

DOWNLOAD ZONE USING INTELLIGENT INFORMATION RETRIEVING

A Thesis submitted to the College of Arts & Science in partial fulfillment

Pf the requirement of degree Master

Of Science (Information Technology),

University Utara Malaysia

By

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ABSTRACT

The downloading procedure is designed to allow the visitors to download what he want of fun, science and reality files. All the internet visitors are randomly searching about their favorite's files without any kind of smart supporting. However this will leads them to the wrong choice of the downloading files and starts wasting the time, and also, some of them are still beginner in searching and downloading, and don't know what should they do to show the list of downloadable files. What the downloading sites need to do is to create a new technique that could be short-cut the steps to reach the goal for the visitors about his favorite files to download them. One of those techniques is to use the history records of the visitor whom already use the site to download file/multimedia, and determine what he want and what is the files he likes from all of the huge database, and show him his favorites files without go long into the same steps to download the files. These methods will save the user time, and make the site more fun to open it again several times later.

Keyword: Intelligent Information Retrieving

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CHAPTER ONE

1.1 Introduction

The web technology has become the main approach of people for sharing network resource and gets the required data. At present, various information resource which provided by the several Web servers on the internet are increasing rapidly, randomly and have become the voluminous information spaces. Depends to partial information, until the mid of 1999, there were 16 million host computers on the internet at least, and also the number of multimedia materials which shown in ASP, PHP, JSP or normal HTML pages has been more than a billion. The number of multimedia record is being increase about 10 million per month. The analyses show that way to lead to excellent information retrieving on the Internet is one of the most important applications and it is realized by using the search engine mainly (Zhang, Hou, Zhou, and Ding, 2006).

Information retrieving tool is what the people need to reach their downloading goal using a custom way to search and download through a large number of databases records. However, the trick is how we can use the historical search records to activate a useful information retrieval. Moreover, the traditional information retrieval techniques have been criticized as deeply flawed; the main reason is that the existing

search technique is mainly based on the keyword match itself. In other sentence, Users input keywords which they want look for, and then the retrieval system must return the matching document to users. By using this method, if the user inserts a word with wrong syntax, the retrieval engine should lead to an empty result page.

But why the user needs to write his own words to search for? The investigations show that a lot of users feel lazy to write their words into the web text field and click search. So the automatic information retrieving must be declared to help those users in their searching and just give them what they looking for automatically and without any long traditional searching procedures.

The information retrieving process in this project based into the history of the users. However, each one of them looking for specific material to download. In the normal procedure, the systems catch the user profile to make a historical record about what this user downloaded in the past. The system now will handle these records to an information retrieving kit to make a smart decision about what the user favourite's files could be. Moreover, the system will decide what the user interest with, depends into the history of him. In Figure 1.1, in the next page shows the planning of the system. The intelligent information retrieving will control a multimedia database management system (DBMS) which consists of tables that holds a Mobile Themes, Mobile Software, Video, Audio and Wallpaper records. These files will appear for the site users to download them.

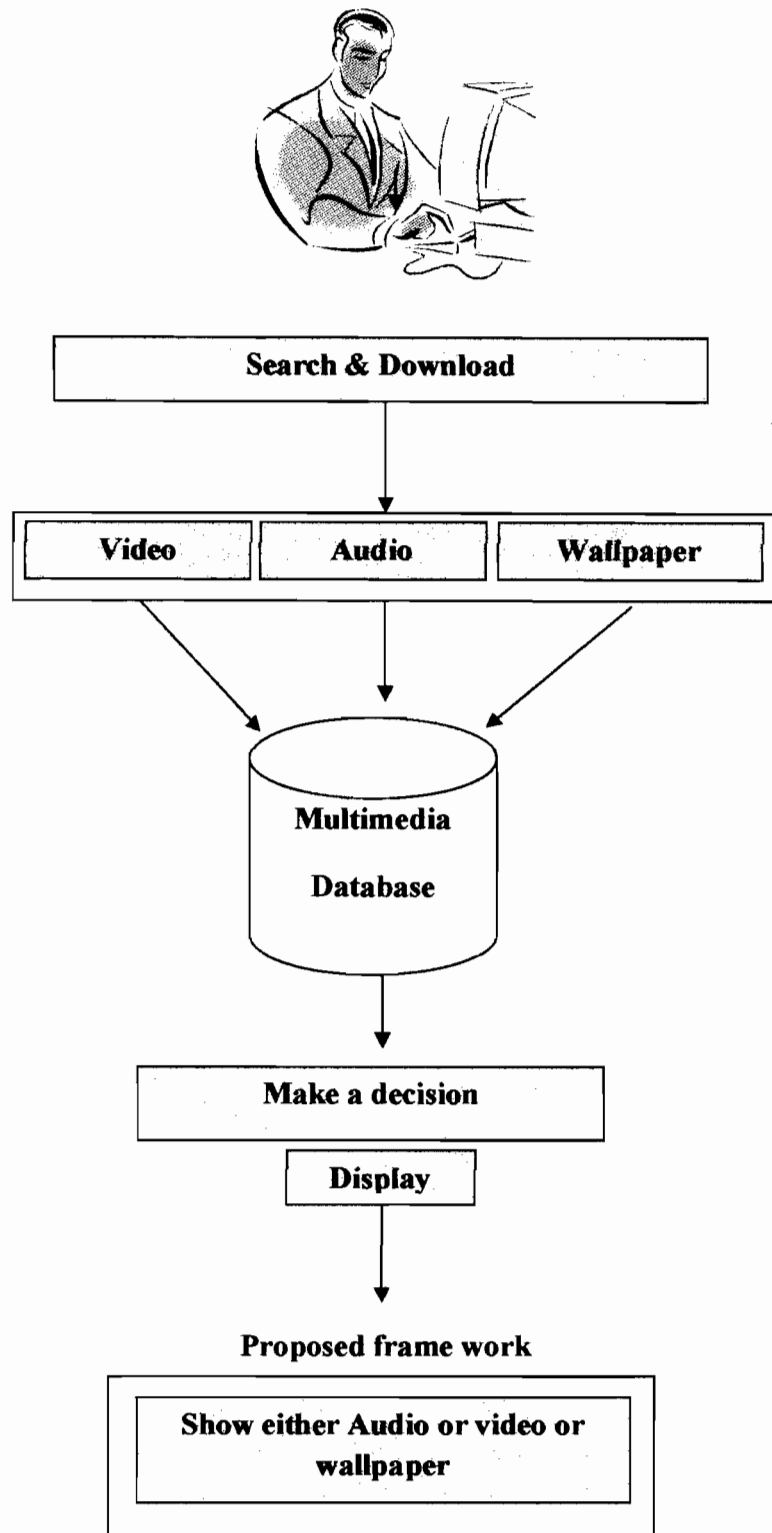


Figure 1.1: Decision making into multimedia database / Web-site

1.2 Problem statement

When a user is looking for files that he already download it in the past, he has to Re-do the search procedure and face the same problems he encountered in the last access. The user then will loss his time in keeping repeat the same steps in each download procedure (Semeraro, Abbattist, Fanizzi, and Ferilli, 2002), (Yong-Min, Shu, 2009). The user could be led into an empty result page if he doesnt know what he looking for exactly and what he need. And this happened several times per day through web sites like Metacafe. The Metacafe system force the user to repeat the same steps to download the files because it doesnt run any smart solution for the data retrieving (Ying, Tianjiang, and Xueling, 2007).

1.3 Research question

- I. What are the ways to make the downloading operations short and easy to the users through the websites?

1.4 The objectives of this project:

- I. To make a history records about each user favourite download type which can be used later to retrieve the customer favourite media files to shortcut the download steps and save his time.
- II. To create a multimedia database mechanism and store the files in it.
- III. To declare a new search simulator to search faster into the database files.

IV. To clarify the downloading steps to the customer.

1.5 Scope of the Study

The scope of this project is limited into retrieving a multimedia files depends on the visitor history, and displays them using a standalone menu. These files are appears to the user himself depends on his download history. Those files are represents as following:

- (i) Video files: 3GPP, MP4 and AVI.
- (ii) Audio files: WMA, MP3, AMR, WAV and ACC,
- (iii) Images files: JPG, GIF and BMP.
- (iv) Themes and software: SIS and EXE

1.6 Significance of the study

The Internet has emerged as the most popular way to share and downloading the multimedia materials, this site will be the reference of many kinds of multimedia files to download and share them, and in the other hand will help the user to download what he want. The world now going into a speedy scenario of change, so this project focus into the shortest way to allow the user downloads the files.

1.7 Summary

This chapter gives the general description of the entire work, it contains the introduction, problem statement, research questions, scope of the study and significant of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the literatures review which are related to this study, includes the theories, development and research of the intelligent retrieving, security and multimedia database that is using in the project development.

In the past and present, the search engines on WWW (World Wide Web) such as Google and Yahoo, resolve the problem of information resource location at a certain extent. But they mostly use the retrieving mode based on key word index. Which will bring the following disadvantages: (1) it needs client to offer the key word with precise meanings or else the search engine will return large numbers of un-needed result? Users need to moderator the relativity of this information by themselves. (2) It is very difficult that the index database of search engine is consistent with actual information. The information on the internet, such as the content of Web pages, so much as Web site itself may be change (Chen, Liu, Song, and Yu, 2002)

Intelligent information Retrieval tool is an important way for people to obtain knowledge and information. However, the traditional information retrieval technique has been criticized as deeply flawed; the main reason is that the existing search technique is mainly based on the keyword match. In other words, Users input keywords which they want to search, then retrieval system return the matching document to users. Because of synonyms, it's very difficult to understand user exact needs by keyword (Ying, Tianjiang, and Xueling, 2007).

2.2 Intelligent information retrieving.

2.2.1 The Digital Library:

The digital library which using the intelligent information retrieving is a library looking to make the steps which concern with the document retrieving is more easy and simple to the user and customer. In the last ten years, digital libraries became a prominent research area, the main goals of projects involving digital libraries are the application of the several information retrieval techniques (Semeraro, Abbattista, Fanizzi, and Ferilli, 2002)

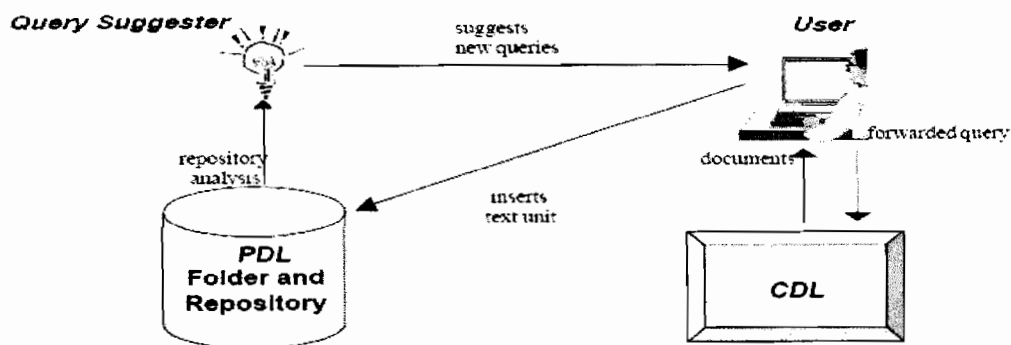


Figure 2.1: Private digital library, (Semeraro et al, 2002)

The Private Digital Library (PDL) as shown in Figure 2.1 is represents the service of the Corporate Digital Library (CDL) prototype. The goal of CDL is allow the users to generate a local-private digital library which they can store their preferred documents once they are retrieved from the CDL. In addition, the PDL system is playing as a person who can tell the user about his favorite selection, and also in generate the suitable query for him (Semeraro et al, 2002).

The system is work as below: when the user search out of his required files, then he find them and start to download them one by one, the digital library gives him a choice to create a private area to him, its name is (PDL), this area stored all his history of downloads and transactions, on the other hand, if the user is not fulfilled by the results of the his query which he write it in the general digital library, he may select, from the documents found, only some parts of the text units, and use these parts to complete his text unite. The documents in the private library are organized by the *Cataloguer* module in proper folders, according to user preferences. The user can decide to find documents contained in his private library, by activating a local Search Engine. (Semeraro et al, 2002).

2.2.2 Intelligent Information Retrieval System Based on Ontology

CG (Computer Graphics) is the name of the prototype which will control the intelligent retrieving into the ontology system. CG ontology consists of several basic components as follows:

CG concepts layer:

The top layer of the concepts and the relationships between them. In this ontology, concepts are terminologies (For example, knowledge-points name) in CG domain. Each concept node is treated as a class, and contains its concept name, attributes and processes. The associations between the concepts mainly are union, generalization or aggregation and so on. The association represents a general relationship. The generalization describes the concept of inheritance, it represents 'is-kind-of' relationship in ontology; and, the aggregation represents 'is-part-of' relationship. Ontology architecture is composed of various (Ying, Tianjiang, and Xueling, 2007).

Knowledge-points layer:

This layer describes the information of CG knowledge-points, such as knowledge-points content, difficult degree of knowledge-points, teaching aim and requirements of knowledge-points etc.

Reference resources layer:

This layer describes CG reference resources (such as courseware, website, question bank etc.) The information of courseware mainly includes courseware name, courseware abstract, author, and courseware type (text, graphics, audio, video and so on). The information of question bank mainly includes difficult degree of question, relating knowledge-points, question text, answer, question type (multiple choice, true or false, fill in the blanks, matching, numerical answer, procedural steps in solving a

problem procedures, long descriptive answer/essay and so on). The information of website mainly includes website abstract, website address, creator (Ying, Tianjiang, and Xueling, 2007).

2.2.3 Retrieving Engine for Historical Manuscript Images.

This is the automatic retrieving system for handwritten historical manuscripts (images). In Figure 2.2, the system instead uses a preparation set of transcribed manuscripts to automatically retrieve a trial set of un-transcribed (Non copy) handwritten page images. The system is still under training until now, and it is use an annotated-translated set of 100 pages of George Washington's manuscripts and issued to query a dataset of 987 page images from the identical group (Rath, Manmatha, and Lavrenko, 2004)

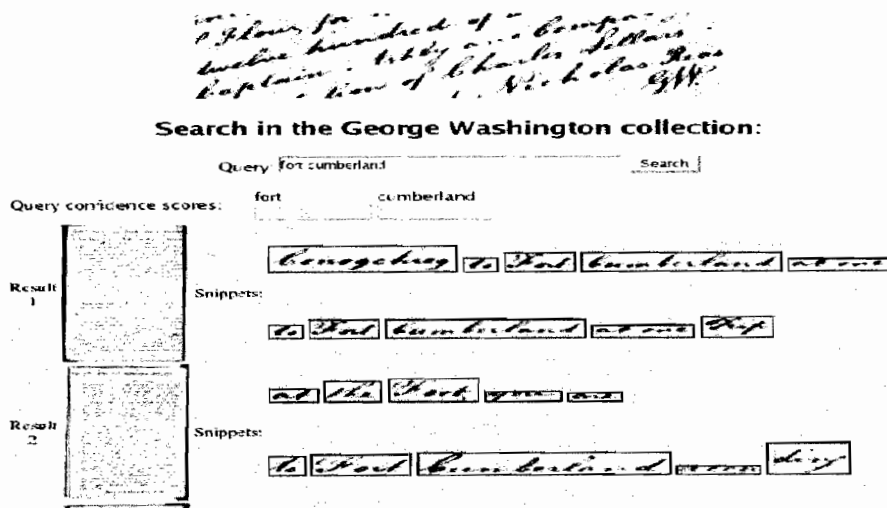


Figure 2.2: Retrieving Engine for Historical Manuscript Images, (Rath, Manmatha, and Lavrenko, 2004)

Many libraries have large quantities of handwritten document collections either written using PCs or just images. Many organizations aim to digitize (switch to digital) such material and upload it to the web to make it available to a wider viewers around the world. On the other hand, the full data of image format and the collections are large which makes it complex and nescient to retrieve. The current approach is to use **metadata**, which are created physically in a tedious, labor intensive and expensive process. This makes automatic approaches to searching and accessing this material very attractive (Rath, Manmatha, and Lavrenko, 2004).

2.2.4 An Intelligent Information Retrieval System Model (The personal intelligent information retrieval system):

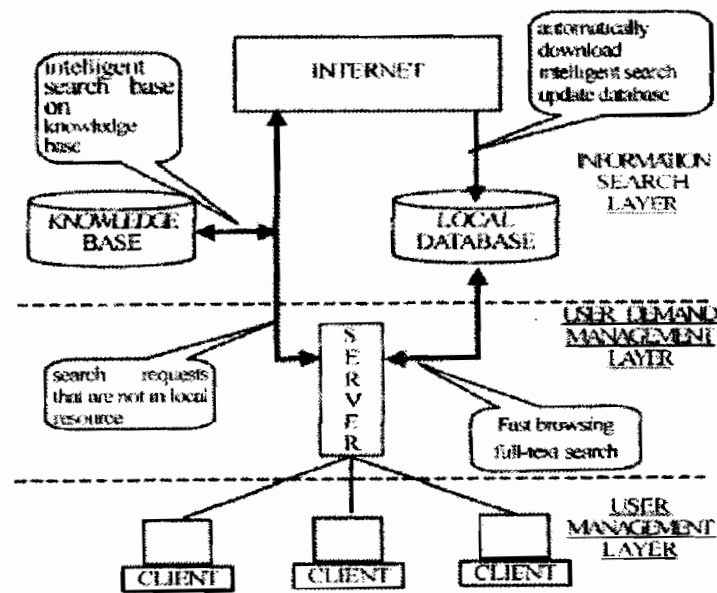


Figure 2.3: the architecture of a personal intelligent information retrieval system (Chen, et al, 2002)

Depends into Figure 2.3, the personal intelligent information retrieval system model stands on three layers C/S frame has been suggested. The model has the typical three layers is named a "Client Server framework". Figure 2.3 show the model's building and the relations between each layer. The first layer is user management layer (UML). This layer must install in the client. Its working to create and keep up the user's individual demand mode depends on the search requests supplies by user as well as the feedback information (Zhang, Hou, Zhou, and Ding, 2006).

The second layer is User Demand Management (UDML). It must be installed into the server, and must be working to watch the Web information at real time. According to the user's explore demand content is or is not in local database, it should choose either off-line browsing the local resource or delivering the search demand to the third layer to accomplish Web on-line intelligent searching. The third layer is Information Search Layer (ISL). This one must be installed the same with UDML. This layer working to make get in touch with the each commercial search engine system on the Internet. According to the distributed characteristic of information resource, the ISL should select some commercial search engines to search information (Chen, Liu, Song, and Yu, 2002).

2.2.5 Artificial Intelligent Information Retrieval Using Assigning Context of Documents

In the modern websites, a search engine usually presented either crawler-based results (Retrieve depends onto the result) or human maintained catalogues (A private result for each user), like Google search engine, its catalogues was created automatically: it creep the web, then the users search into what he already search and found (Yong-Min, Shu, 2009).

Today, it is really common that both types of results are presented, typically; a mix search engine will favour one type of listings over another's. For example, MSN Search engine is more likely to look after the user history more than Look Smart engine. User queries without context can be fuzzy which will result in the retrieval of many irrelevant documents that no need for them to use. The recovered documents may have right terms but also with the undesired context. It has been argued that if exploiting user's context has benefit to get better the performance of information retrieval systems (Yong-Min, Shu, 2009).

It is already seven basic suggested categories in which information existing in an office could be divided based on information type. So, this idea was not follow further, not to mention that considered its use in information retrieval systems. The experts proposed an **information retrieval system** that uses an enlarged range of categories for a document collection based on context as information type. The challenge of

developing intelligent information retrieval system based on context of documents has the following issues:

- How to develop a methodology of assigning context to documents using assigners, then to validate the results by measurement of consistency between assigners and the searched result?
- Web usage tools, usually implementing the process of customizing the content and structure of web sites in order to satisfy the specific need of everyone, without asking for it explicitly.
- Web content mining tools use automatic classification of document contents, including their multimedia objects as well as textual information, to find out the keywords (Zhang, et al,2006)

A document collection or test collection is required for evaluating an information retrieval system in a laboratory type environment. The evaluation methodology based on standard collections test, it assumes that the relevance can be approximated by topical similarity of the query to document. Hence, user is not required to make relevance assessment about retrieved documents. The relevance is binary—relevant or irrelevant; and recall for a query is always known (Yong-Min, Shu, 2009).

After generating the document collection, the next task was to define a set of context that could fairly represent the documents in the collection. Keeping in mind the scope and nature of the context in that document collection should be synthetically

considered. When a set of context categories arrived, all the documents in the collection will be examined according to the predefined context set. This set of context categories should cover all possible context categories based on the type of information contained in the selected document collection.

2.2.5.1 The architecture model

While the visitor sends an event to the system; the system must to find and feedback the keywords and sentences as a group, as well as the page number, where. Likewise, the user specified a numeric value, which point to the inspect depth at which each site has to be inspected. Besides, the relative keywords and background must also be shown in the search area (Yong-Min, Shu, 2009).

Firstly, the user event will be distributed to many standard search engines, and this is the first component of the Search Engine Wrapper (SEW). Then, standard search engines are queried all of the results are to be composed and parsed to get a list of links.

Secondly, the Web Spider (WS) downloads the found pages, and check those links then WS will check out some links, which is referring to pages on the same site. The kinds of link did not come from standard engines, this means, the process did not end until the user-defined depth is attained. Downloaded pages are processed by a Document pre-processor that extracts useful information within a single document.

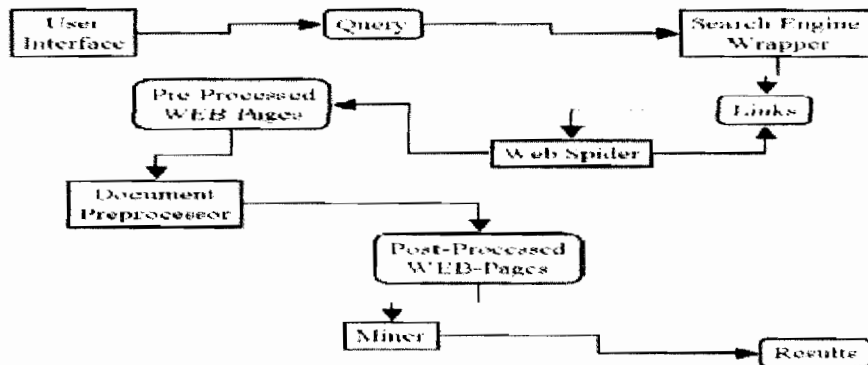


Figure 2.4: the architecture of a personal intelligent information retrieval system (Chen,et al, 2002)

Finally, the Miner agent uses an assigning context of documents, to retrieved the pages according to the type of information. Figure 2.4 shows the general architecture for an artificial intelligence information retrieval system based on context of document (Yong-Min, Shu, 2009).

2.3 Multimedia databases.

2.3.1 What is the multimedia database?

The multimedia database is a controlled group of mixed mode multimedia files like Text (Kalipsiz, 2000), Video, Images files which stored in the tables as records. The multimedia database management system (DBMS) is to control the multimedia records in case of insert, update, delete and select procedures. The multimedia DBMS has several requirements like: multimedia data modeling, multimedia object storage, multimedia indexing, retrieval, browsing and multimedia query support.

Media is separated into two main classes: continuous and discrete. Continuous media such as audio and video, change with time, this mean is like the video, it has a timing to run and stop. Discrete media are time independent, or we can say fixed time like word, excel documents (Kalipsiz, 2000).

2.3.1.2 Types of multimedia database

The types of multimedia database are:

- Text or documented sheet.
- Graphics: drawings and illustrations encoded using high-level descriptions like PIC and postscript files.
- Images: pictures and photographs with encoding defined by standard formats such as JPEG and MPEG.
- Animation
- Video
- Audio

2.3.1.3 Query in multimedia database

The query statement in multimedia database is complex, because its must deal and contact with complex and temporal relationships inherited in the different models of multimedia data types.

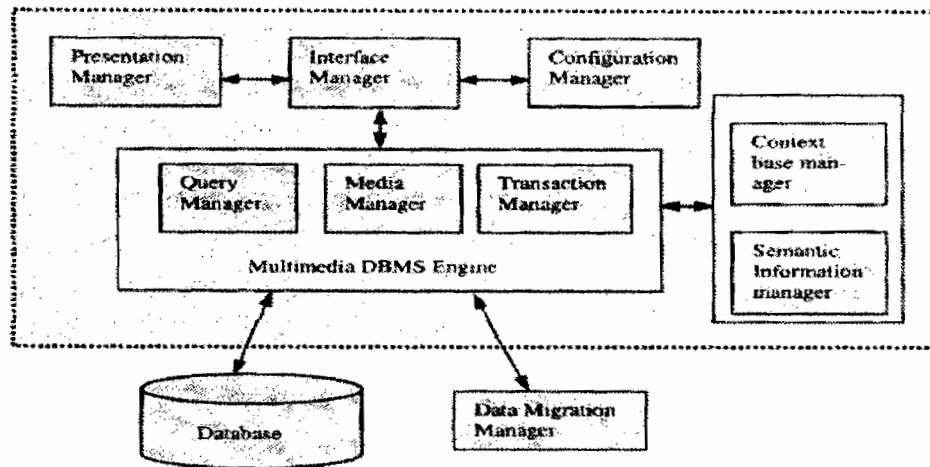


Figure 2.5: The Multimedia database query architecture (Kalipsiz, 2000)

In Figure 2.5, the multimedia database run a normal database with a multimedia DBMS engine, this engine consists of three parts: the query manger, the media manager and the transaction manager. And each one of the external parts like interface manager are interconnected with the engine to get controlling itself (Kalipsiz, 2000).

2.4 Summary

This chapter discussed the main study of the project, and discussed some technologies about intelligent information retrieving, the chapter was also focused into the active system and future system that applying the study and highlighting the main problems that heading the study, and the possible solution to solve them. This chapter discussed some theory's that applied to maintain the intelligent information retrieving system.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology which is adapted to this study. The methodology is an agreeable method, excellently chosen, described and accepted among the experts in Information System Research Design (Vaishnavi, Kuechler, 2007). Overview of the methodology is briefly discussed in Section 3.2.

3.2 Research Methodology

Research methodology is more than just collections of method to perform a research. It is a systematic way to solve the research problem (Kothari, 1985). The methodology used in this work is adopted from general methodology, however we have included two stages; gathering data and elicitation between them as shown in Figure 3.1, (Vaishnavi, Kuechler, 2007)

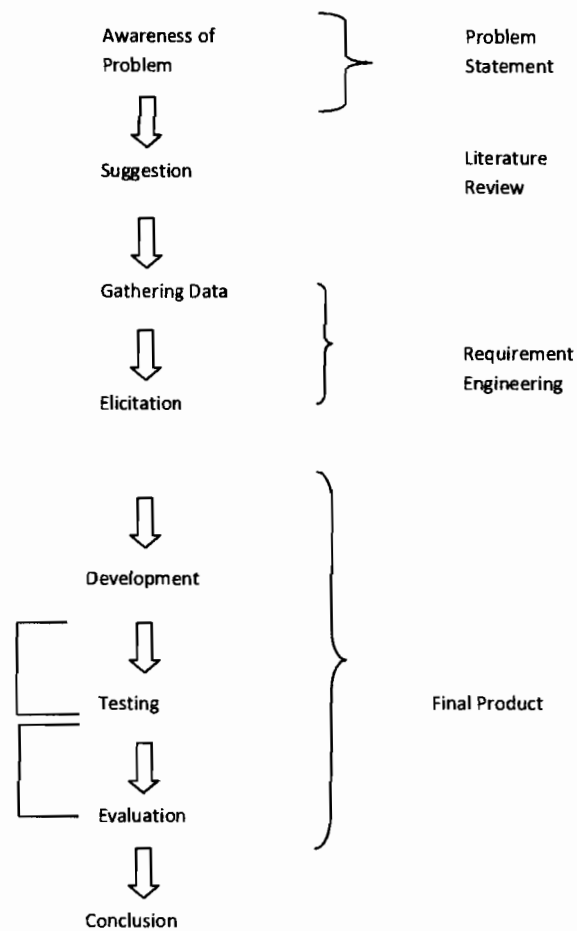


Figure 3.1: Methodology of Design Research
 (Source: Vaishnavi, Kuechler, 2007)

3.2.1 Awareness of the Problem

- In this stage we got to know the gap between the user requirement and available products then define the problems statements.
- Based on our observation there are some limitations in the existing online Download sites, such as existing online sites doesn't provide customers with

the opportunity to include their requirement in requesting the files and share them.

- The main problems are mentioned as bellow:
 1. The new customers may be lost in the web sites and don't know what they want to do and how they go throw.
 2. Customer would not prioritize his preferences.
 3. The search for specific download file like mobile application will be depends on the mobile type not on mobile kind, and later the mobile application will be run into some of mobile kind and some will not run throw them.
 4. The user cannot share his media files with the others.
 5. Based on these problems, we see a need to design and develop a new approach in identifying relevant information

3.2.2 Suggestion

The study suggested the design of a Web site for downloading and retrieving services, and develops a prototype to solve the problems of the identified earlier. The output of this phase is a tentative design that includes multimedia files about four kinds of mobiles (I-mate, Siemens, Sony Ericsson and Nokia), each one of these mobiles has its own software and media which stored in the database, and retrieving depends on user mind and favorites. And these will formulation suitable architecture (Information Retrieval System architecture) to achieve the desired result.

3.2.3 Gathering Data

The main problems that faced the user are the others websites which may concern with the files downloading, do not provide customer with a user's preferences facility in showing and downloading the multimedia files. Such a facility would allow a customer to show his historical preferences (for example the favorites download of each user) in identifying the suitable multimedia file to download. Furthermore, in order for a customer to reach the end of the downloading procedure, he forced to keep going into the details of the downloading steps each time he want to download a file like shown in Figure 3.2. Such an approach is time consuming and a customer might be put off and proceed with another websites or download shops.

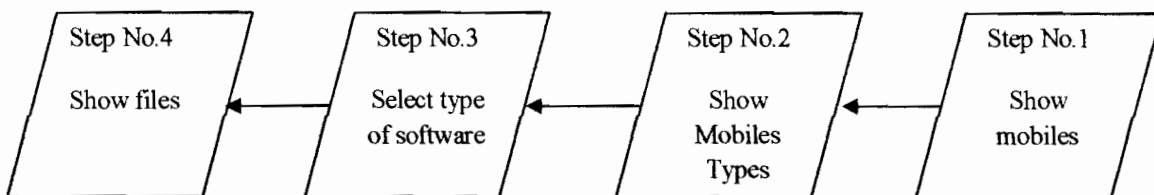


Figure 3.2: The Downloading Procedure of the system

3.2.4 Elicitation

In this stage, we refined the collected data and generated useful information for the study. Requirements elicitation is the practice of obtaining the requirements of a system from users, customers and other stakeholders (Administrators). Elicitation is not only a process to gather information but it is non-trivial because we can never be sure that we will get all requirements from the users and customers by just asking them what they want and how they want.

We need to use elicitation practices to make sure that the requirements we have gathered are enough to make the study successful in terms of efficiency and effectiveness. Requirements elicitation practices include interviews, questionnaires, user observation, workshops, brain storming, use cases, role playing and prototyping. The interviews were done of around 8 persons about the requirements of a multimedia downloading websites. The brain storming was arranged with some students who go through many multimedia downloading sites more often. The user observation analysis was done to make sure we cover all the possibilities.

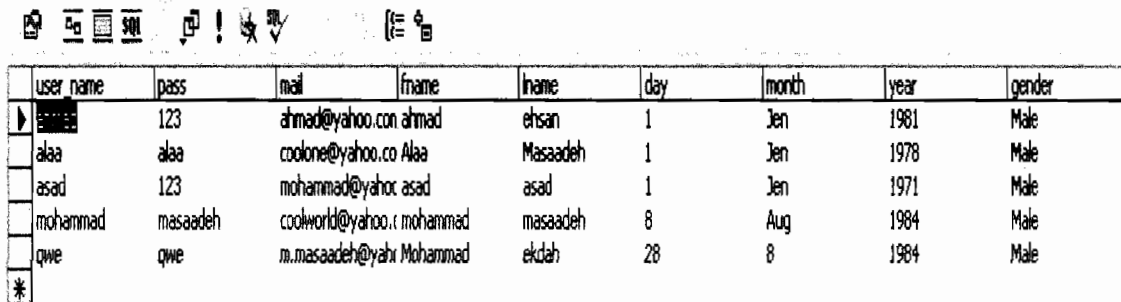
3.2.5 Development

The provisional design is implemented in this phase. The DLZ (Downloading ZONE) for multimedia files is developed. We use the Microsoft SQL Server 2000 (Rob & Coronel, 2009) that contains a database named "Mohammad" which contains the necessary tables that store information about what needs to store data about the files. There are several tables created such as:

- I. Customers table which includes data about customers.
- II. Items table which includes data about all the multimedia files.
- III. Emp tables which includes data about the site administrators.
- IV. Main table which includes data about the favorites download about each customer and related with the Customers table.

The table Customers as shown in Figure 3.3 stores information of the customers which registered in the site, the information is created with additional attributes that contains null values to make the new versions development easier. These attributes that we added should be in the known about each customer that registered in the site.

Table 3.1: Customers Table



user name	pass	mail	fname	lname	day	month	year	gender
	123	ahmad@yahoo.com	ahmad	ehsan	1	Jen	1981	Male
alaa	alaa	coolone@yahoo.co	Alaa	Masaadeh	1	Jen	1978	Male
asad	123	mohammad@yahoo	asad	asad	1	Jen	1971	Male
mohammad	masaadeh	coolworld@yahoo	mohammad	masaadeh	8	Aug	1984	Male
qwe	qwe	m.masaadeh@yahi	Mohammad	ekdah	28	8	1984	Male

The attributes are following:

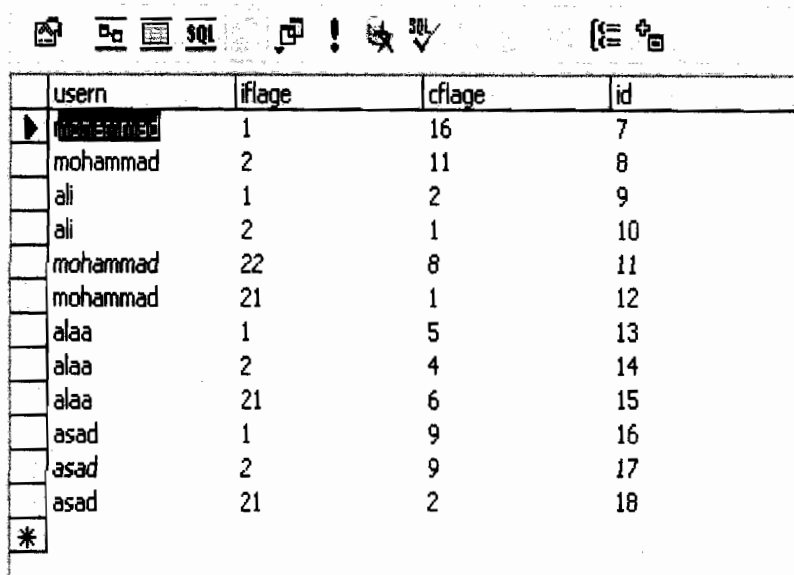
1. **User_name:** The user uses this attribute to login to the system, the username must be unique.
2. **Pass:** The user uses this attribute to login to the system.
3. **Mail:** This attribute allow the administrator to know the e-mail of the user.
4. **Fname:** The user must insert his first name.
5. **Lname:** The user must insert his first name.
6. **Day:** Detect the day of registration.
7. **Month:** Detect the month of registration.
8. **Year:** Detect the year of registration.
9. **Gender:** Detect the sex of the user (Male or Female).

Table 3.2: Items Table

flag	type	img	fil	emp	dat	id
21	3250	2pac.jpg	2pac_5pqv8xq9.sis	Mohammad	<NULL>	90
21	3250	300sparta.jpg	300sparta_t7c7zvj	Mohammad	<NULL>	91
21	3250	Allah.jpg	allah_o8hcpphb.sis	Mohammad	<NULL>	92
21	3250	Animatedbike.jpg	animatedbi_j89xt5	Mohammad	<NULL>	93
21	3250	Animatedcat.jpg	animatedca_r6ij22i	Mohammad	<NULL>	94
21	3250	Animatedlake.jpg	animatedla_c5239i	Mohammad	<NULL>	95
21	3250	Badboy.jpg	badboy_csmxq4ne	Mohammad	<NULL>	96
21	3250	Bell.jpg	bell_yi72hfdz.sis	Mohammad	<NULL>	97
21	3250	Blacknight.jpg	blacknight_9kylioss	Mohammad	<NULL>	98
21	3250	Bluecar.jpg	bluecar_cb1tc8jw.s	Mohammad	<NULL>	99
21	N92	BMW.jpg	bmw_dzu57ifd.sis	Mohammad	<NULL>	100
21	N92	BMWmini.jpg	bmw-mini_cfs6qnb	Mohammad	<NULL>	101
21	N92	Car.jpg	car_prwyywehiv.sis	Mohammad	<NULL>	102
21	N92	Dodo.jpg	dodo2_j6jm5a88.si	Mohammad	<NULL>	103
21	N92	Expressself.jpg	expressyou_cpdu2	Mohammad	<NULL>	104
21	N92	Fighter.jpg	fighter_rho1pbb7.s	Mohammad	<NULL>	105
21	N92	Firedance.jpg	firedance_kr4he6xi	Mohammad	<NULL>	106
21	N92	Fish.jpg	fish_m66sb9mo.sis	Mohammad	<NULL>	107

1. **Flag:** This attribute is created automatically when the user selects the type of the file he/she want to upload.
2. **Type:** This one is represent the type of mobile that the file supporting.
3. **Img:** This attribute represent the image name.
4. **Fil:** This attribute refers to the file name the image name.
5. **Emp:** This attribute refers to the employee name whom submitted the file with its details.
6. **Date:** refers to the submission date.
7. **Month:** the primary key which makes the record unique.

Table 3.3: Main table



	usern	iflage	cflage	id
▶	mohammed	1	16	7
	mohammad	2	11	8
	ali	1	2	9
	ali	2	1	10
	mohammad	22	8	11
	mohammad	21	1	12
	alaa	1	5	13
	alaa	2	4	14
	alaa	21	6	15
	asad	1	9	16
	asad	2	9	17
	asad	21	2	18
*				

In Table 3.4, it used for the intelligent web retrieving, which it's our study in this report, the attribute of this table is like follow:

1. **Userrn:** This attribute is represents the username of the users which already registered over the site.
2. **Iflage:** This attribute is represents the type of the file which was downloaded before.
3. **Cflage:** This attribute represents the number of downloads for each Iflage.
4. **ID:** The attribute make all the records of this table are running uniquely.

Table 3.4: Employee table

job_type	emp_name	pass	fname	mname	lname	email
Explorer	Abed	abed	Abdullah	-	Affi	nice123@yahoo.com
Explorer	Ali	Ali	ali	-	Al-qudeh	cool123@yahoo.com
Manager	Mohammad	123	Mohammad	Bahjat	Masaadeh	coolworld@yahoo.com

gender	social	license	degree	job	exp	nationa	address	day
Male	Single	B.Sc. Degree	Computer seince	Database generatc	2 year	Jordanian	Irbid	16
Male	Single	B.Sc. Degree	Computer seince	Site fixer	3 year	Jordanian	Ajloun	18
Male	Single	B.Sc. Degree	Computer seince	Database mangmer	3 year	Jordanian	Irbid	28

month	year	ad2	phone	privileg	sal	now
Mar	1985	Ednabbeh	-	2	600	14/09/2009 11:28:
April	1985	Eanjannah	-	2	500	14/09/2009 11:27:
Aug	1984	Alhuson	0788242645	1	1000	14/08/2009 11:16:

This table represents all information about the employee which is working through the site administration controlling, and the attributes as below:

1. **Job_type:** This attribute is represents the general type of the job.
2. **EMP_name:** This attribute is represents the username of the Employee.
3. **Pass:** This attribute is represents the password of the Employee.
4. **Fname:** This attribute is represents the first name of the Employee.
5. **Mname:** This attribute is represents the mid name of the Employee
6. **Lname:** This attribute is represents the last name of the Employee.
7. **E-mail:** This attribute is represents the E-mail of the Employee.
8. **Gender:** This attribute is representing the sex of the employee
9. **Social:** This attribute is represents the social condition of the employee (single, married, divorced).
10. **License:** This attribute is represents the license type of the employee (Degree, diploma, Master, Doctor).

11. **Degree:** This attribute represents the degree of the employee (IT, CS ,CIS).
12. **Job:** The attribute represents the current job of the employee.
13. **EXP:** This attribute is represents the number of experience years for each user.
14. **Nationa:** This attribute is represents the nationality of the employee.
15. **Address:** This attribute represents the address of the employee.
16. **Day:** The attribute shows the birth day of the employee.
17. **Month:** The attribute shows the birth month of the employee.
18. **Year:** The attribute shows the birth year of the employee.
19. **Ad2:** This attribute represents the details of the address.
20. **Phone:** The attribute save the contact number of the employee.
21. **Privilege:** This attribute is storing the type of the privilege, which number 1 refers to administration privilege (has a full permission to insert, update and delete the records), and number 2 refers to the employee privilege (which has a limited permission into the database).
22. **Sal:** This attribute is represents the amount of salary to each user.
23. **Now:** This attribute represents the employment date.

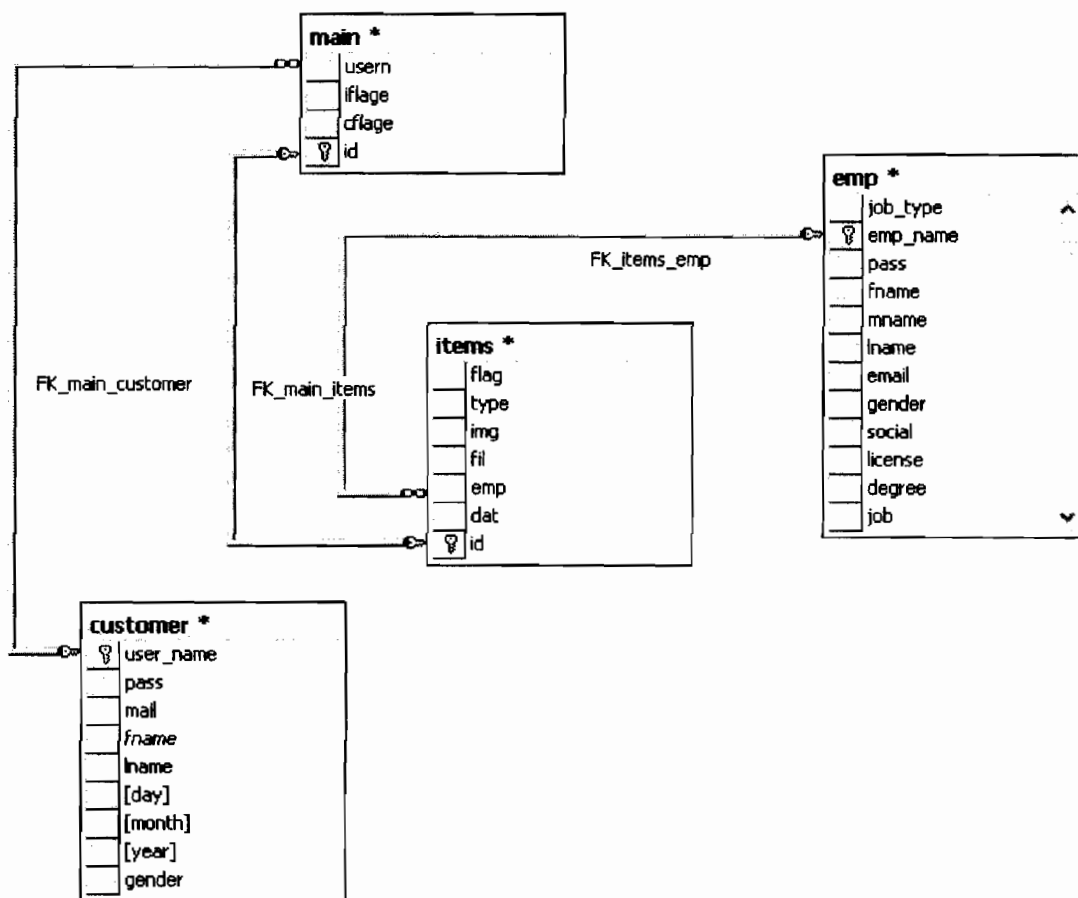


Figure 3.2: Database tables relationship for the project tables

To describe the action of the algorithm, the system is working with customer registration (allow the customer to upload data and download files and also show his favorites previous download) and without customer registration (allows the customer to just upload data and download files). The intelligent choice will be available to the customer after the first uses. This mean the customer needs to register into the website and start download, and then the favorites files will appear to the user starts from the next download.

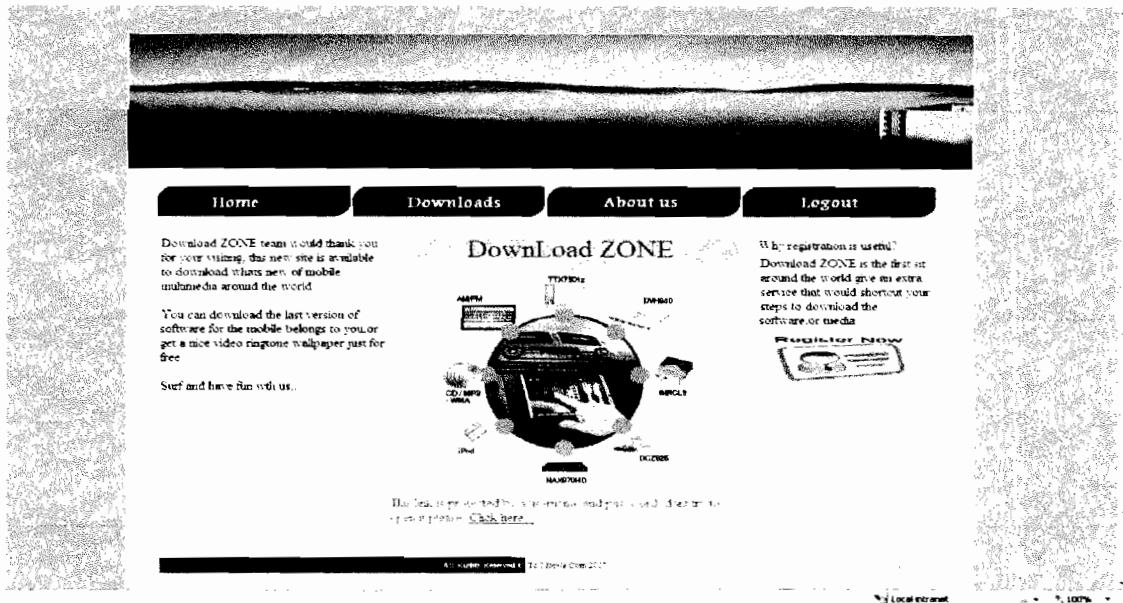


Figure 3.3: First page of the system

The user allows pressing the button “Downloads” to go to the downloading page, the user name is ‘Bahjat’ and the password is ‘Bahjat’

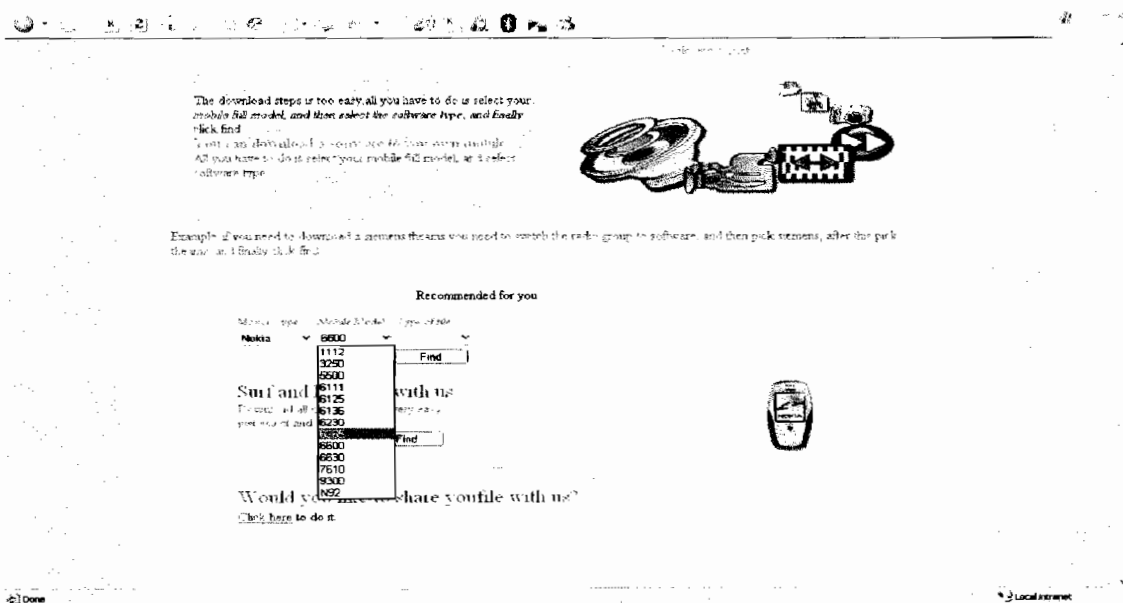


Figure 3.4: Download page of the system

The user can now and under his name “Bahjat” to download whatever he want of the files and then click Logout button to clear the Session from the server.

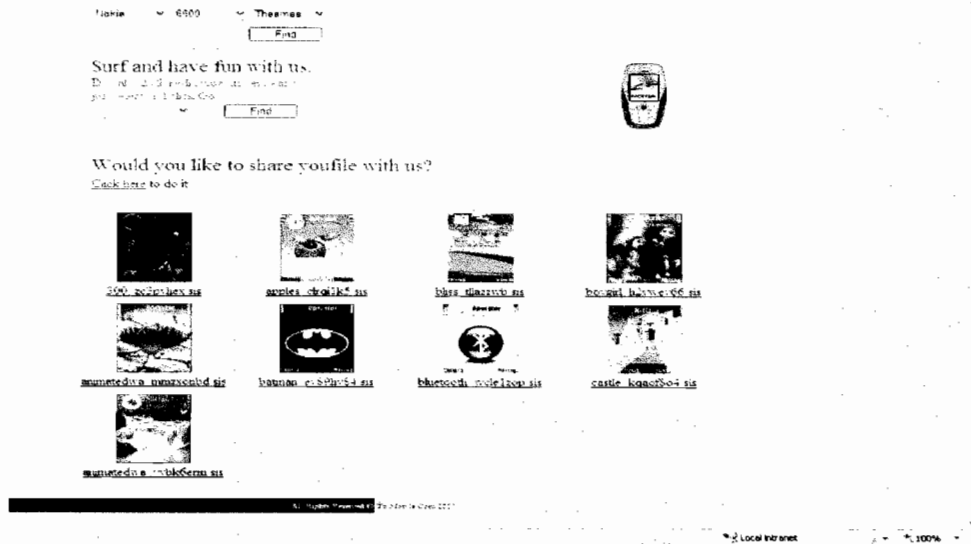


Figure 3.5: Search results for Nokia 6600 themes

Once the user “Bahjat” go back to the system, the system control will read the favorites download items to him and display them on the web browser

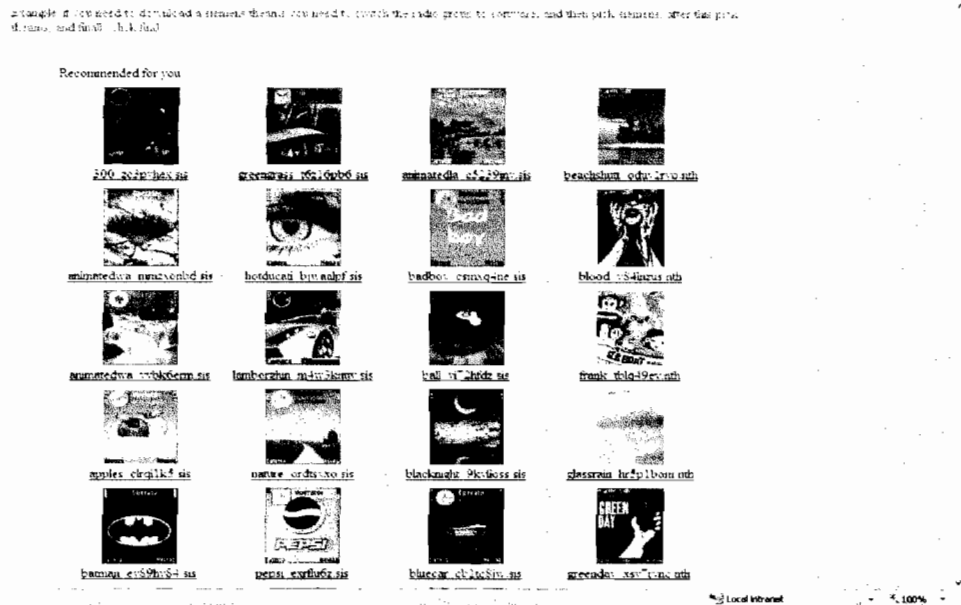


Figure 3.6: Information of the car (version A)

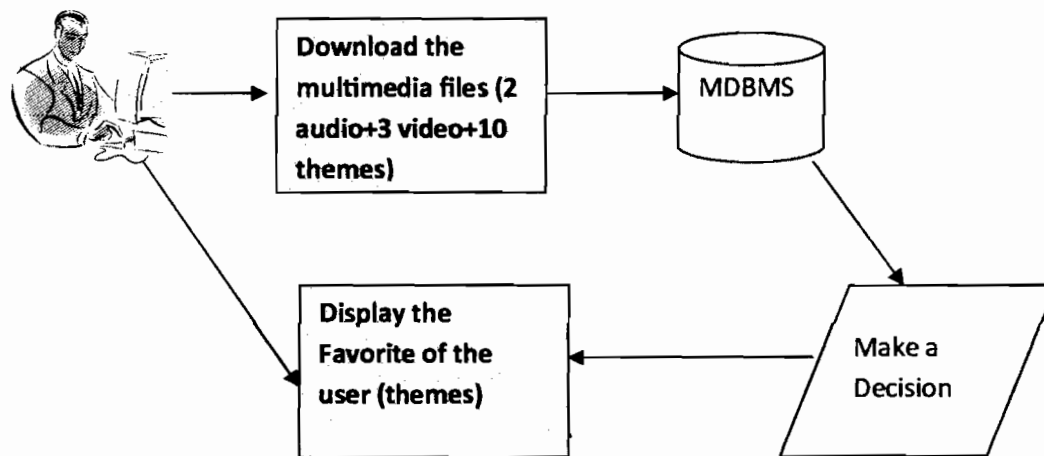


Fig (3.7): The Downloading and Retrieving procedure.

Figure 3.7 shows how the Information Retrieval System architecture works. User makes the downloading schema at the same session like below:

1. The first download:

- Username = Bahjat.
- Mobile type = Nokia.
- Mobile model = 6600.
- Type of download = Themes (10).

2. The second download:

- Username = Bahjat.
- Type of download = Audio(2).

3. The third download:

- Username = Bahjat.
- Type of download = Video(3).

Each time between every download procedure, the system will open the Main table in the database, and insert new record in it which consists of Username + iflag + Cflag + id, each one of these record will creates of one time only, after this it will be just update the Cflag which refer to the downloading number of the same item, so we can conclude that each user can has maximum of 11 records (Video + Audio + Wallpaper + (Themes + software) *4 types of mobiles)=11. The data retrieving which installed with the system will not be activated unless the user writes his username and password.

Back to the example, the system will create three records in the main table (audio + video + themes) under the user name "Bahjat". The user "Bahjat" will go back to the system later under his name, while he open the Downloads page, the system will go back to the database again, and search what is the max value of the Cflag which belong to the username "Bahjat", after detecting the max number of Cflag, the system will handle the type of download (IFlag) which belong of the max number of Cflag and go to the items table, and display to the user "Bahjat" all the media file which has the same value of the Iflag

3.2.6 Testing

Thirty students from UUM were asked to examine the prototype and provide their feedback. We put the results got from students in SPSS to evaluate the results. These results are explained in Chapter 5.

3.2.7 Evaluation

Thirty students from UUM were asked to examine the prototype and provide their feedback. We put the results got from students in SPSS to evaluate the results. These results are explained in Chapter 4.

3.3 Summary

In this chapter, the methodology which is suggested for this study is presented. A generalized sequence of the several steps for building and deploying traditional and enterprise applications is discussed. There are several Tables created. The Tables store information of the downloaded items, the information about some table's columns with additional attributes that contains null value to make the new versions development easier.

CHAPTER FOUR

Download ZONE (DLZ) Analysis and Result

4.1 Introduction

In this chapter the design of the application is done for the Download ZONE for multimedia services via web browsing, this chapter discusses the requirement of the system, and what the system must do, what the limitation of it, and also, this chapter shows the steps for each user to complete his work into the system.

4.2 Lists of Requirements

The system requirement is the data that collected to represent the information and what the system should do the system limitation and how could it work. The requirements are divided into two parts:

4.2.1 Functional Requirements:

Depended on the objectives and the definition of the Use Cases, the following are the functional requirements for DLZ system. The complete list of the system requirements (the functional requirements) is shown in Table 4.1.

Listed below are the functional requirements and non-functional requirement of the system. In the priority column, the following short hands are used:

- M – mandatory requirements (something the system must do)
- D – desirable requirements (something the system preferably should do)
- O – optional requirements (something the system may do)

Table 4.1: Functional requirements

No.	Requirement ID	Requirement Description	Priority
VISITOR REQUIREMENTS			
1.	DLZ_01	Exploring	
2.	DLZ_01_01	View General information about the website.	M
3.	DLZ_01_02	View supported multimedia mobiles.	M
4.	DLZ_01_03	View available multimedia/software.	M
5.	DLZ_01_04	The visitor can print all the General Information	D
6.	DLZ_02	Signup	
7.	DLZ_02_01	Visitor can apply to register by click REGISTER button to writes personal information about himself	M
8.	DLZ_02_02	Visitor can click CANCEL button to return back.	O
9.	DLZ_02_03	Displays error message if there is incomplete Personal information.	O

10.	DLZ_02_04	Visitor can click SUBMIT button to save the Personal information.	M
11.	DLZ_03	Download	
12.	DLZ_03_01	The visitor can download the Multimedia files.	M
13.	DLZ_03_02	The visitor must select the mobile type and multimedia kind.	M
14.	DLZ_03_03	The data must display once the visitor click FIND.	M
15.	DLZ_03_04	The visitor can download the target file by click into its link.	M
UPLOAD			
16.	DLZ_04	Upload Software	
17.	DLZ_04_01	The Administrator and User can upload the software by clicking on button Upload	M
18.	DLZ_04_02	The Administrator and User must select the type of software files and an image to present the file.	M
20.	DLZ_04_03	The Administrator and User must search and select the files from the system with the file image presenter.	M
21.	DLZ_04_05	The Administrator and User click into button UPLOAD to finish add new software file.	M
22.	DLZ_04_05	The Administrator and User may click CANCEL button to cancel the operation.	O

23.	DLZ_05	Upload Multimedia	
24.	DLZ_05_01	The Administrator and User can upload the Multimedia files by clicking on button Upload	M
25.	DLZ_05_02	The Administrator and User must select the type of Multimedia files.	M
26.	DLZ_05_03	The Administrator and User must search and select the files from the system.	M
27.	DLZ_05_04	The Administrator and User click into button UPLOAD to finish add new Multimedia file.	M
28.	DLZ_05_05	The Administrator and User may click CANCEL button to cancel the current operation.	O
USER REQUIREMENTS			
29.	DLZ_06	View personal information	
30.	DLZ_06_01	User can view his personal information by click VIEW button.	D
31.	DLZ_07	Update personal information	
32.	DLZ_07_01	User can update his personal data by click button UPDATE.	D
33.	DLZ_07_02	User can insert the new data and update them.	D

LOGIN TO THE SYSTEM			
34.	DLZ_08	Sign in	
35.	DLZ_08_01	The administrator/user must be key-in user ID and password.	M
36.	DLZ_08_02	The administrator/user press LOGIN button.	M
37.	DLZ_08_03	The administrator/user can click CANCEL button to return back.	O
38.	DLZ_08_04	The Administrator/User can press SIGN IN PROBLEMS if he forgets his password.	O
39.	DLZ_08_05	System will verify the Login information	M
ADMINISTRATORE REQUIREMENTS			
41.	DLZ_09	View Reports	M
42.	DLZ_09_01	View the available system users by click on button EMPLOYEE	M
43.	DLZ_09_02	View the available system customers by click on button CUSTOMERS	M
44.	DLZ_10	Delete files	
45.	DLZ_10_01	The Administrator can delete the files by clicking on button MEDIA	M
46.	DLZ_10_02	The Administrator can view a list of non-verified file	
47.	DLZ_10_03	The Administrator must select the file name.	M

48.	DLZ_10_04	The Administrator can delete the file by click onto button DELETE	M
49.	DLZ_10_05	The Administrator can cancel this operation by press BACK button.	O
50.	DLZ_10_06	The Administrator can press DONE button to complete the update procedure.	M
51.	DLZ_11	Add New Employee	
52.	DLZ_11_01	The Administrator insert new employee by click EMPLOYEE button.	M
53.	DLZ_11_02	The Administrator can insert the required employee information and click into FINISH button.	M
54.	DLZ_11_03	The Administrator can press CANCEL button to go back of this step.	M
55.	DLZ_12	Delete Employee	
56.	DLZ_12_01	The Administrator can delete an exciting employee by click DELETE link.	M
57.	DLZ_12_02	The Administrator can press into CANCEL button to cancel the operation.	O
58.	DLZ_13	Delete Membership	
59.	DLZ_13_01	The Administrator can delete a member ship by click DELETE button.	M
60.	DLZ_13_02	The Administrator can press into CANCEL button to cancel the operation.	O

61.	DLZ_14	Generate Reports	
62.	DLZ_14_01	The Administrator can generate report about available employees on the system.	D
63.	DLZ_14_02	The Administrator can generate report about available customers on the system.	D

4.2.2 Non-Functional Requirement:

Non-functional requirements in Table 4.2, describe all aspects in elective way. In this project determines some of these requirements, this requirement will help system to achieve its goal clearly, rapidly and easily.

Table 4.2 Non-Functional requirements

No.	Requirement ID	Requirement Description	Priority
64.	DLZ_15	Reliability issues	
65.	DLZ_15_01	For a single user, the system should crash no more than once per 10 hours.	M
66.	DLZ_15_02	If the systems crash, it should behave perfectly normal when reloaded again.	M
67.	DLZ_16	Usability	
68.	DLZ_16_01	Improve the system interface.	M
69.	DLZ_16_01_01	Easy to use and don't need training	M
70.	DLZ_16_02	Categorize depended on the subject	M

71.	DLZ_17	Efficiency	
72.	DLZ_17_01	<i>performance</i>	D
73.	DLZ_17_01_02	Ability to search and retrieve data	D
74.	DLZ_17_02	space	D
75.	DLZ_17_02_01	Support the system with a large data bases	D

Data Dictionary

Table 4.3: Data Dictionary

Sentence	Meaning
General Information:	(Site features, policy calculator, Mission Vision).
Login Information:	User name and Password.
Login permission:	What allow and not allows to the user can do on the site database.
Personal information:	Like e-mail, first name, last name... etc.

4.2.3 Software requirements:

Briefly in Table 4.4, the DLZ system needs the following tools, hardware and software to run correctly and in complete way of full activation of all requirements:

Table 4.4 Software requirements

No	Requirement ID	Requirement Description	Description	Priority
76.	DLZ_18	Operation System(OS)	Win XP SP2 or Win Vista 32x	M
77.	DLZ_19	Internet Server	IIS (internet information services for windows.	M
78.	DLZ_20	.NET requirement	.NET Platform	M
79	DLZ_21	DBMS (Database system)	SQL Server 2000	M

4.3 System Design

4.3.1 Requirements modeling

The Unified Modeling Language (UML) is the suitable platform to implement the system design. The UML goal to provide a common vocabulary of object-oriented terms and diagramming techniques that is full to model and design many systems (Dennies et al , 2002).

4.3.1.1 Use Case Diagram

The use case diagram is a diagram that represents sequence of actions which allow the analyst to model the instruction of the information system depends on its settings. The use case is using to show what is the limitation for each actor (user), and its drawn to reflect when the actor uses a system to do a task or process. The actor could be a person, computer, out-system like organization, Figure 4.1 show the use case diagram as a general behavior for the DLZ system with its actors and cases.

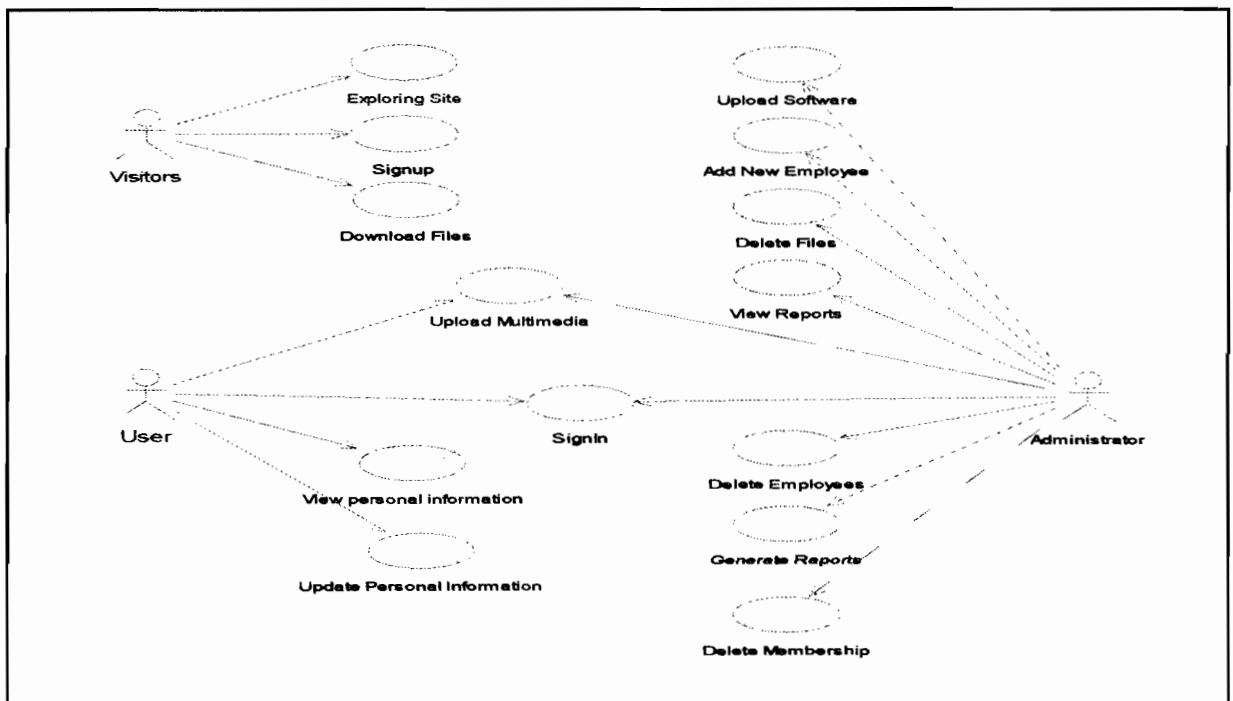


Figure 4.1: Use Case Diagram for DLZ system

4.3.1.2 Use case specifications:

The semantics of use cases is directly obtained as a consequence of formal representation of use cases in the language of higher-order logic (Rysavy,& Bures,2004). The analyst in this stage will specify the following use cases:

Table 4.5: Use case specification

1. USE CASE: DOWNLOAD FILES (DLZ_03)

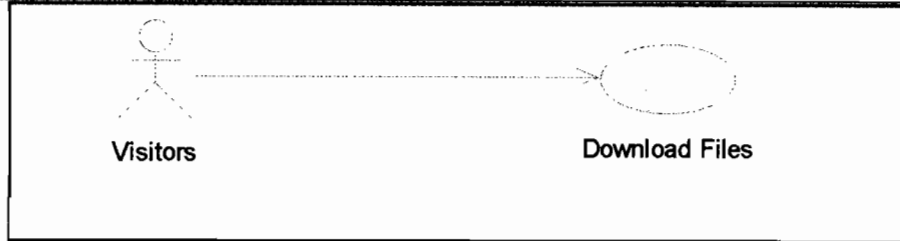


Figure 4.2: Download Files

BRIEF DESCRIPTION:

This use case is performed by the visitor, in this use case allow the visitor to download the files by select the mobile type and multimedia kind, the data will display once the visitor click the FIND button.

PRE CONDITION:

Not Applicable.

CHARACTERISTIC OF ACTIVATION:

The visitor must enter the Download page.

FLOW OF EVENTS:

Basic Flow (DLZ_03_01)

- The visitor can select his mobile type from list of choices.
- The system control will handle the events and go throw table ITEMS to search about mobile kinds and display them to the user.
- The visitor selects the type of software and click FIND button.
- The page control will search into table ITEMS and retrieve the user selection into his page.
- The visitor can select his target file from list of files and click into its link to download it.

POST-CONDITIONS

- The system creates a history records for each user dependently, these records are represent what is the favorite's files for the visitor.
- Each time the visitor makes a download procedures, these history records will updates depends the file kind of the downloads.

CONSTRAINT(S)

Not Applicable.

2. USE CASE: UPLOAD SOFTWARE (DLZ_04)

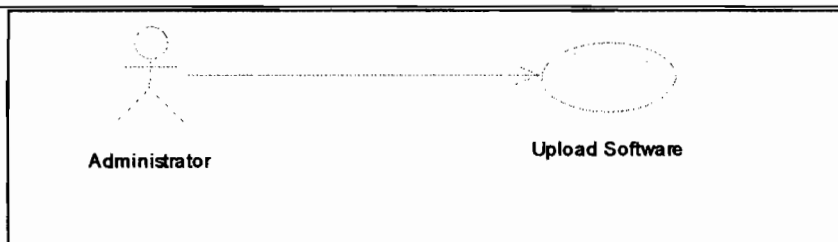


Figure 4.3: Upload Software

BRIEF DESCRIPTION:

This use case is performed by the Administrator, in this use case allow the administrator to upload the software when he select the file type (themes, software) with the mobile type, and pick the software file up from his local system then click the UPLOAD FILES button to complete the uploading procedure.

PRE CONDITION:

The administrator must be signed in into the system before uploading.

CHARACTERISTIC OF ACTIVATION:

The administrator must enter to the upload page.

FLOW OF EVENTS:

Basic Flow (DLZ_04_01):

- The administrator must select the type of his file using the interface of the system.
- The administrator must select an image to present his file from his local system by press into BROWES button.
- The administrator must select his file from the local system by press into BROWES button.
- The administrator click UPLOAD button to complete the uploading procedure (A_1: Cancel).
- The system will handle the event and save both of image name and file name into the database table name ITEMS.
- The system control will upload the selected image and file into folder named (FILES).
- The system will display a message to the stuff and user that the procedure is done successfully.

Alternative Flow:

A_1 Cancel (DLZ_04_05)

The administrator my press the CANCEL button to abort the operation.

POST-CONDITIONS

The system allows the visitor to show the uploaded software files.

CONSTRAINT(S)

Not Applicable.

3. USE CASE: UPLOAD MULTIMEDIA (DLZ_05)

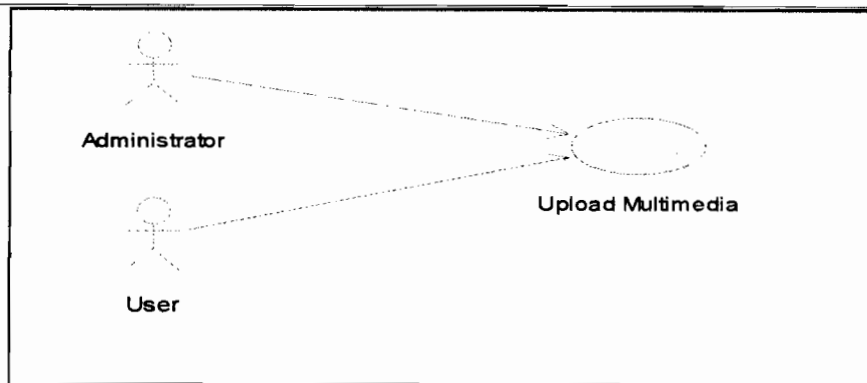


Figure 4.4: Upload Multimedia

BRIEF DESCRIPTION:

This use case is performed by the User and Administrator, in this use case allow the both of user and administrator to upload the software when he select the file type (Music, Video or Wallpaper) , and pick the multimedia file up from his local system then click the UPLOAD FILES button to complete the uploading procedure.

PRE CONDITION:

The User or administrator must be signed in into the system before uploading.

FLOW OF EVENTS:

Basic Flow (DLZ_05_01):

- The staff or administrator must select the type of his multimedia file using the interface of the system.
- The actor must select his file from the local system by press into BROWES button.
- The actor click UPLOAD button to complete the uploading procedure (A_1: Cancel).
- The system will handle the event and save the file name into the database table name ITEMS.

- The system control will upload the selected file into folder named (FILES).
- The system will display a message to the Administrator and user that the procedure is done successfully.

Alternative Flow:

A_1 Cancel (DLZ_05_05):

The user or administrator may press the CANCEL button to abort the operation.

POST-CONDITIONS

The system allows the visitor to show the uploaded multimedia and software files.

CONSTRAINT(S)

Not Applicable.

All the other use case specifications are available in appendix B.

4.3.1.3 Sequence Diagram:

The goal of sequence diagram is to show the interaction and relation between each of the actors and the system different pages, depends to Dennis et al (2005), the sequence diagram permits an analyst to describe the dynamic relations among objects in the DLZ system. Figure 4.15, Figure 4.16, Figure 4.17, Figure 4.18, and Figure 4.19 shows the sequence diagram for each one of the use case specification. The other entire sequence diagrams are available in appendix C.

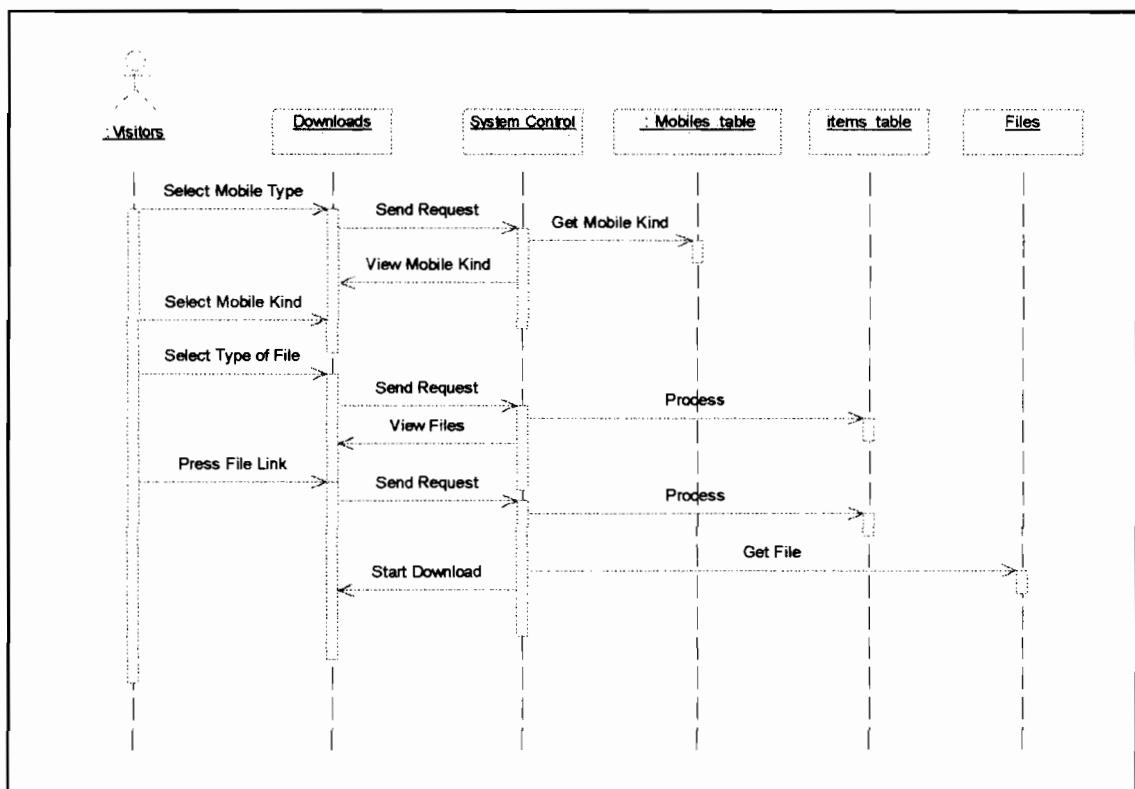


Figure 4.5: Download Files Basic Flow

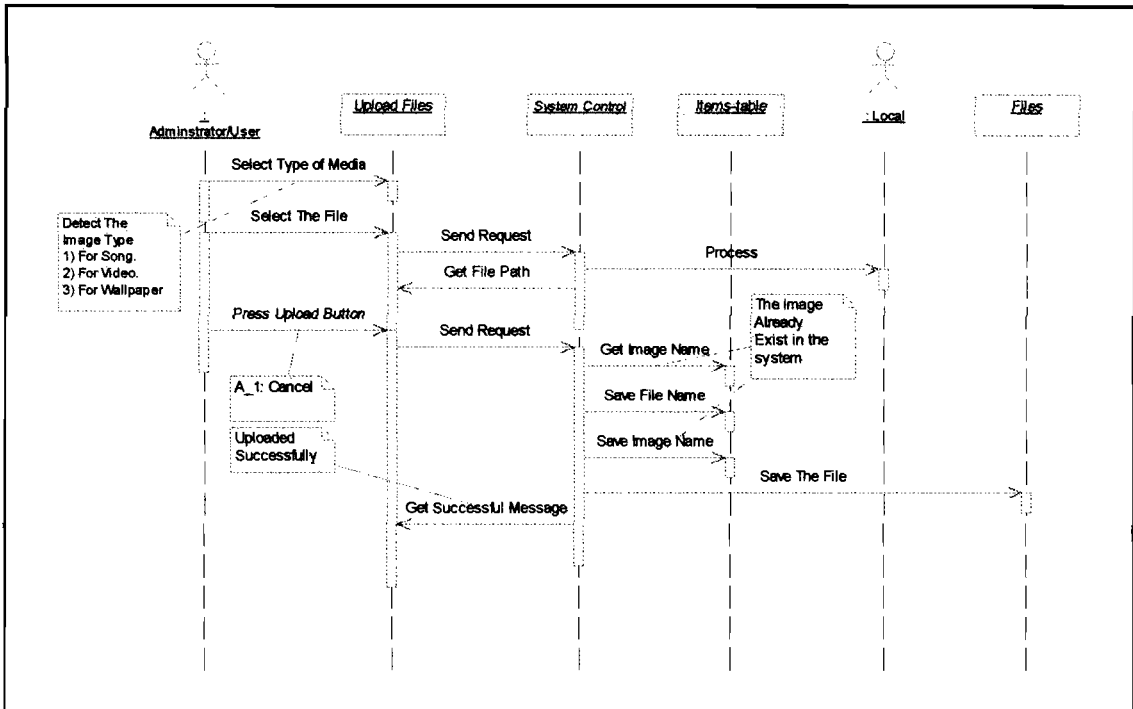


Figure 4.6: Upload multimedia basic Flow

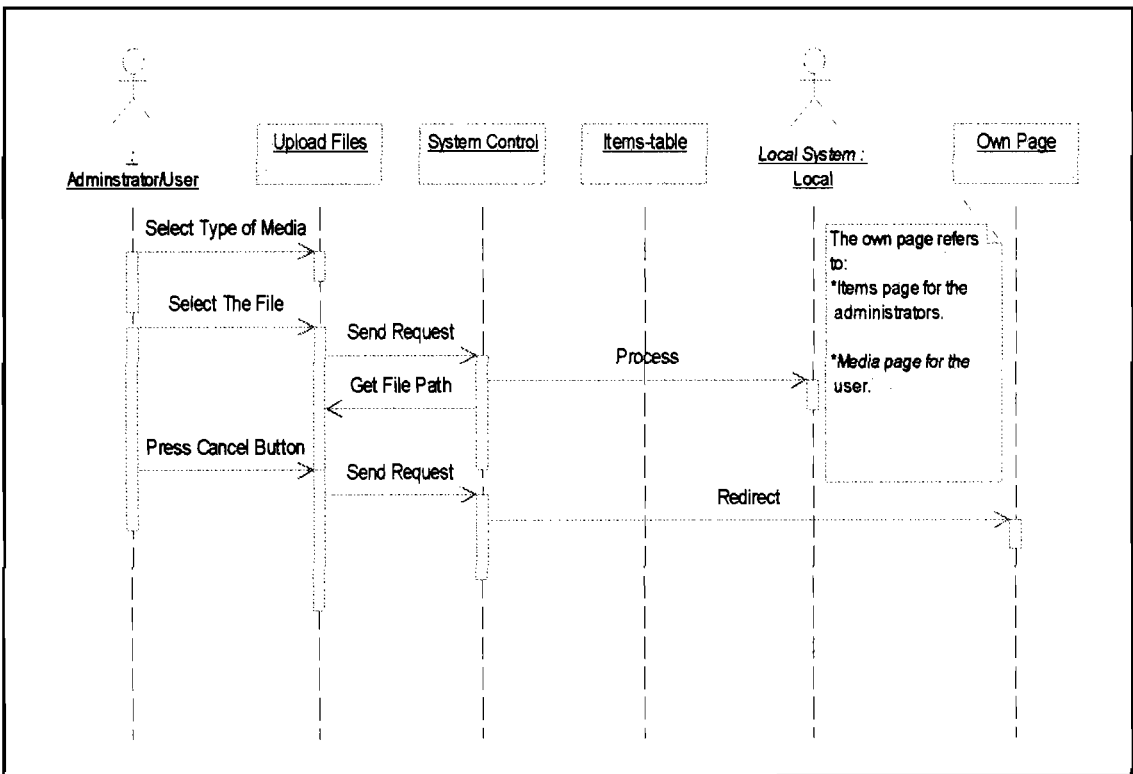


Figure 4.7: Upload multimedia Alternative Flow

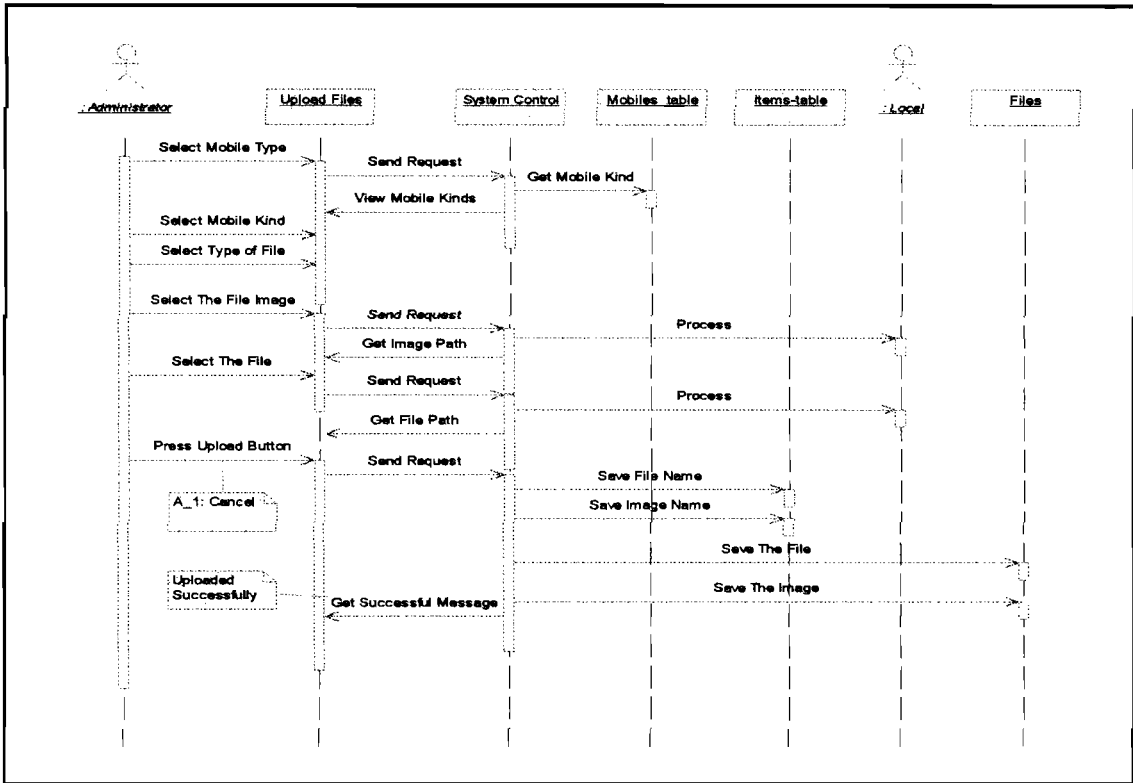


Figure 4.8: Upload Software Basic Flow

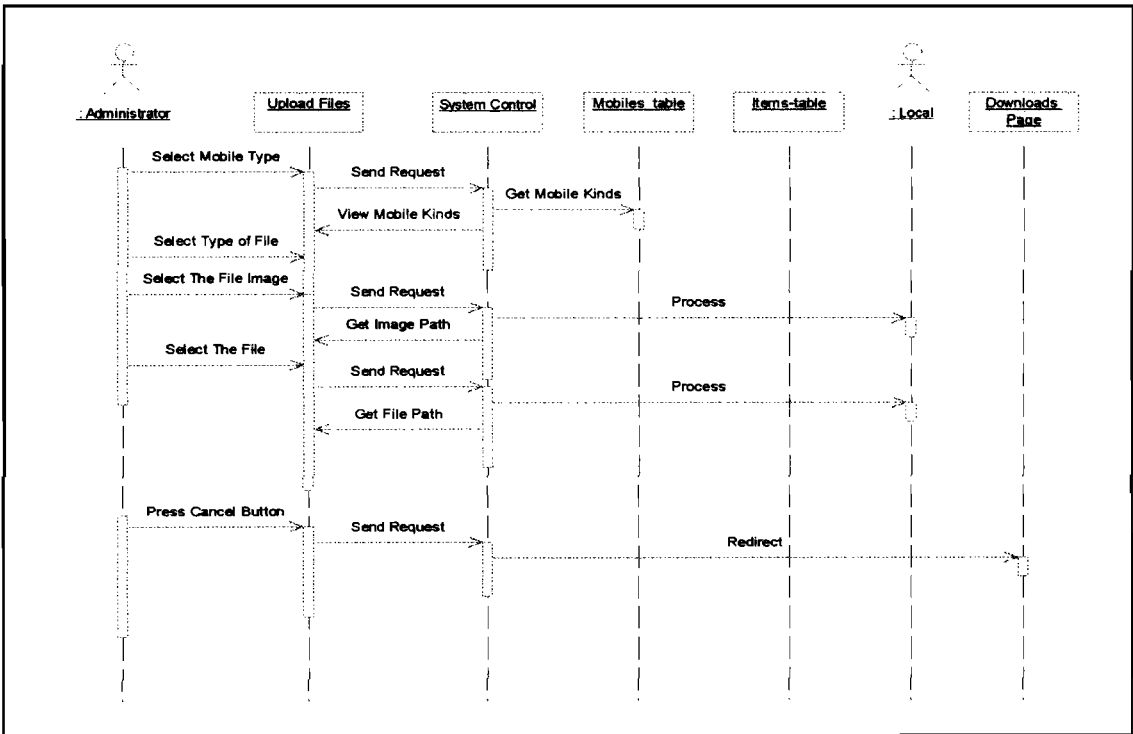


Figure 4.9: Upload Software Alternative Flow

4.3.1.4 Class Diagram

The UML class diagrams are used to describe the static view of an application: the main constituents are classes and their relationships (Noraida,& Zarina,& Sufian,2007).

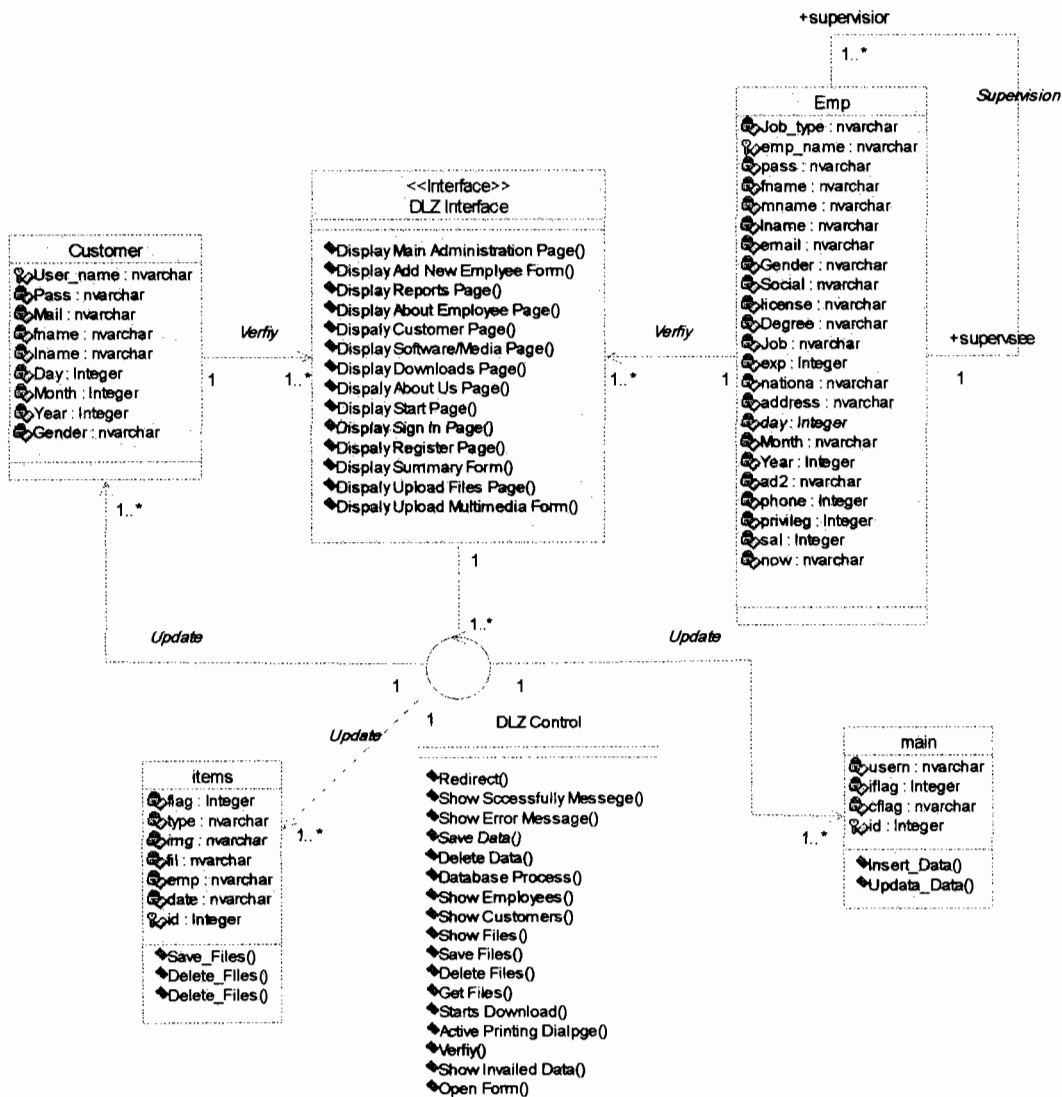


Figure 4.10: Class Diagram for DLZ System

4.4 System Development

4.4.1 Graphical User Interface (GUI)

In this part, the GUI will permit each of the customers and the administrators to view and use the system through the use of computer-controlled devices. GUI let the system user to show where the page that gives him the choices of download is. In this system, we have several web pages that allow the user to use them, and we will discuss them below:

4.4.1.1 The Home Page (index1.aspx):

This page is the first one appears to the users. It has a list of link, they are Home, Downloads, About Us, Log out, Administration and customers register.

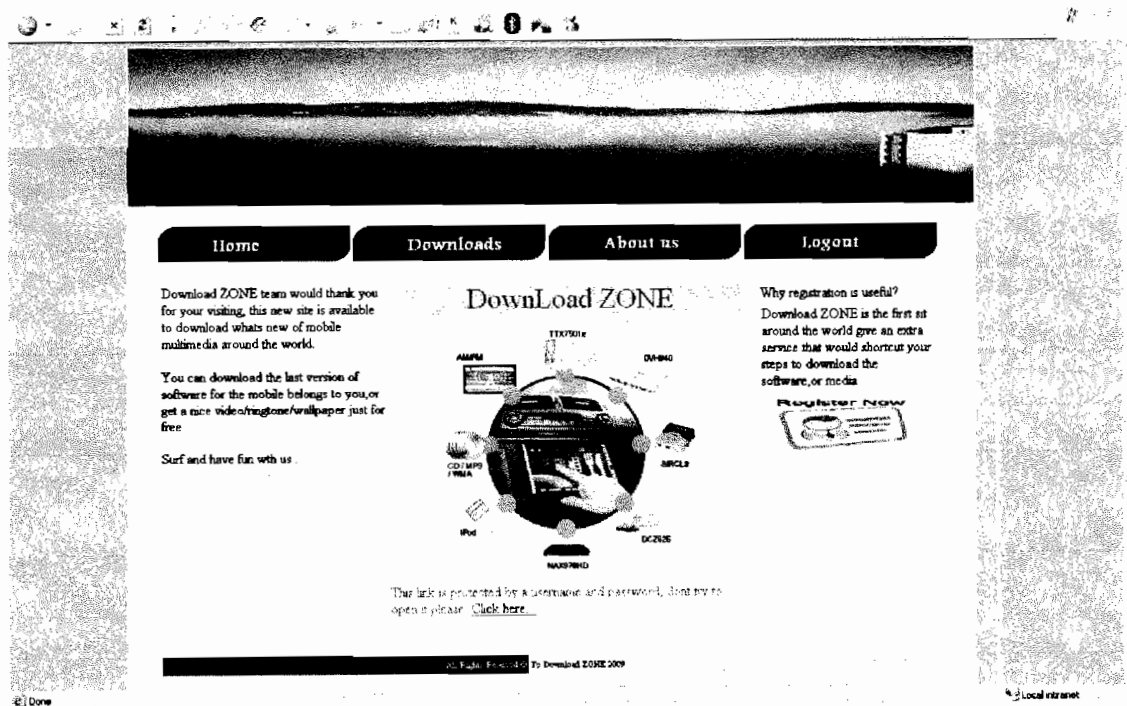


Figure 4.11: DLZ System Home Page

4.4.1.2 Registration Page (Userc.aspx):

In the Home page, the new users allow to click into the image registration to signing to the system if they are old user, and sign up if they are still new.

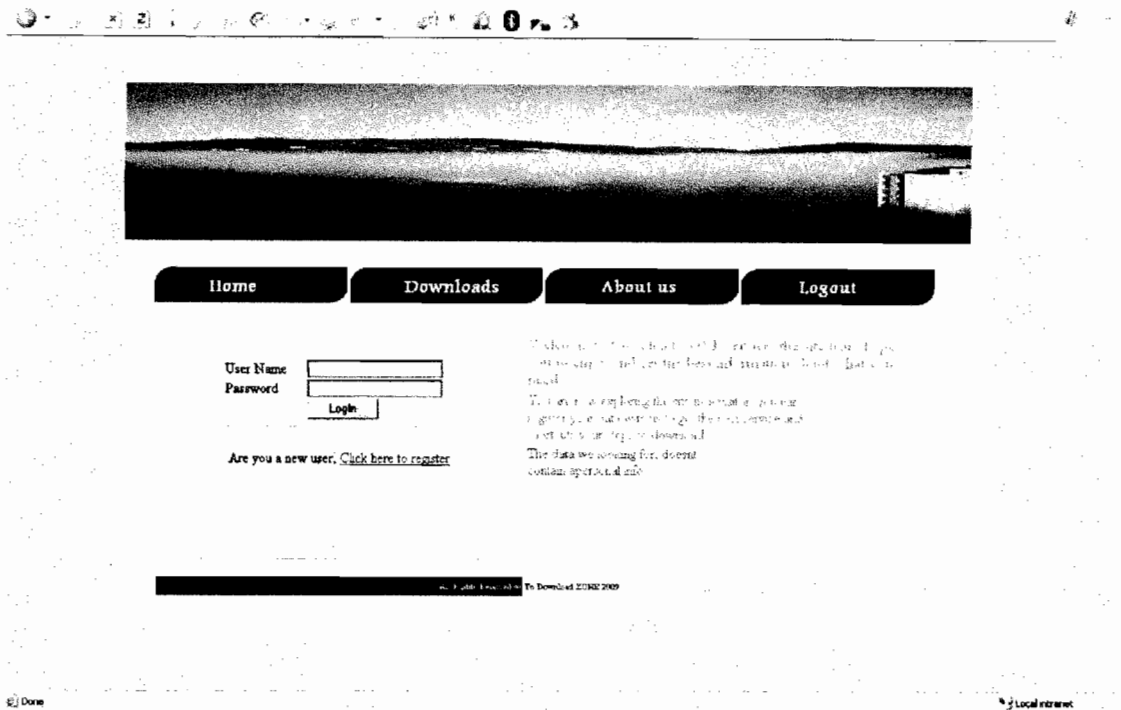


Figure 4.12: DLZ Registration Page

If the user owns a username and password, he just writes them into their fields and click Login button. If not, the user can click the “Click here to register” link to sign up as a new user. The Unregistered user can go throw downloading pages and download what he want from several multimedia files, but the intelligent information retrieving service will not be activate because the system don’t know who is the user to give him his favorites downloads. When the user which he owns a username and password login, a greeting message will appear into all the pages that greet the user and show him all the time that he is still sign in.

4.4.1.3 Sign Up Page (Registerc.aspx):

The screenshot shows a web browser window displaying the DLZ Sign Up Page. At the top, there is a navigation bar with four buttons: 'Home', 'Downloads', 'About us', and 'Logout'. Below the navigation bar is a registration form. The form contains the following fields and controls:

- User name:
- Password:
- E-mail Address:
- First name:
- Birth Date: (with a dropdown menu showing '1', 'Jan', and a downward arrow)
- Confirm Password:
- Confirm Email-Address:
- Last name:
- Gender: Male Female

At the bottom of the form, there are two buttons: 'Reset' and 'Submit'. Below the form, there is a small footer area with the text 'Done' on the left and 'Local intranet' on the right.

Figure 4.13: DLZ Sign Up Page

This page allows the new user to create his own profile into the site database records, the records which required knowing about each new user are Username, password, Email Address, First Name, Last Name, Birth Date and Gender. All these record must be entered, if the user forgot one of them, the system must alert him by a small star (*) beside the forgotten field. The password and E-mail must write twice to make sure that they entered correctly, if don't, the system will alert the user that there is a wrong password, wrong E-mail and an error in the E-mail spelling. If everything is OK, the user allows clicking Submit to go to the next page, or else click Reset to go back to the page Default.

4.4.1.4 Summary of the new registration (summary.aspx):

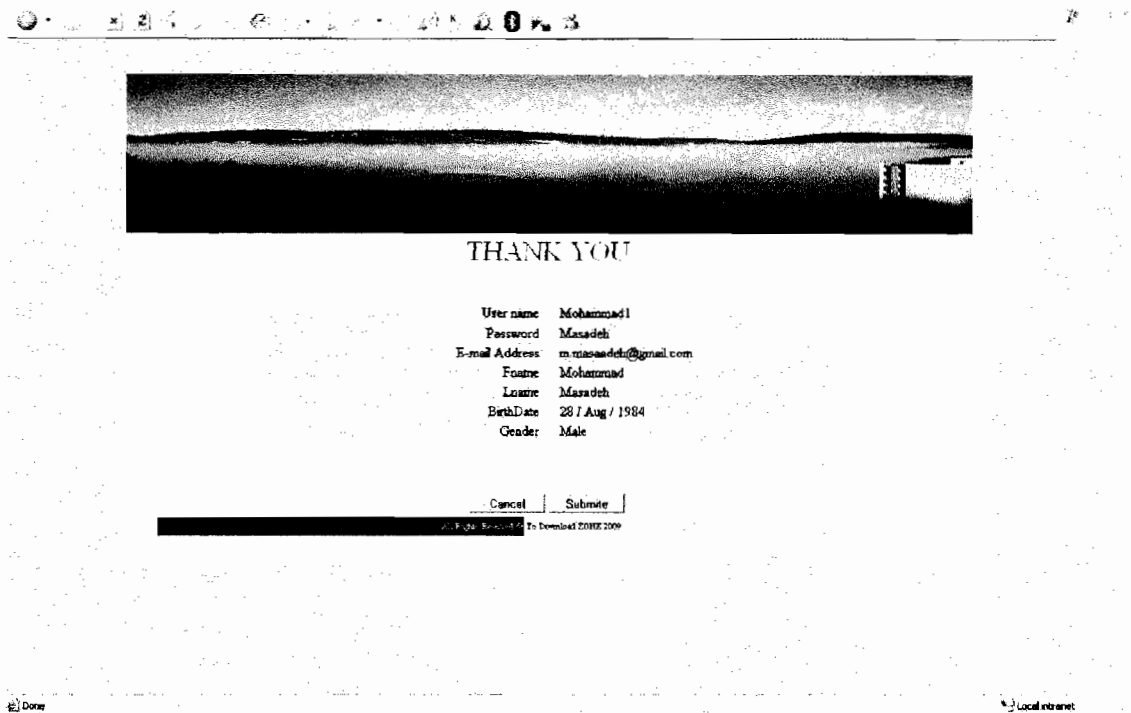


Figure 4.14: DLZ Summary Page

The summary page give a quick view for the user data as shown in Figure 4.24, until now the data still saved as a session into the website and no new record are created into the database, this happened to allow the user click the Cancel button to drop the temporary profile and starts again if he found a wrong in the records, or else click Submit button to create a new profile.

After the new profile is created, a new link button appear to the user, the user must click it to go back to the Registration page in Figure 4.12, to allow the user inserting his user name and password, then click Login button. After this the session will e-send the user request to the Home page in Figure 4.11.

4.4.1.5 Downloads Page (Download.aspx):

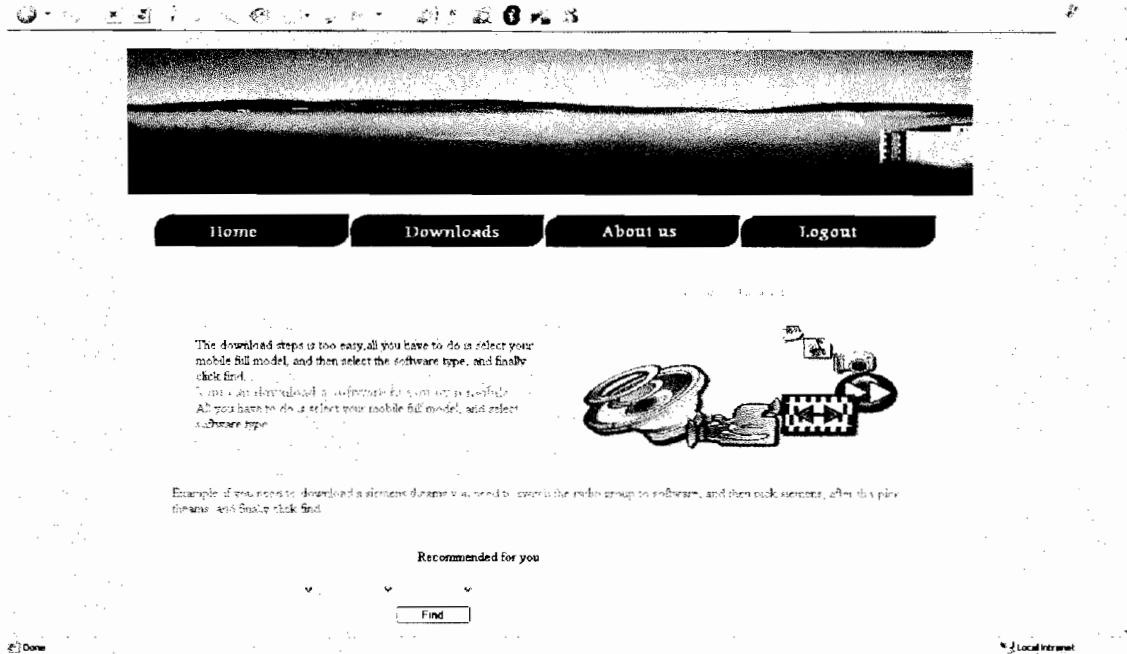


Figure 4.15: DLZ Downloads Page

In The top of this page in Figure 4.25, the customer first name appears to make a proof that the customer session is still running. When the new customer log to this page for the first time, the intelligent files retrieving will not be activate, because this service need a history records of the user about what he like to download.

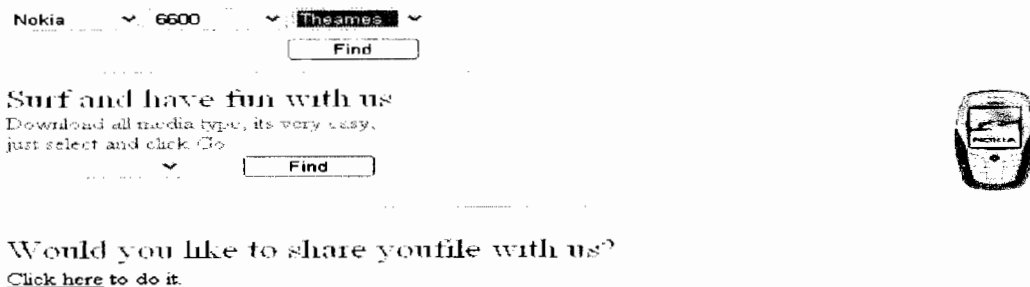


Figure 4.16: DLZ Search interface

In Figure 4.26, its show the main search interface of the DLZ system, the user allow to select one of 5 types of multimedia files: Themes, Software, Audio, Video and Wallpaper, the user allow to select one of them, then he can press button Finish to view the available file.

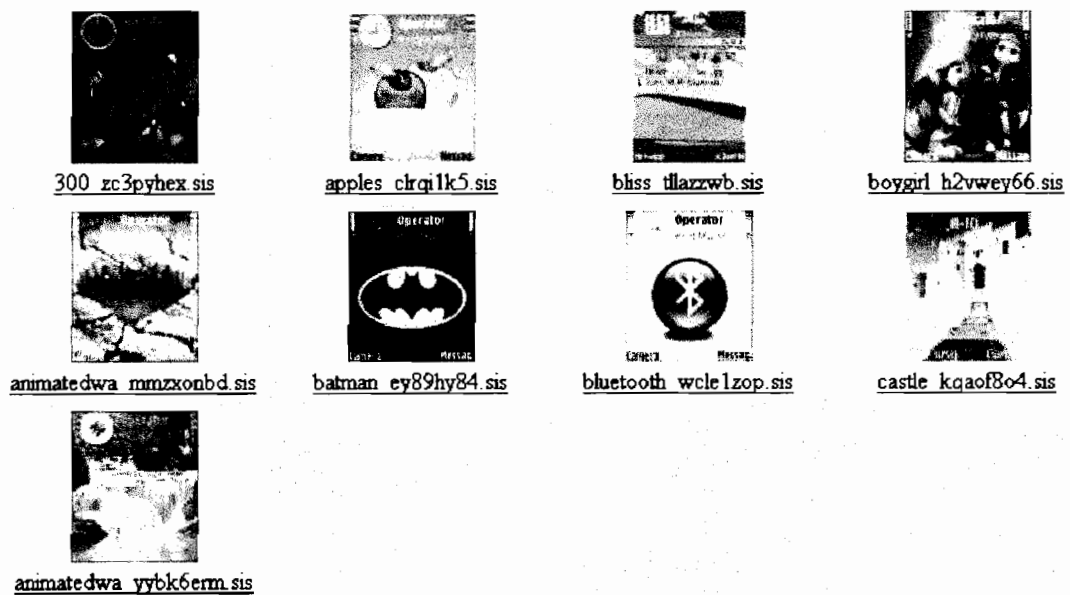


Figure 4.17: DLZ Search Result

In Figure 4.27, its show the result of the Nokia 6600 Themes, simply the user can click into the file name to download it. Once the user download the file, the DLZ system will create a new profile for the user and start update it every time the user “Mohammad” download a file.

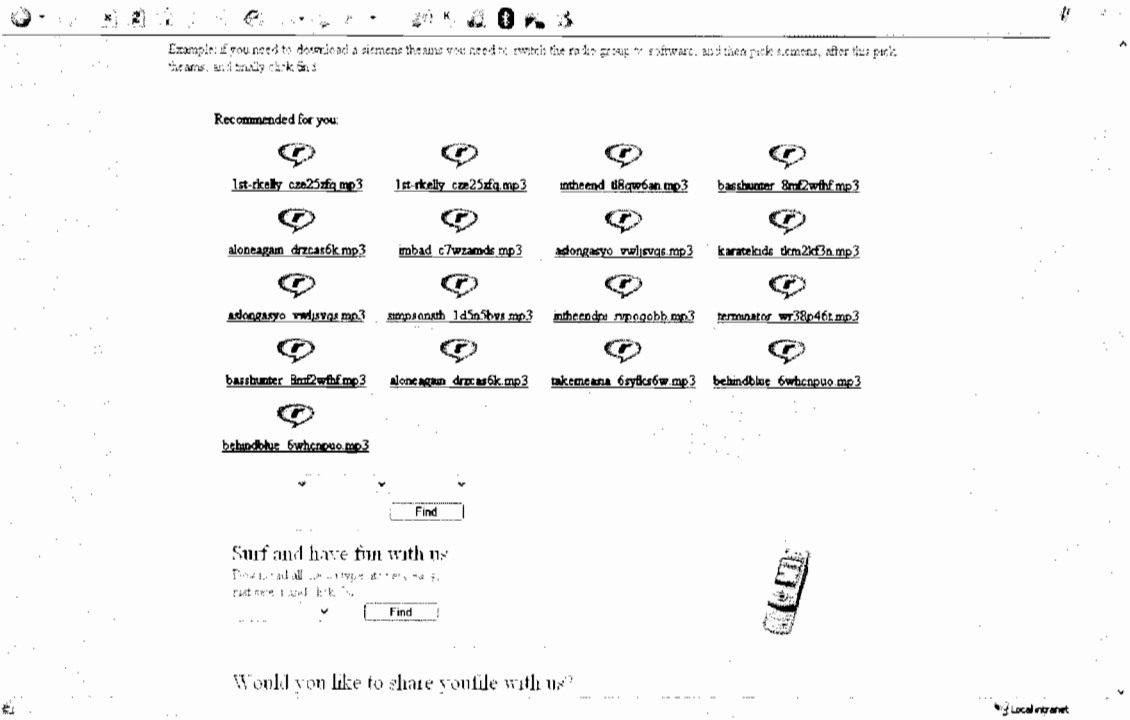


Figure 4.18: The intelligent information retrieving

As an example, the user mohammad1 was download files, and the maximum number of files was to the audio multimedia files, the me logged out, next time he logging in and go back to the downloads page, the system will generate his favorite like Figure 4.28.

4.5 Testing

The prototype was tested and make sure that it's reached all the requirements which it must do them correctly. The testing steps forced us to use real data of mobile extension format like .SIS file. Those files were entered automatically to the multimedia DBMS and starts view them in the main customer page. Moreover, the system has a good security to keep track that the administration side must be independent from the user side. The system now covered its components and works as well as it must be, and all its units are works together effectively.

CHAPTER FIVE

DISCUSSION OF RESULTS

5.1 Introduction

The evaluation uses usability testing based on the standard tests followed by interview in a closed environment with video equipment. Testing with potential users can obtain as efficient feedback as possible in a short time frame and with the available resources. It is also irrelevant to ask people in a focus group to predict whether they would like something they have not tried, so the only way to get valid data is to let users experience the technology before opinions are sought (Nielson, 2000).

According to Williams (2009) the usability testing in a system of software system development projects can be considered as the most important part. Usability effectiveness, efficiency and specific users can achieve specified goals in a certain environment to create satisfaction. The System testing is the final stage in the system development, after the system has been developed; it was tested by running the system on internet explorer, Dennis (2002) system testing is to minimize system from bugs

and errors but not to fully eliminate it. The user evaluation of the prototype was conducted on thirty respondents; each of them was given brief explanation regarding the usage and the user interface of the prototype. The questionnaire was adapted from (Dennis, 2002), it covers three dimensions: Usefulness, Ease of Use of the prototype and Using DLZ system for retrieving and downloading process.

The questionnaire consists of two sections: General information and System aspects. And the sample size was 30 students and all of them from University Utara Malaysia; a complete of this questionnaire is included in Appendix A.

5.2 General Information

The General section functions as mechanism to collect student demographics and student experience with mobile applications. The System aspects section functions as mechanism to collect data on student opinion regarding to the prototype usability aspects. Figures below summarized Demographic Distribution of the Sample. The Statistical Package for Social Sciences (SPSS.12) is used to perform descriptive statistics analysis for the collected data (Coakes, Stead, 2007), and the relevancy of retrieved information is based on precision. (Search, Practies, 1994). The demographic questions include the Gender, Age, Education, Period, brand and Year of study as seen in Figures bellow.

5.3 Demographic Distribution of the Sample:

Table 5.1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	21	70.0	70.0	70.0
	Female	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

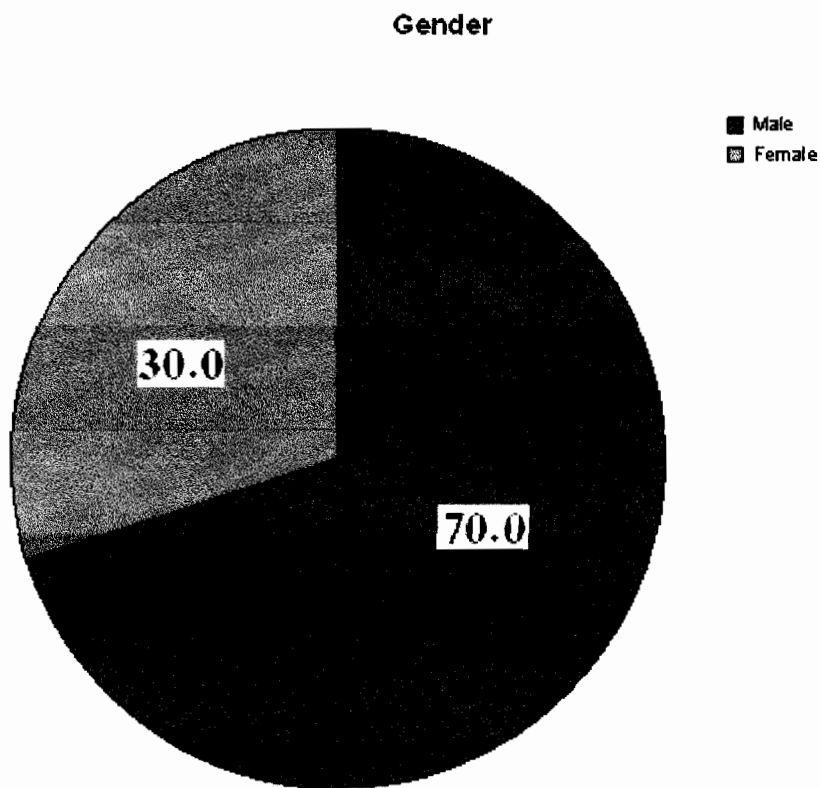


Figure 5.1: Gender

In Table 5.1, the gender of the 30 persons which was answered on the questioner was divided into 70% male on 21 students, and 30% girls in 9 students, and represents in Figure 5.1 as male in blue and female in green.

Table 5.2: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-24	11	36.7	36.7	36.7
	25-29	7	23.3	23.3	60.0
	30-35	8	26.7	26.7	86.7
	More than 35	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Age

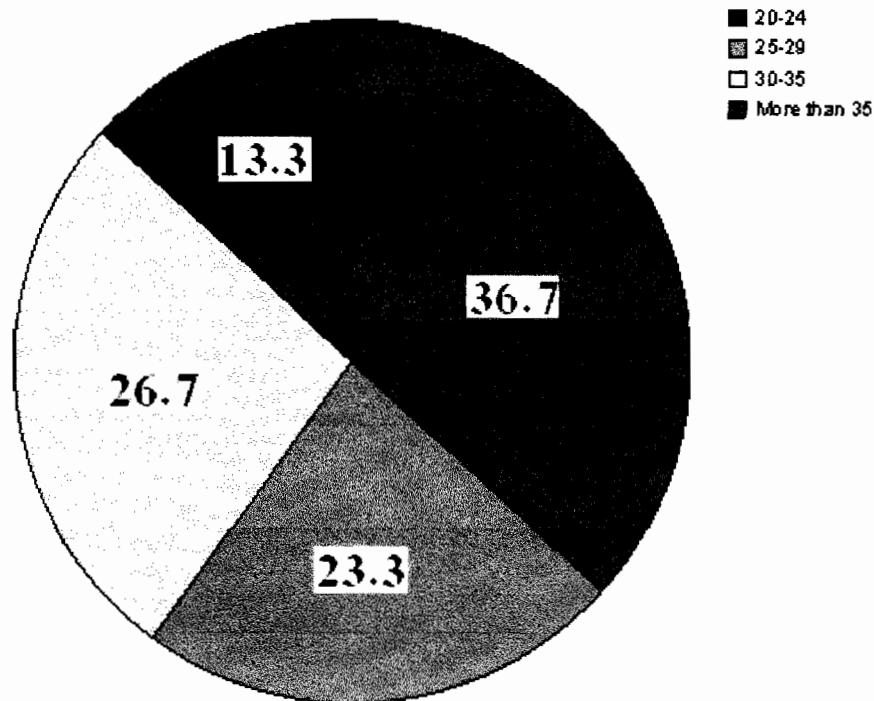


Figure 5.2: Age

In Table 5.2, the age of the sample is 36.7% for 20-24 and 23.3% for 25-29, and 26.7% was for 31-35 and the others is for more than 35 years old of the 30 persons which was answered on the questioner, and this shown graphically in Figure 5.2. The Figure shows that the height value for the students which age are between 20-24 because the site concern much more with the fun material

Table 5.3: Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	12	40.0	40.0	40.0
	China	5	16.7	16.7	56.7
	Arabic	10	33.3	33.3	90.0
	Other's	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Race

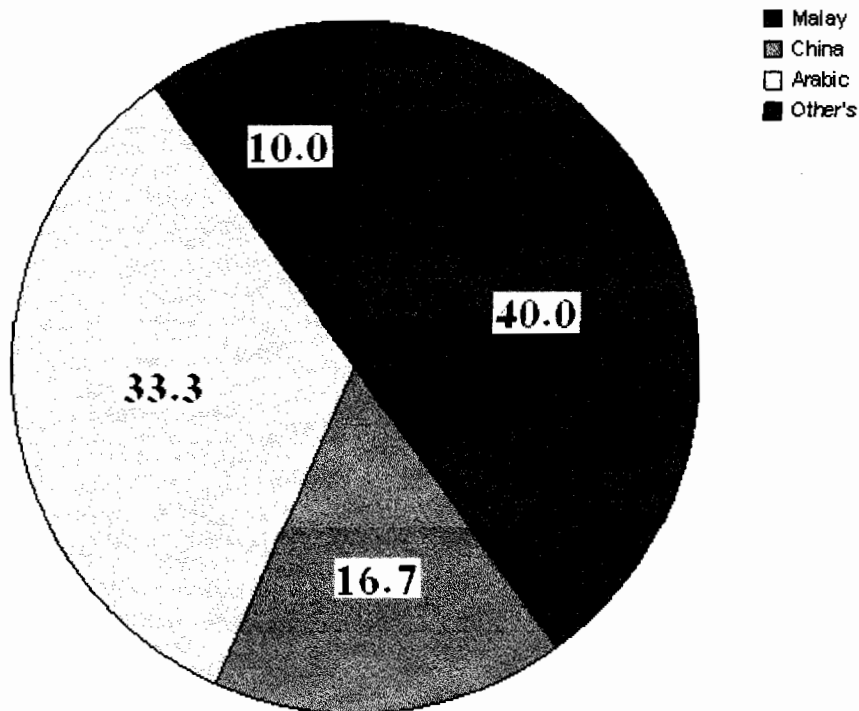


Figure 5.3: Race

Most of the sample persons are Malay as shown in Figure 5.3 and Table 5.3, the other races was divides into Indians, Thai and Indonesian. The sample rate shows that Arab is just 33.3 and the Chinese is only 16.7 in the UUM.

Table 5.4: Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Degree	6	20.0	20.0	20.0
	Master	16	53.3	53.3	73.3
	PH,D	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Education

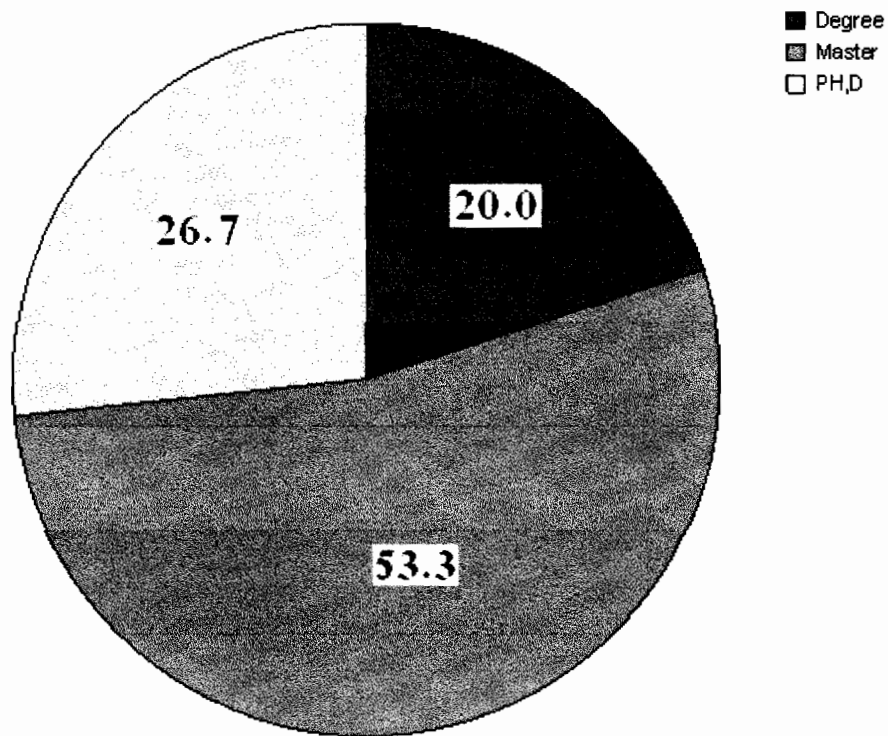


Figure 5.4: Education

Because of the sample was from UUM students, the graph above shows that Master level is the highest, the PH,D, and last the Degree.

More information about the system evaluating will be in appendix d.

5.4 Summary

This chapter concentrates on the evaluation of the study room prototype by a sample of target students, so there was explanation of the content of the questionnaire and then statistical analysis of the user responses to the different sections of the questionnaire. The users found this prototype Satisfaction, Ease of use and learning, Usefulness, and Using DLZ system for downloading and retrieving data. Even more, users were satisfied to use this clear simple system to do their downloading procedures and retrieve their favorite's data.

CHAPTER SIX

CONCLUSION

6.0 Introduction

The main goal of this study is to describe and show a method of the intelligent information retrieving and how it can be run to controlling and retrieving from the multimedia database. The study shows a graphical view to the acceptance of the system for the undergraduate, postgraduate and PhD students in the UUM, which they used the system and test the intelligent retrieving on it, and the study also provide the security design of the system which will be expressed in appendix B.

6.1 Conclusion of the study

Depends of chapter one previously, the objectives of this study is to make a history records for each user to use it in the data retrieving mechanism. The multimedia database is the next success objective that the retrieving mechanism applied on it. The third objective was to create a new search depend into selecting from available data. All of the objectives above leads to one more objective that the user can download his

files without any extra instructions or steps. The easy using of the site shows into only one page needed to do the retrieving and the download

6.2 Recommenders

The project has good extra services that could be useful steps to help improve the downloading and sharing procedure, those recommenders are below:

6.2.1 Steps to download

The system by using the intelligent information retrieving, was cut-off the number of steps required to start downloading to more than the half, which will be very good to save the user time.

6.2.2 Files sharing

The system gives a chance to the user to share his lovely files with the other users; this step gives a fun and family mask of the site.

6.2.3 Security

The system has an administration side to get a full controlling to the user side, this step will give the safe feeling to the user, and allow him that his files are only for the users which registered over the site.

6.3 Limitations

The research has some limitations as the data gathered is limited into Video, Audio, Wallpaper, Themes and software, the system also cannot detect the type of the uploaded media files.

6.3.1 Limited data type.

The system supports the files in general way. The system cannot detect the type of the submitted file to allow uploading it or just reject it.

6.3.2 No spam detector

The system cannot detect if the uploaded file could be a Trojan or not, the system only upload the files, and the administrators check them manually.

6.3.3 File size

The system cannot upload a large file. The system only able to upload size which up to 10MB

6.4 Future work

We looking now to allow the system keeping in touch with the customer through the E-mail and inform him about the newest files uploaded to the database. And also to make the system sharable through several servers to get more and more size for the files. And also the classifying of the files into several types makes a large step into successfully data retrieving for the customer. Classifying the files into categories, could helps the customer to select his favorite category easily, and surly this will leads to select the right file.

6.5 Conclusion

The result of this study is shows how we can use the multimedia database and controlling it throw intelligent kit of information retrieving, this system give a brief discussion of how could be the service for the online software's in the future, either for the software efficiency or for the software flexibility, and how can users and

visitors reach their goals of downloading without any needing to go through the same steps each time.

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Appendix A

(System evaluation questioner)

System to be evaluated:

Design Download Zone System for intelligent information retrieving

Introduction:

This questionnaire consists of 23 questions in three parts

1. General information.
2. System aspects.
3. Overall satisfaction.

Please answer **ALL** questions in **ALL** parts.

Part 1: General information

1. Gender:

male female

2. Age: _____ Years

3. Educational background:

Diploma Degree Master PhD

4. What is your race?

Malay Indonesian Arab Thai Other

What is your Religion?

Muslim Christian Hindu Buddha

Part 2: System aspects

This part is intended to obtain your views on some aspects of the Download Zone System for intelligent information retrieving (DLZ). Please mark [√] your answers.

1 = strongly disagree

2 = Disagree

3 = Natural

4 = Agree

5 = strongly agree

PERCEIVED USEFULNESS		1	2	3	4	5
6	Using DLZ to Download the files is quick.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Using DLZ would improve the performance of intelligent information retrieving.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Using DLZ would increase my productivity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Using DLZ would enhance my effectiveness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Using DLZ would make it easier to do my tasks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	I would find DLZ useful in my daily downloading.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PERCEIVED EASE OF USE		1	2	3	4	5
12	Learning to operate DLZ would be easy for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	I would find it easy to get DLZ to do what I want it to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	My interaction with DLZ would be clear and Understandable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	I would find DLZ to be flexible to interact and download.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	It would be easy for me to become skillful at using DLZ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	I would find DLZ easy to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 3: Overall Satisfaction

This part is intended to rate your satisfaction with the overall usability of Design a download zone system for intelligent information retrieving (DLZ)

Please mark [√] your answers.

1 = strongly disagree.

2 = Disagree.

3 = Natural.

4 = Agree.

5 = strongly agree.

Attributes of Usability		1	2	3	4	5
18	I am satisfied with the number of steps included in DLZ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	It is easy to understand what is needed to interact with DLZ .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20	The procedure through DLZ was clear.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	I would need additional instructions to complete the task.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22	DLZ is more complex than most others are.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	It was easy to remember the steps through DLZ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you for cooperation and your attention

Appendix B

(UML Use case specifications)

1. USE CASE: EXPLORING SITE (DLZ_01)

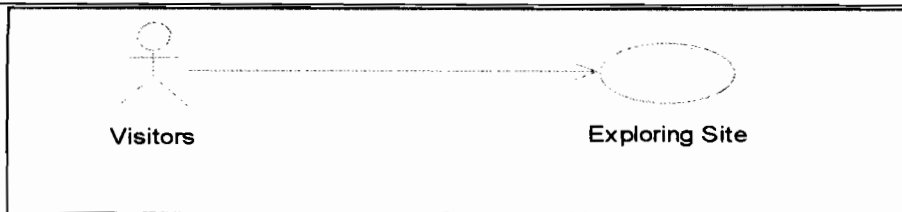


Figure1: Exploring Site

BRIEF DESCRIPTION:

This use case is performed by the visitor, this use case allows the visitor to exploring the website and view general information about it (view general information about the website, view supported multimedia mobiles and View available multimedia / software).

PRE CONDITION:

Not applicable.

CHARACTERISTIC OF ACTIVATION:

Event Driven (on visitor's demand).

FLOW OF EVENTS:

Basic Flow (DLZ_01_01)

- The visitor can view general information about the site by choose the link About Us.
- View the supported multimedia mobiles by click into (Mobiles).
- View available multimedia files by click into Downloads button.

POST-CONDITIONS

Not Applicable.

CONSTRAINT(S)

Not Applicable.

2. USE CASE: SIGNUP (DLZ_02)

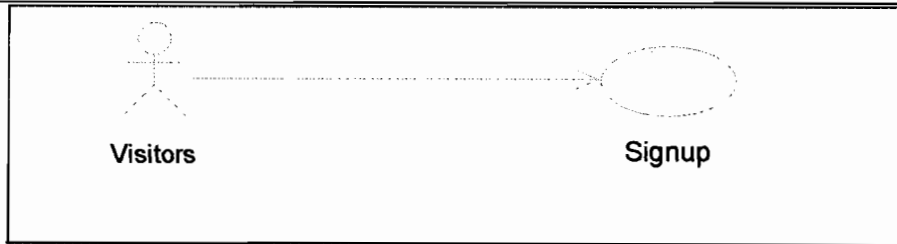


Figure 2: Sign Up

BRIEF DESCRIPTION:

This use case is performed by the visitor, this use case allows the visitor to make the signup procedure include insert the personal details about the visitor and the e-mail address to submit and save them into the system.

PRE CONDITION:

The visitor must have an e-mail to make the sign up.

CHARACTERISTIC OF ACTIVATION:

The visitor must enter the sign up page.

FLOW OF EVENTS:

Basic Flow (DLZ_02_01):

- The visitor can apply to register by click the REGISTER button.
- The visitor writes his personal information about himself like (first name, last name, e-mail address... etc) and click SUBMITE button (**E-1: incomplete personal information**),(**A_1: CANCEL**).
- The system control will open a new page SUMMARY that is containing a quick report about the user signup information.
- The visitor can click SUBMITE button to save the personal information of the visitor.
- The system control will handle the event and save the new record in the table CUSTOMER into the database.

- The system control will display approval message that the record has been saved.

Alternative Flow:

A_1: Cancel (DLZ_02_03)

- The visitor can press CANCEL to return back to the previous action.

Exceptional Flow:

E_1: Incomplete personal information (DLZ_02_04)

- The system informs the visitor about the incomplete data.

POST-CONDITIONS

The system allows the visitor to sign in as a system user.

CONSTRAINT(S)

Not Applicable.

3. USE CASE: VIEW PERSONAL INFORMATION (DLZ_06)

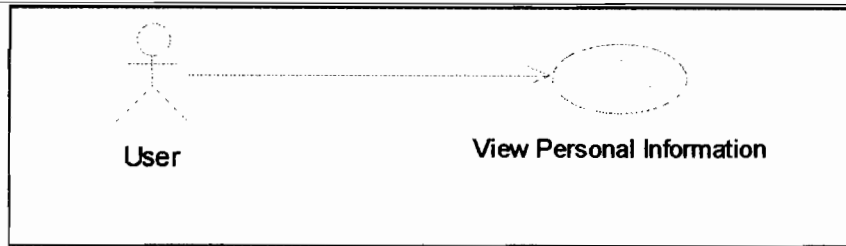


Figure 3: View Personal information

BRIEF DESCRIPTION:

This use case is performed by the user, in this use case allow the user to view his personal data, the data which inserted before to complete the signup procedure (Username, Password, E-mail... etc).

PRE CONDITION:

The user must be sign in.

CHARACTERISTIC OF ACTIVATION:

The visitor must enter the personal page.

FLOW OF EVENTS:

Basic Flow (DLZ_06_01):

- The user can show his personal data once he click ABOUT US button.
- The system control will handle the event and search into the table CUSTOMERS about the user details depends on the user name.
- The system control will display the details into the about us page.

POST-CONDITIONS

Not Applicable.

CONSTRAINT(S)

The user can show his personal data only.

4. USE CASE: Update PERSONAL INFORMATION (DLZ_07)

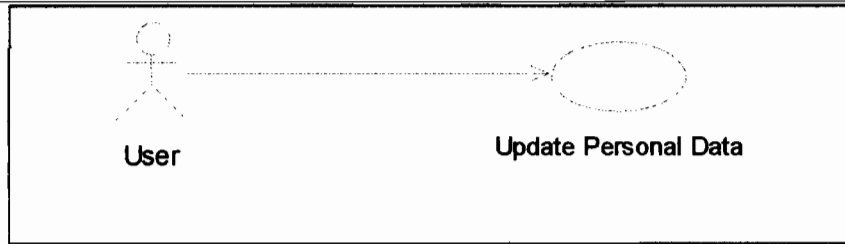


Figure 4: Update Personal information

BRIEF DESCRIPTION:

This use case is performed by the user; in this use case allow the user to update his personal data.

PRE CONDITION:

The user must be sign in.

CHARACTERISTIC OF ACTIVATION:

The visitor must enter the personal page.

FLOW OF EVENTS:

Basic Flow (DLZ_07_01):

- The user can update his personal data once he click UPDATE button.
- The page will open new dialog with blank text fields.
- The user inserts his new data and click CONFIRM button.
- The page control will go throw table CUSTOMERS and update the user record.
- The system control will display approval about this procedure to the user.

POST-CONDITIONS

New data will update for the user.

CONSTRAINT(S)

The user can update and print his personal data only.

5. USE CASE: SIGN IN (DLZ_08)

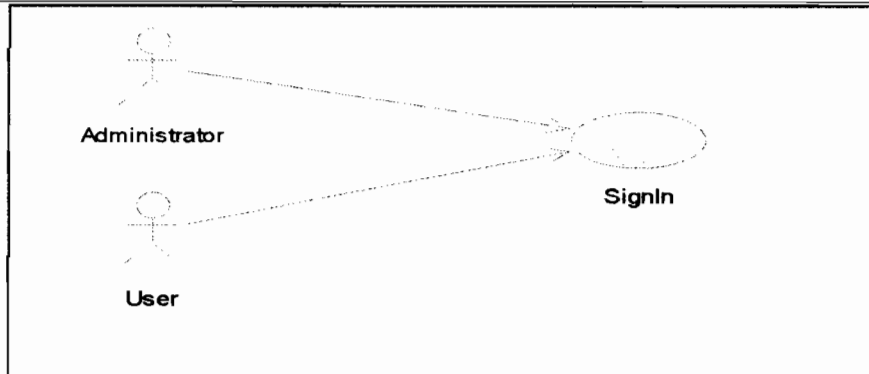


Figure 5: Sign In

BRIEF DESCRIPTION:

This use case is performed by the staff or the user, in this use case allows the staff or the user to Sign in to the system through Username and Password, and each actor has his own Login information and permission.

PRE CONDITION:

The staff or the user must have a username and Password.

CHARACTERISTIC OF ACTIVATION:

The staff or the user must enter the Sign in page.

FLOW OF EVENTS:

Basic Flow (DLZ_08_01):

- The user and staff must enter the Sign in information (user name, password) and click LOGIN button. (E-1: Invalid Password or user name), (A-1: Cancellation).
- System control must verify the login data by go to search about the username and password into the database table name CUSTOMERS.
- The system control will redirect the user to the index page and show the username into each table.

Alternative Flow:

- A-1: Cancellation. (DLZ_08_03)

The actor can press the “CANCEL” button return back to the previous page.

Exceptional Flow:

- E-1: Invalid information (DLZ_08_02)

The system will display error message if there is incomplete information

POST-CONDITIONS

The system will allow the actor to login to their main page.

CONSTRAINT(S)

Not applicable.

6. USE CASE: VIEW REPORTS (DLZ_09)

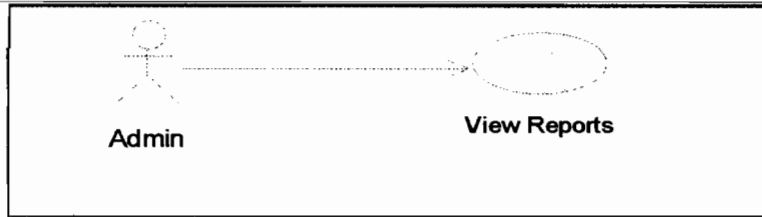


Figure 6: View Reports

BRIEF DESCRIPTION:

This use case is performed by the Administrator; in this use case allows the Administrator to view the site employee's information by click into button Employees and the site customer's information by click into button customers.

PRE CONDITION:

The Administrator must be sign in.

CHARACTERISTIC OF ACTIVATION:

The Administrator must enter to the reports page.

FLOW OF EVENTS:

Basic Flow (DLZ_09_01):

- The Administrator can show the site Employees information by click EMPLOYEES button.
- The system control will handle the event and retrieve all the employees' details into a quick view to the administrator.
- The Administrator can show the site Customers information by click CUSTOMERS button.
- The system control will handle the event and retrieve all the customers' details into a quick view to the administrator.

POST-CONDITIONS

Not Applicable.

7. USE CASE: DELETE FILES (DLZ_10)

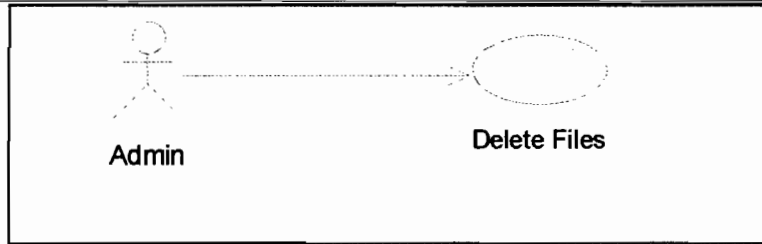


Figure 7: Delete Files

BRIEF DESCRIPTION:

This use case is performed by the Administrator; in this use case allows the Administrator to delete the files from the website, he can select the file which need to delete and click DELETE button.

PRE CONDITION:

The Administrator must be sign in.

CHARACTERISTIC OF ACTIVATION:

The Administrator must enter to the Delete Files page.

FLOW OF EVENTS:

Basic Flow (DLZ_10_01):

- The Administrator must select the mobile type from list of selections.
- The system control must handle events and go throw table ITEMS to retrieve the records into quick view to the Administrator.
- Every cell of the quick view has the file name and a link DELETE to delete it.
- The Administrator can delete the selected file by click into DELETE button.
- The system control will go to the database table ITEMS to delete the file record.
- The system control will display approval message to the Administrator about this procedure.

POST-CONDITIONS

The deleted file will remove from the system.

CONSTRAINT(S)

Not Applicable.

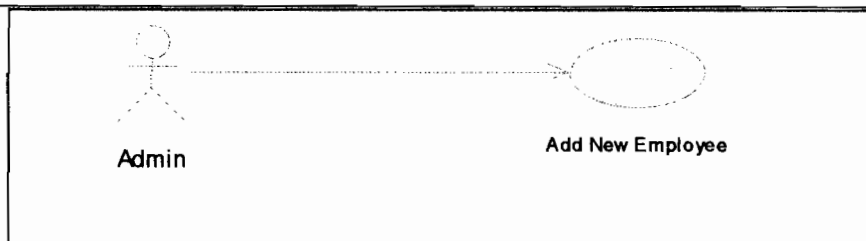
8. USE CASE: ADD NEW EMPLOYEE (DLZ_11)

Figure 8: Add New Employee

BRIEF DESCRIPTION:

This use case is performed by the Administrator; in this use case allows the Administrator to add new employee to the employee list, and give to him a specific privilege to exploring the administration side of the website.

PRE CONDITION:

The Administrator must be sign in.

CHARACTERISTIC OF ACTIVATION:

The Administrator must enter to the Employee page.

FLOW OF EVENTS:

Basic Flow (DLZ_11_01):

- The Administrator can log to employee page by click EMPLOYEE button.
- The Administrator can insert all the necessary data about the employee.
- The Administrator can click FINISH button to add new employee (A_1:

Cancel).

- The system control must handle the event and go to the database table EMP to add new record.
- The system control must display approval message to the administrator about the operation.

Alternative Flow:

A_1: Cancel (DLZ_11_03)

The Administrate can press CANCEL button to stop the operation and get back to previous page

POST-CONDITIONS

The files will be filtering and shown to the public.

CONSTRAINT(S)

Only the files which been uploaded by the user.

9. USE CASE: DELETE EMPLOYEES (DLZ_12)

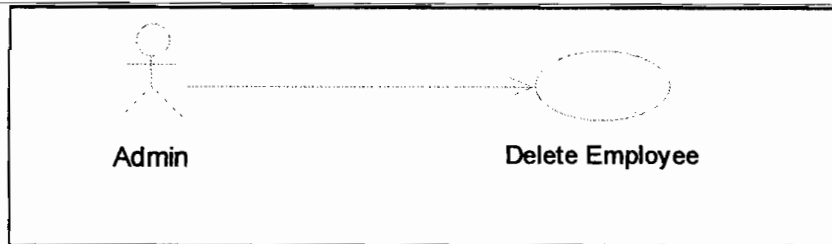


Figure 9: Delete Employees

BRIEF DESCRIPTION:

This use case is performed by the Administrator; in this use case allows the Administrator to delete the membership of the Employee by select his name and delete it using a specific link.

PRE CONDITION:

- The Administrator must be sign in.
- Must be at least one registered employee to delete him.

CHARACTERISTIC OF ACTIVATION:

The Administrator must enter to the Employees page.

FLOW OF EVENTS:

Basic Flow (DLZ_12_01):

- The Administrator must select the employee first name from list of employees.
- The Administrator can press into DELETE link to complete the deletion of the Employee (A_1: Cancel).
- The system control must handle the event and go to the EMP table to delete the selection record.
- The system control must display an approval message to the Administrator.

Alternative Flow:

- A_1: Cancel (DLZ_12_02)

The Administrator can press BACK button to get back of this action to the previous page.

POST-CONDITIONS

The selected Employee name will be deleting from the system.

CONSTRAINT(S)

Not Applicable.

10. USE CASE: DELETE MEMBERSHIP (DLZ_13)

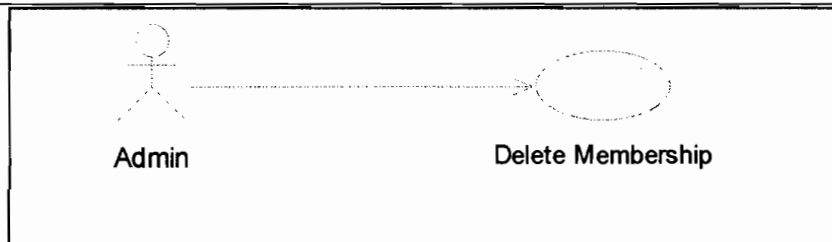


Figure 10: Delete Membership

BRIEF DESCRIPTION:

This use case is performed by the Administrator; in this use case allows the Administrator to delete the membership of the user by select his name and delete it using a specific link.

PRE CONDITION:

- The Administrator must be sign in.
- Must be at least one registered user to delete him.

CHARACTERISTIC OF ACTIVATION:

The Administrator must enter to the user page.

FLOW OF EVENTS:**Basic Flow (DLZ_13_01):**

- The Administrator must select the customer first name from list of employees.
- The Administrator can press into **DELETE** link to complete the deletion of the customer (A_1: Cancel).
- The system control must handle the event and go to the **CUSTOMERS** table to delete the selection record.
- The system control must display an approval message to the Administrator.

Alternative Flow:

- A_1: Cancel (DLZ_13_02)

The Administrator can press **BACK** button to get back of this action to the previous page.

POST-CONDITIONS

The selected User name will be deleting from the system.

CONSTRAINT(S)

Not Applicable.

11. USE CASE: Generate Reports (DLZ_14)

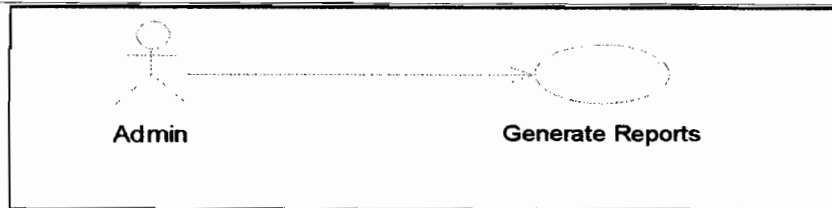


Figure 11: Generate Reports

BRIEF DESCRIPTION:

This use case is performed by the Administrator; in this use case allows the Administrator to generate and print reports about the employees and the users whom already registered into the system.

PRE CONDITION:

The Administrator must be sign in.

CHARACTERISTIC OF ACTIVATION:

The Administrator must enter to the Reports page.

FLOW OF EVENTS:

Basic Flow (DLZ_14_01):

- The Administrator can select the Employee name and press the PRINT.
- The system control will redirect the Administrator to the EMP_PRINT page.
- The print dialog will appear to the Administrator after 2 seconds to start printing.

POST-CONDITIONS

The selected name will be print into a hard copy.

CONSTRAINT(S)

Not Applicable.

Appendix C

(UML Sequence diagram)

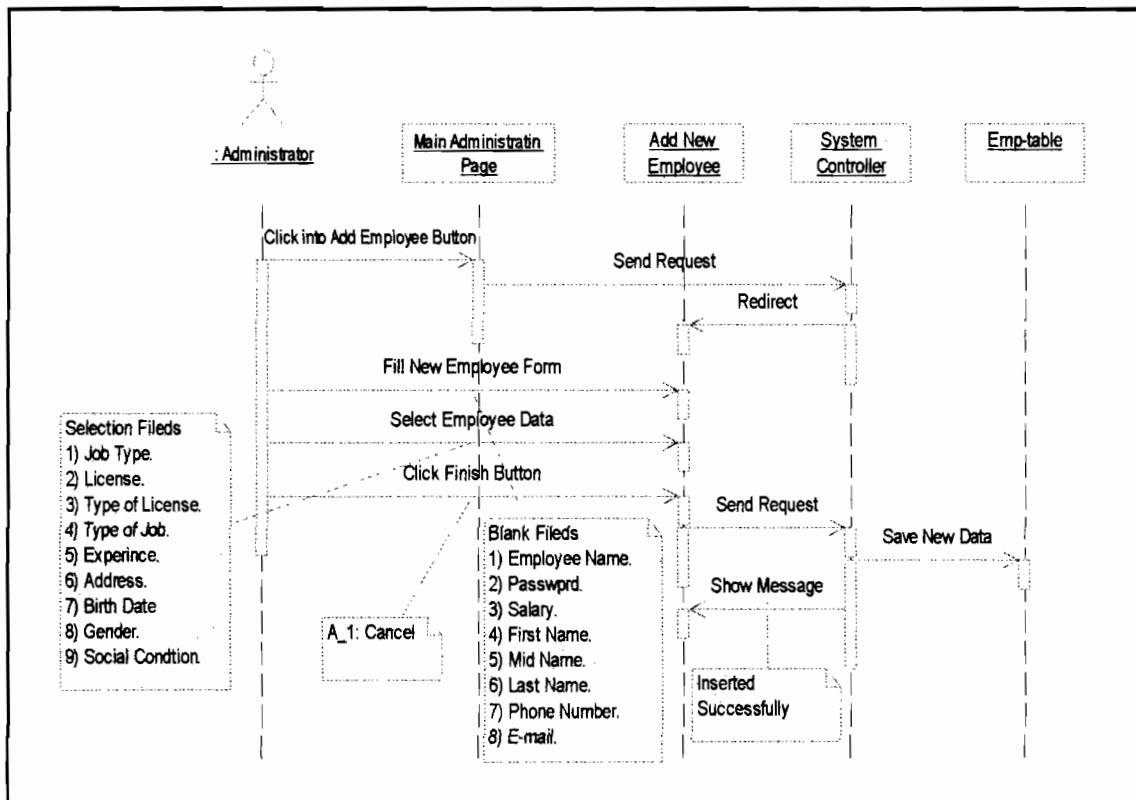


Figure 1: Add new Employee Basic flow

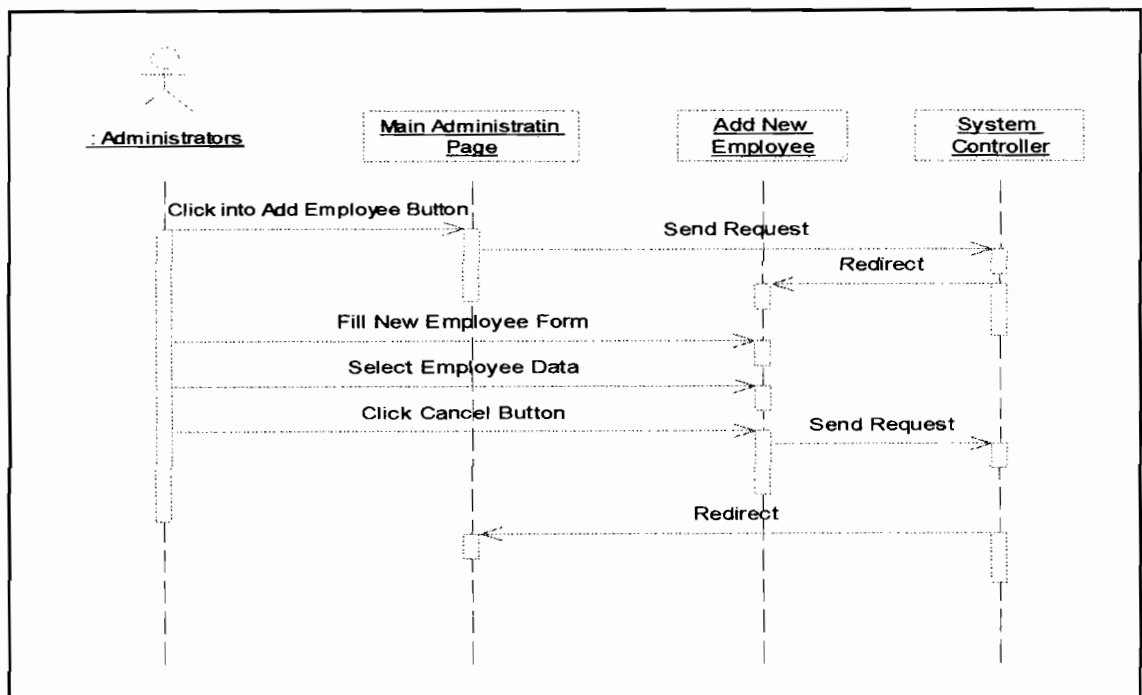


Figure 2: Add new Employee Alternative flow

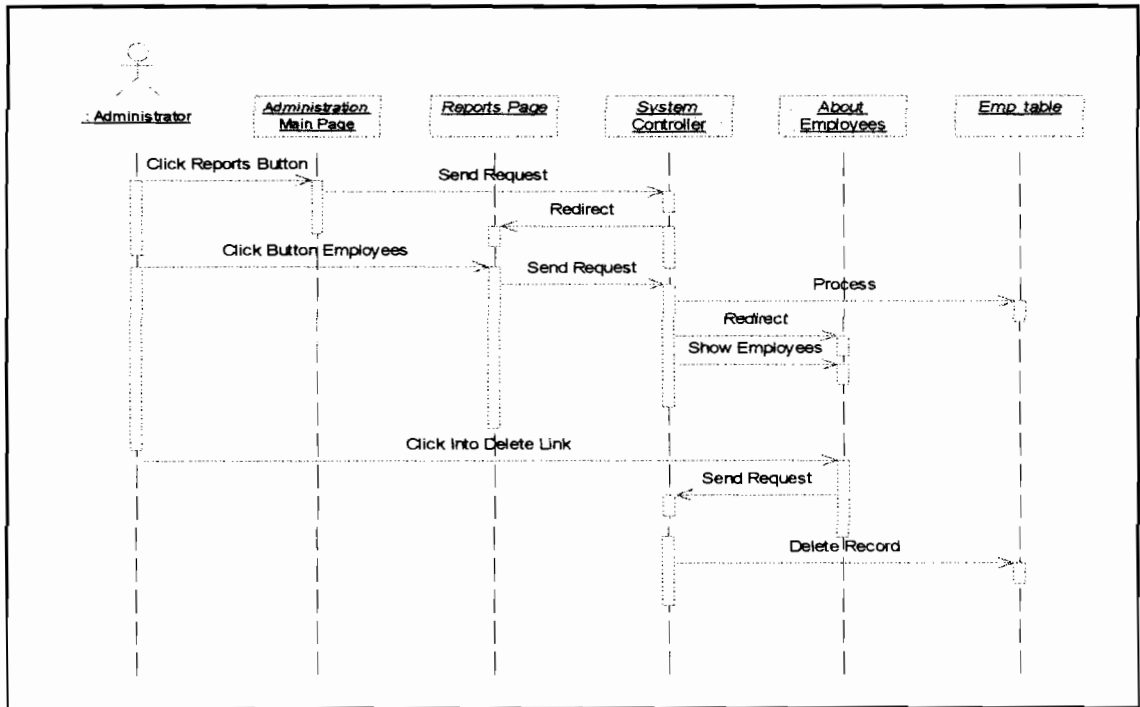


Figure 3: Delete Employee Basic flow

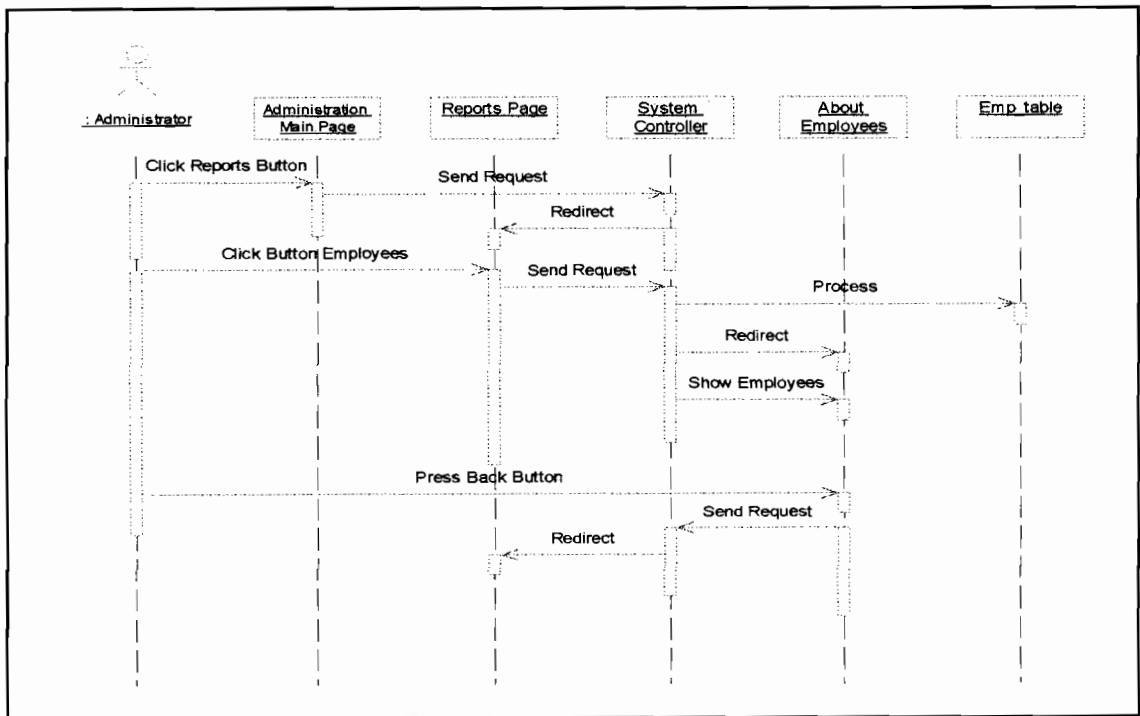


Figure 4: Delete Employee Alternative flow

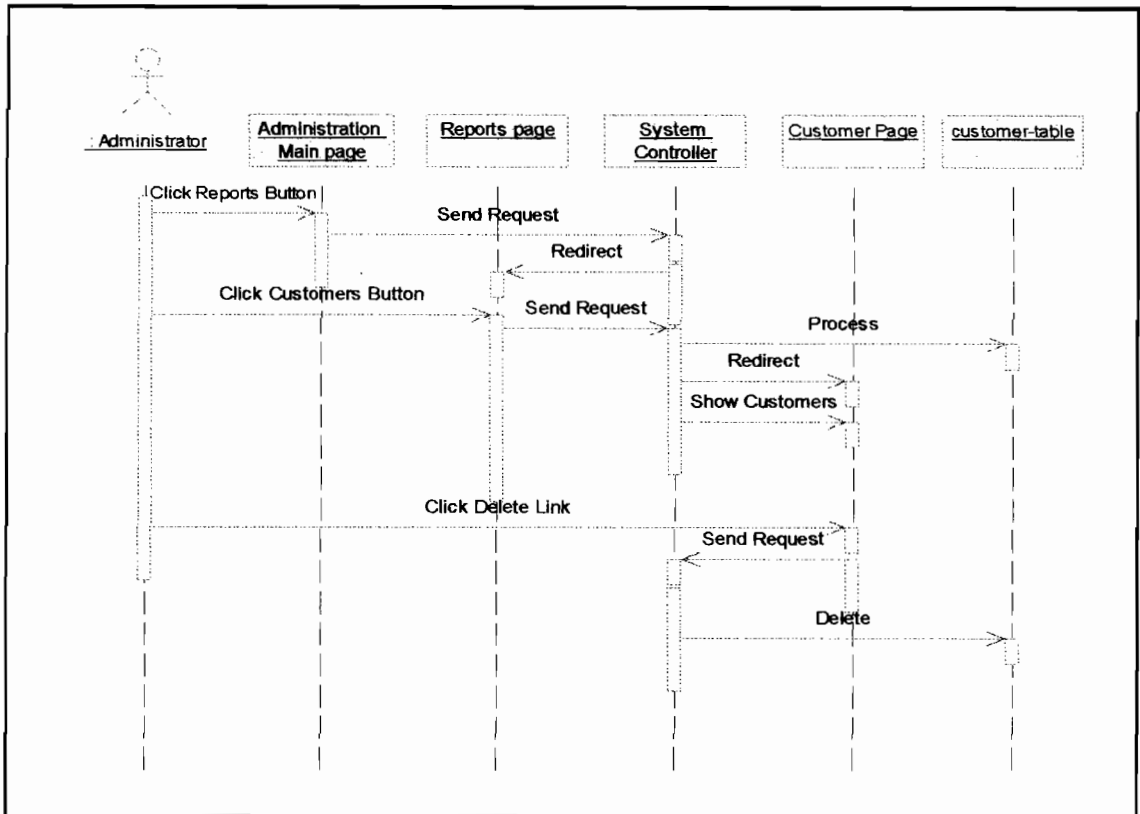


Figure 5: Delete Membership basic flow

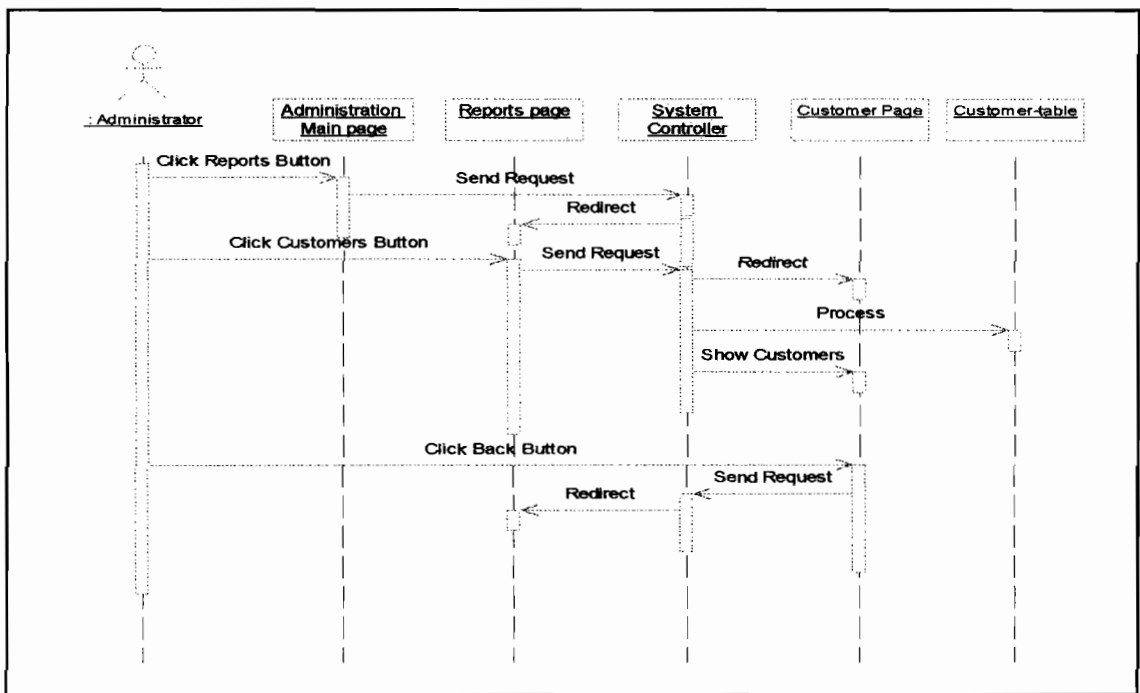


Figure 6: Delete Membership Alternative Flow

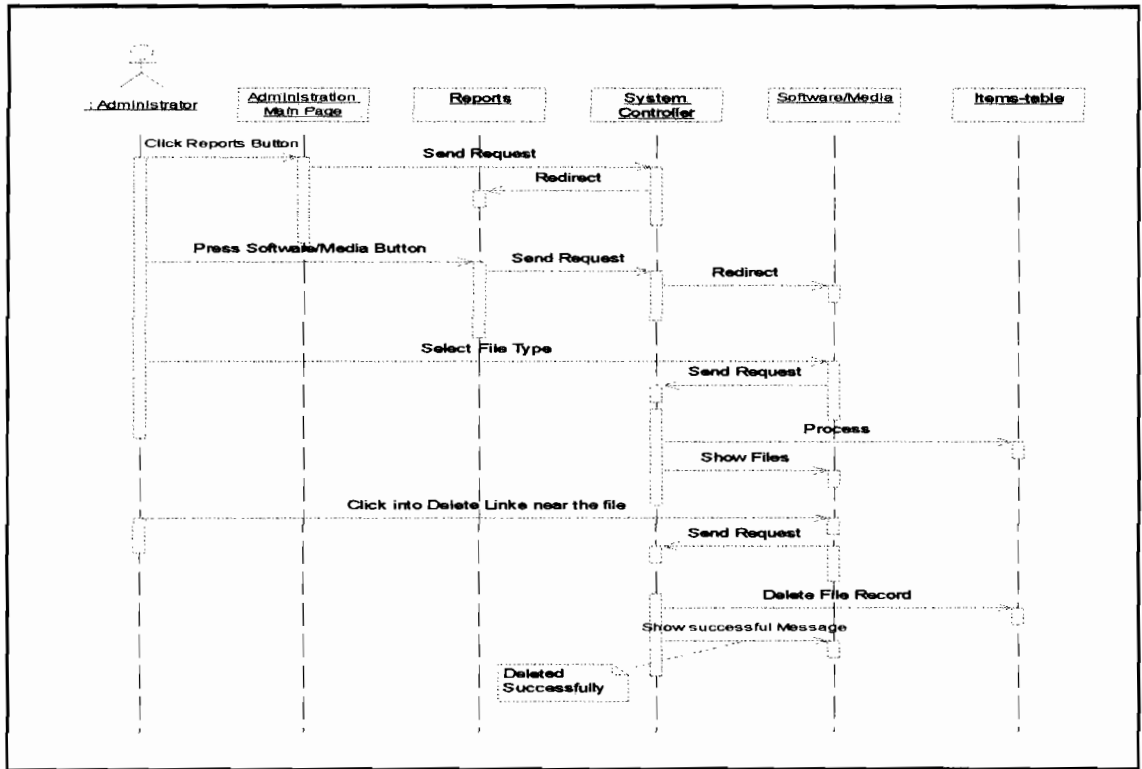


Figure 7: Delete Files Basic Flow

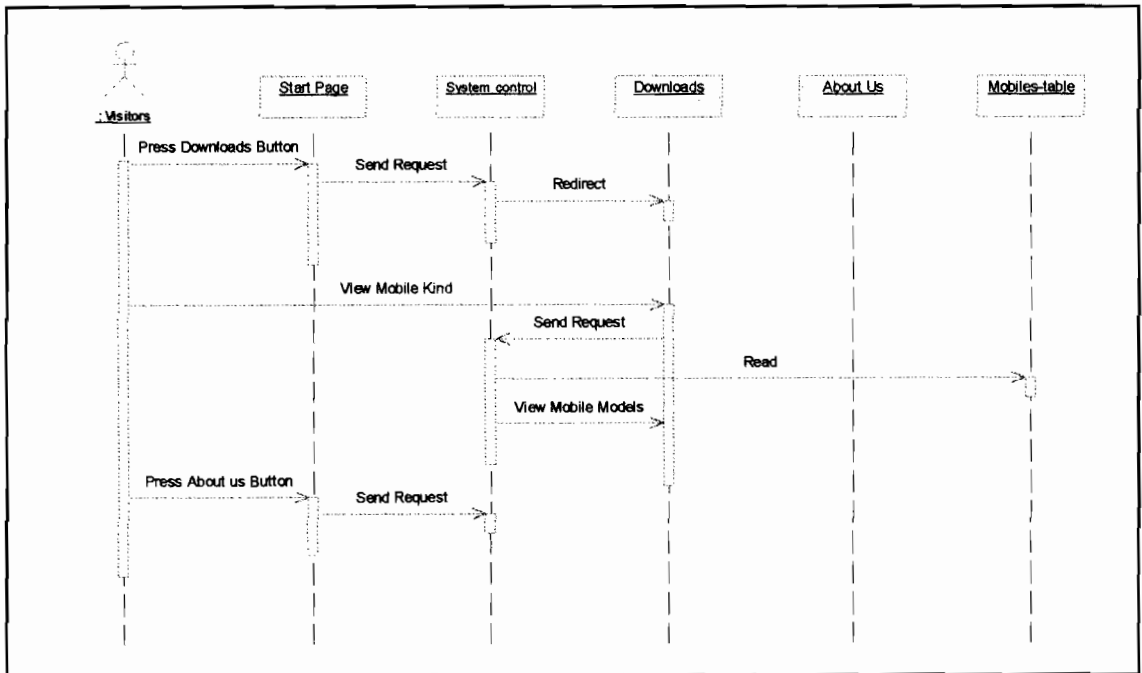


Figure 8: Exploring Site basic flow

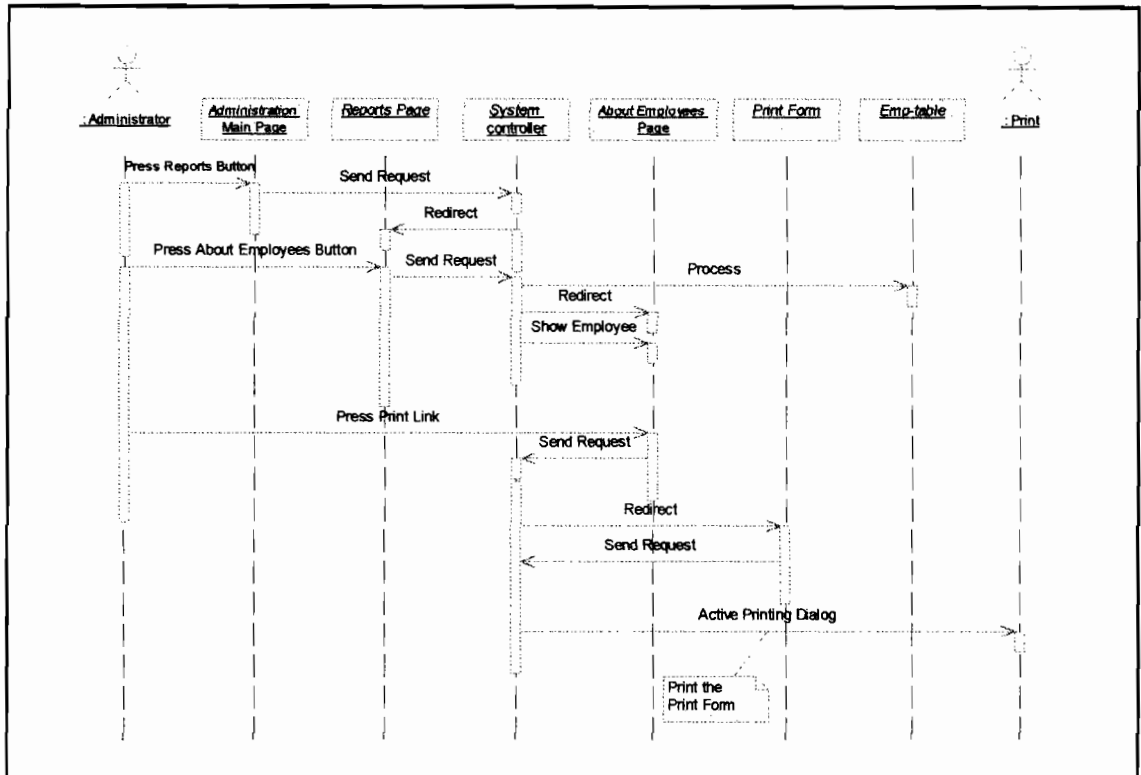


Figure 9: Generate reports Basic Flow

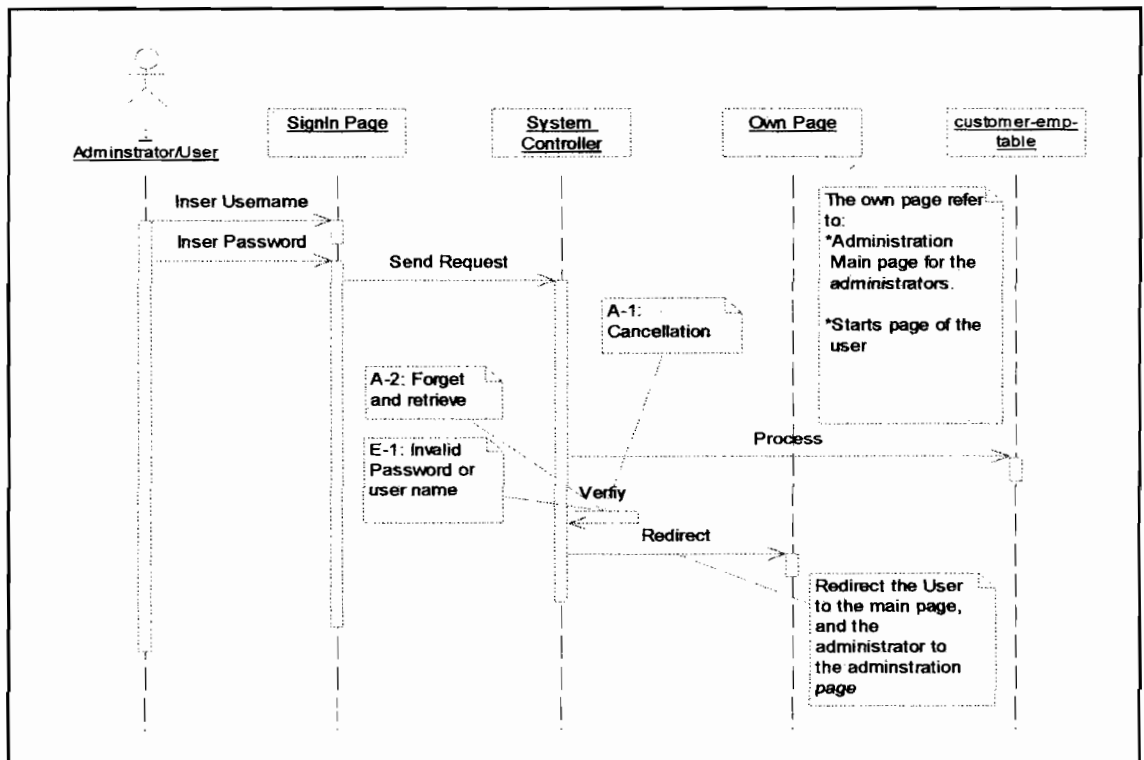


Figure 10: Sign In basic Flow

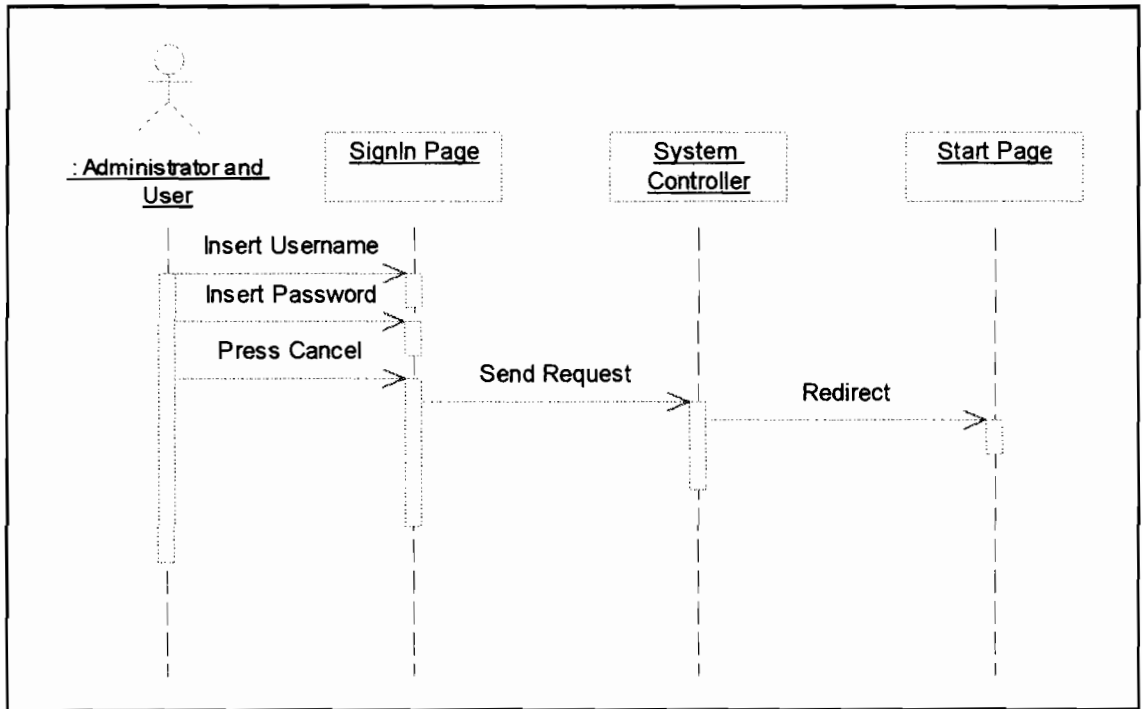


Figure 11: Sig in Alternative Flow

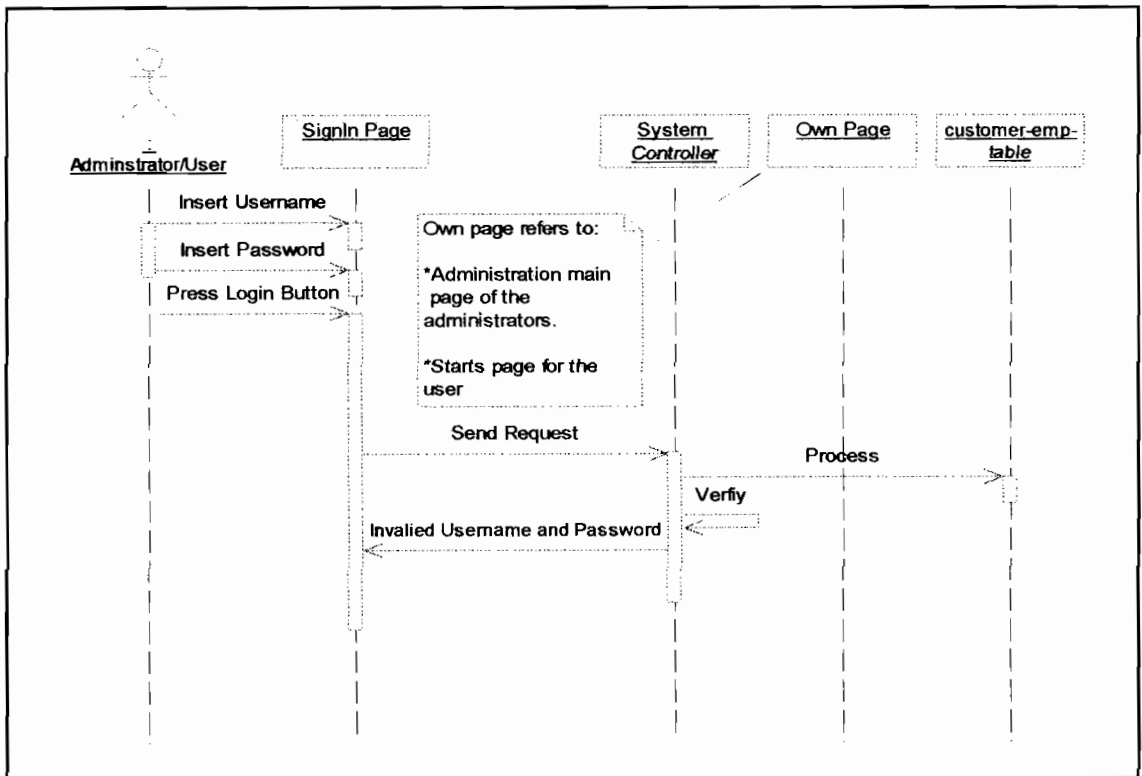


Figure 12: Sign In Exceptional Flow

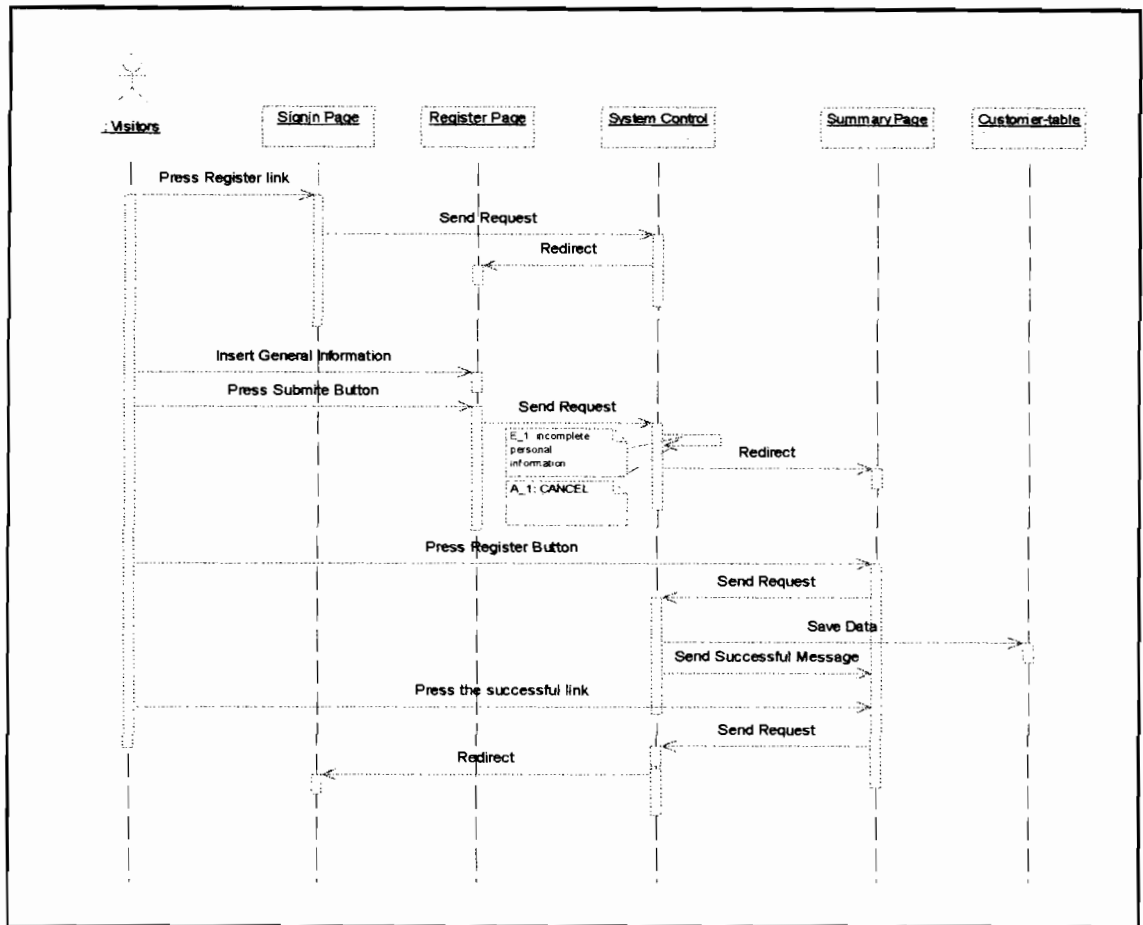


Figure 13: Sign up Basic flow

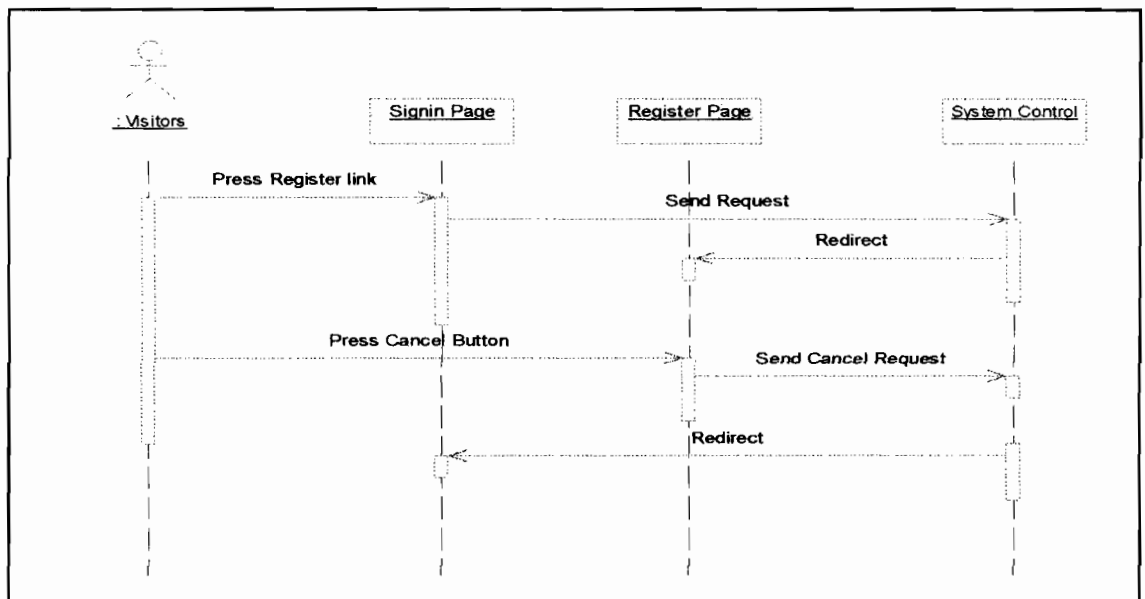


Figure 14: Signup Alternative Flow

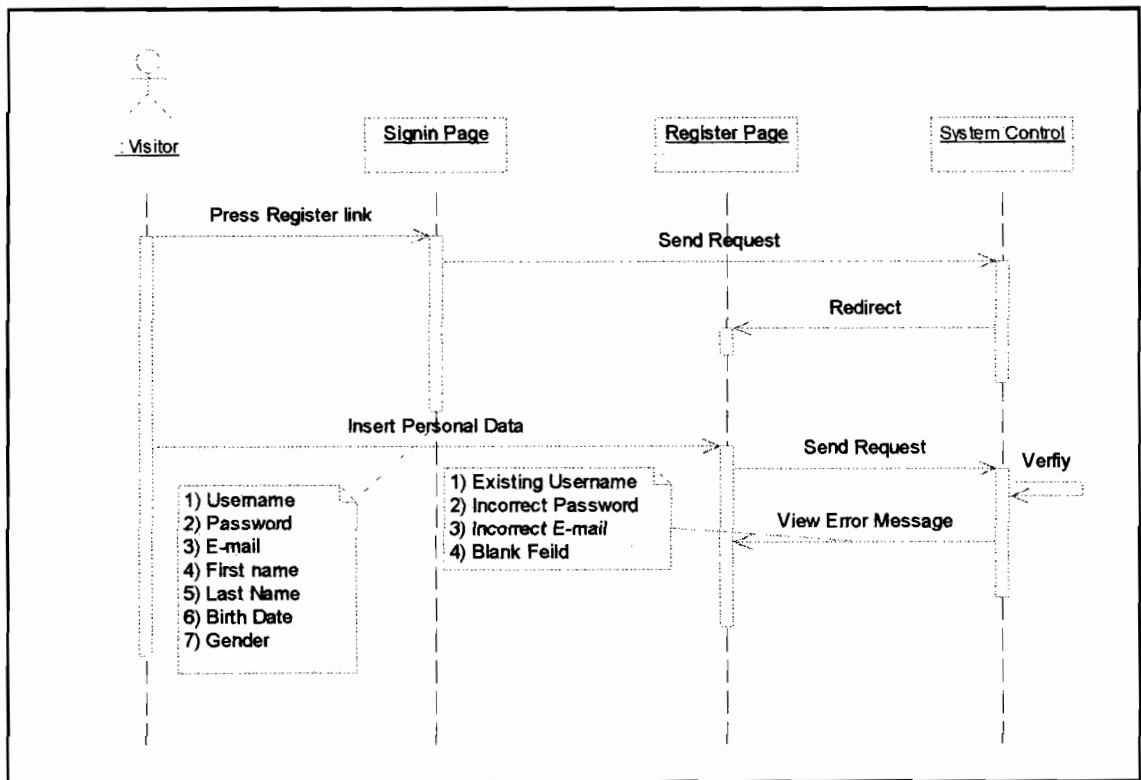


Figure 14: Signup Exceptional Flow

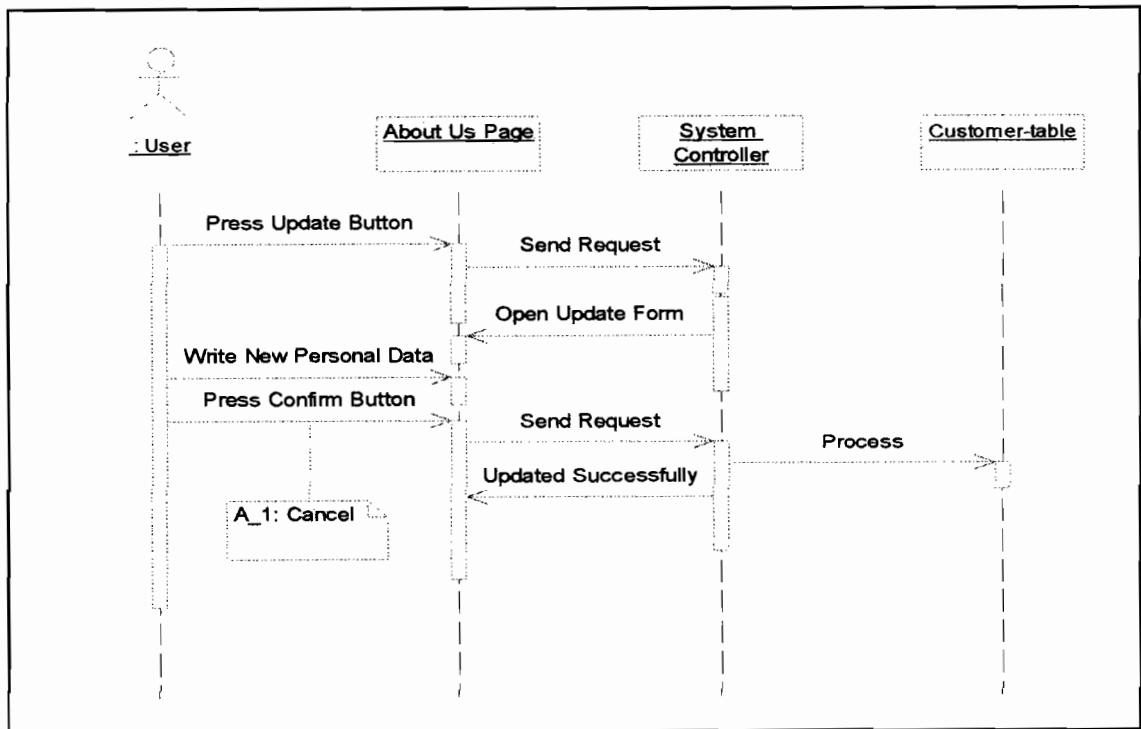


Figure 15: Update Personal Data Basic Flow

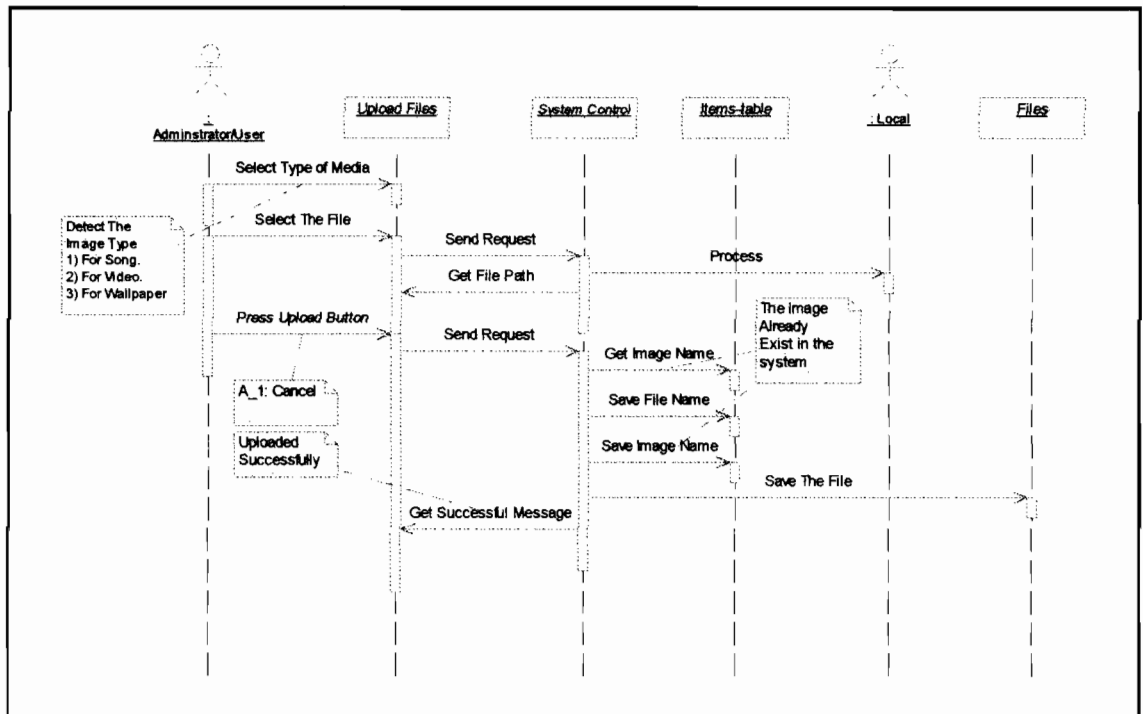


Figure 16: Upload multimedia basic Flow

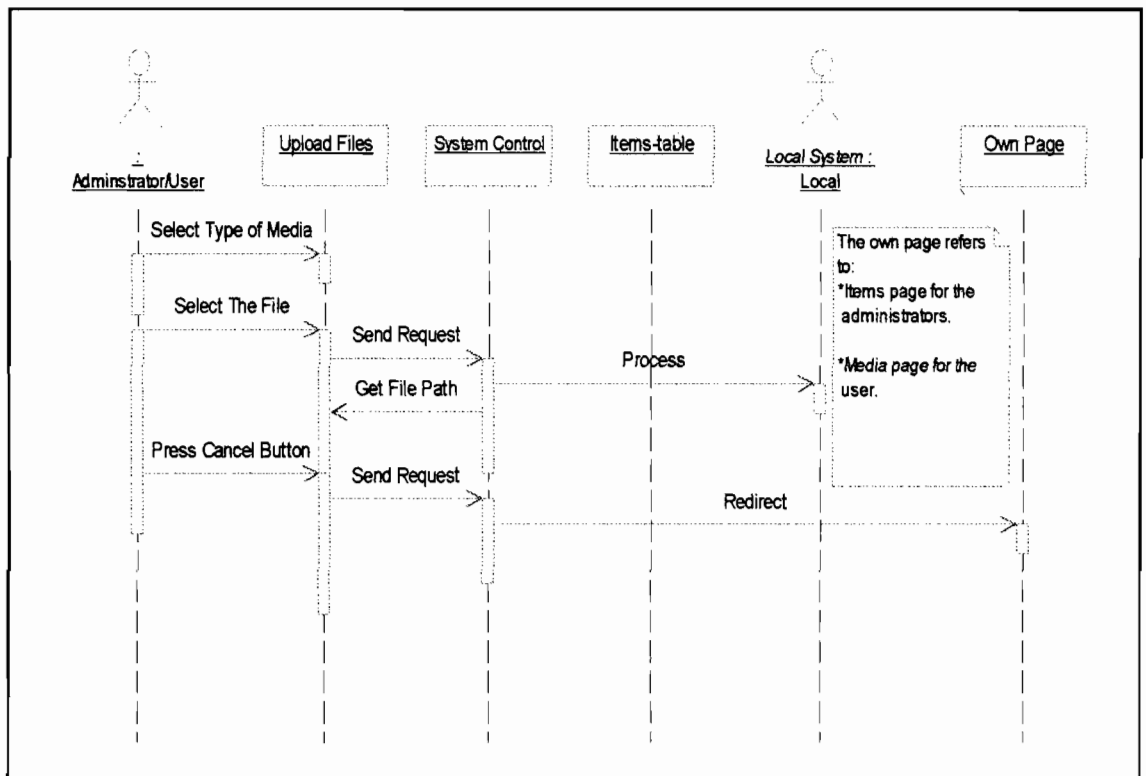


Figure 17: Upload multimedia Alternative Flow

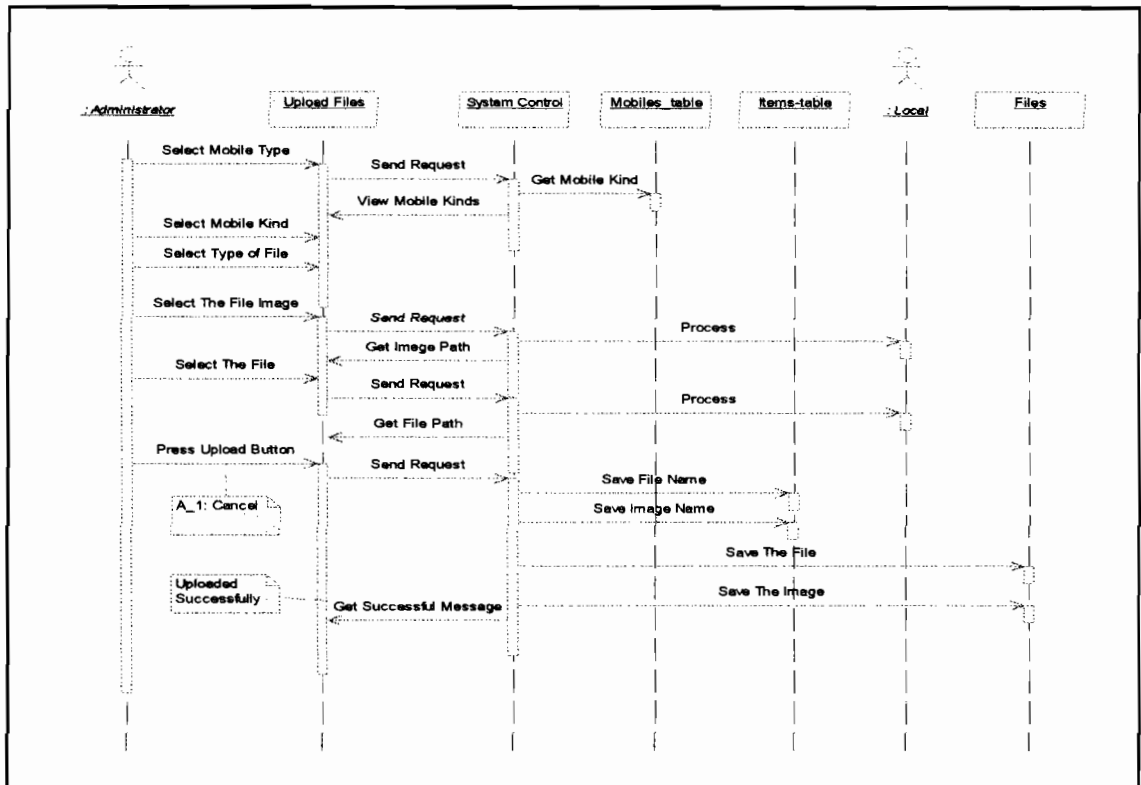


Figure 18: Upload Software Basic Flow

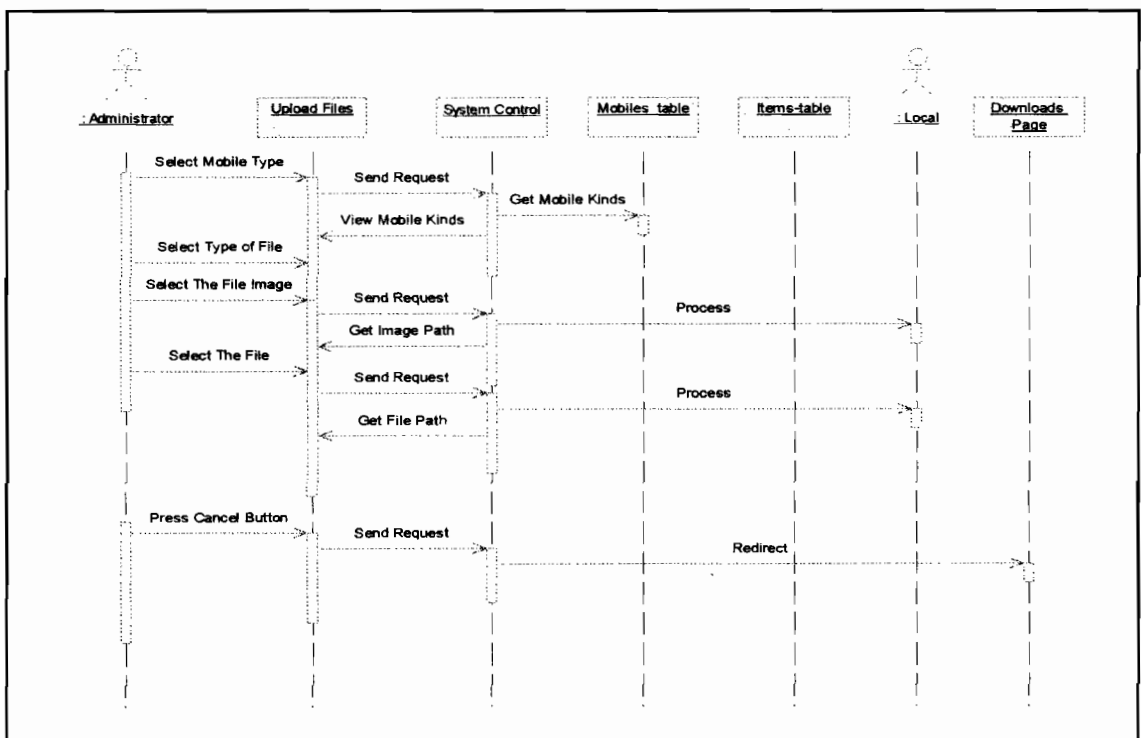


Figure 19: Upload Software Alternative Flow

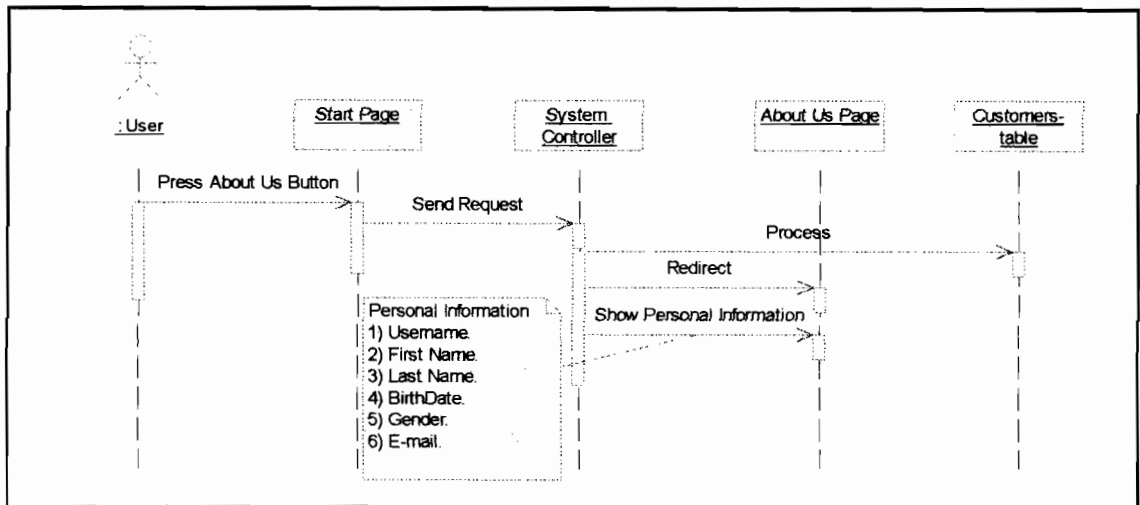


Figure 20: View Personal information Basic Flow

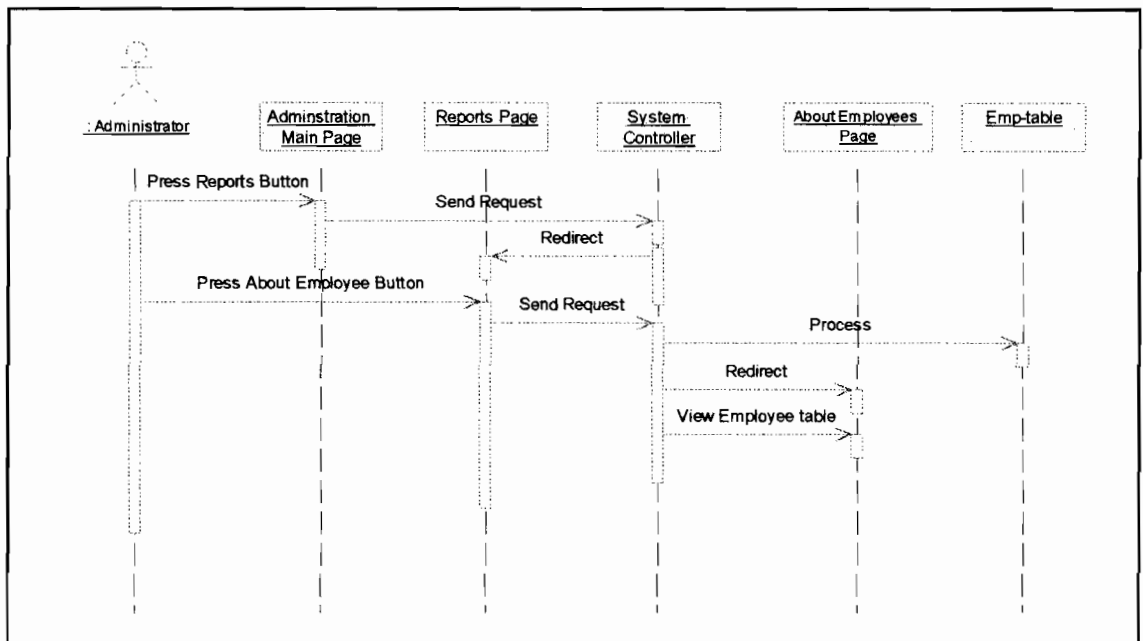


Figure 21: View Reports flow

Appendix D

(Discussion of the result)

Table 1: Using DLZ to download the files is quick.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural	3	10.0	10.0	10.0
	Agree	11	36.7	36.7	46.7
	Strongly agree	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

Using DLZ to Download the files is quick.

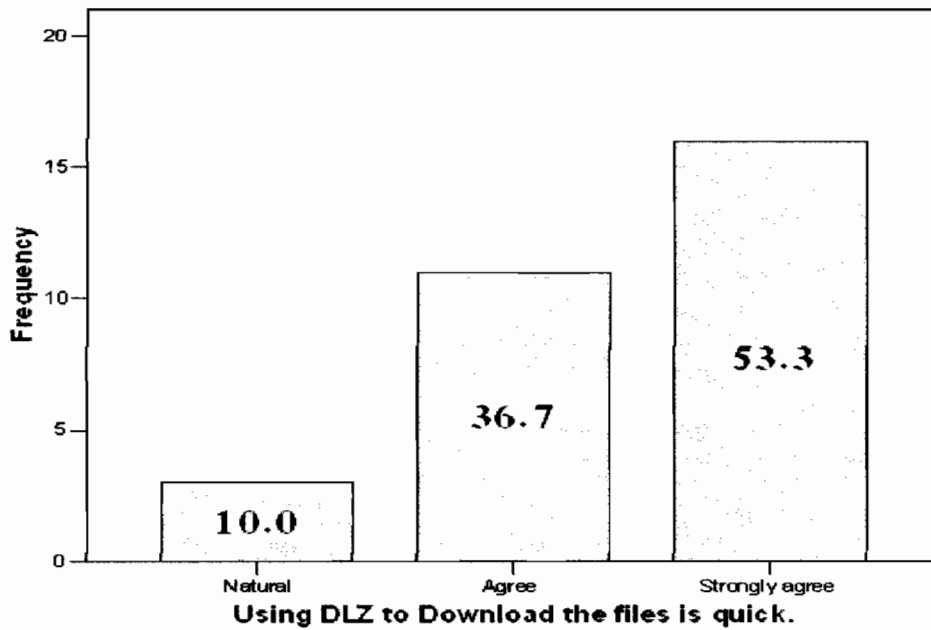


Figure 1: Using DLZ to download the files is quick

As shown in Figure 1, 10.0% of the students of the UUM are only Natural in their selection about downloads from DLZ is quick. The other rate is 36.7%; this one is for the students whom applied that they are just agree about the downloading from DLZ is quick. The last one is 53.3%. This is for the largest amount of student sample that

strongly agree about the easy steps that the DLZ applied to reach the easiest download procedure.

Table 2: Using DLZ would improve the performance of intelligent information retrieving.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural	3	10.0	10.0	10.0
	Agree	8	26.7	26.7	36.7
	Strongly agree	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Using DLZ would improve the performance of intelligent information retrieving.

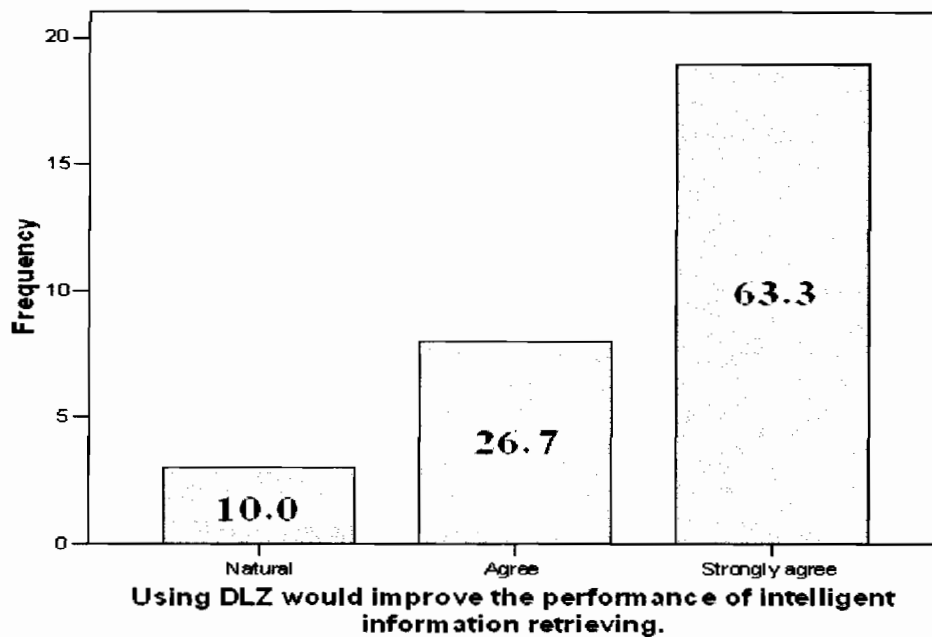


Figure 2: Using DLZ would improve the performance of intelligent information retrieving

In table 2, the result shows that a little number of students is applied as natural in their answers; they are just 3 out of 30. The next reading is on the students whom answered just agree on their questioner, they are only 8 out of 30, but the largest number was to the UUM students whom answered with strongly agree that the DLZ would improve

the performance of the intelligent information retrieving, they are 19. The result graph in Figure 2 shows the results in percentage.

Table 3: Using DLZ would increase my productivity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural	3	10.0	10.0	10.0
	Agree	12	40.0	40.0	50.0
	Strongly agree	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

Using DLZ would increase my productivity

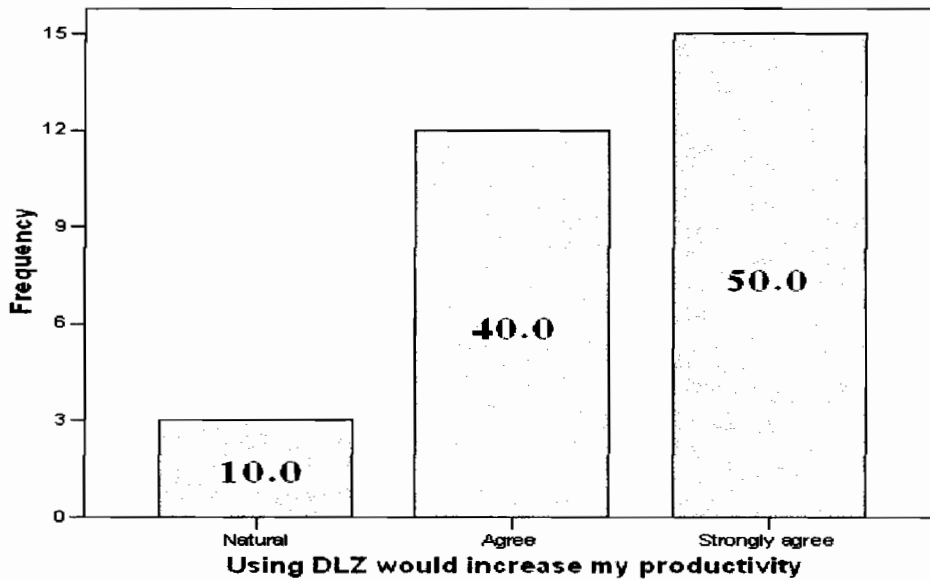


Figure 3: Using DLZ would increase my productivity

The results in table 3, shows how it's the closing between the agree graph and the strongly agree one. The 40.0% of the agree graph shows that only 12 students of the UUM students sample are only agree about the DLZ would increase the productivity of them. 50.0% of the sample in 12 UUM students are strongly agree about the increasing

productivity by using DLZ. Only 10.0 in 3 students are applied by natural answer about this point as shown in Figure 3 which presents the graph of the student sample answer.

Table 4: Learning to operate DLZ would be easy for me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural	3	10.0	10.0	10.0
	Agree	11	36.7	36.7	46.7
	Strongly agree	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

Learning to operate DLZ would be easy for me.

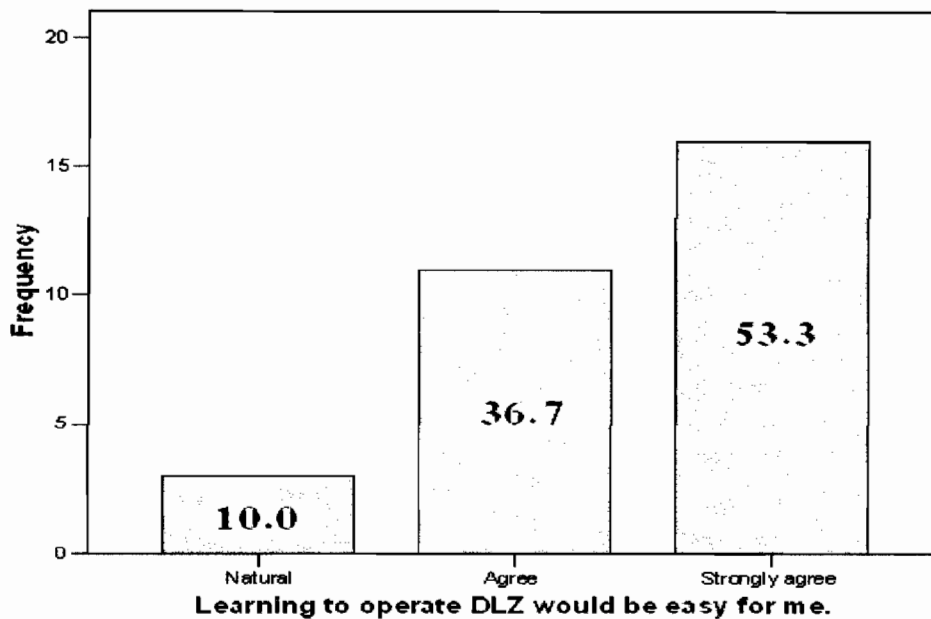


Figure 4: Learning to operate DLZ would be easy for me

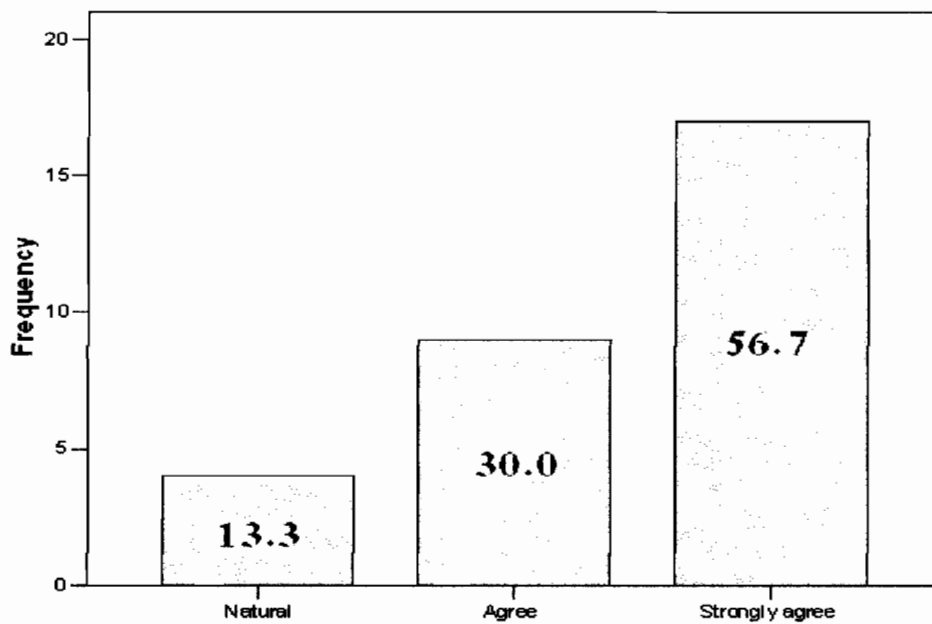
The easy steps in using DLZ for several goals are the question now. Depends on table 4 only 3 students answered with natural of this question, the rate of them is only 10.0%. The next rate was 36.6% and this one for the students which find that DLZ is easy to use and answered with agrees. The last one is the largest with 53.3% in 16

students of the UUM students' sample. They are answer with strongly agree that they found the DLZ system is very easy to use, either for upload data or download information

Table 5: I would find it easy to get DLZ to do what I want it to do.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural	4	13.3	13.3	13.3
	Agree	9	30.0	30.0	43.3
	Strongly agree	17	56.7	56.7	100.0
	Total	30	100.0	100.0	

I would find it easy to get DLZ to do what I want it to do.



I would find it easy to get DLZ to do what I want it to do.

Figure 5: I would find it easy to get DLZ to do what I want it to do.

Depends on figure 5. The rate of the students which are strongly agree that the DLZ do what they want to do is 56.7 in 17 students. Those students are completely gratification about using the system. In the next rate which shows only 30.0% in 9 of

the students are only agree by using the system to reach them goals. And the smallest rate was to the students which applied by natural. They are only 13.3 in 4 students.

Table 6: My interaction with DLZ would be clear and Understandable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural	5	16.7	16.7	16.7
	Agree	6	20.0	20.0	36.7
	Strongly agree	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

My interaction with DLZ would be clear and Understandable

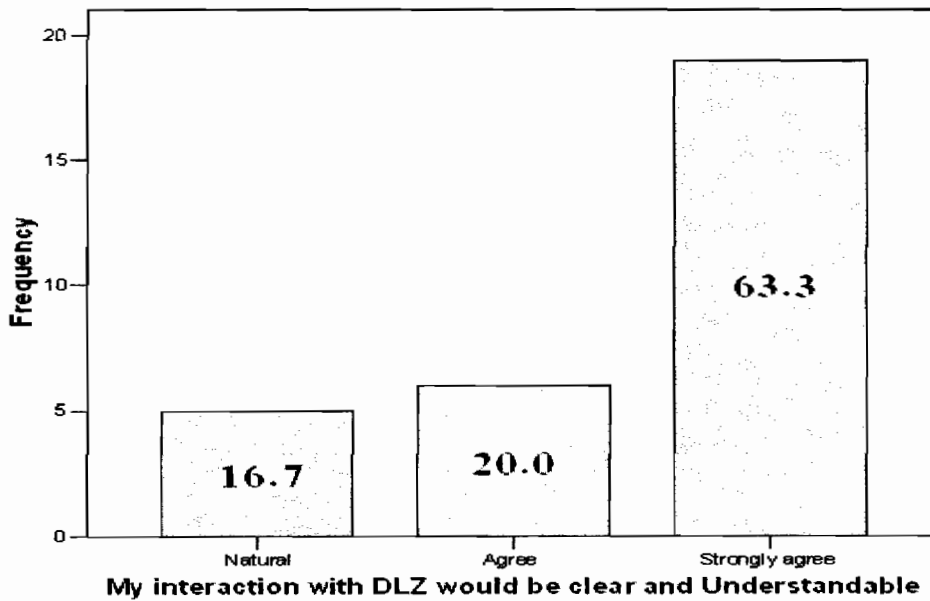


Figure 6: My interaction with DLZ would be clear and Understandable

In this question, the DLZ system should make the interaction are clear and understandable, the largest rate was to the student who's applied with strongly agree on this. Those students are 19 in rate 63.3% depends on table 6. The next rate is to the students who's applied by only agree that the DLZ system will make their interaction

are clear and understandable. Lastly, the student who's applied by natural was only 16.7% in 5 students. Those one didn't deal strongly that the DLZ system would make the interaction of the user clear and understandable.

Table 7: I am satisfied with the number of steps included in DLZ.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural	4	13.3	13.3	13.3
	Agree	10	33.3	33.3	46.7
	Stringly agree	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

I am satisfied with the number of steps included in DLZ.

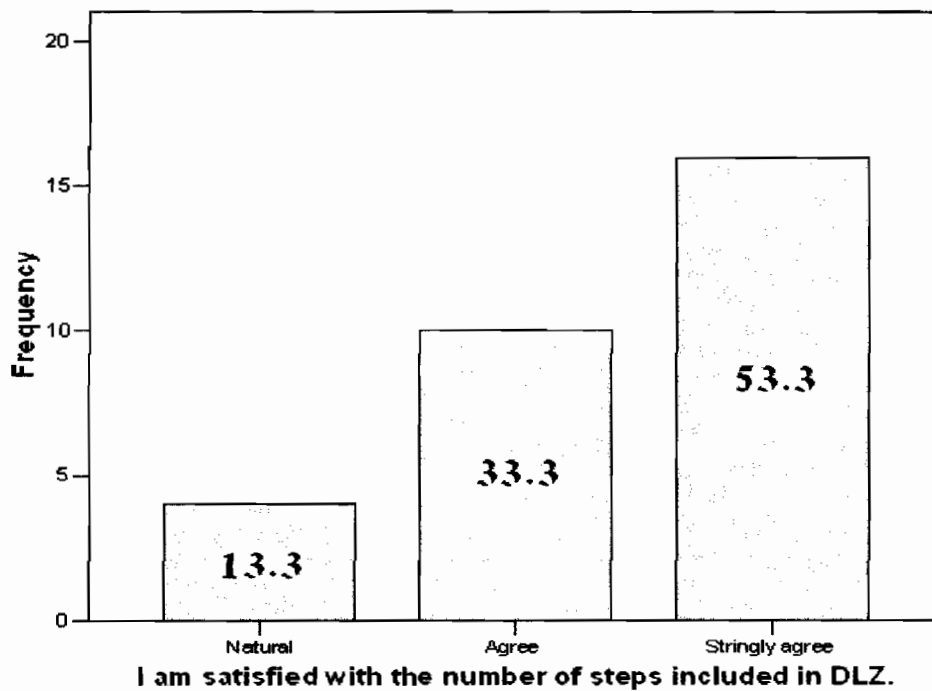


Figure 7: I am satisfied with the number of steps included in DLZ

In the table 7, the results appear that about 53% of the students sample are strongly agree that the number of the steps included in the DLZ system are satisfied for them.

Those student are 15 one. The second rate shows that 33.3% of the students are only agree with the number of the steps in the system. And only 13.3% in 4 students are applied with natural answer.

Table 8: It is easy to understand what is needed to interact with DLZ

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural	2	6.7	6.7	6.7
	Agree	7	23.3	23.3	30.0
	Strongly Agree	21	70.0	70.0	100.0
	Total	30	100.0	100.0	

It is easy to understand what is needed to interact with DLZ

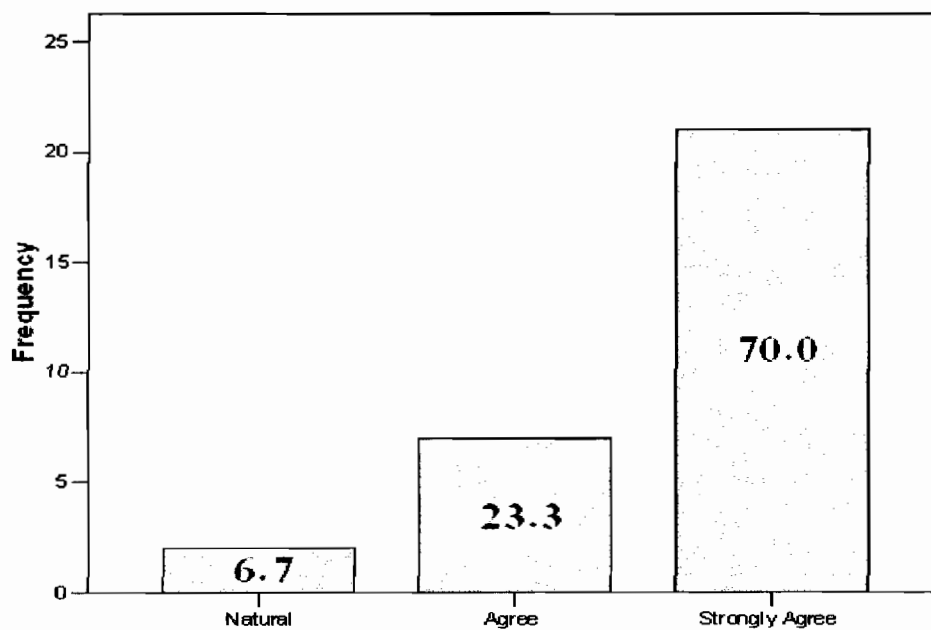


Figure 8: It is easy to understand what is needed to interact with DLZ

The high number of the student that they apply on the easy to understand the interact with DLZ, is for the students whom applied the form by strongly agree. Depends on table 8 they are 21 in rate 70.0%. the next graph shoes that only 23.3% in 2 student are

only agree with this. And only two students are answered with natural that it is easy understand what is needed to interact with DLZ.

Table 9: I would need additional instructions to complete the task.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	18	60.0	60.0	60.0
	Disagree	10	33.3	33.3	93.3
	Natural	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

I would need additional instructions to complete the task.

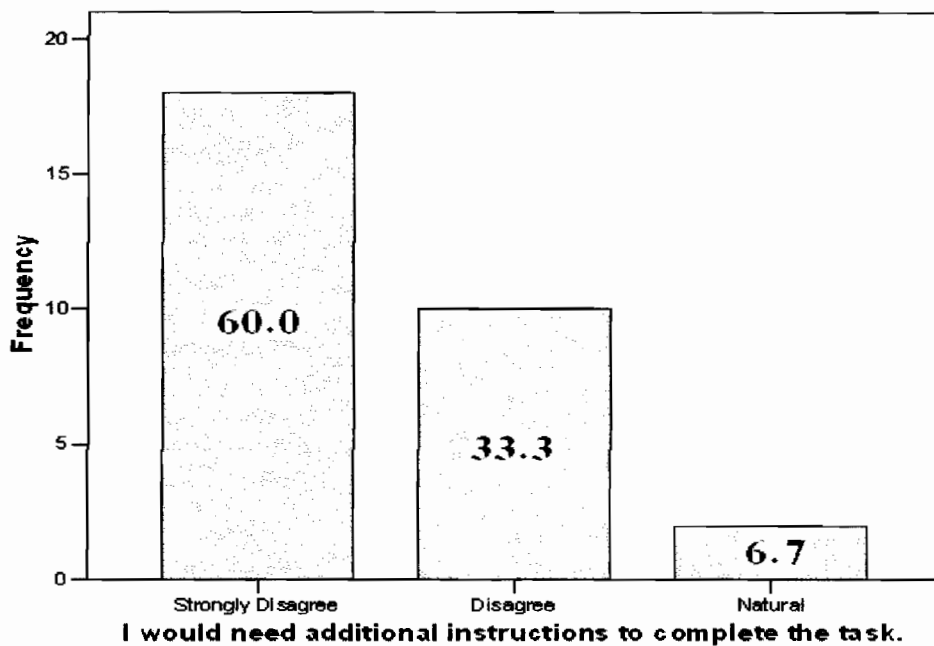


Figure 9: I would need additional instructions to complete the task

In Figure 9, its present that 60.0% in 18 students of the DLZ system evaluator are strongly disagree with they need additional instruction to complete the task. They found

the system easy to use and simple. While the other rate, which show that 33.3% in 10 students are only disagree with this and only 6.7% in 2 students are just Natural with this, they had some problems while they using the system to download files.