrator Page for adding more system administrators, and the Modify Administrator Page for modifying or deleting the information of the system administrator in the system.
- (2) The Organization Manager Page which consists of 2 sections. The Add Organization Page for adding more units or departments of organization, and the Modify Organization Page for modifying or deleting the information of units in the system.
- (3) The Reporter Manager Page which consists of 2 sections. The Add Reporter Page for adding in more news reporters, and the Modify Reporter Page for modifying or deleting the information of news reporters in the system.

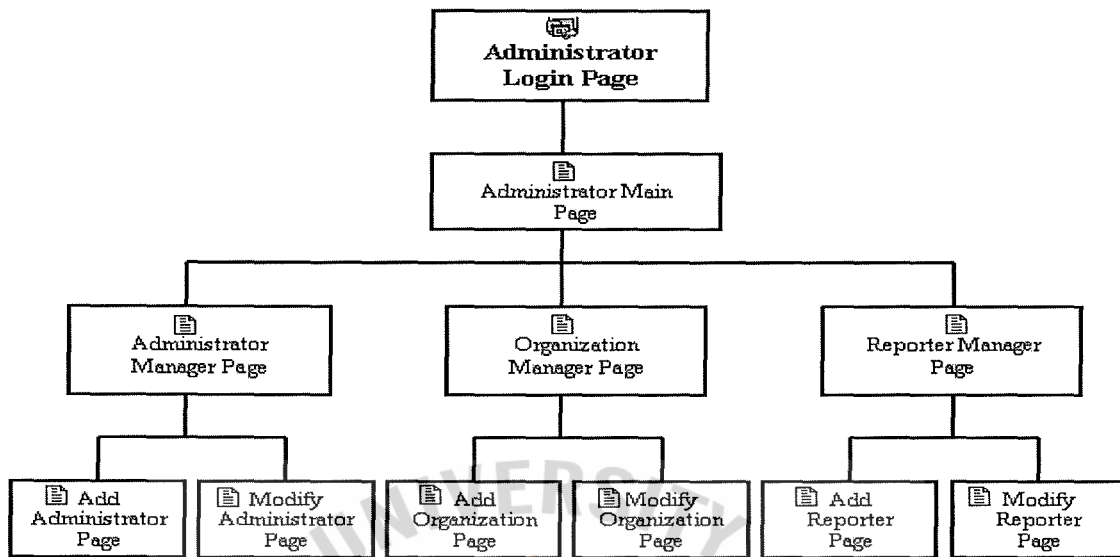


Figure 3.2. The Structure of System Administrator's Web Page in the System.

The links between the web page of the System's Administrator and the Database as mentioned above consists of 3 main sections as shown in Figure 3.3.

- (1) The Administrator Manager Page links to the KEYMAN Database which stores the information of the system administrator such as name, position, telephone numbers, e-mail address and password etc. to be used in login.
- (2) The Organization Manager Page such as the structure of an organization etc. which is able to increase or decrease according to the suitability and requirement.
- (3) The Reporter Manager Page links with 3 Tables. The VR_USER which stores up information of the news reporters such as name, position, telephone numbers, e-mail address and password etc., the VR_STYLE which stores up the styles of news presentation, and the VR_NEWS which stores up information and news content in the section of secure of other Database.

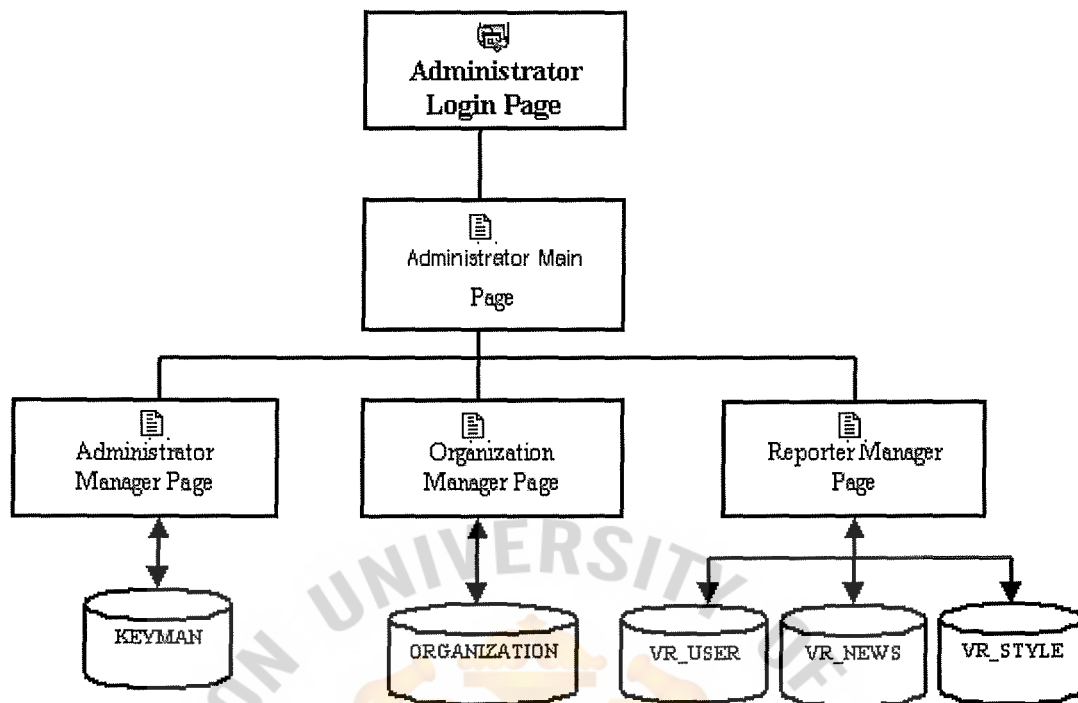


Figure 3.3. The Links to the Database between the Sections of System Administrator.

A brief structure of the news reporter's web page section consists of 6 main pages, i.e. the Reporter Login Page which has to enter through the Hidden URL, for enhancing security in news presentation to the system. Once entered the system, there are the Add News Page, News Modify Page, Change Reporter Info Page, Edit News Page and Delete News Page, as shown is Figure 3.4.

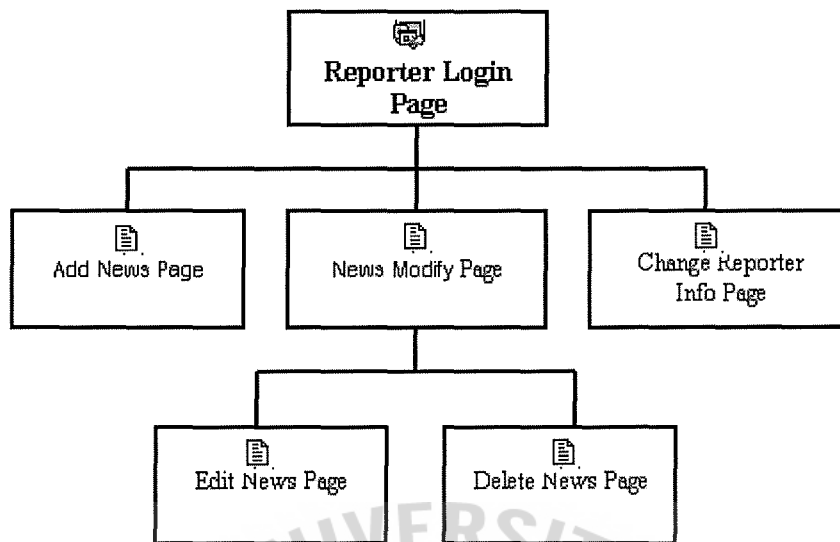


Figure 3.4. Structure of the News Reporter's Web Page Section.

The links from reporter's web page section to the database are being connected through 2 Tables, i.e. the VR_USER and the VR_NEWS. The Reporter Login Page of the news reporters links to the Tables VR_USER and store up news related to him such as name, position, telephone number, e-mail address and login password to the system. If any modification of his information were being carried out, the same modification would be made to the information within the VR_USER. In the section displaying information about the news, the news reporter has presented, the addition, deleting and modification of the news and information will have links between the VR_USER and VR_NEWS. This stores up the data and news contents to be presented only and specially by the news reporter concerned, as shown in Figure 3.5.

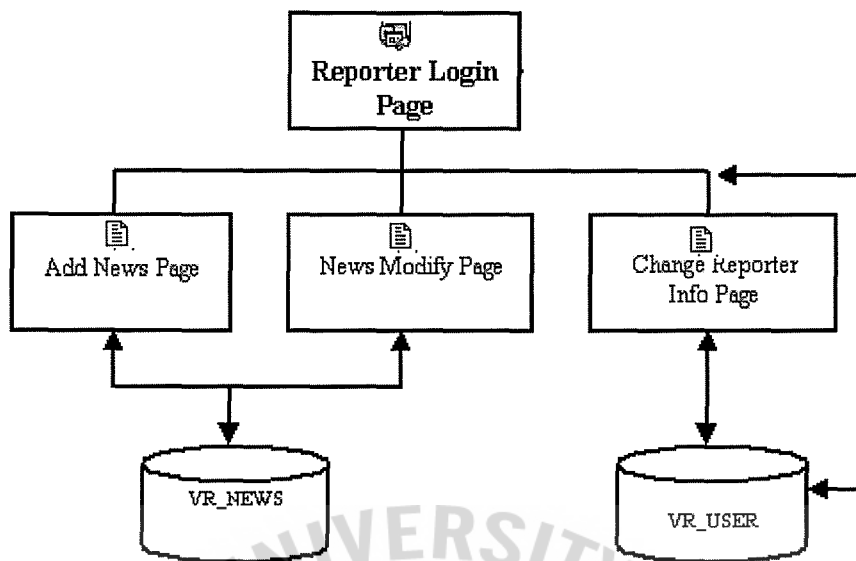


Figure 3.5. The Links with Database in the News Reporter Section.

The brief structure of the web site of the News Presentation and search engine section is a main page for the visitors to view the web site, searching for news information which is to be displayed in the Search Result Page, and to view the page of news detail from the Detail News Page. There is also a link to the news reporter's data page in the News Reference Page and also allows the visitors to comments in the Reader Comment Page, as shown in Figure 3.6.

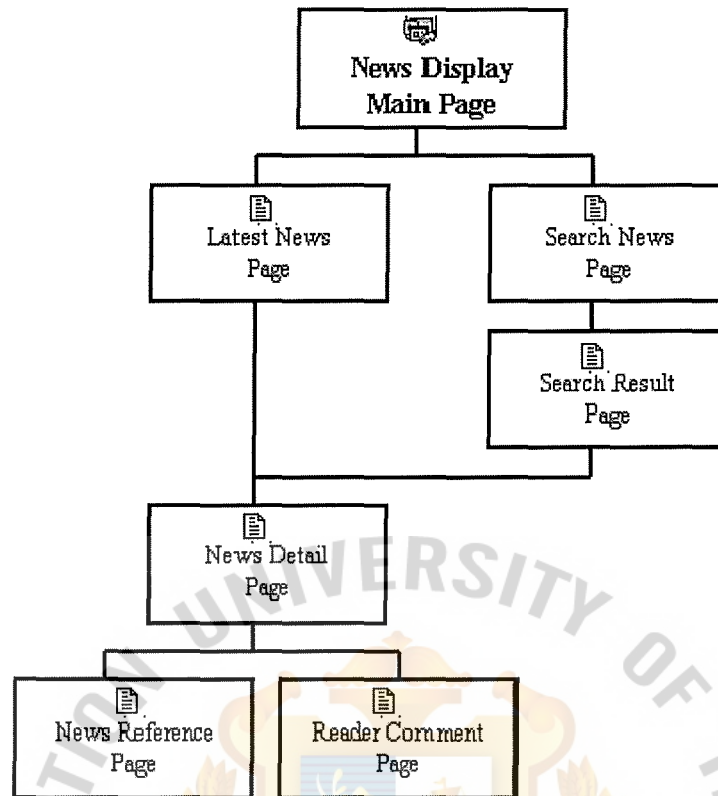


Figure 3.6. Structure of News Presentation Section's Web Page.

The links of reporter section's web page is with the database through 2 Tables, i.e. VR_USER and VR_NEWS. The Main Page which is for the visitors to view and search for news is being linked with 2 Tables. The VR_NEWS displays the news headlines, news summary and news content, and the comments coming from the web site. The VR_USER is for requesting information regarding who is the news reporter, from which part of the organization, and how to contact him, through the News Reference page. The VR_NEWS shows the news headlines, news summary and news content, and comments from the Reader Comment Page, entering the VR_NEWS as shown in Figure 3.7.

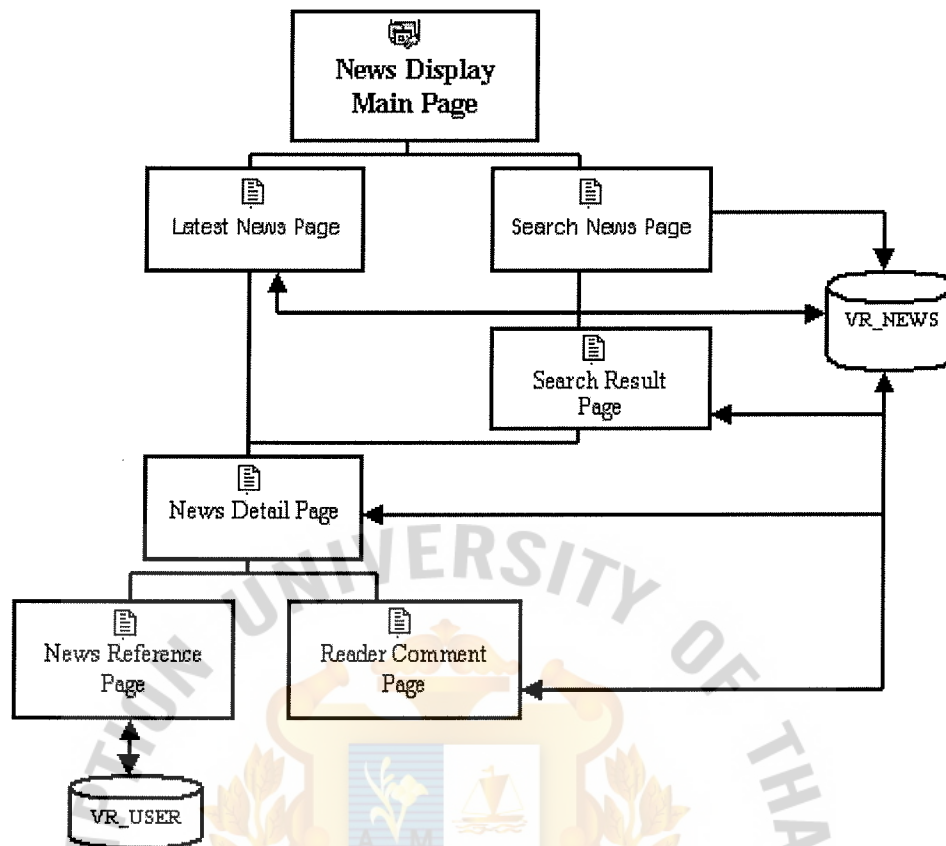


Figure 3.7. The Links with Database within the News Reporter Section.

3.4 The Database System for Database Driven News Online System

The database is the most important and indispensable element of the Database Driven News Online System. In the system, the database is being built on the Microsoft SQL Server version 7 which is a Relational Database. The Database in the Database Driven News Online system consists of 6 tables as follows:

- (1) The Table of ORGANIZATION (unit) contains 12 fields. The ORG_CODE is the Primary Key (Table 4.1). The ORGANIZATION table is related to the ORGANIZATION_GROUP table through the ORG_GROUP field, as shown in Figure 3.8.

- (2) The Table of ORGANIZATION_GROUP (unit group) contains 6 fields, and the ORG_GROUP is the Primary Key (Table 4.2).
- (3) The Table of KEYMAN (system administrator) contains 9 fields, and the CODE is the Primary Key (Table 4.3).
- (4) The Table of VR_NEWS (the news) contains 15 fields. The NEWS_ID is the Primary Key (Table 4.4) which is related to the VR_USER table through the USER_ID field, and is related with the VR_STYLE field through the STYLE_ID field, as shown in Figure 3.8
- (5) The Table of VR_STYLE (style of the news) contains 5 fields, and the STYLE_ID is the Primary Key (Table 4.5).
- (6) The Table of VR_USER (the news writer) contains 10 fields. The USER_ID is the Primary Key, and the ORG_CODE is the Foreign Key (Table 4.6) and is related with the Table of ORGANIZATION through the ORG_CODE field, as shown in Figure 3.8.

The details and relationship of each table of the Database is shown in Figures 3.8 and 3.9.

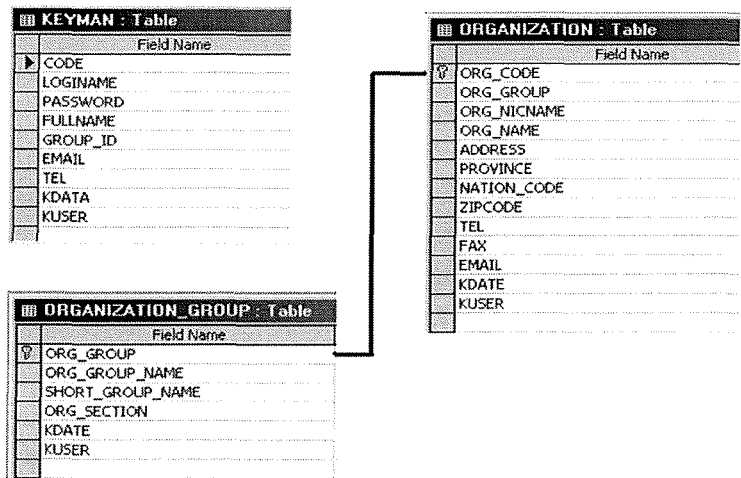
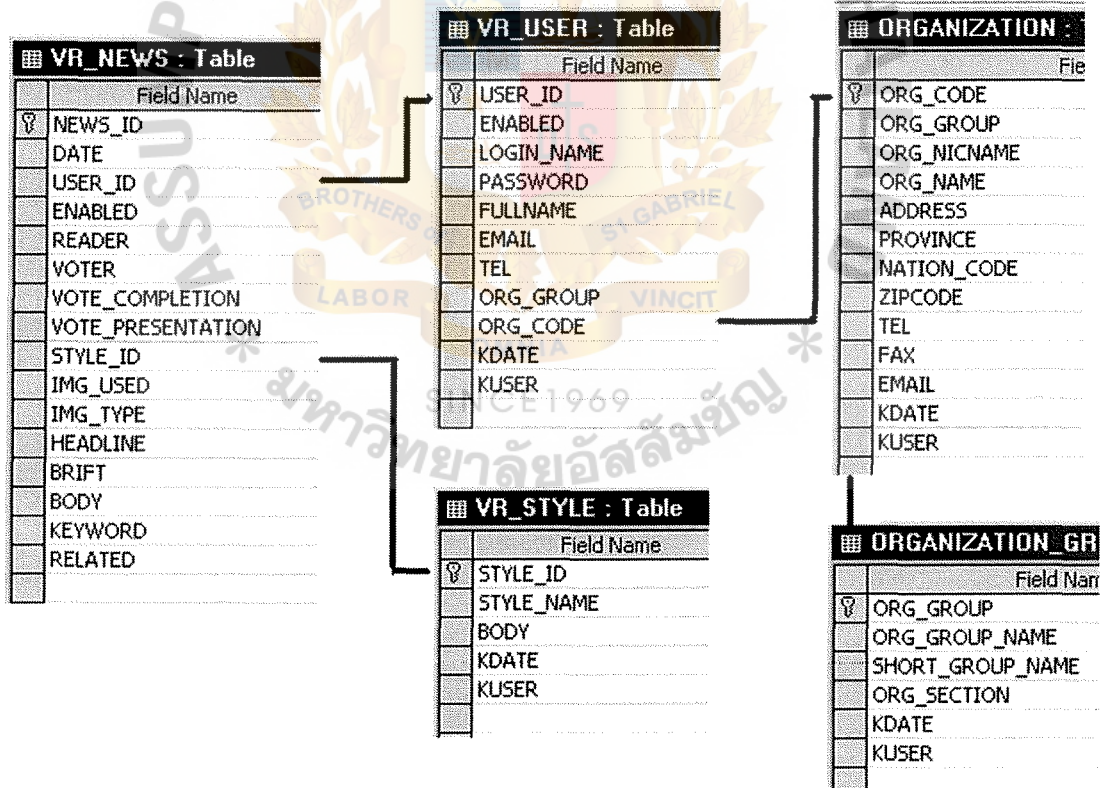


Figure 3.8. The Database Tables of the System Administrator.



Virtual Reporter Diagram

Figure 3.9. The Database Tables of News Reporter and News Presentation Section.

3.5 The Hardware Structure of Database Driven News Online System

The network system consists of 2 sections, i.e.

- (1) The internal network section which is the section behind the Firewall or the security system to protect the system against hackers or external attack, and the second section which is in contact with the external network, which is the web server. There are 4 servers, and one of them is the Database Server.
- (2) For the section in contact with the external network needs to contact to the ISP, which is the connecting door to the outside world. In practical, they require the URL to be specified for easier record of the users.

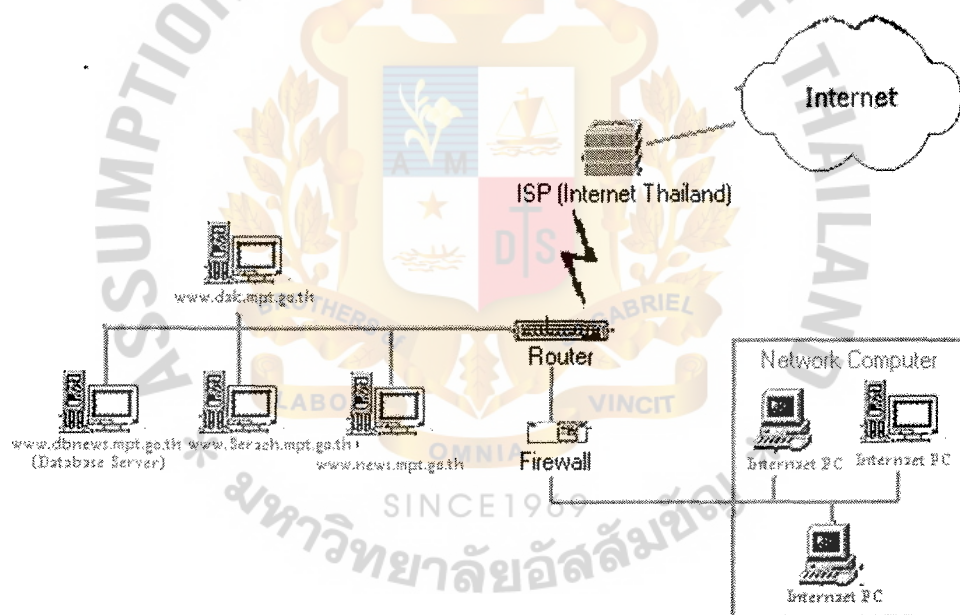


Figure 3.10. The Connection of Web Server into the Internet System.

The network structure shown in Figure 3.10 is an example of the connection, just to show that this system is able to be connected both as Intranet or Internet according to requirement.

3.6 Software System

The basic software system required for the application of this system has 3 main sections, i.e.

- (1) The main implementation system of the server being used is Windows NT 4.0 Service Pack 4
- (2) The Database Server being used is Microsoft SQL Server Version 7
- (3) The Web Server being used is Internet Information Server Version 4

The above-mentioned system is simply the most basic system capable of application for the required system.

3.7 PC Specifications

Processor	Intel Xeon Processor 2.80 GHz Processor
Cache Memory	Integrated 512-KB Level 2 cache (full speed)
Memory	256 MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (Standard) to 4 GB (Maximum)
Network Controller	NC7760 PCI Gigabit Server Adapter (embedded)
Storage Controller	Integrated Dual Channel Ultra ATA-100 IDE Adapter
Hard Drive	40 GB Ultra ATA/100
Internal Storage	640 GB maximum (with optional hard drives)
Optical Drive	48x IDE (ATAPI) CD-ROM Drive
Form Factor	Tower (5U) (Tower to Rack Enabling Kit available)
Operating System	Windows NT Server 4 Service 3

3.8 Network Security Enhancement

To improve the security of the news service provided by Web and SQL server, A firewall server is installed in order to track and control communications, deciding whether to allow, reject or encrypt communications. Firewall is needed in most organization because it can protect the sensitive portions of local area networks(LAN) and individual desk top PCs. Most firewalls provide comprehensive security on multiple-levels depends on the network policy. These levels of security should protect against both network and application attacks, while providing robust access control to IT resources, as shown in Figure 3.11.

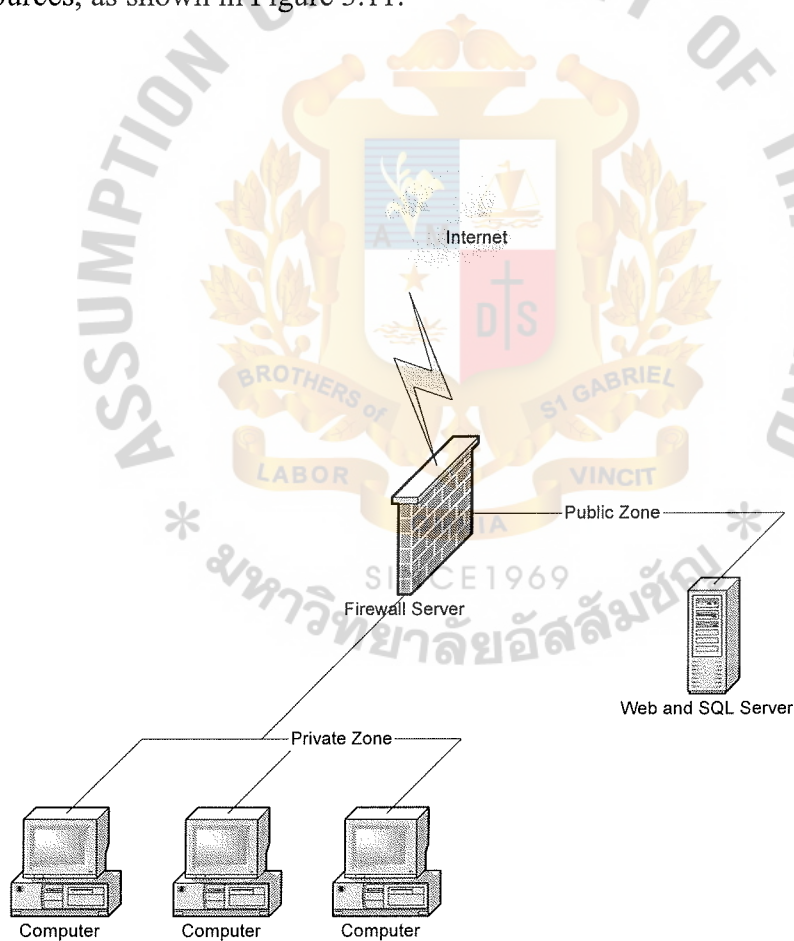


Figure 3.11. Network Diagram

IV. S.W.O.T. ANALYSIS

After surveyed the most of the news online, we found that all of them have the objective to create the web sites for only public relation or PR between the publication's image and the visitors such as www.bangkokpost.com, www.thairath.co.th, www.matichon.co.th, www.manager.co.th, www.thannews.th.com etc. They have some web sites which must to be register before access in their web pages but its also free members such as www.nationmultimedia.com, www.dailynews.co.th. Therefore, it is difficult to make analysis in the financial investment because this project will concentrate in the application development to be the tool in the marketing internet concept only.

However, we can conclude the S.W.O.T. Analysis as following:

4.1 Strengths

- (1) This tool will be make the convenience to the news reports to update the news and can manage their task by himself without any training in new technology and any knowledge of IT.
- (2) The editors of the publication can directly manage, and control, and final prove all the news of the news reporters under their supervision immediately and by internet instead of the hard copy.
- (3) The system administration may reduce their overload in routine update the news online and turn to manage more the security management.
- (4) The news publication can manage the resources not only the time which concerned to the news reporters and the others employees, but also the expenditure to be the most efficient and benefit of its organization.

4.2 Weaknesses

- (1) This will be made the difficult to the news reports to carry out with computer such as notebook computer in according with camera, and micro phone, and tape.
- (2) The system administration will be seriously protection the database from the hacker.
- (3) The database will easy to interrupt by the inside persons of the organization such as the news reporters or editors.

4.3 Opportunities

- (1) No one to initially create this tool for the this marketing internet concept.
- (2) No one make to promote the fastest and the last update news thru the internet and to competitive with the other media such as the live on television.

4.4 Threaten

- (1) This concept may be spread out and many incomers will entrance to this kind of online information in the future.
- (2) All database must be infect by Virus and spread to the visitors who access the web site.
- (3) All online information will be sensitive to the public sector such as in the stock markets around the world.

V. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This Database Driven News Online System show their utility could apply in many kinds of organizations which need to present or transfer the message or information while the sender does not need to have any knowledge of the HTML, FTP, or other languages to write or manage the database management system. It made the organization save the expense of training staffs through the IT courses or take the time of the IT department to develop the other system that is more important also. This program has the security system by key the user name and the password. The sender is able to edit, delete and change immediately and easily in anytime. The tool can catalog and search the news and manage the database easier and quicker.

The main advantages of this system are stated below:

- (1) The visitors can search through keywords in order to find the news in the database.
- (2) The visitors can make the comment into the website.
- (3) The security system can be login in case of editing the message through Hidden URL.
- (4) The news reporters can present, edit the news directly without any IT knowledge or any database management system knowledge.
- (5) The editors can also present, edit or cancellation the news of their subordinates of their subordinates on internet also.
- (6) The system administrator can manage the database which concerns the editors, the news reporters through the web so that it can save time and expense.

5.2 Recommendation

Finally, we found that the economic or business online information can be useful and able to support the need of the businessmen who want to catch up the last update news to run their business. This project can also be applied to the economic or business news section of the publication on the web sites as news online. Those of the businessmen are the important target customers whom are the visitors of this kind of web sites. It will be promoted for news online to be favorite among the businessmen who are willing to pay and able to apply or subscribe to the news online. Then, the publication, the owner of the web site, can make their margin and profitable to recover the expenditure of their web sites instead of the traditional way that just present their image only. And we hope that the newcomers can make a decision to invest and jump in this project of concept to spread out in the future because

- (1) Many economic and business news are concerned to both the private and government sector. Hence, all of people who concerned need the freshest and the update news to make their decision in their business such as the financial figure reports, the economic growth, the interest rate etc.
 - (2) In the future of the digital world, the suppliers are inventing more technology to support for their customers. It means that both the news reporters and the visitors will come to be more close up to communication their news online in the internet network such as the mobile phone in the WAP (Wireless Application Protocol) technology.
 - (3) All the online information are the value added for the businessmen.
- Therefore, the news online must be competitive, themselves and the newcomer, to offer the accurate and benefit information in their web sites for visitors.

Table 4.1. ORGANIZATION.

COLUMN NAME	TYPE	WIDTH/NULL	PK/FK/ID
ORG_CODE	int	IDENTITY(11)	PK/ID
ORG_GROUP	tinyint	NOT NULL	
ORG_NAME	varchar	(50) NOT NULL	
ADDRESS	varchar	(150) NULL	
PROVINCE	varchar	(50) NULL	
NATION_CODE	char	(2) NULL	
ZIPCODE	char	(14) NULL	
TEL	varchar	(50) NULL	
FAX	varchar	(50) NULL	
EMAIL	varchar	(50) NULL	
KDATE	datetime	NOT NULL	
KUSER	int	NOT NULL	

Table 4.2. ORGANIZATION_GROUP.

COLUMN NAME	TYPE	WIDTH/NULL	PK/FK/ID
ORG_GROUP	tinyint	NOT NULL	ID/PK
ORG_GROUP_NAME	varchar	(80) NOT NULL	
SHORT_GROUP_NAME	varchar	(50) NOT NULL	
ORG_SECTION	varchar	(80) NOT NULL	
KDATE	Datetime	NOT NULL	
KUSER	int	NOT NULL	

Table 4.3. KEYMAN.

COLUMN NAME	TYPE	WIDTH/NULL	PK/FK/ID
CODE	int	NOT NULL	ID/PK
LOGINNAME	char	(32) NOT NULL	
PASSWORD	char	(32) NOT NULL	
FULLNAME	varchar	(50) NOT NULL	
GROUP_ID	int	NOT NULL	
EMAIL	varchar	(50) NULL	
TEL	char	(10) NULL	
KDATE	datetime	NOT NULL	
KUSER	int	NOT NULL	

Table 4.4. VR_NEWS.

COLUMN NAME	TYPE	WIDTH/NULL	PK/FK/ID
NEWS_ID	decimal	(18,0) NOT NULL	ID/PK
DATE	datetime	NOT NULL	
USER_ID	int	NOT NULL	
ENABLED	bit	NOT NULL	
READER	int	NOT NULL	
VOTER	int	NOT NULL	
VOTE_COMPLETION	int	NOT NULL	
VOTE_UPTODATE	int	NOT NULL	
VOTE_PRESENTATION	int	NULL	
STYLE_ID	tinyint	NOT NULL	
IMG_USED	char	(10) NULL	
IMG_TYPE	char	(10) NULL	
HEADLINE	varchar	(150) NOT NULL	
BRIFT	varchar	(255) NOT NULL	
BODY	text	NOT NULL	

Table 4.5. VR_STYLE.

COLUMN NAME	TYPE	WIDTH / NULL	PK/FK/ID
STYLE_ID	tinyint	NOT NULL	ID/PK
STYLE_NAME	varchar	(50) NOT NULL	
BODY	text	NULL	
KDATE	datetime	NOT NULL	
KUSER	int	NOT NULL	

Table 4.6. VR_USER.

COLUMN NAME	TYPE	WIDTH / NULL	PK/FK/ID
USER_ID	int	NOT NULL	PK/ID
ENABLED	bit	NOT NULL	
LOGIN_NAME	char	(10) NOT NULL	
PASSWORD	char	(10) NOT NULL	
FULLNAME	char	(10) NOT NULL	
EMAIL	char	(20) NOT NULL	
TEL	char	(10) NULL	
ORG_CODE	int	NOT NULL	FK
KDATE	datetime	NOT NULL	
KUSER	int	NOT NULL	



APPENDIX A
WINDOWS OF PROGRAMME



Figure A.1. Main Page of Login Administrator.

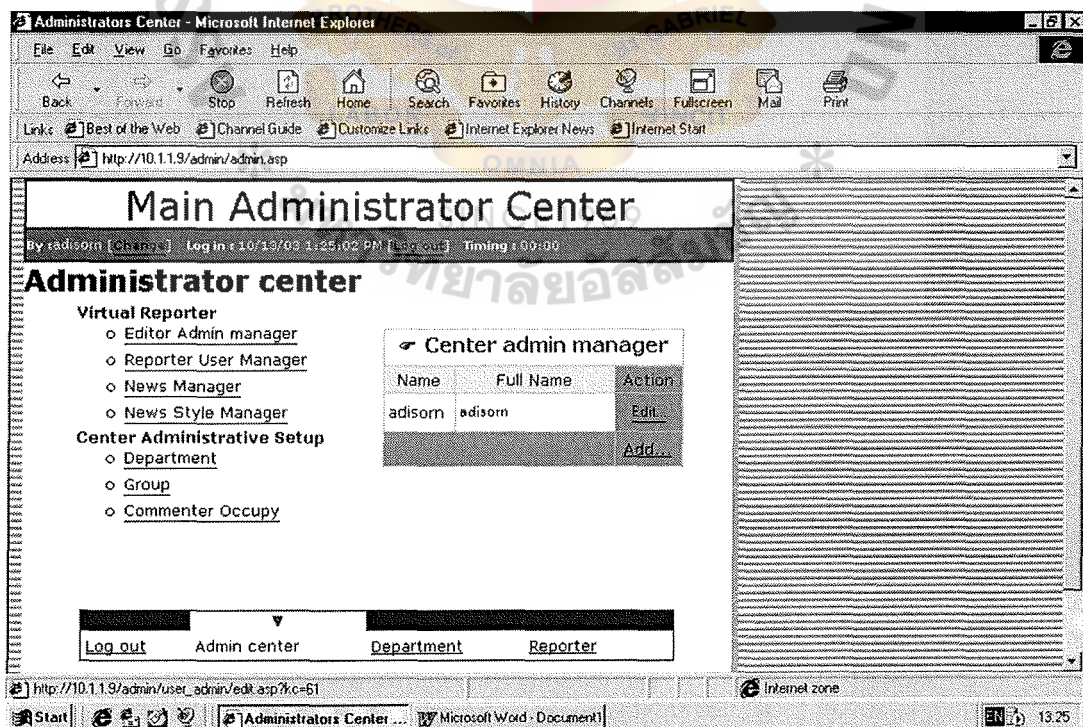


Figure A.2. Page of Monitoring the News Reporter in Control.

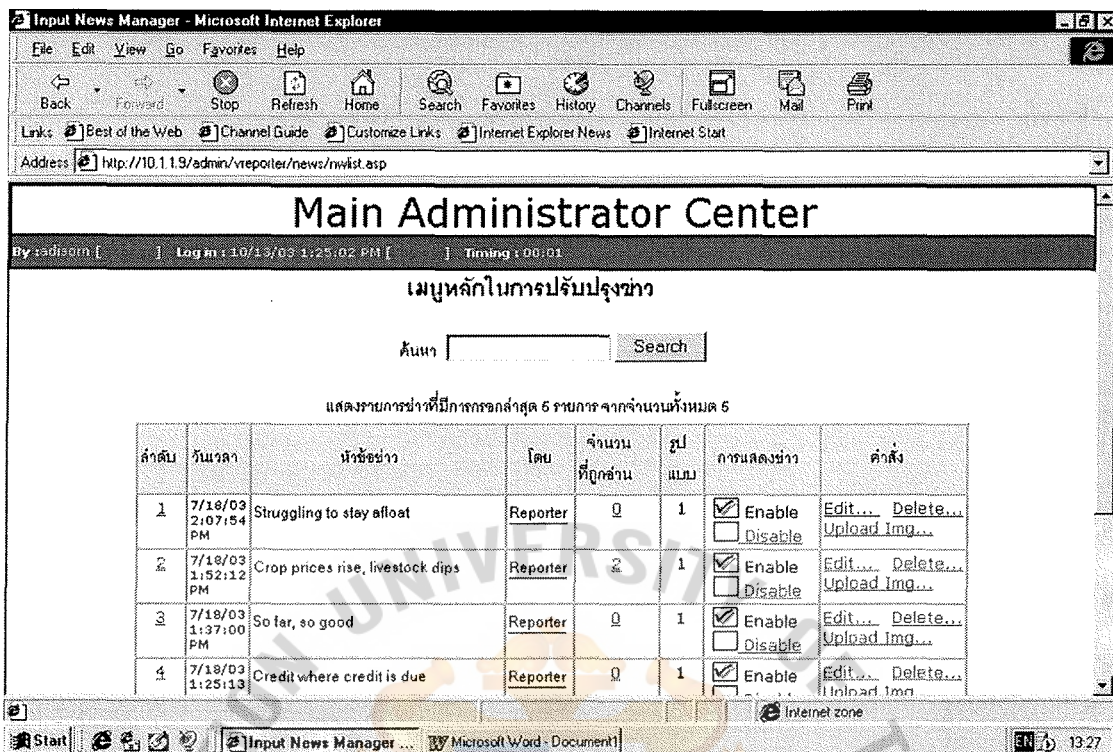


Figure A.3. Main Administrator Input.

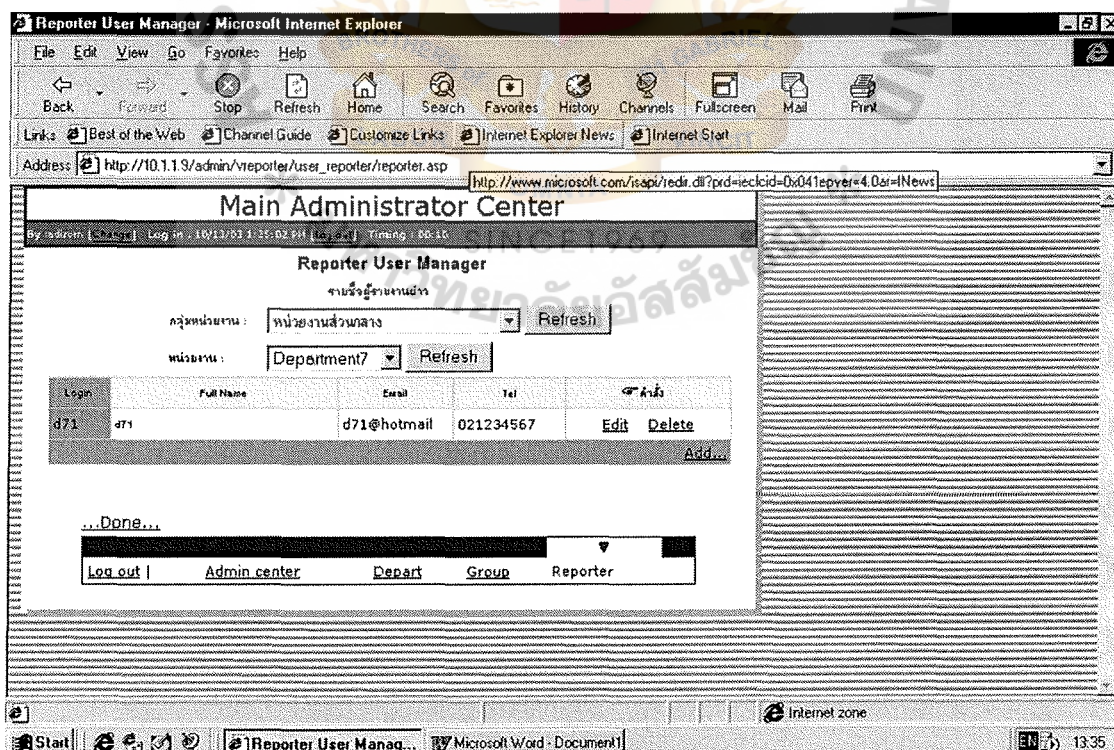


Figure A.4. Page to Create the News Reporter.

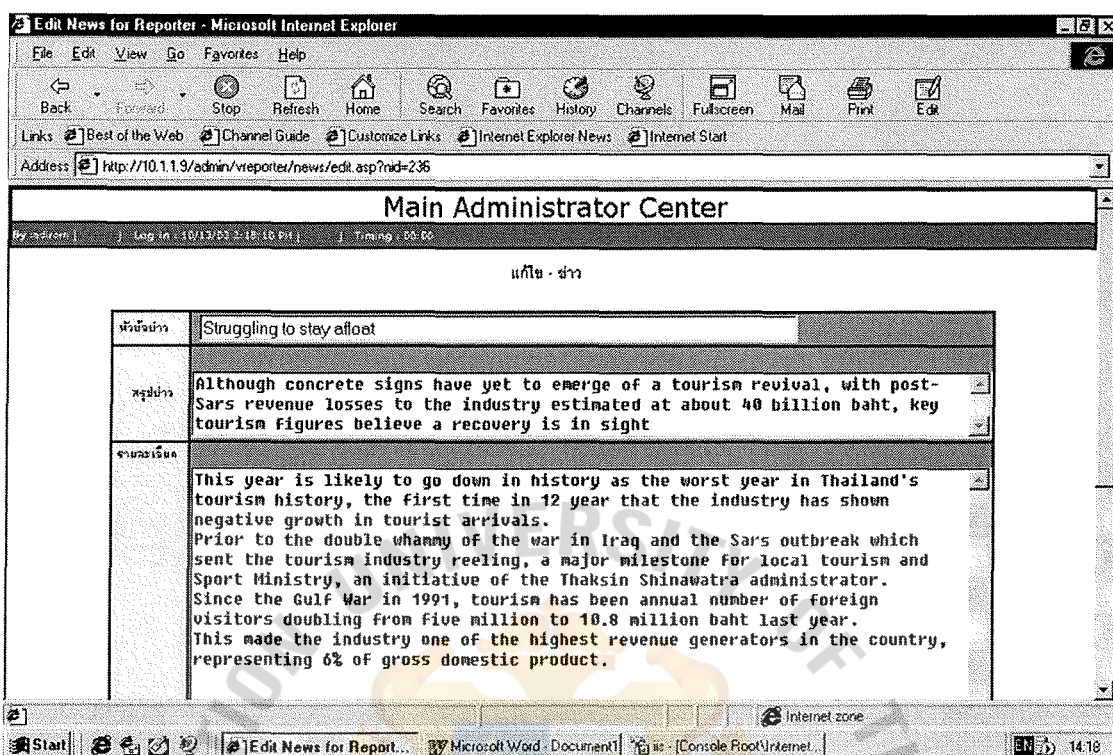


Figure A.5. Add / Edit News Interface.

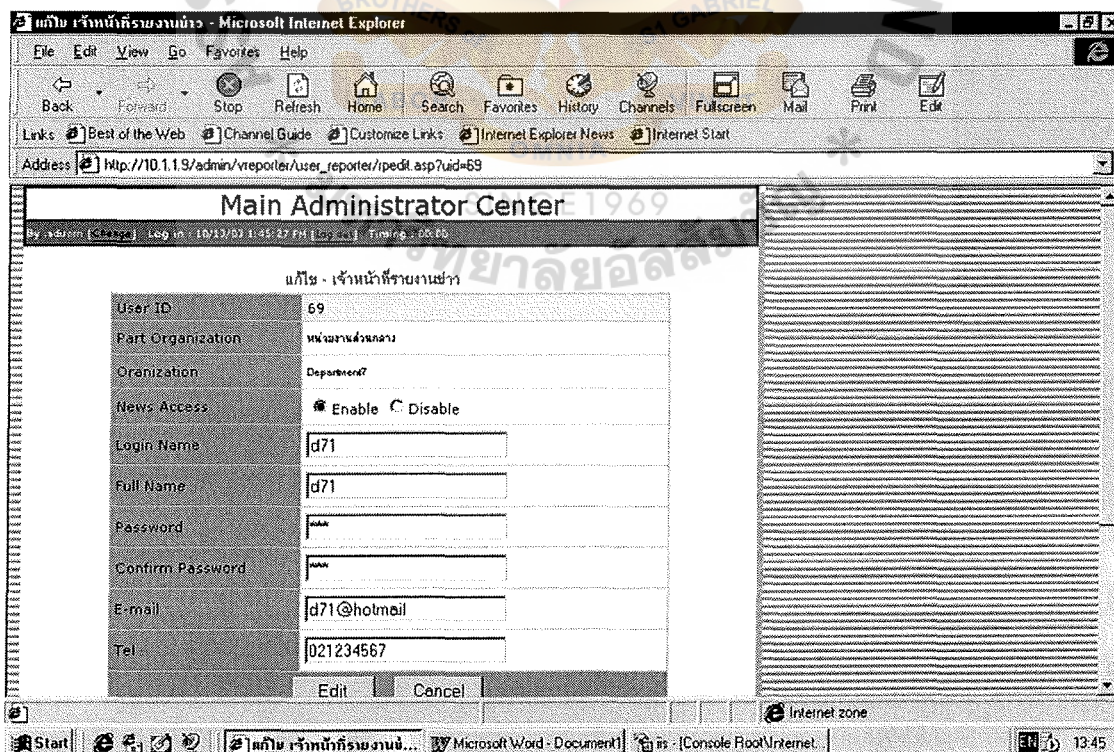


Figure A.6. Editing and Adjusting Page of the News Reporter's Personal Profile.

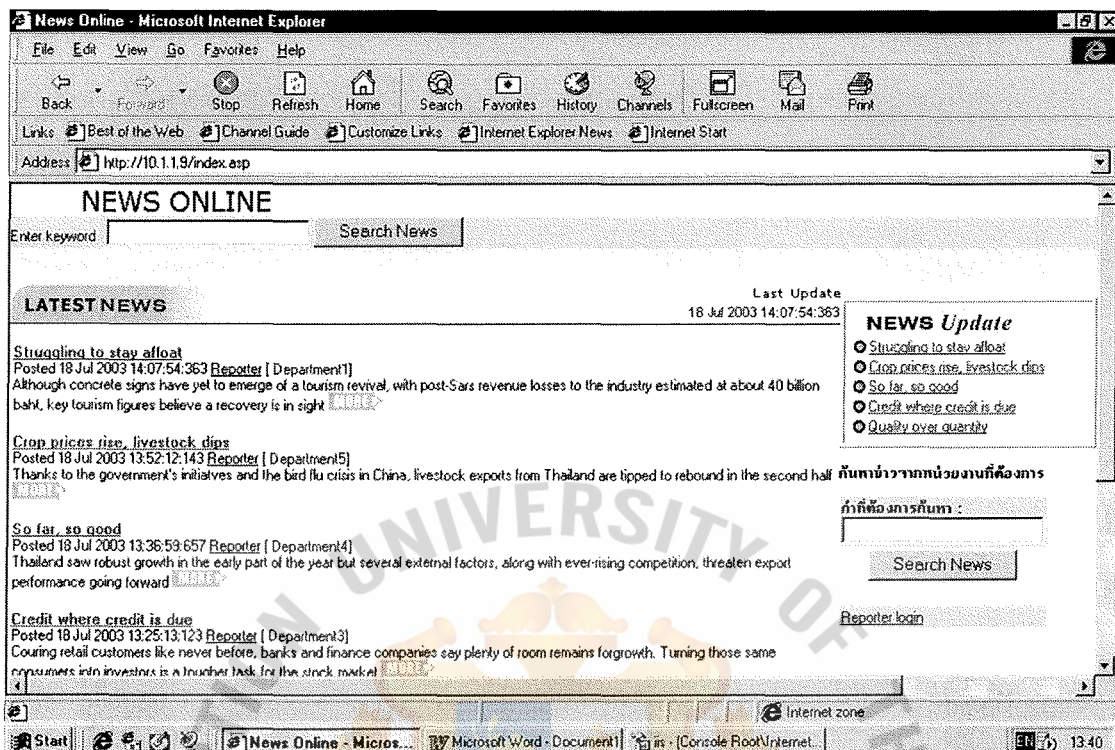


Figure A.7. Main Page of News Online.

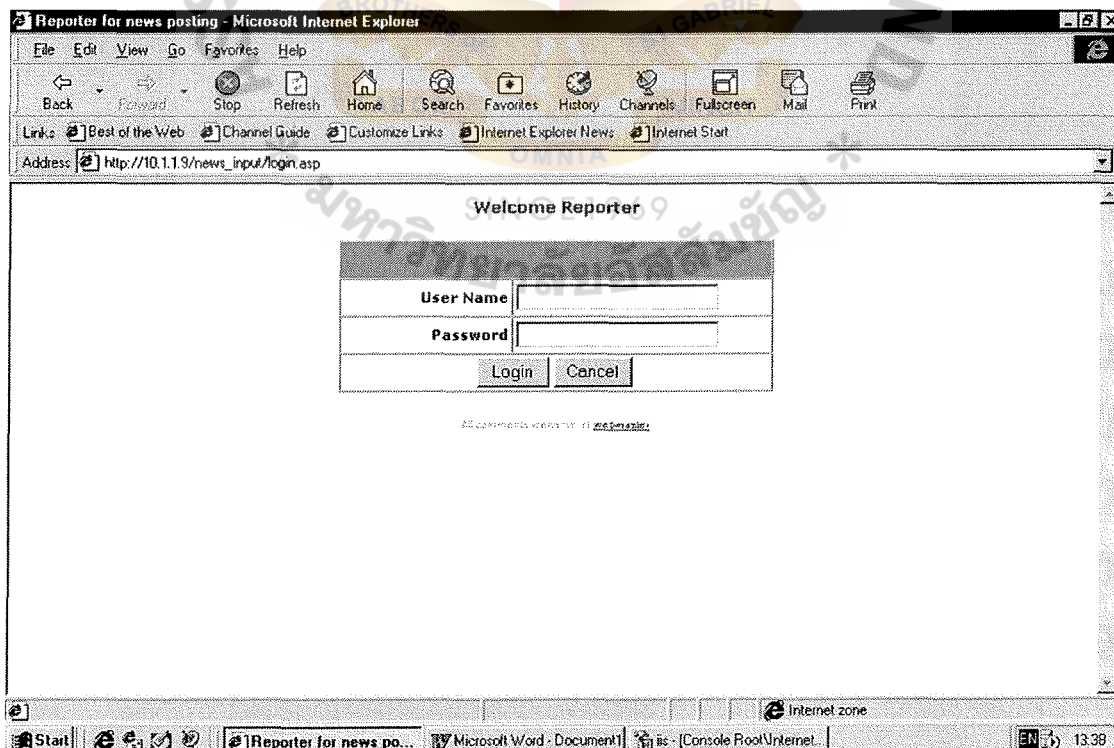


Figure A.8. Page of Login the News Reporter.



APPENDIX B
QUESTIONNAIRES

แบบสอบถาม

แบบสอบถามนี้ทำขึ้นเพื่อสำรวจความรู้ในการเขียนโฮมเพจและประชาสัมพันธ์ข่าวสารบนอินเทอร์เน็ตทางผู้จัดทำขอขอบพระคุณทุกท่านที่ได้สละเวลารอกแบบสอบถามนี้มายัง ณ ที่นี้

ท่านมีคอมพิวเตอร์ที่สามารถต่อเข้าใช้งานที่เกี่ยวข้องกับอินเทอร์เน็ตได้ที่ใดบ้าง

_____ ที่ทำงาน _____ ที่พักอาศัย _____ ไม่มี

ท่านเคยเข้ารับการอบรมการใช้บราวเซอร์ในการหาข้อมูลบนอินเทอร์เน็ตหรือไม่

_____ เคย _____ ไม่เคย

ท่านเข้าไปเยี่ยมชมเว็บไซต์ต่าง ๆ บนอินเทอร์เน็ตบ่อยมากแค่ไหน

_____ เกือบทุกวัน _____ 2-3 ครั้งต่อสัปดาห์
_____ 2-3 ครั้งต่อเดือน _____ น้อยกว่า 10 ครั้งต่อปี

โปรดทำเครื่องหมาย x หน้าภาษาที่ท่านสามารถใช้เขียนโฮมเพจได้

_____ HTML _____ ASP _____ JAVA
_____ ไม่สามารถ _____ อื่น ๆ _____

ท่านเคยใช้โปรแกรม FTP เพื่อ upload หรือ download ไฟล์หรือไม่

_____ เคย _____ ไม่เคย

โปรดกาเครื่องหมาย x หน้าโปรแกรมทั้งหมดที่ท่านเคยได้รับการอบรมการใช้งาน

_____ Windows95	_____ Windows98	_____ WindowsNT
_____ Windows2000	_____ Linux	_____ Unix
_____ OpenVMS	_____ Oracle	_____ Microsoft SQL
_____ Microsoft Access	_____ Excel	_____ Powerpoint
_____ Word	_____ Frontpage	_____ HomeSite
_____ DreamWeaver	_____ Adobe Photoshop	_____ Outlook
_____ FTP	_____ HTML	_____ ASP
_____ JAVA	_____ Visual Basic	_____ Delphi

ถ้าท่านเคยเข้าเยี่ยมชมเว็บไซต์ต่อไปนี้โปรดให้ความเห็นว่าง่ายแค่ไหนในการหาข้อมูลเกี่ยวกับหัวข้อข่าวใดข่าวหนึ่ง (1 หายาก – 5 ง่าย)

CNN www.cnn.com

1 2 3 4 5

BBC www.bbc.com

1 2 3 4 5

เดลินิวส์ www.dailynews.co.th

1 2 3 4 5

ไทยรัฐ www.thairath.co.th

1 2 3 4 5

ฐานเศรษฐกิจ www.thannews.th.com

1 2 3 4 5

มติชน www.matichon.co.th/matichon

1 2 3 4 5

ข้อมูลทั่วไป

เพศ ชาย หญิง

อายุ 15-25 ปี 25-35 ปี 35-45 ปี
45 ปีขึ้นไป

การศึกษา (โปรดระบุทุกลำดับขั้นที่จะทำได้)

_____ปริญญาเอก

_____ปริญญาโท

_____ปริญญาตรี

_____อื่น ๆ

ข้อคิดเห็นเสนอแนะ

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