

**Islamic Economy Through Online Community (IEOC)
Issues on Information Gathering & Storing**

By

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Dissertation submitted in partial fulfilment of
the requirements for the
Bachelor of Technology (Hons)
(Business Information Systems)

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CERTIFICATION OF APPROVAL

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A project dissertation submitted to the
Business Information Programme
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Approved by,



(Mr. Abdullah Sani Bin Abdul Rahman)

UNIVERSITI TEKNOLOGI PETRONAS
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July 2007

CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgments, and that the original work contained herein have not been undertaken or done by unspecified sources or person.

nornabilah

NORNABILAH MUSTAFA

ABSTRACT

Knowledge Communities are communities of interest that come together to share knowledge that affects performance. Knowledge Management envisions getting the right information within the right context to the right person at the right time for the right business purpose. Communities are more aware and concern of sharing and transfer the knowledge. The rapid development of web technology had made the World Wide Web an important and popular application platform for disseminating and searching for information as well as conducting business. As a huge source, World Wide Web has allowed unprecedented sharing of ideas and information on a scale never seen before. The use of Web and its exponential growth are now well known, and they are causing a revolution in the way people use computers and perform daily tasks. Therefore Islamic Economy thru Online Community [IEOC] intention was to proposed for an avenue of knowledge sharing and experience for the community. Issue on Information Gathering and Storing is discussed in this project paper where it concentrates on how data are being managed and used. The target users of this website are among consumers and business personnel. In developing the project, the methodology comprises of four (4) phase: System Planning and Strategy , System Analysis and Design , System Implementation and System Testing. The tools used comprises of Macromedia Dreamweaver MX 2004, Joomla Open Source, Apache Web Server and PHP scripting language. In the end of this paper, conclusion and recommendation part will discuss for future enhancement.

ABBREVIATIONS

IEOC	Islamic Economy thru Online Community
KM	Knowledge Management
KDD	Knowledge Discovery in Database
BI	Business Intelligent
AI	Artificial Intelligent
OWL	Ontology Web Language

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CHAPTER 1

INTRODUCTION

1. Background of Study

This report presents research on relevant data management mechanism to manage and store all data in Islamic Economy Online Community [IEOC] website in accessible manner. Several methodologies were employed in the development and the analysis of the data.

Information systems and intelligent knowledge processing are playing an increasing role in business, science and technology. Recently, advanced information systems have evolved to facilitate the co-evolution of human and information networks within communities. These advanced information systems use various paradigms including artificial intelligence, knowledge management, and neural science as well as conventional information processing paradigms.

With this in mind, new designs and applications of advanced information and knowledge processing paradigms in areas such as business, education, management and science are look into. Areas covered include sample applications like artificial life-based systems, information evaluation, information fusion, machine intelligence, ontology and data mining.

1.1 Web Community

The human society has been entering a network-centered information era, in which users need access faster, more reliable and functional network services. The increasing popularity of the World Wide Web leads to an exponential growth in the Internet usage. The term "**community**", when used to describe virtual communities, is contentious among some circles. The traditional definition of a community is of a geographically circumscribed entity (neighborhoods, villages, religion, race etc). Virtual communities, of course, are inherently dispersed geographically, and therefore are not communities under the original definition. However, if one considers communities to simply possess boundaries of some sort between their members and non-members, then a virtual community is certainly a community. The idea of neatly bounded communities is also being critiqued, since communities are fluid just as much as they are static, with members joining and leaving and even being part of different communities simultaneously.

1.2 Joomla Open Source

Joomla is an open source solution for web developer under the GPL license with a Content Management System (CMS) .It helps to build websites and other powerful online applications. It is used all over the world for everything from simple websites to complex corporate applications. Joomla! is easy to install, simple to manage, and reliable. Among its available extensions are;

- Dynamic form builders
- Business or organizational directories
- Document management
- image and multimedia galleries
- E-commerce and shopping cart engines
- Forums and chat software
- Calendars
- Blogging software
- Directory services
- Email newsletters
- Data collection and reporting tools
- Banner advertising systems
- Subscription services

1.3 Information Gathering

Information gathering is information valued for its currency and relevance rather than its detail or accuracy—in contrast with "*data*" which typically refers to *precise or particular* information, or "*fact*," which typically refers to *verified* information. Sometimes called "active data" or "active intelligence", these typically regard the current plans, decisions, and actions of people, as these may have urgency or may otherwise be considered "valuable" from the point of view of the intelligence-gathering organization. Active intelligence is treated as a constantly mutable component, or variable, within a larger equation of understanding the secret, covert, or otherwise private "intelligence" of an opponent, or competitor, to answer questions or obtain advance warning of events and movements deemed to be important or otherwise relevant.

1.4 Information Storage

An information storage and retrieval system (ISRS) is a network with a built-in user interface that facilitates the creation, searching, and modification of stored data. An ISRS is typically a peer-to-peer (P2P) network operated and maintained by private individuals or independent organizations, but accessible to the general public. Some, but not all, ISRSs can be accessed from the Internet. (*The largest ISRS in the world is the **Internet** itself.*) A significant difference between an ISRS and a database management system (DBMS) is the fact that an ISRS is intended for general public use, while a DBMS is likely to be proprietary, with access privileges restricted to authorized entities. In addition, an ISRS, having no centralized management, is less well-organized than a DBMS

1.5 Problem Statement

1.5.1 Problem Identification

Nowadays, the existing community web portals simply specify what and how the users can contribute there and search about. The specification comes from the web portal creators and their view of the domain, which is normally comprehensive, but is definitely limited, and thus, makes the portal out of interest for the users after they've depleted this view.

Problem Summary:

- Lack of common avenue where Islamic community can share knowledge & experience relating to economic development
- Lack of communication among consumer and Muslim businesses
- In Malaysia the context of knowledge community are inexistent

1.5.2 Significant of Project

- **Medium of communication**
This system also acts as a medium to communicate and share knowledge among the community. With the features added in the system, people can easily and freely upload, ask and say anything through the forums and chat box in the system. So the knowledge and experience among the community members can be shared and be discussed.
- **Easily to host and manageable**
This system is run using a free scripting file and server. So, it can run in any platform of operating system like Windows, Free BSD, Linux and et cetera depends on the system administrator.

- **Commercialize product**

If the system is a success, this system can be commercialized which can benefit the business people (government body, niches business and private sector) and also the community whom are using it for knowledge sharing basis.

1.6 Objective and Scope of Study

1.6.1 Objectives

This project will be divided into two (2) parts whereby the first part of the project is to analyze or study of Web Community, Information Gathering and Storing concept while the second part will focus more toward the development and integration of IEOC system.

The development of this system is based on the following objectives:

- To share experience, knowledge and business ideas that are related to the Islamic economic development
- To provide a medium of propagation for the Islamic business values and concepts to the communities
- To design and implement input mechanism for the system (IEOC) that will allow it to intelligently gather information and transform it into knowledge

1.6.2 Scope of Study

The system shall concentrate on:

- Sharing of Islamic Economic knowledge in a community
- Online Community in Malaysia
- Issues relating to the input and processing of the information into the IEOC.

1.6.3 Relevancy of Project

- To encourage knowledge sharing
- Enable the user to store information anywhere anytime
- Increase the knowledge of Islamic community

CHAPTER 2

LITERATURE REVIEW AND THEORY

2.1 Community Portal on the Web

Wikipedia Encyclopedia defines a community is a tight formation of members that share *common ground* in a variety of real or abstract areas. Most *sociologists* agree that a *society*, while much larger in size, lacks the structure provided by the *sense of community* exhibited in a community. From a *psychological perspective*, an individual's success and happiness can be affected by their social interaction with others. Community portal on the Web provide an access gateway to the World Wide Web. Portals bring together local information and offer services like email and discussion forums to extend community activity and interaction. They integrate various information sources and services, such as search engines and directories, and usually enable users to customize the content, layout and navigation to suit their needs. Local needs and interests are central to community portals. Appendix E displayed the list of the available websites in the country and the nature of its content. (*See Appendix E*)

2.2 Control

Conference done by Ir. Ahmad Faizul Shamsudin in this website suggested that the Artificial Intelligence (AI) and a few other methods are used to control the process or flow of a system. He introduces the Islamic approach as well as exposes the prevalent philosophy and technology of AI. As mention, *Ulumul Mantiq* can contribute to a powerful search algorithm. The concept of *Al-Bayyan* can open new understanding on the relationship of things for machine learning. The *Tauhidic* principles can be used in the process of "detaching the real from the unreal than reconnecting the two" in AI systems.

2.3 How to motivate people to contribute or co-operate with the website activity?

The website offers public events and in house training where in a way gets the customers to participate. Quote "Science is organized knowledge. Wisdom is organized life" and "Knowledge is power" are used to motivate people.(Steven Collins,2007)

Give your visitors a free ebook. You could write your own and include an ad in the ebook linking to your site and allow other people to sell it or give it away. If you don't want to take the time to write one, you could ask other writers permission to use their articles and assemble an article eBook or commission an eBook. There are plenty of writers around willing to write a fresh eBook at a fair price.

Hold free online classes or seminars. They could be held in your web site's chat room. The idea of "live" information will entice people to visit your web site. You will become known as an expert on the topic.

Offer free online services or utilities from your web site. They could be search engine submitting, copy writing proofreading etc. The service or utility should be helpful to your target audience.

Influence behavior in ways that align with your site goals and participant needs, and everyone will appreciate it. Here's how: *Phase 1: Adjust Your Site Identity, Phase 2: Adjust Your Algorithms, Phase 3: Adjust Your Architecture, Phase 4: Increase Your Editorial Presence.*

2.4 Internet in Malaysia

Internet are become one of the important communication ways of Malaysian nowadays. According to General Manager of Strategic Development Division Telekom Malaysia (TM) Bhd, the number of the Internet subscribers in Malaysia is expected to reach the 10 million mark in the next five years. His statement is based on the growing trend of Internet users in the last three years as Malaysia moved towards advanced information, communications and multimedia services. In 2004 the number of subscribers was 2.9 million, in 2005 it increased to 3.5 million subscribers, and in 2006 the number of subscribers in Malaysia was close to five million. This is an encouraging growing trend, and most of the Internet subscribers were eyeing for high speed broadband infrastructure. According to research done by C.I.Almanac, 11,016,000 of Malaysian's are the internet users as of Sept/2006 which contributes 38.9% of the population. Table below shows the summary of the internet users in Malaysia.

Table 1.1: Malaysia Internet Usage and Population Growth

YEAR	Users	Population	% Pen
2000	3,700,000	24,645,600	15.0 %
2005	10,040,000	26,500,699	37.9 %
2006	11,016,000	28,294,120	38.9 %
2007	13,528,200	28,294,120	47.8 %

Table 1.2: World Internet Usage and Population Statistics

WORLD INTERNET USAGE AND POPULATION STATISTICS						
World Regions	Population (2007 Est.)	Population % of World	Internet Usage, Latest Data	% Population (Penetration)	Usage % of World	Usage Growth 2000-2007
Africa	933,448,292	14.2 %	43,995,700	4.7 %	3.5 %	874.6 %
Asia	3,712,527,624	56.5 %	459,476,825	12.4 %	36.9 %	302.0 %
Europe	809,624,686	12.3 %	337,878,613	41.7 %	27.2 %	221.5 %
Middle East	193,452,727	2.9 %	33,510,500	17.3 %	2.7 %	920.2 %
North America	334,538,018	5.1 %	234,788,864	70.2 %	18.9 %	117.2 %
Latin America/Caribbean	566,606,627	8.5 %	115,759,709	20.8 %	9.3 %	540.7 %
Oceania / Australia	34,468,443	0.5 %	19,039,390	55.2 %	1.5 %	149.9 %
WORLD TOTAL	6,574,666,417	100.0 %	1,244,449,601	18.9 %	100.0 %	244.7 %

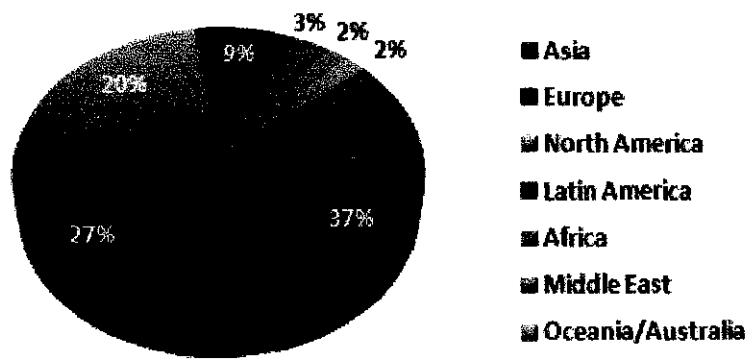


Figure 1.1: World Internet Users

2.5 Benefit of Web Community

A good community portal, with other sites in the community pointing to it, makes it easier to find the community on the Web. The community portal has the potential to score higher in the search engine ratings because of its broader and inclusive approach to community information. Search engine rankings and the location of the community in the rankings is especially important for tourism efforts and for businesspeople who may need to travel to the community.

The community portal is also a tool for workforce development. With features like blogs for all users and the ability to distribute posting privileges, many people in the community have the opportunity to acquire new skills by using the community portal as an interactive, hands-on learning tool. As residents acquire these skills, their marketability in the workplace increases and the community becomes more attractive to relocating businesses as well as to businesses already in the community.

A feature-rich community portal with multiple ways to inform community members about what is happening in the community (e.g. community calendar, discussion forums, RSS feeds, blogs, automated reminders, etc.) has the potential to increase civic participation. Formal and informal studies in Blacksburg, Virginia and in other communities with active community portals (Design Nine,2007) indicate that when residents have the right information at the right time, they tend to get more involved in the life of the community. In other words, they are more inclined to get out of the house and attend community meetings and to take part in community and civic activities.

The community portal project can become an ongoing technology resource for the community at large, constantly reviewing new Internet-based services like RSS news feeds, blogging, Voice over IP telephony, and other developments. The portal can provide evaluations, links, and resources on the site itself to help residents and businesses in the community make informed decisions. As part of the training and education component of the effort, short courses and seminars can be offered on topics of interest to the community.

Finally, the community portal project can save money. By becoming a valuable technology resource in the community, residents, local businesses, and local government, over time, should spend less on technology and get more value for the funds that are expended. As an example, the community portal can help raise community awareness about the value of bandwidth aggregation. As more and more bandwidth users in the community use that information to pool buying needs, the community benefits directly by having more funds available for core needs and objectives. Indirectly, increased investments, especially by businesses on the core business rather than on overhead, will, over time, lead to increased economic development, new job opportunities, and a community that is vibrant, livable, and prosperous.

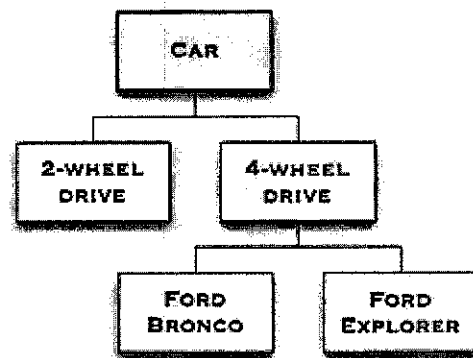
2.6 Ontology Approach

The paperwork discuss the used of ontology in framework for Structuring Process Knowledge and Process of Model-Based Problem Solving. Ontology means a formal specification of a hared conceptualization. The development of ontological structure is the frame of the intended knowledge base itself. That is the 'data structure' for a certain domain.

Research result

- Qualitative evaluation; approach can be used in other domains.
- Evaluations by partners: objectives of transparency and quality assurance can be met by approach.

Figure 1.2: : Example of Ontology Relationship



2.7 Intelligent database

Full-text database that employs artificial intelligence (*AI*), interacting with users to ensure that returned items (hits) contain the most relevant information possible. This is in contrast to a traditional database, which is searchable only by keywords and verbatim phrases connected by *Boolean* operations such as AND, OR, and NOT. Intelligent database technology is in its infancy, and is evolving as AI becomes more advanced.

An intelligent database provides expanded and more flexible options for conducting queries. For example, a user might type in a question as a full

sentence. The database then provides a list of hits arranged according to the likelihood (from highest to lowest) that the resulting data contains a useful answer to that question. The AI may correct suspected errors (such as inaccurate spelling) input by the user. Some intelligent databases display synonyms (items with similar meanings) or antonyms (items with opposite or negative meanings) for keywords and phrases.

2.8 “Turning Data into Information” – Next Generation Storage & Intelligent File System

A storage system that provides federated search and indexing based on metadata within the content raises that storage system from data storage to information storage. The value of accessing information quickly and precisely should be self-evident. In the case of compliance, it can make the difference in saving you from a hefty fine and can provide evidence to support your case during litigation proceedings. (Connery A. and Hasan H. ,2005)

2.9 Web Ontology Language (OWL)

OWL is a semantic markup language for publishing and sharing ontologies on the World Wide Web (WWW). It can be used to describe the classes and relations between them that are inherent in Web documents and applications. OWL development is the next step towards the idea of Semantic Web. Generally, OWL makes an open world assumption ie. Descriptions of resources are not limited to one file defining the ontology. It is possible to reference as many external files as required.

2.10 Semantic Web

The **Semantic Web** provides a common framework that allows **data** to be shared and reused across application, enterprise, and community boundaries. It is a collaborative effort led by W3C with participation from a large number of researchers and industrial partners. As the information on the Web grows, search engines routinely return tens of thousands of results when, very often, only one answer is desired. In order to determine what is true and meaningful, the Web has turned many people into research analysts whether they were ready for the task or not.

2.11 Knowledge Discovery in Database

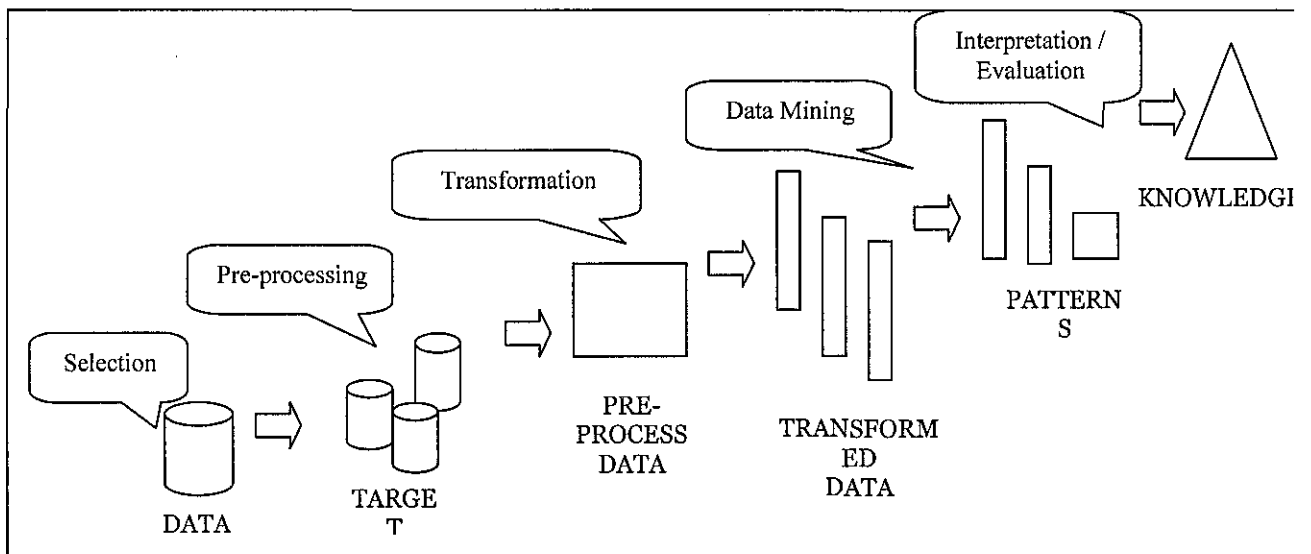


Figure 1.3 : The Knowledge Discovery Process

Knowledge Discovery in Database (KDD) is considered to be “the non-trivial extraction of implicit, previously unknown and potentially useful information from data”. This implies a focus only on the discovered information, yet the current opinion is that KDD means more than this. KDD refers to the overall process of discovering useful knowledge from data, while data mining refers to the application of algorithms for extraction purposes. Figure 2 present a process that includes human intervention.(Brachman, R.J, Anand)

2.12 Data Mining

It is also called as data or knowledge discovery is the process of analyzing data from different perspectives and summarizing it into useful information - information that can be used to increase revenue, cuts costs, or both. Data mining software is one of a number of analytical tools for analyzing data. It allows users to analyze data from many different dimensions or angles, categorize it, and summarize the relationships identified. Technically, data mining is the process of finding correlations or patterns among dozens of fields in large relational databases.

It enables these companies to determine relationships among "internal" factors such as price, product positioning, or staff skills, and "external" factors such as economic indicators, competition, and customer demographics. And, it enables them to determine the impact on sales, customer satisfaction, and corporate profits. Finally, it enables them to "drill down" into summary information to view detail transactional data.

Eg. WalMart used the data mining capacity of Oracle software to analyze local buying patterns. They discovered that when men bought diapers on Thursdays and Saturdays, they also tended to buy beer. Further analysis showed that these shoppers typically did their weekly grocery shopping on Saturdays. On Thursdays, however, they only bought a few items. The retailer concluded that they purchased the beer to have it available for the upcoming weekend. The grocery chain could use this newly discovered information in various ways to increase revenue. For example, they could move the beer display closer to the diaper display. And, they could make sure beer and diapers were sold at full price on Thursdays.

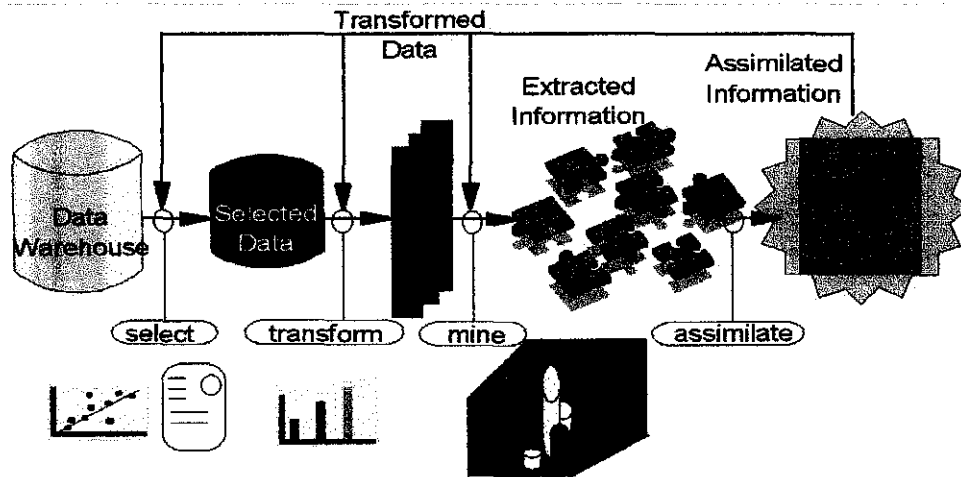


Figure 1.4 : Data Mining Architecture

2.13 Meta Data

It is a data about data. An item of metadata may describe an individual datum, or content item, or a collection of data including multiple content items. Metadata can be stored either *internally*, in the same file as the data, or *externally*, in a separate file. Both ways have advantages and disadvantages:

- **Internal storage** allows transferring metadata together with the data it describes; thus, metadata is always at hand and can be manipulated easily. This method creates high redundancy and does not allow holding metadata together.
- **External storage** allows bundling metadata, for example in a database, for more efficient searching. There is no redundancy and metadata can be transferred simultaneously when using streaming. However, as most formats use URIs for that purpose, the method of how the metadata is linked to its data should be treated with care.

Eg. An article about "sport utility vehicles" would also be tagged "4 wheel drives", "4WDs" and "four wheel drives", as this is how SUVs are known in some countries. (R. Todd Stephens, 2006)

2.14 Expert system

Expert system is a computer application that performs a task that would otherwise be performed by a human expert. For example, there are expert systems that can diagnose human illnesses, make financial forecasts, and schedule routes for delivery vehicles. Some expert systems are designed to take the place of human experts, while others are designed to aid them.

Expert systems are part of a general category of computer applications known as *artificial intelligence*. To design an expert system, one needs a *knowledge engineer*, an individual who studies how human experts make decisions and translates the rules into terms that a computer can understand.

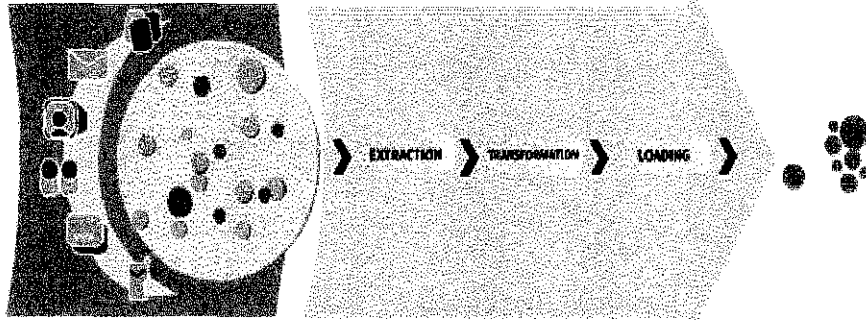


Figure 1.5: Selection and Extraction of Information

2.15 Web Crawler

Web crawler is a program or automated script which browses the World Wide Web (WWW) in a methodical, automated manner. Other less frequently used names for Web crawlers are **ants**, **automatic indexers**, **bots**, and **worms** (Kobayashi and Takeda, 2000).

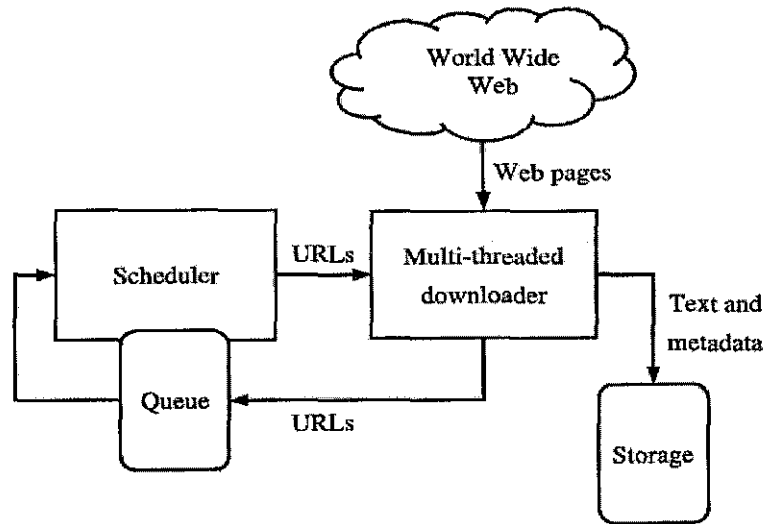


Figure 1.6 : Web Crawler Architecture

In particular search engines, use *spidering* as a means of providing up-to-date data. Web crawlers are mainly used to create a copy of all the visited pages for later processing by a search engine that will index the downloaded pages to provide fast searches. Crawlers can also be used for automating maintenance tasks on a Web site, such as checking links or validating HTML code. A Web crawler is one type of bot, or software agent. In general, it starts with a list of URLs to visit, called the **seeds**. As the crawler visits these URLs, it identifies all the hyperlinks in the page and adds them to the list of URLs to visit, called the **crawl frontier**. URLs from the frontier are recursively visited according to a set of policies.

There are three important characteristics of the Web that generate a scenario in which Web crawling is very difficult:

- its large volume,
- its fast rate of change, and dynamic page generation,

CHAPTER 3

METHODOLOGY

3. OVERVIEW

Method for creating a portal web site, comprising: storing seed data within a database, the seed data identifying an initial appearance and operation of the portal web site; collecting preference data from a user of the portal web site, the preference data identifying a set of user preferences about the appearance and operation of the portal web site; storing the preference data within a database; and generating the portal web site based upon the preference data

3.1 Procedure Identification

3.2.1 Conduct a survey/questionnaire among students.

This method will need to distribute questionnaires to users (student) where the results of the questionnaires are as in appendix A. It is to identify how many students would prefer and will use the new method of viewing their timetable. Basically the questionnaire is to get feedback from end users.

3.2.2 Online Research

Research is done through similar web portal via internet that had information sharing. A study on information storage .

3.2.3 Borrow books related to the topic.

Another method which I could use as reference to assist me throughout this project is by borrowing related books from the library. This is important so that I have further understanding and optimistic action taken towards achieving the objective of this project.

3.2 Development Methodology

The project had followed the common project development life cycle. However, for the first part of the project only the planning, analysis and design phase will be implemented.

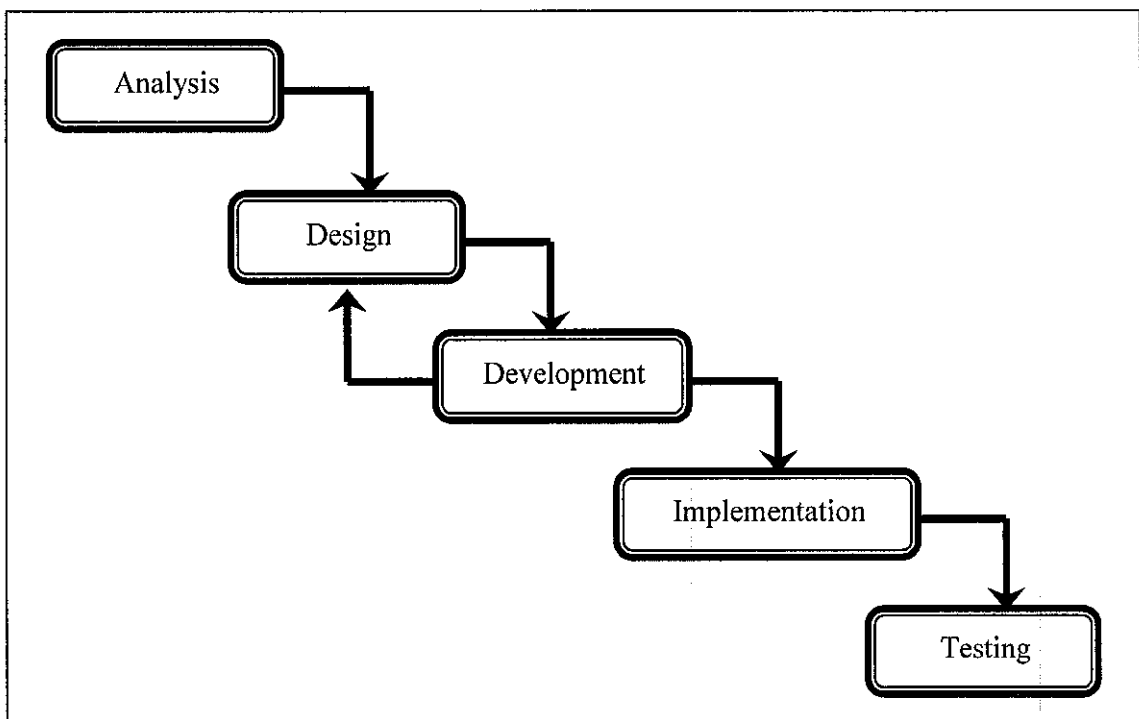


Figure 2.1 : System Development Life Cycle (SDLC)

Phase 1: Gathering information and understand requirements.

This stage was the starter of the project. Every plan for this project was clarified and studied in this phase. Below are the steps in developing the planning phase:

- A proposal was sent and a week later the topic was approved.
- The scope of the topic was narrow down and requirements for the project are identified.
- The project timeline was developed in order to schedule appropriately. The Gantt chart of the project is shown in *Appendix A.* (See *Appendix A*)
- The project's problem statements, objective were defined to get a clear picture of the project.
- The project's methodology was discussed and plan in this stage

Phase 2: Architecture the site interface (layout) and information storage.

In this phase, a survey has been conducted. The survey was done to find out about people's view on the Islamic Economy Online Community relevancy, AND functionality. This is to create a solution that can be proposed to curb the problems in accessibility of data and user friendliness. The samples of questions are shown in the *Appendix B.* (See *Appendix B :Pre-Test*)

In this phase also a research was done on how the data can be shared and manages within the website for knowledge sharing purposes. The research done is very crucial in determining the user of the system and the expected system functionality, where in this project the target user are the UTP students. All possible findings concerning the project are carefully reviewed to ensure the best solution is proposed to end user.

**Phase 3: Build the website according to the site design agreed upon.
(System Prototype & System Testing)**

In this phase the system prototype are build according to the agreeable system design in phase 2. Interface layout is design using Macromedia Dreamweaver MX 2004 . PHP language as website scripting and MySQL databases is used to store all the data. Apache server is use for file configuration. System performance & testing has been carry out to test the successfulness of the system. Questionnaire sample of user feedback on this re-test can be viewed in *Appendix C. (See Appendix C :Post-Test)*

Phase 4: The finished website is made available. (System Implementation)

The final phase is focused on implementation tasks such as go-live, training, and documentation. Here, the documentation is being prepared to conclude on the overall research and experiment. Snapshot of the website is shown in *Chapter 4: Result and Discussion*

- Note :
- (1) Phases 2 and 3 may run concurrently at times.
 - (2) Phase 3 will usually loop back to Phase 2 as needed before moving on to Phase 4.

3.3 Development Tools

The proposed tools to develop this system are to use **PHP** as the language for the web portal and **MySql** database to store all the information. For web server **Apache** is being used since it is reliable to be use with MySql. The following are the system requirement for the web portal;

Development Hardware:

- Intel P4 2.4 GHz
- 256MB RAM
- 80GB Hard Disk
- Monitor
- Network Interface Card

Development Software:

- Macromedia Dreamweaver MX 2004
- PHP
- Apache Server
- Joomla

CHAPTER 4

RESULTS AND DISCUSSION

4. Overview

Many developers rely on the Web as a platform-independent application environment. The benefits that Communities of Practice claimed as part of a Knowledge Management programme have led them to become the focus of much attention. Usually it is formed within a single discipline in order to focus efforts in sharing knowledge, solving problems, or innovative ventures.

4.1 Results and Discussions

This project focused on issue of data gathering and storing. As the Web grows into an even richer storehouse of human knowledge, we need ever more powerful tools to search and interpret the tremendous amount of available data; this applies to intranets as well as the global Web. Two models have emerged to help manage this data on a global scale: the Semantic Web and Web services.

The Semantic Web provides a common framework that allows data to be shared and reused across application, enterprise, and community boundaries. It is an extension of the current Web in which information is given well-defined meaning, better enabling computers and people to work in cooperation. The Semantic Web is data-centric.

Web services provide a standard means of interoperating between different software applications, running on a variety of platforms and/or frameworks. Web services are message-centric.

4.2 Business Process

4.2.1 System Architecture

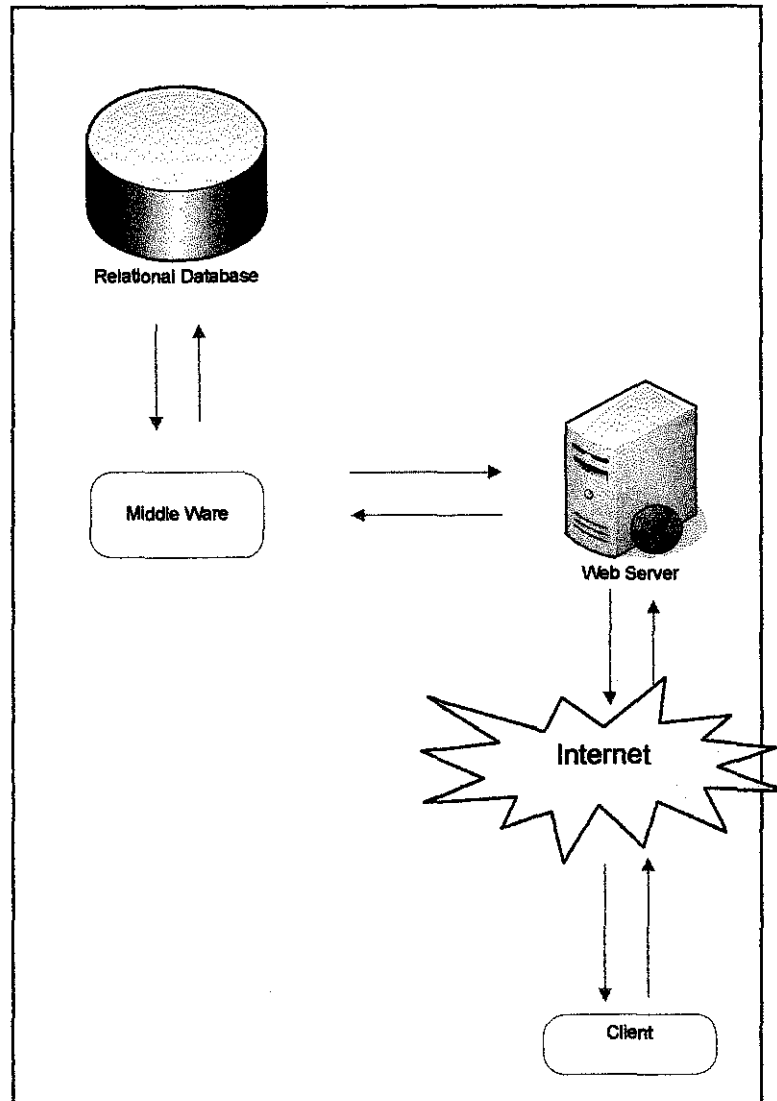


Figure 3.1 : System Architecture

4.2.2 Use Case Diagram

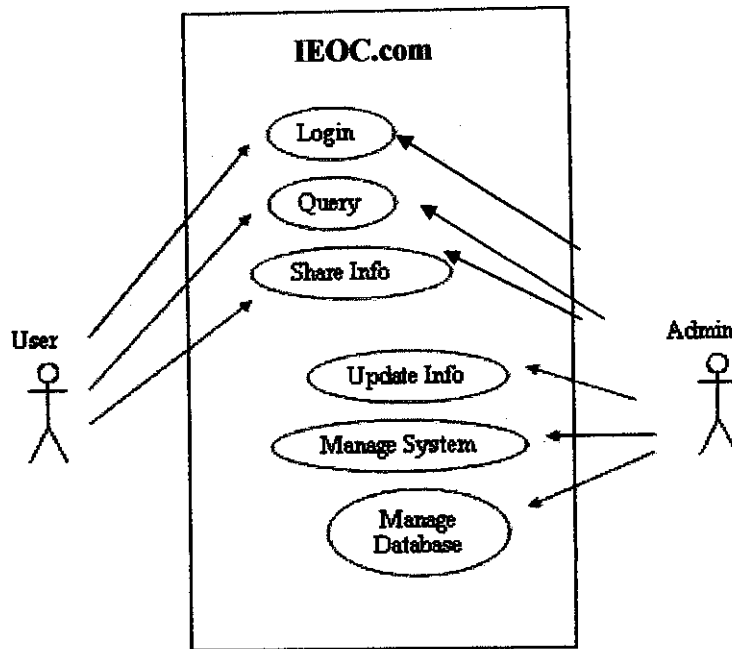


Figure 3.2 : Use Case Diagram

Illustrated in Figure 3.2 above is the use case diagram of IEOC.com system. Two (2) main character involves are user (consumer & business personnel) and admin whom responsible for updating and manage the system.

4.2.3 Portal Framework

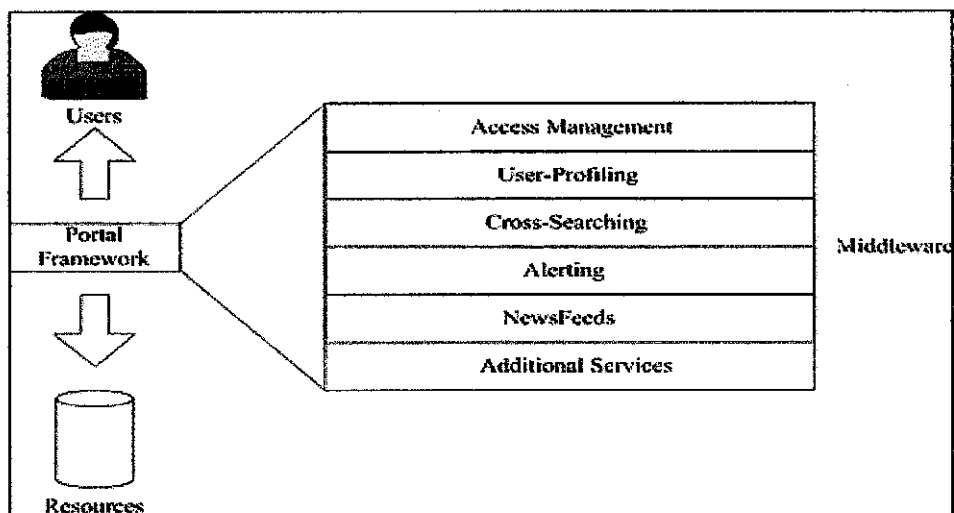


Figure 3.3 : Portal Framework

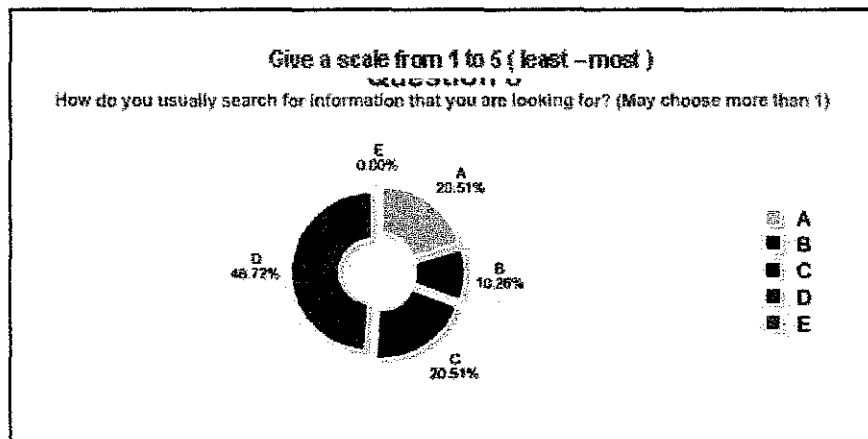
4.3 Data Gathering and Analysis

For the data gathering and analysis part, an analysis is conducted. The analysis is about getting sufficient information on medical information that should be insert into the website. Other websites are also being surveyed to see what lack in terms of website services and information is. These shortages were then listed down for each and every information will be weighted so that it can be determined whether it should be included in the website or not. From the analysis, useful information can usually help to develop web portal.

Another source of data gathering is by doing a survey. This survey was carried out onto 30 people who are identified as the potential user for the portal. The results are of the survey are as below.

4.3.1 Pre-Test

This survey was conducted in the Phase 2 (Design & Analysis) development life cycle. Purpose was to collect and gathered as much information as possible matters related to the web portal development and to ensure the service provided meets user requirement.



- A) Library
- B) Book Store
- C) Ask friends / family
- D) Internet (Please answer question no. 9)
- E) Other

Figure 3.4 : Pre-Test Question 1

Result shows that most people prefer the use of Internet with 46.72% compared to book store with only 10.26% votes to get information. Internet are more reliable and easy to be access from anywhere at anytime. It's hassle free, fast and safe time. Other method mostly used is library and by asking friends or family with 20.51% each.

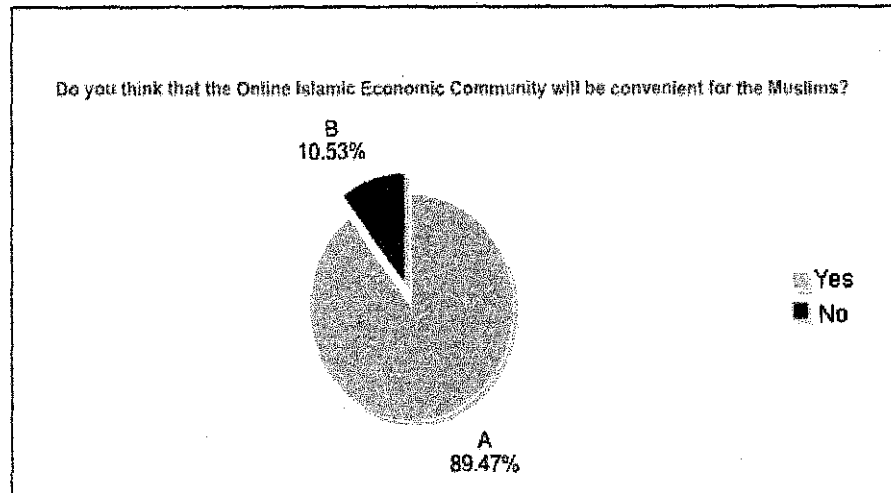


Figure 3.5 : Pre-Test Question 2

Most people agreed that the system would benefit the Muslims people because the website emphasizes more on providing the information for Islamic World. However this wont change the fact that “everyone can share” where knowledge are also being shared with others for business used and collaboration purposes despite of race, age and status. Issues on this wont happened because we live in a community where sharing is caring.

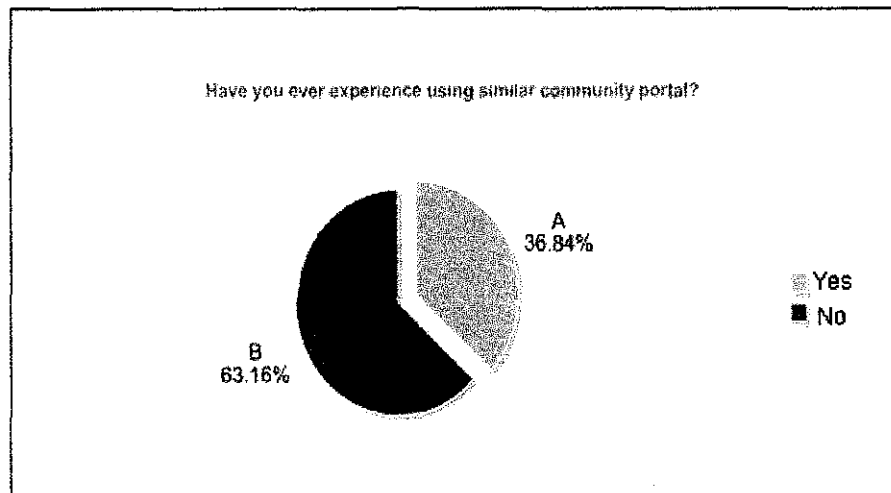


Figure 3.6 : Pre-Test Question 3

This question gave an advantage to our project to indicate the usage of community portal among users in Malaysia. Looking at Figure , result shows that only 36.84% did experience using similar community portal as EIOC.com While a larger portion of 63.16% votes that they are not expose or ever experience using such community portal. This indicates that people in Malaysia are still lack of knowledge sharing culture and use of online portal.

4.3.2 Post-Test

This survey was conducted in the Phase 3 (Implementation/Production) development life cycle. Purpose was to apply from the information and data gathered to develop the interface of web portal .This phase are among the most crucial development process because the result will reflect success of the system. . Therefore system Prototype & Testing were also involve to test on the system performance and data usability.

The questionnaire for this part was made in Matrix Rating Scale type of question. The scale was given from 1 to 5 with 1 having the least marks while 5 are the highest. Results were displayed in percentage point form from user's vote.

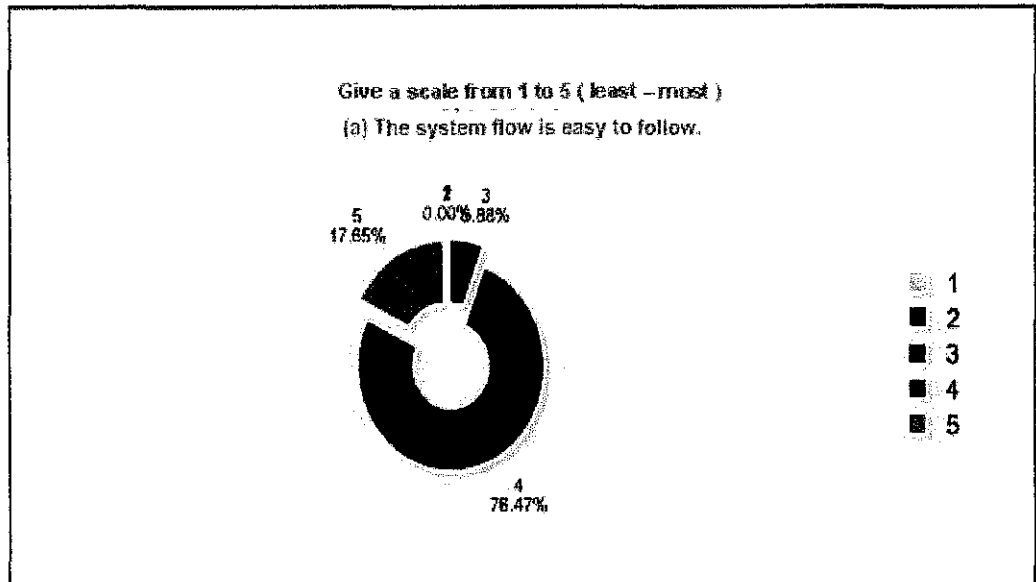


Figure 3.7 : Post-Test Question 1

From the result, most users gave scale of 4 with 76.47% for the system ease of flow. While the least is at the scale of 3 with only 6.88% of votes. Here we can conclude that the system are 94.12% easy to be used

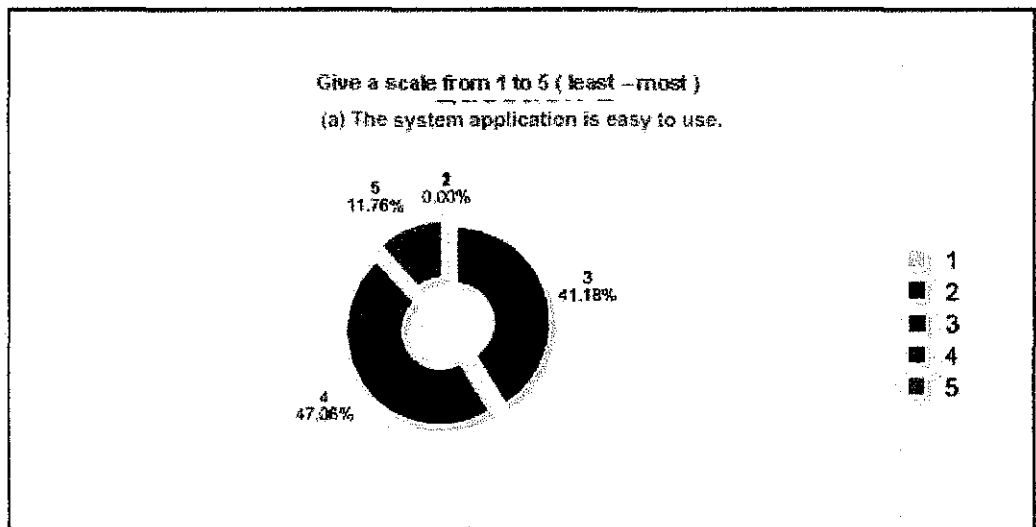


Figure 3.8 : Pre-Test Question 2

Referring to the figure above, we can conclude that our system application of ease to use are at a moderate state where most vote came from scale 4 and 3 with 47.06% and 41.18% each.

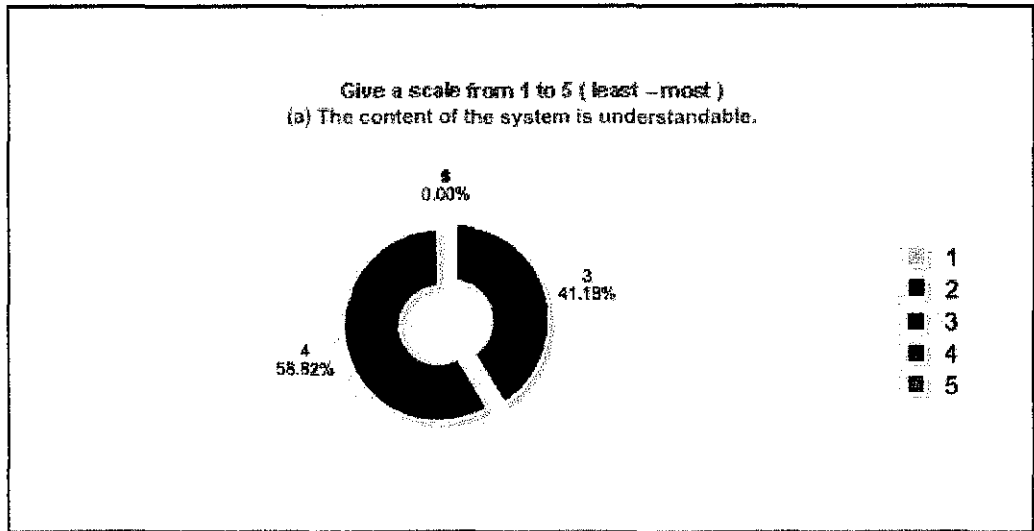


Figure 3.9 : Pre-Test Question 3

From the result , its proven that our system can be easily understand by the user when mostly user only vote for scale 4 and 3 with 58.82% and 41.18% each.

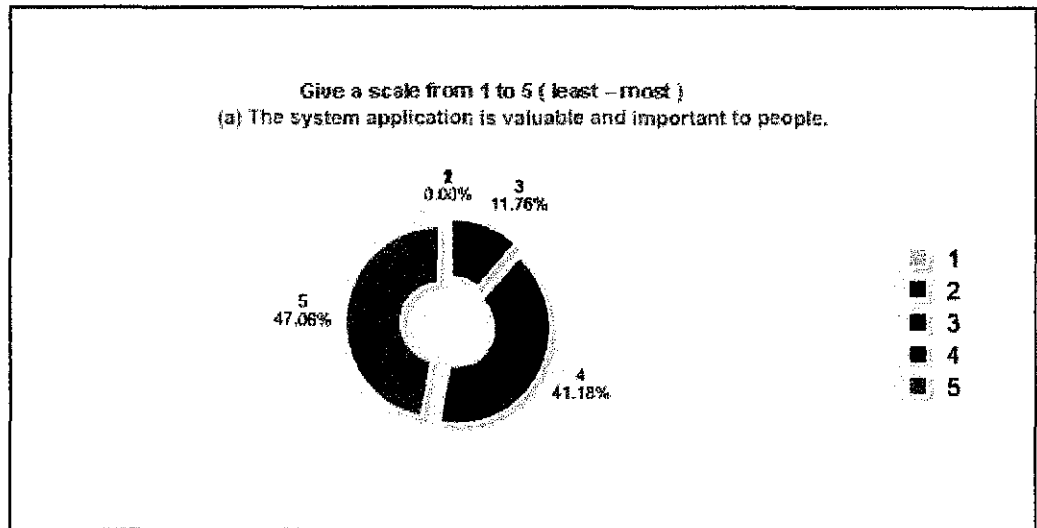


Figure 3.10 : Pre-Test Question 4

Referring to the above figure, most people think that the system application is valuable and important to the people when 47.06% votes for scale of 5 and up to 11.76% in scale 3. We can conclude that the system is 88.24% valuable and important.

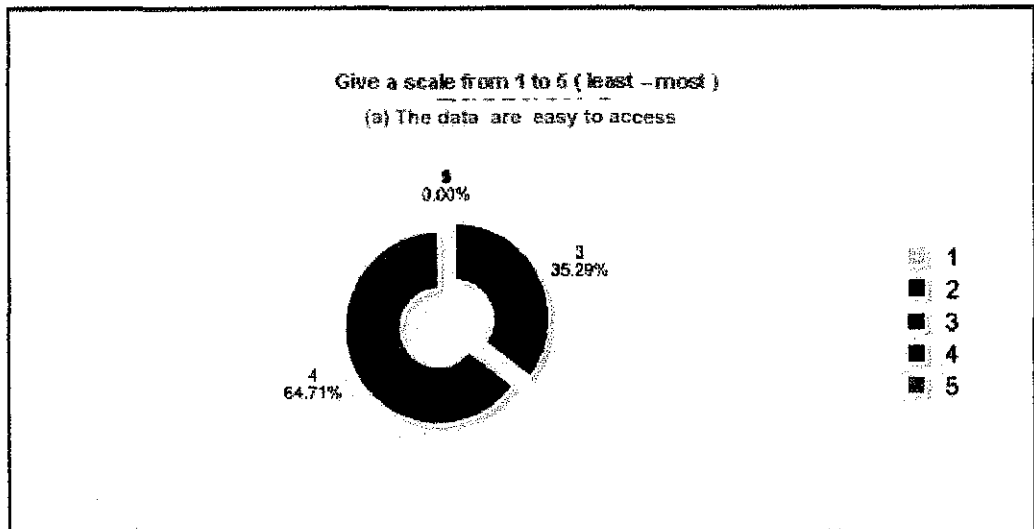


Figure 3.11 : Pre-Test Question 5

From the result, data in the system can easily be access without hassle or any problems occur yet so far because most votes came from scale of 4 and 3 only with 64.71% and 35.29% each.

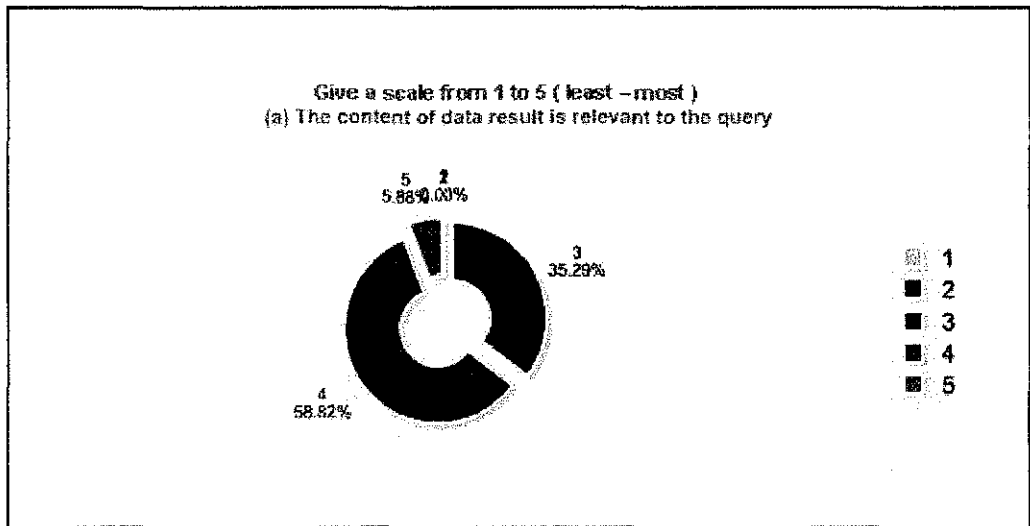


Figure 3.12 : Pre-Test Question 6

Referring to the above figure, we can conclude that the content of data result from users query return 5.88% of most relevant vote while only 58.83% and 35.29% gave the scale of 4 and 3 each.

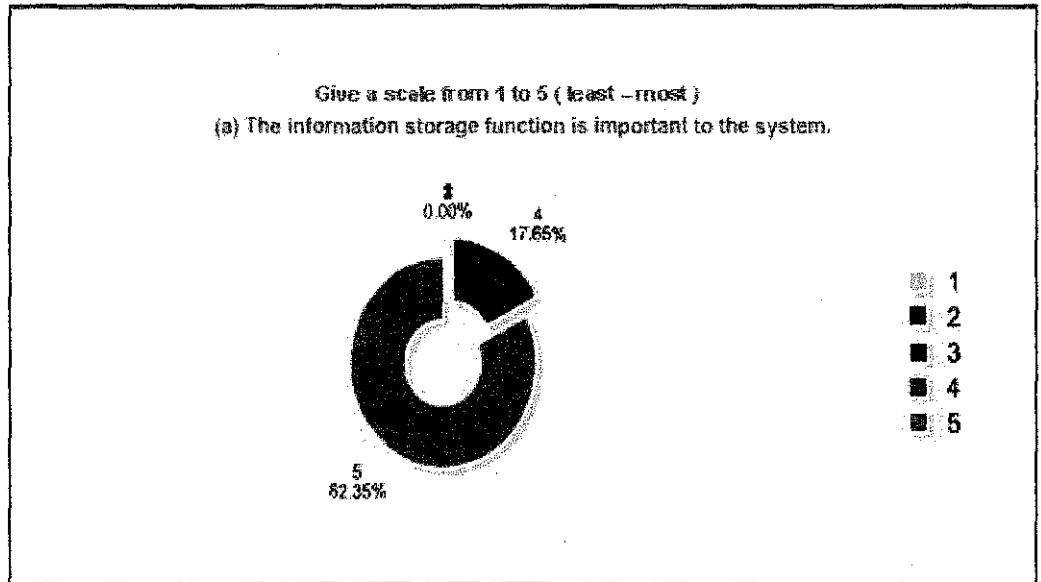


Figure 3.13 : Pre-Test Question 7

From the result, most user with 82.35% vote for scale of 5 do think that the information storage function if important to the system. The rest came from group scale of 4 with 17.65%. We can conclude that information storage does play an important role.

4.4 User Interface

Figure below shows the screen capture of the front page of the website prototype. From the figure, the purposes and the services of the website are provided to show the user how the flow should be.

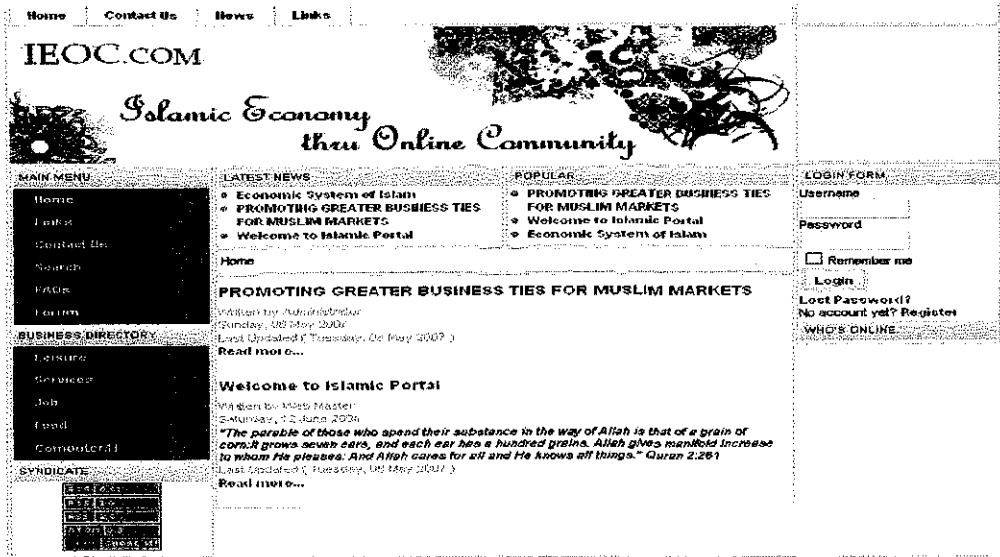


Figure 3.14: Snapshot of Main Page

This is a welcome page for the new user. To enable them to use the website functions and privileges, user have to register first. The process will only take few minutes.

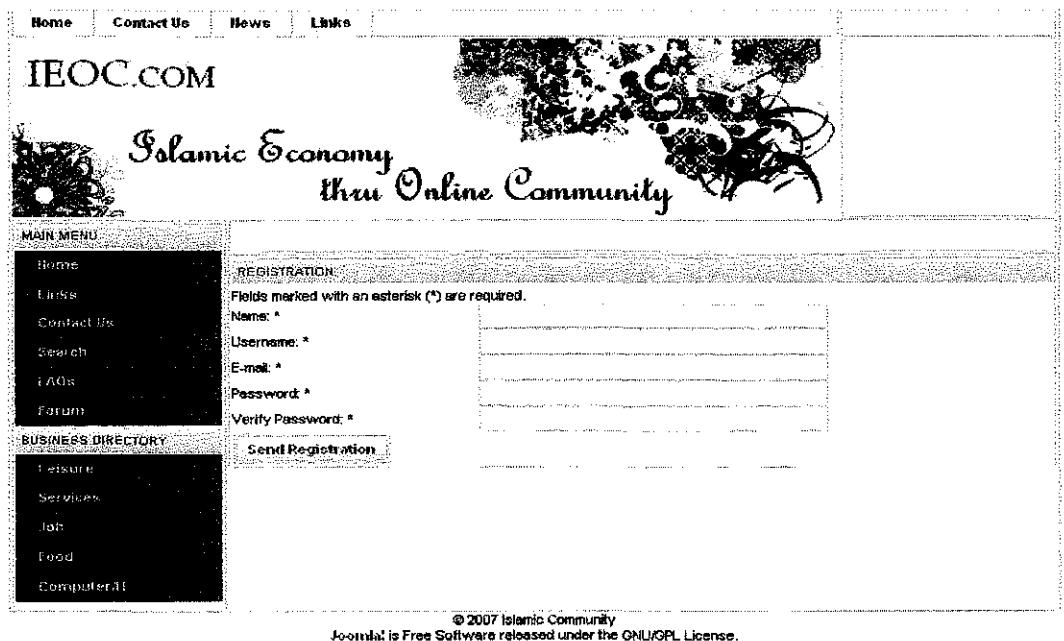


Figure 3.15: Snapshot of Member Registration

The snapshot shows the registration form for the user whom interested to become a member of the web portal.

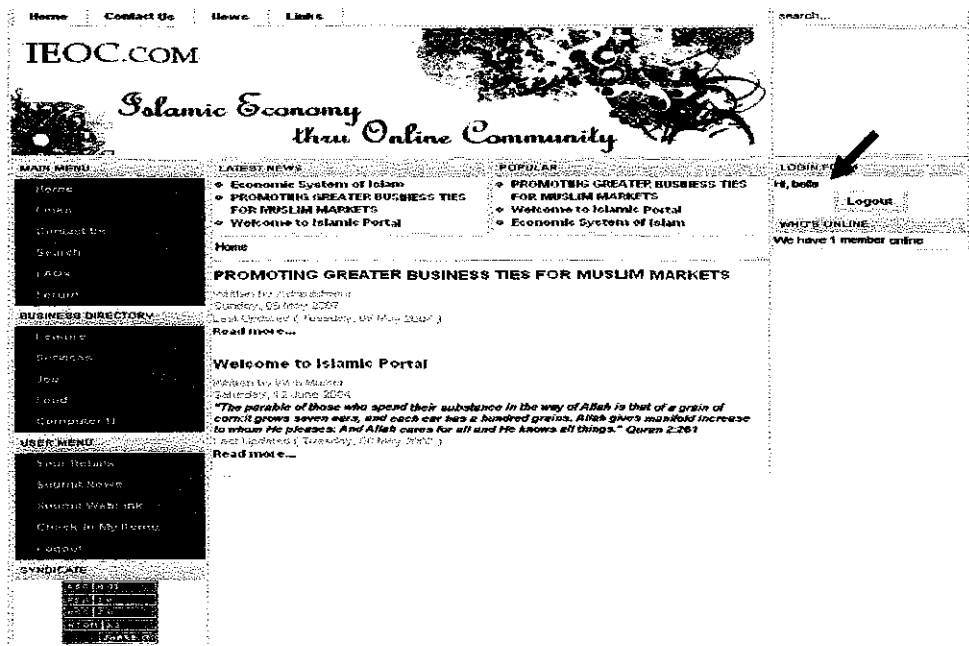


Figure 3.16: Snapshot of Member Login

Once log in, the user will be recognize as a member and able to use the functions provided by the portal such as, Search, Web Forum, Submit News and Update user profile . Their information were kept confidential for security purposes .

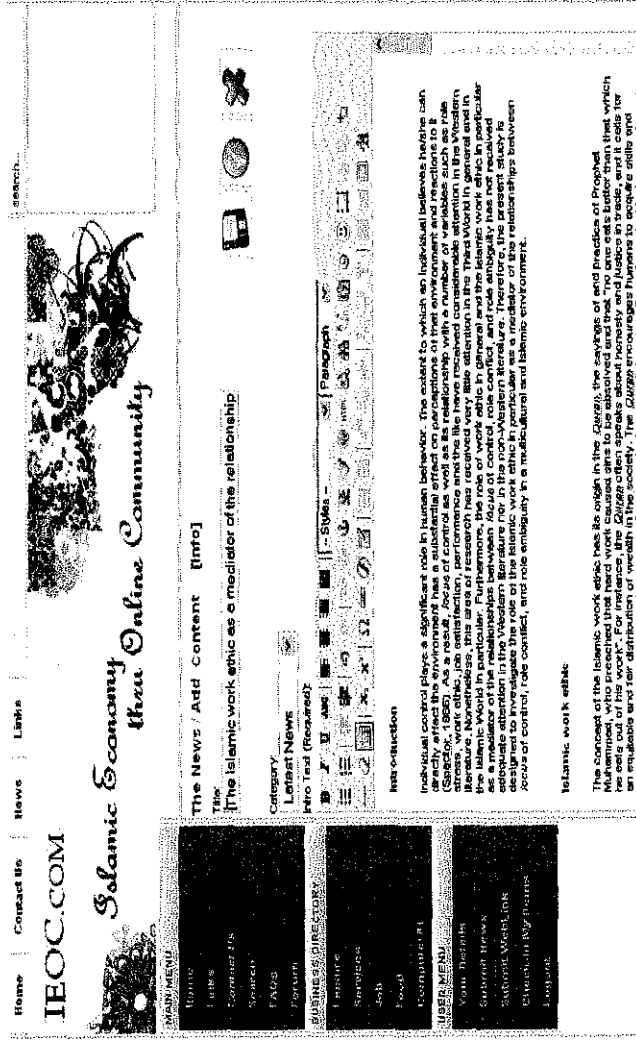


Figure 3.17: Snapshot of User Upload File / News

Member can upload or post any news that they desired to be share on the web portal. Once post, the admin will then check the content of the news to avoid discrimination or irrelevant data content.

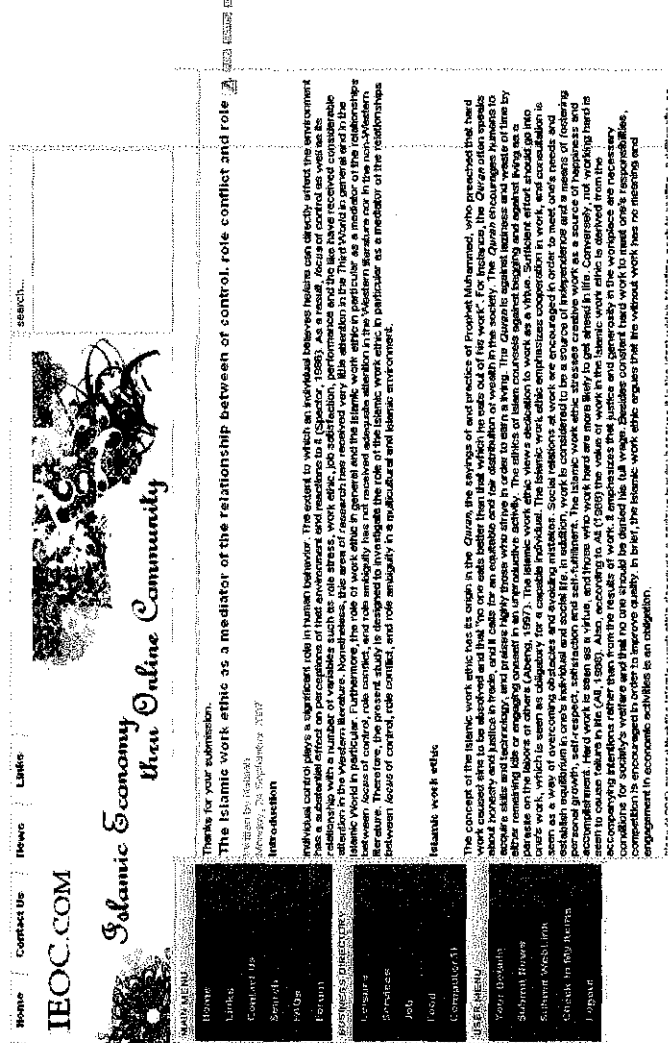


Figure 3.18: Snapshot of Success File Upload

Successful file that has been prove by the administrator will only then can be viewed in the website. Data is stored in database in categorized manner: Latest News & Popular. From time to time the admin can update or delete the news as they wishes. The news also can be downloaded into PDF format.



Figure 3.19 : Snapshot of New Update / Display

Snapshot above displayed the successful news post by the user earlier after it had been approved by the admin. This function enables the user to gain the latest news posted and the data are being update frequently.

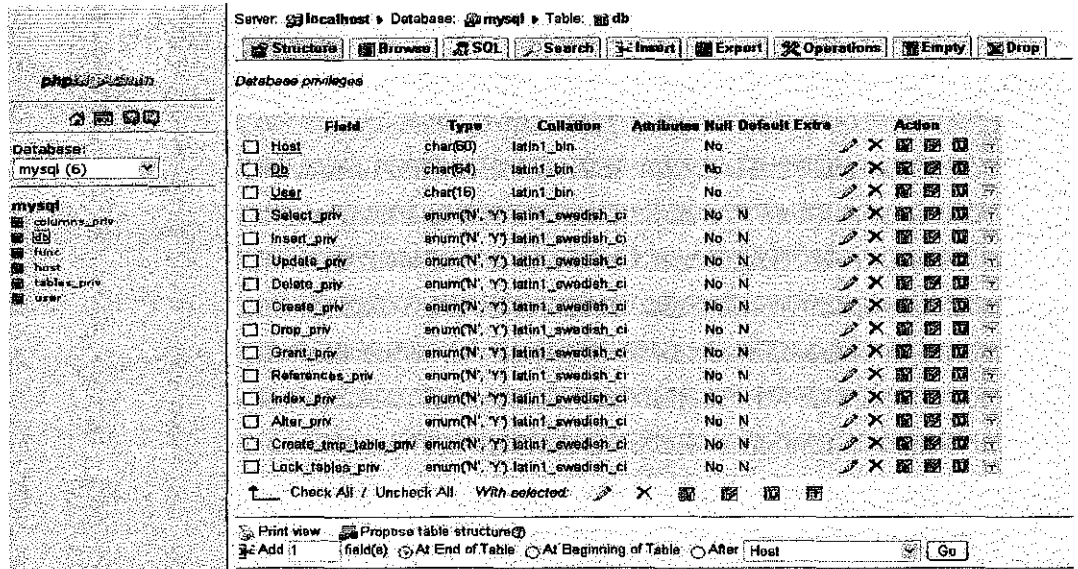


Figure 3.20: Snapshot of database

Snapshots above shows database of the web portal develop MySQL Database using phpMyAdmin. All data are stored and manage here for updates and upgrade purposes by the administrator.

4.5 Importance of Data Management

Data management provides the infrastructure to transform raw data into consistent, accurate and reliable corporate information. Its foundation consists of the five building blocks of data management technology:

- **Data Profiling** – Inspect data for errors, inconsistencies, redundancies and incomplete information
- **Data Quality** – Correct, standardize and verify data
- **Data Integration** – Match, merge or link data from a variety of disparate sources
- **Data Augmentation** – Enhance data using information from internal and external data sources
- **Data Monitoring** – Check and control data integrity over time

4.6 How does Commercial & Social aspect helps

The success of the community would be determined on both social and economic criteria. Commercial performance measures such as profitability and return on investment would apply. However, the amount of activity on, and interest in, the portlets, within their targeted demographics, would be more an indication of the social success.

4.6.1 Commercial Aspect

- All online activities are free to members with no subscription fees
- Income is generated through advertising with continuous dynamic banner advertising on all portal pages with linkages are only by paid banner advertisements.
- No external links to Search Engines, as this leaks traffic off site,
- Online services not to duplicate or compete with established players eg Yellow Page directories
- The specific portlets are demographically positioned by interest in this case local sport and youth entertainment.

4.6.2 Social Aspect

(i) How to manage web community?

- **Anticipated Reciprocity**
A person is motivated to contribute valuable information to the group in the expectation that one will receive useful help and information in return. Indeed, there is evidence that active participants in online communities get more responses faster to questions than unknown participants

- **Increased Recognition**

One of the key ingredients of encouraging a reputation is to allow contributors to be known or not to be anonymous. Profiles and reputation are clearly evident in online communities today. Example :

Amazon.com - allowed to create profiles about themselves and as their contributions is measured by the community, their reputation increases.

Myspace.com – allowed sharing all kinds of information about themselves including what music they like, their heroes, etc.

eBay – enable the user to rate their experience and measure the trustworthiness of someone you potentially will do business with

- **Sense of efficacy**

Individuals may contribute valuable information because the act results in a sense of efficacy. **Wikipedia** is a good example of an online community . Wikipedia is an online encyclopedia which uses online software to enable anyone to create new articles and change any article in the encyclopedia. The changes you make are immediate, obvious, and available to the world.

(ii) **Impact on user**

By having the Islamic Economy Online Community user are able to

- Learn
- Communicate
- Share & Exchange Knowledge
- Experience
- Venture into business

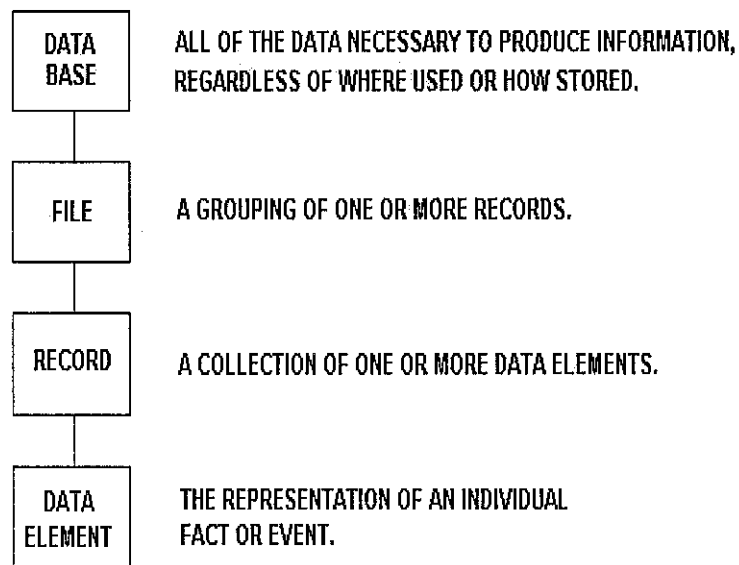
4.7 Why Islamic Economic Community

Islamic economics is economics in accordance with Islamic law. There are two paradigms for understanding Islamic Economics - one assuming the political framework is Islamic and the other assuming the political framework is non-Islamic, resulting in a paradigm that seeks to integrate some prominent Islamic tenets into a secular economic framework.

The former paradigm seeks to restate the economic problem as being a problem of distribution of resources in order to meet the basic and luxurious needs of individuals in society, building an ethical marketplace where there is co-operative competition, participants are rewarded by being exposed to risk and/or liability, property is equitably divided between public and private use and the state has a clear role in policing, taxation, managing public assets and ensuring the circulation of wealth. Islamic movements calling for political reformation will generally propose this paradigm to explain how they will introduce economic reform

4.8 Database Construct

Data resources can be organized into a generic and universal structure. The basic building block is the data element itself, the representation of an individual fact or an event. A collection of one or more data elements is a record and one or more records make up a file. And a data base represents all of the data used to produce information, regardless of where used or how stored.



ALL DATA STRUCTURES CONFORM TO THIS MODEL.

Figure 4.1: **Data Structure Model**

All data resources are structured in this generic manner. Terms such as "schema," "sub-schema," "segments," "tracks," "cylinders," "sectors," "tables," "arrays," "tuples," "data stores," etc., (all of which deal with particular computer techniques and tools), can all be translated into the basic constructs mentioned above.

The organization of data serves two purposes: one is to logically describe the "objects" used to manage and operate the business, and; to express how data will be physically stored. The differences between logical and physical are substantial; there will not necessarily be a direct relationship between the two.

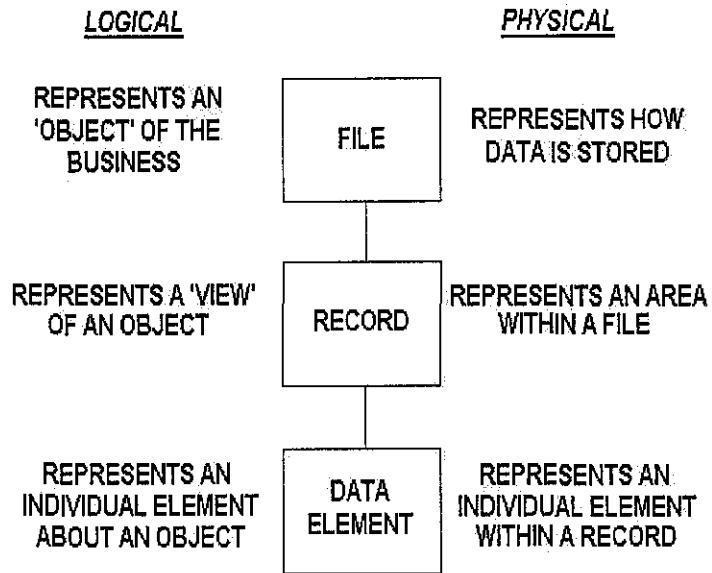


Figure 4.2 : Logical Data Vs Physical Data

Physical files may differ considerably from logical files. Here, the file represents a particular way of physically storing data. Data may be physically stored in a variety of files, such as an indexed file, a "flat" file, a DBMS file, etc. Even manual files follow this model with the exception they also store inputs and/or outputs (both of which consist of records and data elements).

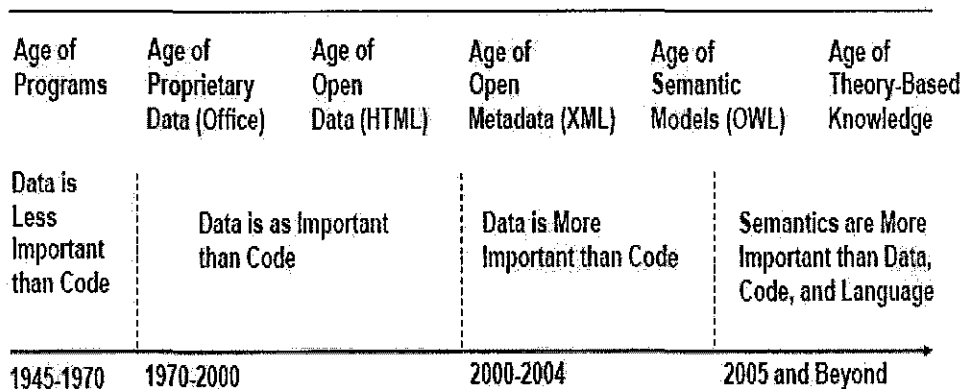


Figure 4.3 : Analysis Of Data Importance Thru Year

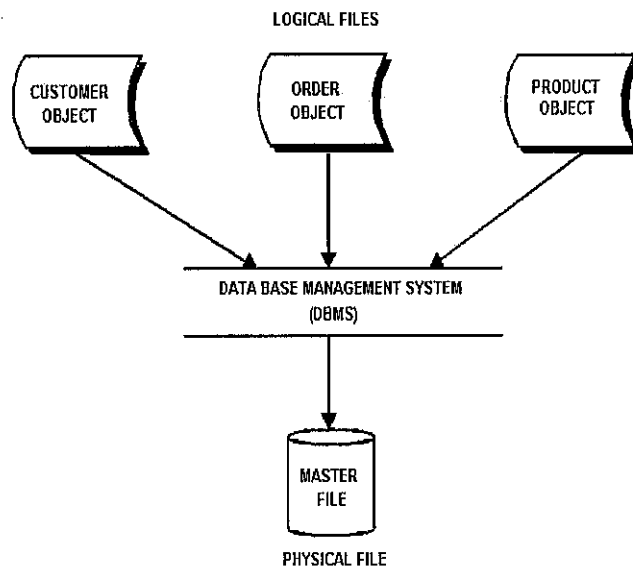


Figure 4.4 : **Data Files Logic**

Unlike the logical file that is organized according to a unique data identifier ("primary basic grouping"), the physical file does not require any specific organization and can use any sort/access key desired. Ultimately, it depends on the file management technique or tool being used.

The logical view of data is the basis for all physical data base design, regardless of the file management technique or tool selected. The physical files must ultimately carry out the intentions of the logical files in terms of what data must be stored, the dependencies between data, and volume. As a matter of fact, all DBMS packages can implement these logical views, regardless of whether they have a hierarchical, network, relational, or object-oriented structure.

Again, there are substantial differences between logical and physical files. Perhaps the most noticeable difference is the logical file will remain relatively static while the physical file will change dynamically, based on advances in technology. One of the most important reasons for defining data resources logically is to seek data independence from the physical environment, thus allowing any physical implementation without disrupting systems.

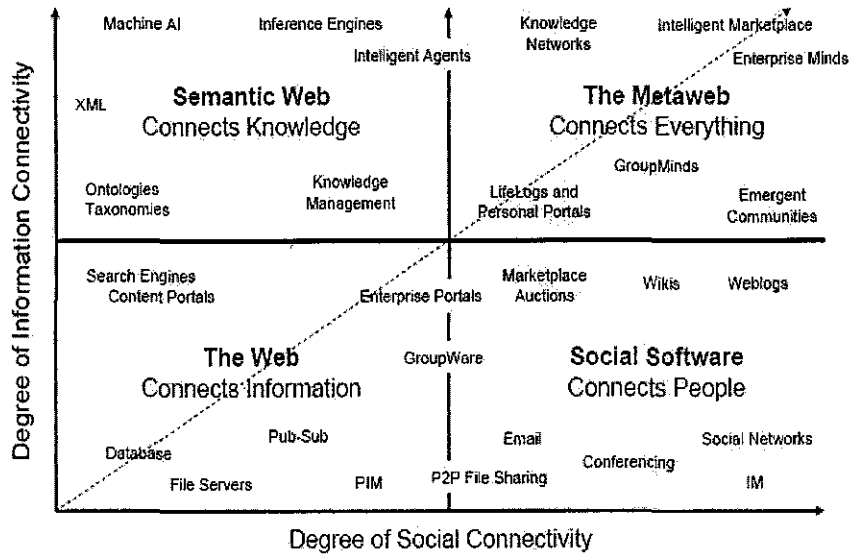


Figure 4.5 : The MetaWeb

Semantic technologies are functional capabilities that enable both people and computers to create, discover, represent, organize process, manage, reason with, present, share, and utilize meanings and knowledge to accomplish business, personal, and societal purposes.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5. Overview

This section will conclude the project and discuss the recommendation for future enhancement.

5.1 Conclusion

A method for designing a knowledge portal for retrieving, organizing and delivering knowledge to a user belonging to an organization comprises identifying a community of users belonging to the organization characterized by a common interest with respect to the knowledge, and identifying business processes executed by the users in the community in accordance with strategies of the organization. The method then comprises analyzing the business processes to identify specific activities performed in executing the processes and patterns for performing the respective activities, and subsequently constructing the knowledge portal in accordance with the patterns. Analyzing the business processes to identify specific activities performed in executing the processes may be done by developing scenarios for using the portal in performing the respective activities and examining the scenarios to identify the patterns for performing the respective activities.

As a conclusion, the idea implementing IEOC.com was to

- Help the community to experience & share their knowledge in a meaningful manner
- Collect & gather as much information as possible for sharing purposes.
- Enable to propagate the Islamic business concept

This project however, focused on the issue of information gathering and storing where information collection agents extracting information from the information provider node based on the summary data; transmitting the extracted information to the server; storing the transmitted information in an event database; cataloging the stored information into hierarchical categories; retrieving with a delivery agent based upon the hierarchical categories selected information from the stored information; and transmitting the selected information to the client node.

5.2 Recommendation

There are various recommendations for this project. The first recommendation was to enhance more features into the website to enable more knowledge sharing and experience among communities. E.g. SMS Text Messaging, Job search, TV Listing, Searching via a map and counseling on-line.

Second recommendation is to produce more avenue website to benefit community and economic development. It is important to have a platform for people to meet and connect. Communication is possible regardless of their geographical location, time, money and status.

Third recommendation is the website can roll out as a commercial product if the system proves to be viable. The idea gave not only benefit business personnel for better business opportunity but also benefit other web developer to come out with a better version of website which can enhance for a better future.

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APPENDICES

Appendix A: Gantt Chart

Appendix B: Evaluation Pre-Test

Appendix C: Evaluation Post-Test

Appendix D: Joomla Back-End Development

Appendix E: Islamic Community Website
Available in Malaysia

Gantt Chart

Appendix A

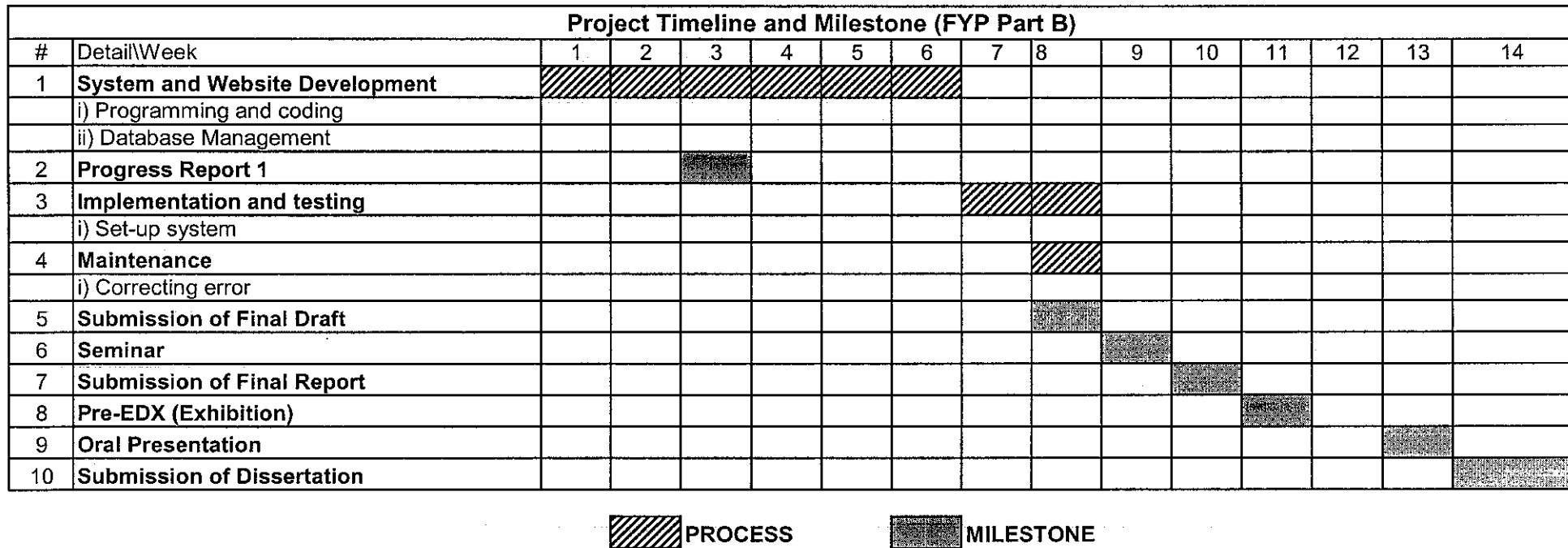
		Project Timeline and Milestone (FYP Part A)													
#	Detail/Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Selection of project title	Process	Process	Process											
	i) Research on interested topic														
	ii) Submission of Project Proposal			Milestone											
	iii) Topic approval and supervisor assigned				Milestone										
2	Requirement analysis and definition				Process	Process	Process	Process	Process						
	i) Project background identification														
	ii) Literature Review														
	iii) Project relevancy analysis (survey)														
3	Submission of Preliminary Report									Milestone					
4	System Design									Process	Process	Process	Process	Process	Process
	i) System architecture														
	ii) Database Design														
	iii) Storyboard design														
5	Submission of Interim Report											Milestone			
6	System and Website Development											Process	Process	Process	Process
	i) Web server installation														
	ii) Database server installation														
	iii) Interface design														
7	Oral presentation														Milestone

 PROCESS

 MILESTONE

Gantt Chart

Appendix A



Appendix B

EVALUATION PRE-TEST

Introduction:

The survey is to gather data for the Islamic Economy thru Online Community implementation. The Muslims users to sharing and exchanging specialized knowledge, experience, and views about the daily routine problem, facilitating circulation of community knowledge and collects community members' opinions. This survey is to determine whether the portal could benefit community.

For Overall System:

For the following questions, please tick the answer in the appropriate box.
(Yes or No)

No.	Questions	Yes	No
1.	Do you think that the Online Islamic Economic Community will be convenient for the Muslims?		
2.	If the system is ready and running, would you consider using the system to search the information through the internet rather than manual system (library, book store, etc)		
3.	Have you ever experience using similar portal?		

System Functionalities

For the following questions, please circle the answer with the range 1 (strongly disagree) to 5 (strongly agree).

No.	Questions	Scores				
1.	Islamic Economy thru Online Community needs to be divide search function by categories	1	2	3	4	5
2.	Islamic Economy thru Online Community needs to be divide its information accordingly by types of document(journal, article ,books and forum)	1	2	3	4	5
3.	There must be an announcement section for Latest update on the website	1	2	3	4	5
4.	The navigation around the system must be direct and also user-friendly.	1	2	3	4	5
5.	This website will benefit the community.	1	2	3	4	5

Respondent Feedback

No.	Respondent Information
1.	Gender a) Male b) Female
2.	Age a) <20 b) 20-30 c) 31-40 d) 41-50

Thank you.

Appendix C

EVALUATION POST-TEST

Introduction:

The survey is to gather data for the Islamic Economy thru Online Community implementation. The Muslims users to sharing and exchanging specialized knowledge, experience, and views about the daily routine problem, facilitating circulation of community knowledge and collects community members' opinions. This survey is to determine whether the portal could benefit community.

For Overall System:

For the following questions, please circle the answer with the range 1 (strongly disagree) to 5 (strongly agree).

No.	Questions	Scores				
1.	The system application is easy to use.	1	2	3	4	5
2.	The system flow is easy to follow.	1	2	3	4	5
3.	The content of the system is understandable.	1	2	3	4	5
4.	The system application is valuable and important to people.	1	2	3	4	5

For Storage / Data Function:

No.	Questions	Scores				
1.	The data are easy to access	1	2	3	4	5
2.	The content of data result is relevant to the query.	1	2	3	4	5
3.	The information storage function is important to the system.	1	2	3	4	5

Respondent Feedback

No.	Respondent Information
1.	Gender c) Male d) Female
2.	Age <ul style="list-style-type: none">▪ <20▪ 20-30▪ 31-40▪ 41-50

Thank you.

Processing the Data

Once the data in the form is filled out and the admin clicks the **Save** button, we need to save the information into the database. To start, create `saveReview()` in `admin.reviews.php`:

```
function saveReview( $option )
{
    global $mainframe;
    $row =& JTable::getInstance('review', 'Table');
    if (!$row->bind(JRequest::get('post')))
    {
        echo "<script> alert('".$row->getError()."');
        window.history.go(-1); </script>\n";
        exit();
    }
    $row->quicktake = JRequest::getVar( 'quicktake', '', 'post',
                                     'string', JREQUEST_ALLOWRAW );
    $row->review = JRequest::getVar( 'review', '', 'post',
                                    'string', JREQUEST_ALLOWRAW );

    if(!$row->review_date)
        $row->review_date = date( 'Y-m-d H:i:s' );
    if (!$row->store())
    {
        echo "<script> alert('".$row->getError()."');
        window.history.go(-1); </script>\n";
        exit();
    }
    $mainframe->redirect('index.php?option=' .
                       $option, 'Review Saved');
}
```

First, we pull in the global `$mainframe` and the current database connection. The `$mainframe` object has many member functions you can use to control session variables and headers. We also set `$row` as an instance of our `TableReview` class; the name of the class is assembled from the parameters, with the second acting as a prefix for the first. Next, we call the `bind()` member function of `$row` to load in all of the variables from the form.

The `bind()` function takes an associative array as the parameter and attempts to match all of the elements to member variables of the object. To reduce the risk of SQL

injection attacks, we call `JRequest::get()` to sanitize the values from `$_POST`. This process escapes characters that could be used to control the SQL query.

If `bind()` fails for some reason, we display this as a JavaScript alert and take the user back to the previous screen.

After binding, we can manipulate the member variables of `$row` directly. Since the `quicktake` and `review` fields accept HTML content, they need special handling as the `bind()` function automatically strips out HTML. To get around this, we use the `getVar()` member function of `JRequest`, passing in the form variable name, the default value, the request array we wish to pull from, the expected format, and the `JREQUEST_ALLOWRAW` flag respectively.

In addition to recapturing the HTML data, we are also able to add default data or some other automatically generated data after binding. We've set it to fill in the current date for the review in case it was not chosen.

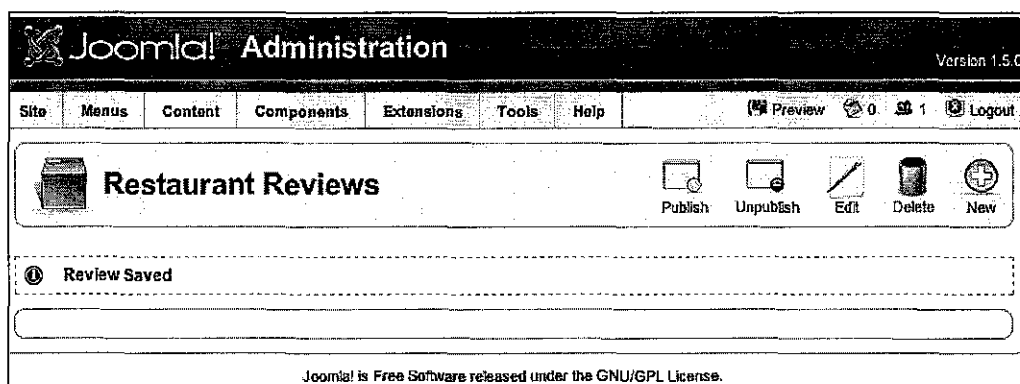
Finally, we call the `store()` function, which takes all the member variables and turns them into an `UPDATE` or `INSERT` statement, depending on the value of `id`. Since we are creating this record for the first time, it will not have a value for `id` and so an `INSERT` query will be constructed.

If there is an SQL error, we return it back to the user and return the user back to the previous screen. Frequently, SQL errors at this level can be caused by extraneous member variables of `$row` not present in the `table` class. If you run into a query error, first check to make sure the spelling of your member variables matches the spelling of the table columns. Otherwise, if the SQL is successful, we use the `redirect()` function from `$mainframe` to send the user back to the main component screen with a confirmation message.

At the moment, the `switch()` statement in `admin.reviews.php` only processes the add task. Now that we have a form and function in place, we can add a case to save our data. Add the highlighted code below to the `switch()`:

```
switch($task)
{
    case 'add':
        editReview( $option );
        break;
    case 'save':
        saveReview( $option );
        break;
}
```

Save all your files and go to http://localhost/joomla/administrator/index.php?option=com_reviews&task=add in your browser. You should now be able to fill out the form and click **Save**. You should see a screen similar to the following:






Why Can't I Click the 'New' Button?



The buttons on the toolbar are designed to work with the form named `adminForm`. Since this screen does not have a form yet, clicking on any of the buttons will result in a JavaScript error. Once `adminForm` is added with the hidden variable `task`, the buttons will function as expected.

You can check the results in the `jos_reviews` database table. If everything works correctly, a table listing in phpMyAdmin shows the result after you click on **Browse**.

	id	name	address	reservations	quicktake	review	notes	smoking	credit_card
  	1	The Daily Dish	180 Main Street	Accepted	This tried and true classic is always a sure bet.	Chicken fried steak, meatloaf, potatoes, string be...	Get there early on Friday nights. it's impossible ...	0	Visa, MasterCard, Discover

Creating a List Screen

Since our admins will not have access to phpMyAdmin, we need to build a screen that lists all of the reviews in the database. To start, add the following function to `admin.reviews.php`:

```

function showReviews( $option )
{
    $db =& JFactory::getDBO();
    $query = "SELECT * FROM #__reviews";
    $db->setQuery( $query );
    $rows = $db->loadObjectList();
    if ($db->getErrorNum()) {
        echo $db->stderr();
        return false;
    }
    HTML_reviews::showReviews( $option, $rows );
}

```

This function loads the data to be displayed, so we get a reference to the current database connection, then call its member function `setQuery()`. The `setQuery()` function takes the string of a query and stores it for later use, rather than executing it right away. When we call `loadObjectList()`, the previously set query is run and the individual rows in the result are loaded into an array as objects. If we run into an error, we display it and stop the component.

If all goes well, we pass the array of results into the following member function to be added to `admin.reviews.html.php`:

```

function showReviews( $option, &$rows )
{
    ?>
    <form action="index.php" method="post" name="adminForm">
    <table class="adminlist">
        <thead>
            <tr>
                <th width="20">
                    <input type="checkbox" name="toggle"
                        value="" onclick="checkAll(<?php echo
                            count( $rows ); ?>);" />
                </th>
                <th class="title">Name</th>
                <th width="15%">Address</th>
                <th width="10%">Reservations</th>
                <th width="10%">Cuisine</th>
                <th width="10%">Credit Cards</th>
                <th width="5%" nowrap="nowrap">Published</th>
            </tr>
        </thead>

```

```
<?php
$k = 0;
for ($i=0, $n=count( $rows ); $i < $n; $i++)
{
    $row = &$rows[$i];
    $checked = JHTML::_('grid.id', $i, $row->id );
    $published = JHTML::_('grid.published', $row, $i );
    ?>
    <tr class="<?php echo "row$k"; ?>">
        <td>
            <?php echo $checked; ?>
        </td>
        <td>
            <?php echo $row->name; ?>
        </td>
        <td>
            <?php echo $row->address; ?>
        </td>
        <td>
            <?php echo $row->reservations; ?>
        </td>
        <td>
            <?php echo $row->cuisine; ?>
        </td>
        <td>
            <?php echo $row->credit_cards; ?>
        </td>
        <td align="center">
            <?php echo $published;?>
        </td>
    </tr>
    <?php
    $k = 1 - $k;
    }
?>
</table>
<input type="hidden" name="option"
        value="<?php echo $option;?>" />
<input type="hidden" name="task" value="" />
<input type="hidden" name="boxchecked" value="0" />
</form>
<?php
}
```

This function starts by defining a form that points to `index.php`, with the name set to `adminForm` (for JavaScript references). A table with the `adminlist` class is then started and headers are added. All the headers are typical, except for the first one that acts as a "check all" checkbox that automatically selects all the records on the screen.

Once out of the header, we begin a loop over the rows. The variables `$i` and `$n` are initially set to 0 and the number of rows respectively; the loop runs as long as there are rows available to display. Once inside the loop, we get a reference to the current row so we can display the contents. We switch the value of `$k` back and forth between 0 and 1; this is used to alternate between two different CSS classes with slightly different background properties.

Several of the member variables are output directly, but a couple of the columns warrant special treatment. Using the `JHTML::_('grid.id')`, we can get the HTML code for a checkbox that will be recognized by the back-end JavaScript. The `JHTML::_('grid.published')` function generates an image button based on the value of the `published` member variable in the row. When it is set to 1, we get a "check" image, while a value of 0 yields an "x" image.

Below the table, there are four hidden variables. The first one holds the value for `option` so that we are routed to the correct component. The `task` is made available so that the JavaScript in the toolbars can set it before submitting the form. When any of the checkboxes for the records are toggled, `boxchecked` is set to 1. It is set back to 0 when all checkboxes are cleared. This aids the JavaScript in processing the list. Once the HTML output code is in place, update your `switch()` statement in `admin.reviews.php` with the following highlighted code. This will add a default case for when no task is selected:

```
switch($task)
{
    case 'add':
        editReview( $option );
        break;
    case 'save':
        saveReview( $option );
        break;
    default:
        showReviews( $option );
        break;
}
```

Appendix E

Islamic Community Portal Website Available In Malaysia

Organization	Website Address	Content
Department of Islamic Development Malaysia (JAKIM) PORTAL	http://www.islam.gov.my/english/index.html	Official website for the department Assist in the creation of a progressive and morally upright ummah
Islamic Da'wah Foundation Malaysia	http://www.yadim.com.my/english/index.asp	Official website for the company A section with news that supports the other Islamic organization
World Islamic Economic Forum Foundation	http://wief.org.my/event2.cfm	Building a bridge between civilization Bring together Government and Business discuss ideas of Muslim business community Information on WEIF activities and events
Angkatan Belia Islam Malaysia	http://www.abim.org.my/web/	Develop and lead the Islamic Civilization into the new Millennium
Pertubuhan Kebajikan Islam Malaysia PERKIM	http://www.perkim.net.my/	Muslim Welfare
Sisters In Islam	http://www.sistersinislam.org.my/	Professional Muslim women group promoting the rights of Muslim women
IIUM	http://elearn.iiu.edu.my/?pr_content=3	Groupware application designed to facilitate communication, collaboration, information sharing, document management and content management