

KNOWLEDGE MANAGEMENT SYSTEM

By

P- 2269

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A PROJECT REPORT

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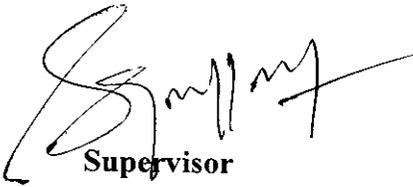
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BONAFIDE CERTIFICATE

Certified that this project report titled **Knowledge Management System** is the bonafide work of **Mr. Kiran Chang K.** (Registration Number: 71205621020) who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



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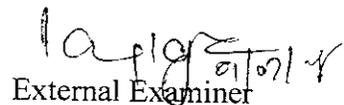
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To whomsoever it may concern

This is to certify that Mr. Kiran Chang Kanagasekar as partial fulfillment of his MCA , from Kumaraguru College of Technology , has completed his project for Patni under the guidance of Mr.Sharifuddin Khazi. He has worked on "Knowledge Management System". The project traineeship duration has been from 24/12/2007 to 25/6/2008.

Kiran Chang has been very sincere & diligent in his job and his performance on the project has been acceptable.

We wish him a bright career and success in all his future endeavors.

For Patni Computer Systems Ltd.

Pradnya Naidu
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ABSTRACT

The project entitled “**Knowledge Management System**” offers total solution to the various Customers related requirements of Insurance. The need for the system is to make configurable website. By using this anyone can create their own website according to the requirement. Each and every module in the system are editable. So the authorized user can edit the module. Then their user can use the system.

It integrates various functions the users with a user friendly environment to accomplish these functions.

The functionalities include Home, Library, Online Tests, Downloads, Settings, FAQ, Contact Us, and Help. The Home module is used to display the home content available in the system. The super administrator is the sole responsible for the entire system. He can add the content for the home module through settings module. By using this Home module the end user can see the home information. And moreover the settings module has the provision to add the picture, text and hyperlink while adding the content in the Home Module.

In library Module, the user can see any kind of content like document, text, picture etc. this module contain tree view on the left hand side. When the user clicks the particular node the appropriate information will be displayed on the right hand side. So the administrator can configure these settings through settings module. The settings module has the provision to add a node and adding the content for the particular node. And the content also looking like the home module.

This Online Test is the additional feature for this application. If the administrator wants to conduct some online tests over this application then it will give the provision called Online Tests. So the administrator can give the categorization for the tests and allocate mark for the tests. It will help the users to assess themselves. Finally it will give the marks that the users secured through this test with some suggestion. So the

administrator has to make some settings in the Settings Module. By using that he can give the categorization for the test and also arrange the test questions.

This download module is the place from where the user can download the necessary documents. The administrator can upload documents on this page and categorize them. So that the users can visit the appropriate category and download the file of his choice. Once we click the link, it will direct to the new window and show all downloadable documents pertaining to the category. The document grid would contain details like:

- Document Name
- Document Description
- Date on which the document was uploaded.

This settings module is the place from where the site can be administered. This module is restricted to the super admin of the content management system. The settings module will be visible for every user but once we click this page it will ask the login information. So if he is an authorized person only then he can enter into it and can make changes. Once the user is authenticated as a super admin the settings page will be displayed to him. There are various aspects of this site that can be controlled using this settings module such as,

- **Tab Settings:**

This tab setting is used to edit the tabs residing in the application. Once the administrator enters into the application, he can see the tab name contains default name. If he wants to edit the tab name or disable/enable the tab he has to click the settings tab and make the changes

- **Project Settings:**

Once we click the Project link it will direct to the interface called project interface. By using that we can create a Company Logo and Application Name

based on the administrator choice. In this module we have an additional feature called preview by using that we can view the preview of our current settings

○ **Home Content Settings:**

This module is used to edit the content displayed on the home page. One can add HTML content and pictures to the home page using this functionality

○ **Tree View Settings:**

This setting is allowing the administrator to add the tree view menu based on the content. And will give the provision to add as a sub node. So to do this we can click on the tree view link and make creation on the interface. The nodes seen in the tree view are database driven and can be administered through this setting.

Once we click the tree view settings it will direct into the new page with existing menu in a hierarchical manner. We can select any one of the menu and select the appropriate action as described below.

- **Add Above** – To add a node above from the selected node.
- **Add Below** – To add a node below from the selected node
- **Add as a Child** - To add a node as a child from the selected node.
- **Edit** - To edit a node
- **Delete** - To delete the particular node.

- **Content Settings:**

The content setting is allowing the administrator to add the content for the menu and to associate with those menus. So that can be done through the interface once we click the content link. This option allows the content to be modified or added as and when a new content topic is added in the tree view

- **Online Tests:**

In the Online tests settings the administrator can add test questions and answers to the online test question data bank. This setting also provides the facility to categorize the questions on the basis of the test categories

- **Download Document Settings:**

The Download documents settings is used to upload the document into the site. Using this setting you can also create various document categories in which the document could be uploaded. This allows the uploaded document to be presented to the user in an organized manner

- **FAQ Settings:**

This module is used to show the frequently asked question. Once the administrator clicks the FAQ Setting it will shows the entire category

- **Contact Us Settings:**

This setting is used to add and update contact details which would be visible in the contact us page.

This FAQ Module is used to display the frequently asked questions, which can be categorized into relevant topics as can be seen on the page. By clicking the category it opens a new page to show the entire questions belonging to the category. Once the user clicks the category it will directs to the new page and where you can be viewed the entire questions and answers belongs to the category

This contact page is used to display the contact information about the owner of this application. So by using this we can contact him through mail or through E-mail. If

there are any problems faced by the user while browsing the site we can bring that to the site owner's notice.

The Help module can guide the user as to how he can efficiently use the content management system. It gives the brief overview of what each module does and how the user can use this module to his convenience. So some menus will be displayed on the left hand side about the modules. If we want to know something regarding the modules then we can click on the left hand side menu and the information will come on the right hand side.

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It's always a pleasure and privileges to be associated with a prestigious outstanding esteemed organization "**Patni Computer Systems**", Mumbai. I am very happy and grateful to be a part of **Patni Computer Systems**.

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TABLE OF CONTENT

Abstract		iii
List of Tables		xi
List of Figures		xii
1 Introduction		
1.1 Organization Profile		1
1.2 Abstract		2
1.3 Project Overview		2
2 System Analysis		
2.1 Existing System		3
2.2 Proposed System		3
2.3 User Interface Requirements		5
3 Development Environment		
3.1 H/W Environment		6
3.2 S/W Environment		6
3.3 Programming Environment		7
4 System Design		
4.1 Data Model		
4.1.1 Entity Relationship Diagram		10
4.1.2 Table Relationship		11
4.1.3 Data Relationship Diagram		15
4.2 Process Model		
4.2.1 Use Case Diagram		16
4.2.2 Sequence Diagram		17
4.2.3 Collaboration Diagram		21
4.2.4 Activity Diagram		24
4.2.5 Class Diagram		25
5 Testing		
5.1 Test Case Reports		28

6	Performance and Limitation	
6.1	Merits of the System	34
6.2	Limitations of the System	34
6.3	Conclusion and Future Enhancements	34
7	Appendices	
	Appendix 1:Sample Screens	36
8	Reference	52

LIST OF TABLES

Table No	Table Name	Page Number
4.1	kms_home_cont_set	11
4.2	kms_proj_set	11
4.3	kms_tab_set	11
4.4	kms_tree_view_set	12
4.5	kms_cont_set	12
4.6	kms_cat	12
4.7	kms_faq_question_by_categories	12
4.8	kms_online_test	13
4.9	kms_question_by_category	13
4.10	kms_doc_down	13
4.11	kms_faq_set_quest	14
4.12	kms_faq_set_ans	14
4.13	kms_contact_info	14

LIST OF FIGURES

Fig No	Figure Name	Page Number
4.1	ER Diagram	10
4.2	Data Relationship Diagram	15
4.3	Website Configuration	16
4.4	System Operation	17
4.5	Add Home Content	18
4.6	Add Library Content	18
4.7	Add Online Questions	19
4.8	Add the Document	19
4.9	Tab Settings	20
4.10	Project Settings	20
4.11	Add Home Content	21
4.12	Add Library Content	21
4.13	Add Online Questions	22
4.14	Add the Document	22
4.15	Tab Settings	23
4.16	Project Settings	23
4.17	Activity Diagram	24
4.18	Class Diagram	26
A 7.1	Login Page	36
A 7.2	Main Settings Page	37
A 7.3	Tab Settings Page	38
A 7.4	Project Settings Page	39
A 7.5	Home Page	40
A 7.6	Library Page	41
A 7.7	Add the node Page	42

A 7.8	Library Content Settings Page	43
A 7.9	Online Test Category Page	44
A 7.10	Online Test Page	45
A 7.11	Online Test Summary Page	46
A 7.12	Add the Online Questions	47
A 7.13	Document Display Page	48
A 7.14	FAQ Question Page	49
A 7.15	Contact Us Edit page	50
A 7.16	Help Page	51

CHAPTER 1

INTRODUCTION

1.1 ORGANIZATION PROFILE

Patni Computer Systems Ltd is a provider of Information Technology services and business solutions. The company employs over 14,000 people, and has 23 international offices across the Americas, Europe and Asia-Pacific, as well as offshore development centers in 8 cities in India. Patni computers clients include more than 200 Fortune 1000 companies. Patni has registered revenues of US\$ 662.91 million for the year 2007.

Patni computers vision is to achieve global IT services leadership in providing value added high quality IT solutions to their clients in selected horizontal and vertical segments, by combining technology skills, domain expertise, process focus and a commitment to long-term client relationships.

Patni has vast experience in system and application development projects, across all major software platforms and environments. Patni computers have major software competency centers throughout India, with professionals employed on onsite as well as offshore projects. Patni spend a significant part of their revenue on training, ensuring that their employees are constantly updated on new technologies and skills.

Committed to quality, Patni adds value to client businesses through well established and structured methodologies, tools and techniques backed by Six Sigma processes. Patni is ISO 9001: 2000 certified and is also assessed at SEI-CMMI Level 5 and P-CMM Level 3

1.2 ABSTRACT

The project entitled “**Knowledge Management System**” provides an ultimate solution for various requirements for the customers. The entire system is fully configurable so the administrator can add the content such as Text, Picture and Document. The system helps the customer to configure according to his needs. Then the users can view the information uploaded by the administrator. Normally the website creation is made for the particular concern so some of the pages are look like static pages. But the entire system is configurable so the customer can upload any kind of information.

1.3 PROJECT OVERVIEW

Normally the site owner has to feed the data statically due to his needs. If any update then he has to re configure the system. So it will lead to time consumption and work heavy. But in the current system overcomes all the issues and provide various facilities.

The system provides additional facilities like Online Tests, FAQ and Download Document. So by using Online Tests the users can assess themselves and can get the test summary. FAQ is used to know the frequently asked question. So that he can aware of information provided by the system. Then the users can download the document provided by the system according to his needs.

Online Library is one of very important problem in our system. The owner of the system will provide various information on his system so that the user can view the information according to his needs. This is one kind of online help.

CHAPTER 2

SYSTEM ANALYSIS

2.1 EXISTING SYSTEM

In the existing system, if the user wants to create a new website, then he/she has to start from the scratch. Proper analysis must be conducted in order to understand all the details regarding the website under development. Also there are no templates available for the creation and thus the websites tend to diversify to a large extent.

The developers have to spend a large amount of time to develop the website from the base and thus the resources involved increases greatly. Also, different methodologies have to be followed diversified domains. Probability of delay is high since the website is created from the scratch. In this system, the developer has to think about the various ways to display the content of the website and he has to position them in appropriate locations.

2.2.1 Drawbacks of the Existing System

The drawbacks of the existing systems can be summarized as below:

- Time Consuming.
- Wastage of Human resources.
- Unavailability of standard template.
- Difficulty in understanding needs from varied domains.
- Not user friendly.

2.2 PROPOSED SYSTEM

The proposed system basically provides a template for creating any kind of a website. It provides with a settings tab through which the super administrator can add contents for the website he intends to create.

In the “**home**” setting, the administrator can add the contents of the home page. This content can be either **text or document or picture**. Options are available in the system to add any of the above said content type. In the “**library**” setting also, the admin

adds the content that will be available to all the users who open the system. The users can click on the library tab to view these contents.

The system will also allow the admin to add questions under various categories for conducting the “**online tests**”. Options are available to set the same question in more than one category. Also the options for the questions and the correct answer for each questions has to be filled in by the admin in order to conduct the test. The users can then select the online test tab in the website and undertake the test under any of the available category.

The admin can add the category for “**download**” document and associate the documents on the category. So the users can download or open the document as they need. The “**frequently asked question**” is one of the additional features of this system. The admin can add the category and create the questions and associate the answers on it. So the user can aware of the particular trend.

2.3.1 Advantages of the Proposed System

The expected benefits of the Proposed System are as follows:

- Easy to use and simple.
- New modules can be added with ease without many modifications to the existing system.
- Flexible and Scalable.
- Data available on demand.
- Retrieval of data and reports will be much simpler.
- Consumes very less time when compared to the existing system.

2.3 USER INTERFACE REQUIREMENTS

The major functions that are involved are **Home Module, Library, Online Tests, Downloads and FAQ** etc.

The **Home Module** is used to display the home content available in the system. The super administrator is the sole responsible for the entire system. He can add the content for the home module through settings module. By using this Home module the end user can see the home information. And moreover the settings module has the provision to add the picture, text and hyperlink while adding the content in the Home Module.

In the **Library Module**, the user can see any kind of content like document, text, picture etc. this module contain tree view on the left hand side. When the user clicks the particular node the appropriate information will be displayed on the right hand side. So the administrator can configure these settings through settings module. **Online Tests Module** is the additional feature for this application. If the administrator wants to conduct some online tests over this application then it will give the provision called Online Tests. So the administrator can give the categorization for the tests and allocate mark for the tests. It will help the users to assess themselves. Finally it will give the marks that the users secured through this test with some suggestion.

In **Downloads Module**, is the place from where the user can download the necessary documents. The administrator can upload documents on this page and categorize them. So that the users can visit the appropriate category and download the file of his choice.

The **FAQ Module** is used to display the frequently asked questions, which can be categorized into relevant topics as can be seen on the page. By clicking the category it opens a new page to show the entire questions belonging to the category. Once the user clicks the category it will directs to the new page and where you can be viewed the entire questions and answers belongs to the category

CHAPTER 3

DEVELOPMENT ENVIRONMENT

3.1 HARDWARE ENVIRONMENT

The hardware support required for deploying the application

Server Configuration

Processor : Pentium 3 / 4 or Above

RAM : Minimum 512 MB

Hard Disk : 20 GB or more

Client Configuration

Processor : Pentium 3 / 4 or Above

RAM : Minimum 128 MB

3.2 SOFTWARE ENVIRONMENT

The software support required for deployment is:

Operating System : Windows XP

Web Server : Microsoft IIS

Database : SQL Server 2005

Software for Development : VB.NET

Browser : Internet Explorer 5.0

3.3 PROGRAMMING ENVIRONMENT

3.3.1 VB.NET

VB.Net is a simple, type-safe, object-oriented, general-purpose programming language. It provides code-focused developers with powerful tools and language support to build rich, connected Web and client applications on the .NET Framework.

3.3.1.1 VB.Net overview

- Visual basic .Net 2005 is the modern, innovative programming language and tool for building .NET-connected software for Microsoft Windows, the Web, and a wide range of devices.
- It is a flexible integrated development environment (IDE), and the capability to build solutions across a variety of platforms and devices, Visual basic .Net 2005 significantly eases the development of .NET-connected software.

3.3.1.2 Features of VB.Net

- VB .Net is a modern and intuitive object-oriented programming language that offers significant improvements, including a unified type system, "unsafe" code for maximum developer control, and powerful new language constructs easily understood by most developers.
- .NET Framework class library to gain powerful built-in functionality, including a rich set of collection classes, networking support, multithreading support, string and regular expression classes, and broad support for XML, XML schemas, XML namespaces, XSLT, XPath, and SOAP.
- Using Visual Basic.Net 2005, developers can construct powerful Web services that encapsulate business processes and make them available to applications running on any platform.

- Visual Basic.Net 2005 also enables developers to build the next generation of Windows-based applications. With visual inheritance, developers can greatly simplify the creation of Windows-based applications by centralizing in parent forms the common logic and user interface for their entire solution.
- With native support for the .NET Compact Framework, mobile Web devices, and embedded applications available as part of Visual Studio 2005 Professional Edition, VB.Net developers can now target a wide variety of mobile devices, including Pocket PCs, mobile phones, and devices powered by the Windows CE operating system. Programmers can become immediately productive by using the same programming model and tools for creating powerful device-based software as they use for building robust Windows- and Web-based solutions.

3.3.2 SQL SERVER 2005

Microsoft SQL Server 2005 provides a new Management Studio, integration with Visual Studio 2005, and the Microsoft .NET common language runtime - all of which help you build, debug, and operate applications faster and more efficiently. SQL Server 2005 Management Studio Express, for easily managing your database. Best of all, as your needs grow; your applications will seamlessly work with the rest of the SQL Server product family.

3.3.2.1 Overview of Sql Server 2005

Extending the strengths of SQL Server 2000, SQL Server 2005 provides an integrated database management and analysis solution that can help developers to do the following

- Build, deploy, and manage enterprise applications that are more secure, scalable, and reliable.
- Maximize IT productivity by reducing the complexity of developing and supporting database applications.
- Share data across multiple platforms, applications, and devices to make it easier to connect internal and external systems.
- Control costs without sacrificing performance, availability, scalability, or security.

3.3.2.2 Features of SQL Server 2005

SQL SERVER 2005 provides statements for a variety of tasks, including

- Querying data
- Inserting, updating, and deleting rows in a table
- Creating, replacing, altering, and dropping objects
- Controlling access to the database and its objects
- Guaranteeing database consistency and integrity
- Supports PL/SQL

CHAPTER 4

SYSTEM DESIGN

4.1 DATA MODEL

4.1.1 ENTITY RELATIONSHIP DIAGRAM

An entity-relationship model is an abstract conceptual representation of structured data. **Entity-relationship modeling** is a relational schema database modeling method, used in software engineering to produce a type of conceptual data model (or semantic data model) of a system, often a relational database, and its requirements in a top-down fashion. Diagrams created using this process are called *entity-relationship diagrams*, or *ER diagrams* for short.

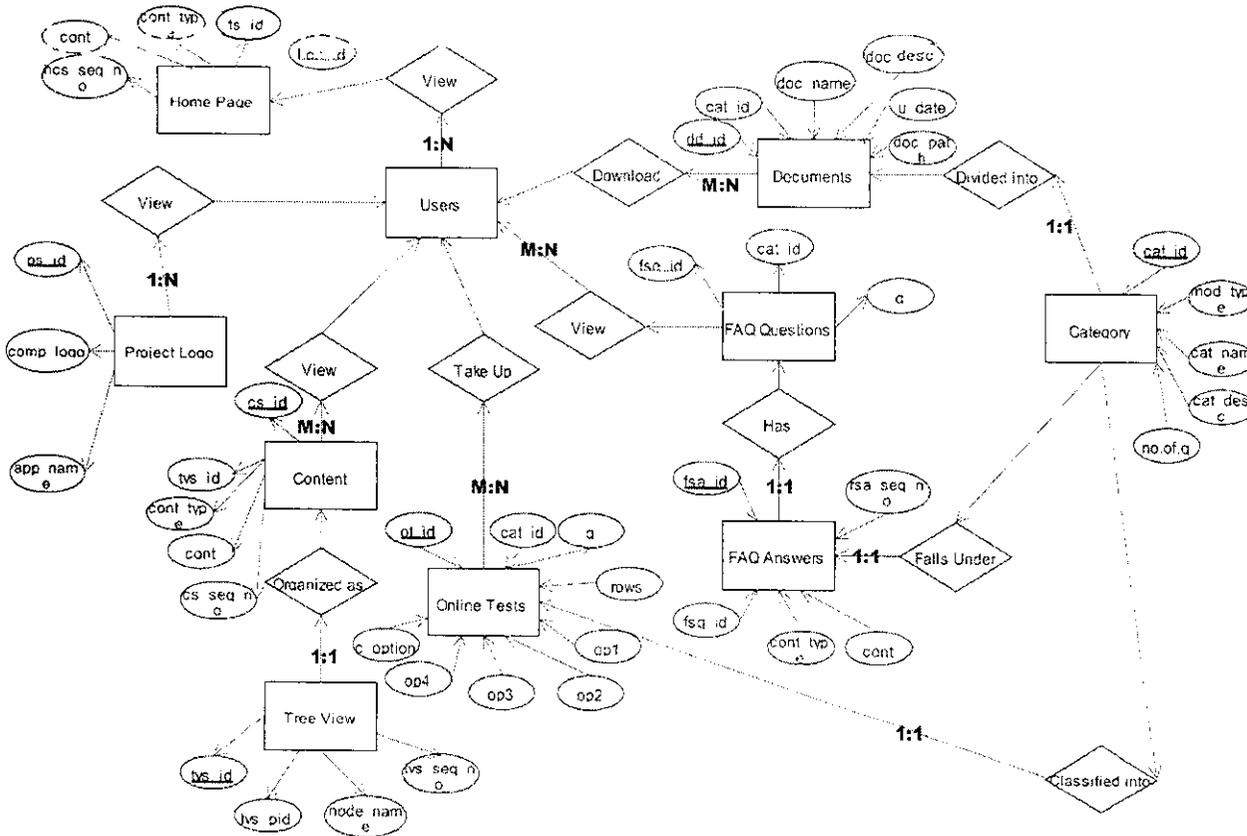


Figure 4.1: Entity Relationship Diagram



P-2269

4.1.2 TABLE RELATIONSHIP

Database design is the process of producing a detailed data model of a database. This logical data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a Data Definition Language, which can then be used to create a database.

Table 4.1: kms_home_cont_set

key	Column Name	Data type	Width	Usage
pk	hcs_id	Number	5	Stores the id for home content
fk	ts_id	Number		Stores the tab id.
	cont_type	Text	100	Stores content type(text or picture)
	cont	Memo	1000	Stores content for the home module
	hcs_seq_no	Number	2	Stores the sequence number for the content

Table 4.2: kms_proj_set

key	Column Name	Data type	Width	Usage
pk	ps_id	Number	5	Stores the id for Project Settings
	comp_logo	Text	50	Stores the image path for the company logo.
	app_name	Text	50	Stores the Application Name

Table 4.3: kms_tab_set

key	Column Name	Data type	Width	Usage
pk	ts_id	Number	5	Stores the id for Tab Settings
	mod_def_name	Text	50	Stores the module's default name.
	visi	Yes/No	3	Stores the visibility of the module tabs.
	new_name	Text	50	Stores the new name for modules.
	ts_seq_no	Number	3	Sequence Number.

Table 4.4: kms_tree_view_set

key	Column Name	Data Type	Width	Usage
pk	tv_s_id	Number	5	Stores the id for tree nodes.
fk	tv_s_pid	Number	5	Stores the parent id for the created node
	node_name	Text	50	Stores the node name
	tv_s_seq_no	Number	2	Stores the sequence number for tree node

Table 4.5: kms_cont_set

key	Column Name	Data Type	Width	Usage
pk	cs_id	Number	5	Stores id for content
fk	tv_s_id	Number	5	Stores the parent id for the created content.
	cont_type	Text	50	Stores the content type
	cont	Memo	1000	Stores the content
	cs_seq_no	Number	2	Stores the sequence number to be display.

Table 4.6: kms_cat

key	Column Name	Data Type	Width	Usage
PK	cat_id	Number	5	Stores the id for all the category
	mod_type	Text	50	Stores the module type for the application
	cat_name	Text	100	Stores the category name
	cat_desc	Memo	100	Stores the category description
	no.of.q	Number	3	Stores the no. of question belongs to the particular category

Table 4.7: kms_fa_q_question_by_categories

key	Column Name	Data Type	Width	Usage
Fk	fsq_id	Number	5	Stores the question id that the answer belongs to that question.
fk	cat_id	Number	5	Stores the category id.

Table 4.8: kms_online_test

key	Column Name	Data Type	Width	Usage
PK	ot_id	Number	5	Stores the id for particular online test question
fk	cat_id	Number	5	Stores the category id that the question belongs
	Q	Text	100	Stores the question
	Row	Number	1	Stores the no. of row has to be displayed
	op1	Text	50	Stores the option 1 answer
	op2	Text	50	Stores the option 2 answer
	op3	Text	50	Stores the option 3 answer
	op4	Text	50	Stores the option 4 answer
	c_option	Number	1	Stores the correct option

Table 4.9: kms_question_by_category

key	Column Name	Data Type	Width	Usage
fk	ot_id	Number	5	Stores the id for particular online test question
fk	cat_id	Number	5	Stores the category id that the question belongs

Table 4.10: kms_doc_down

key	Column Name	Data Type	Width	Usage
pk	dd_id	Number	5	Stores the id for the document
fk	cat_id	Number	5	Stores the category id that the document belongs to that category.
	doc_name	Text	50	Stores the document name.
	doc_desc	Text	100	Stores the document description.
	u_date	Date\Time	10	Stores the uploaded date of the document
	doc_path	Text	50	Stores the location path of the document

Table 4.11: kms_faq_set_quest

key	Column Name	Data Type	Width	Usage
pk	fsq_id	Number	5	Stores the id for the frequent asked question
fk	Cat_id	Number	5	Stores the category id that the faq question belongs to that category.
	Q	Text	100	Stores the faq Question.

Table 4.12: kms_faq_set_ans

key	Column Name	Data Type	Width	Usage
pk	fsa_id	Number	5	Stores the id for the frequently asked question's answer.
fk	fsq_id	Number	5	Stores the question id that the answer belongs to that question.
	cont_type	Text	50	Stores the content type of the answer.
	Cont	Memo	1000	Stores the content of the answer.
	fsa_seq_no	Number	100	Stores the sequence number for the faq answer

Table 4.13: kms_contact_info

key	Column Name	Data Type	Width	Usage
pk	ci_id	Number	5	Stores the id for the contact person
	Name	Text	50	Stores the name for the contact person.
	email_id	Text	50	Stores the email id for the contact person.
	ph_no	Number	15	Stores the phone number for the contact person.

4.1.3 DATA RELATIONSHIP DIAGRAM

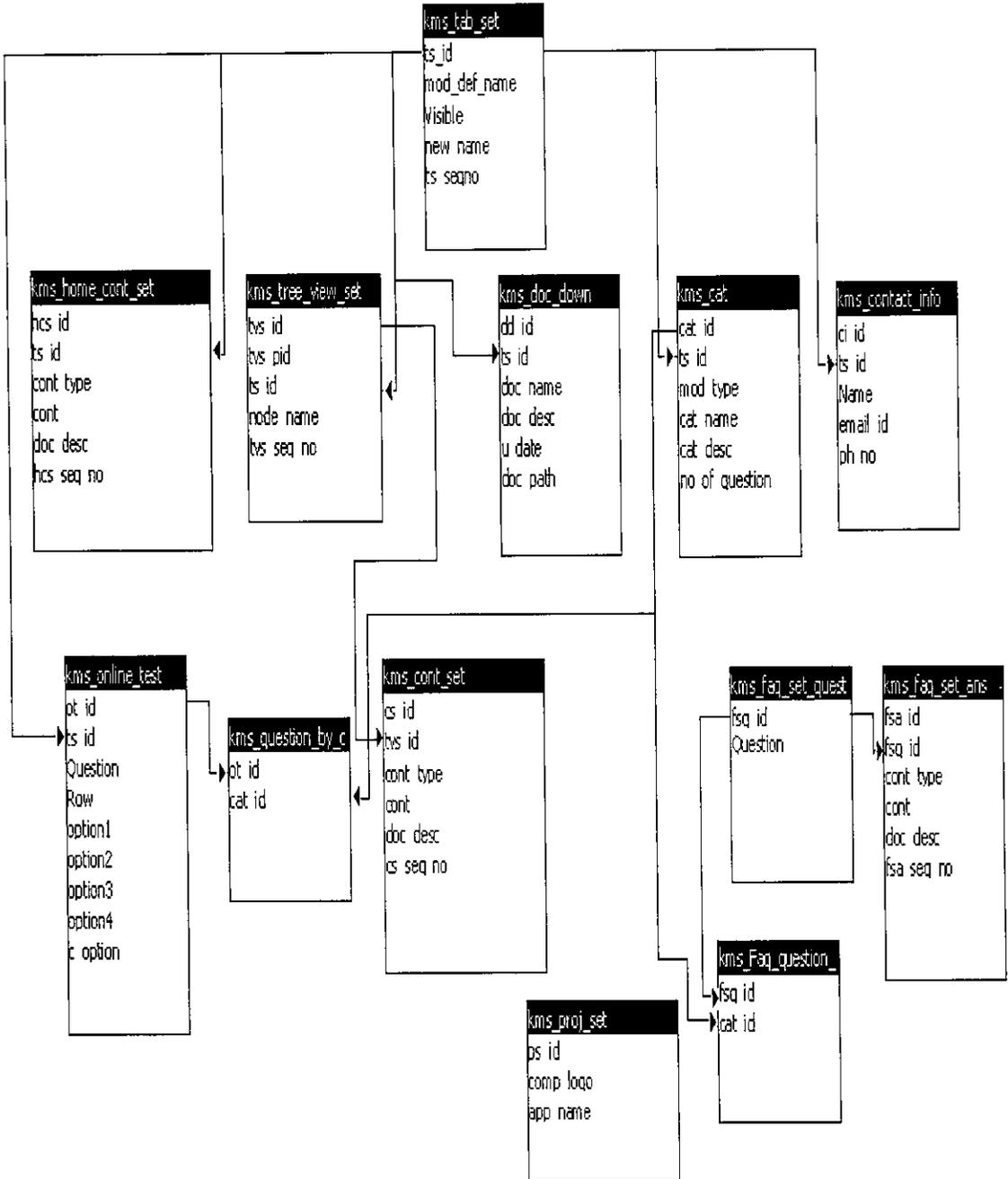


Figure 4.2: Data Relationship Diagram

4.2 PROCESS MODEL

4.2.1 USECASE DIAGRAM

A **usecase diagram** is used to present a graphical overview of the functionality provided by a system in terms of actors, their goals, represented as use cases and any dependencies between those use cases.

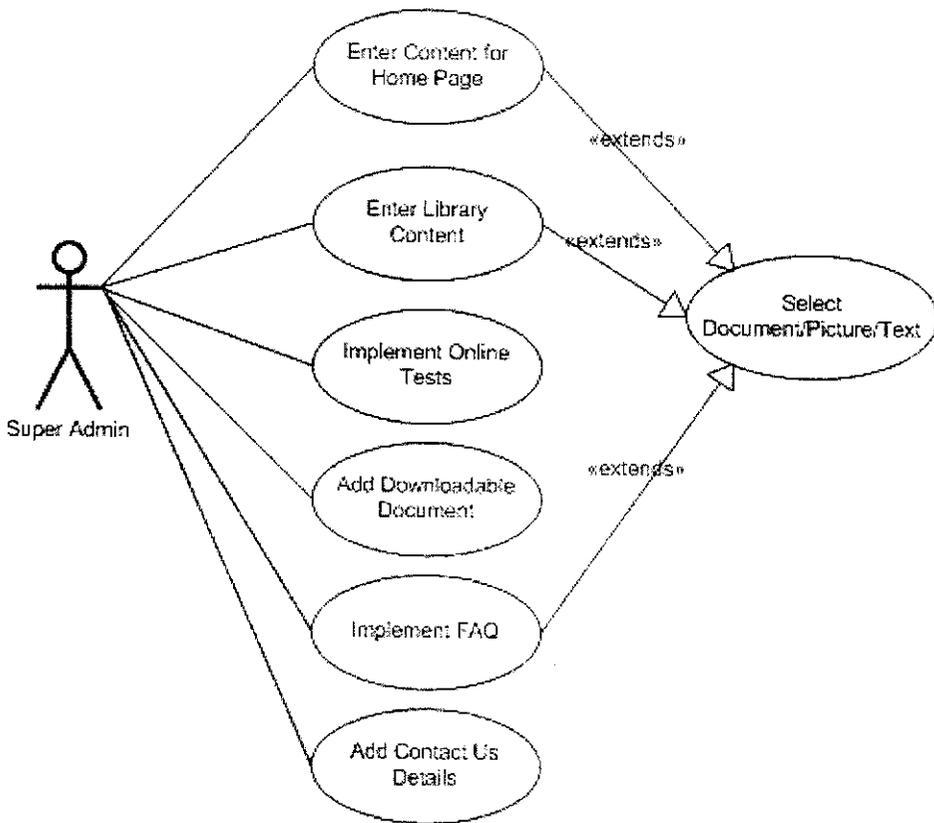


Figure 4.3: Website Configuration

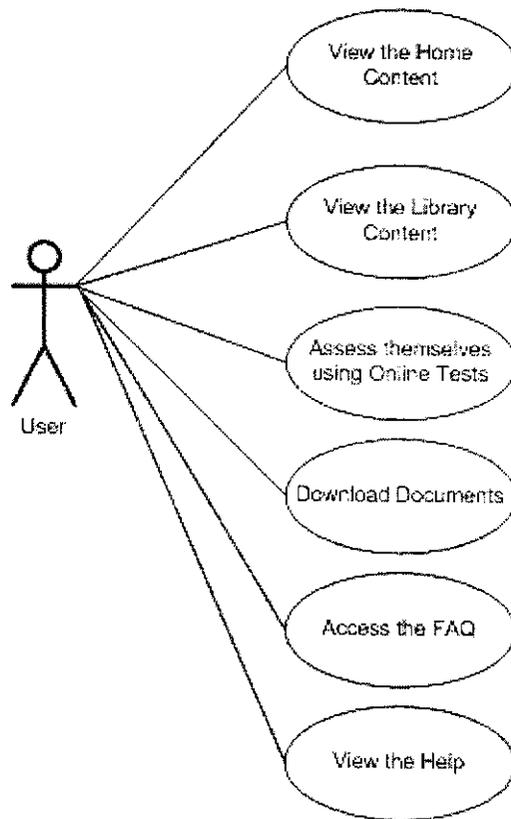


Figure 4.4: System Operation

4.2.2 SEQUENCE DIAGRAM

A sequence diagram is a form of interaction diagram which shows objects as lifelines running down the page, with their interactions over time represented as messages drawn as arrows from the source lifeline to the target lifeline. Sequence diagrams are good at showing which objects communicate with which other objects; and what messages trigger those communications.

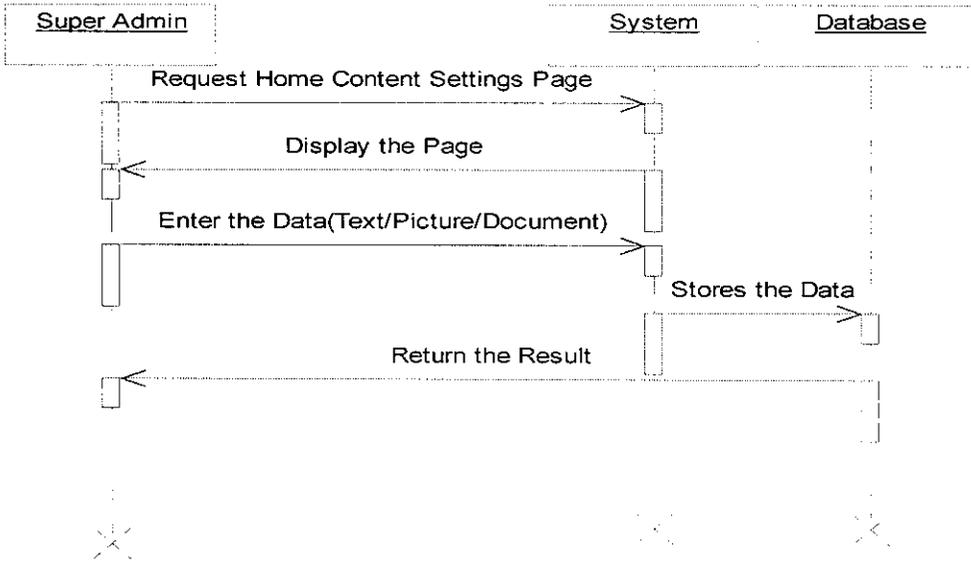


Figure 4.5: Add Home Content

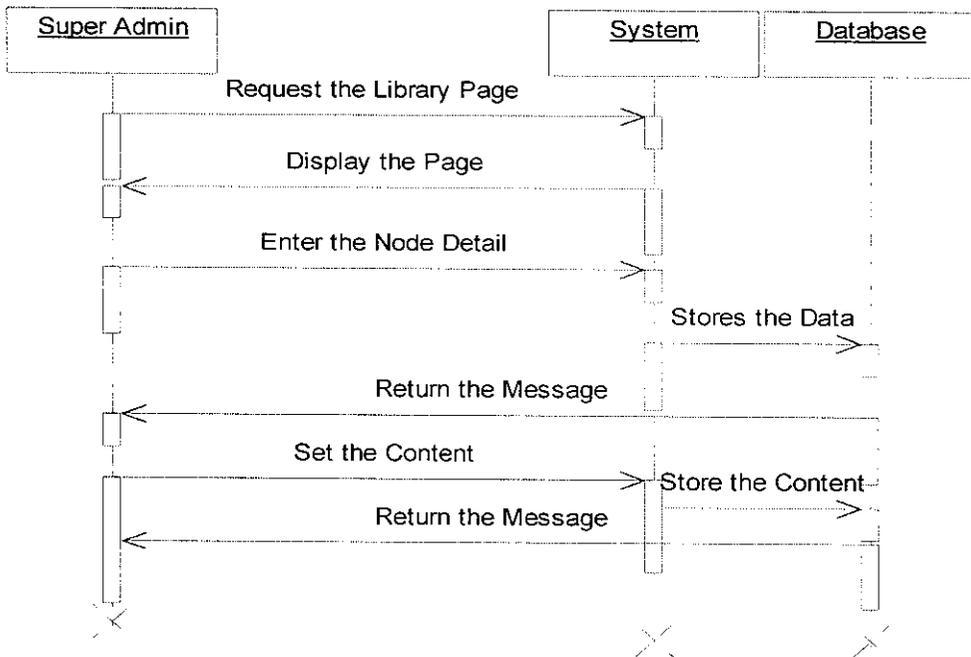


Figure 4.6: Add Library Content

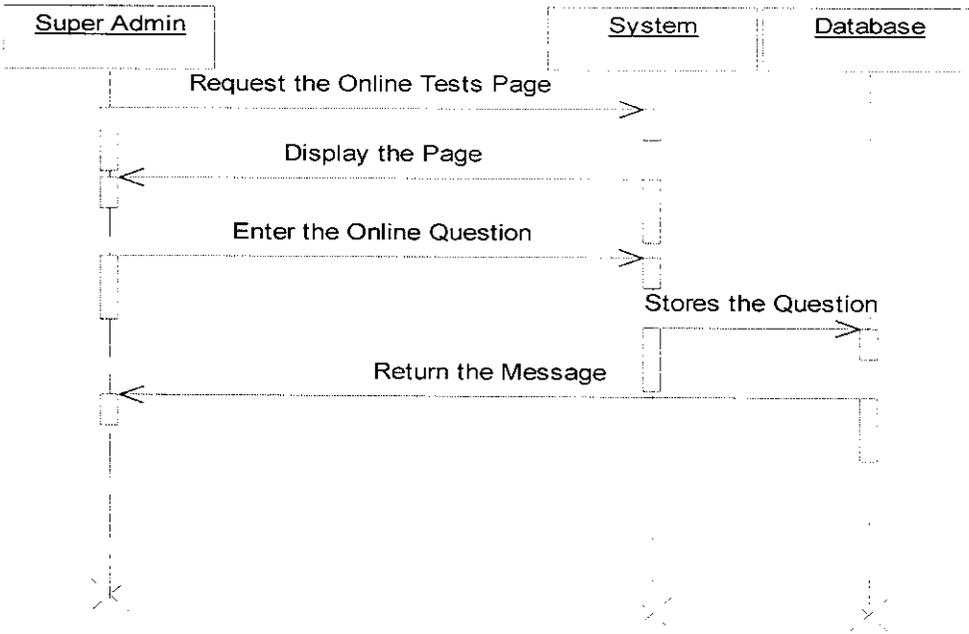


Figure 4.7: Add Online Questions

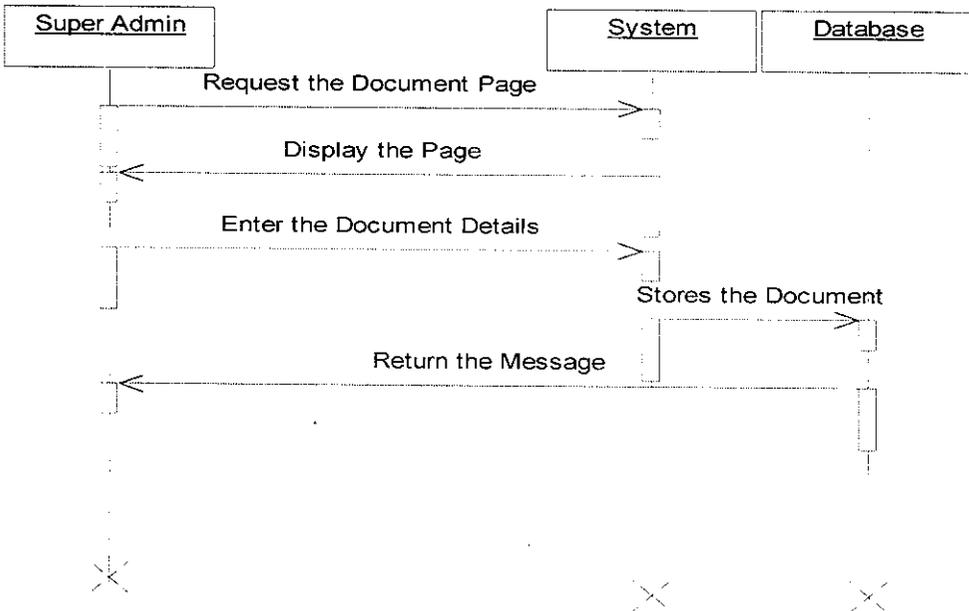


Figure 4.8: Add the Document

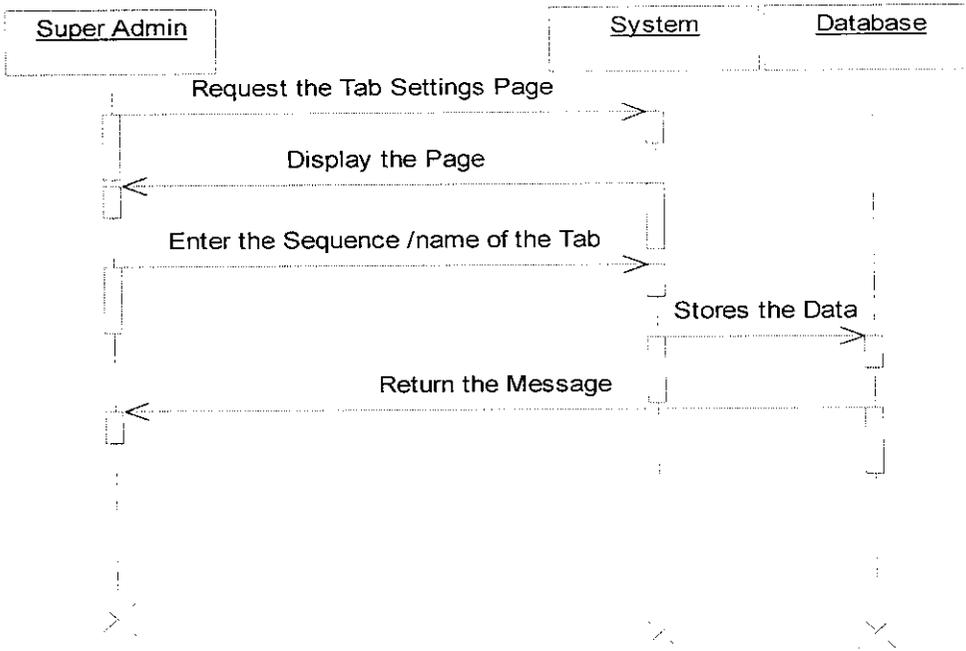


Figure 4.9: Tab Settings

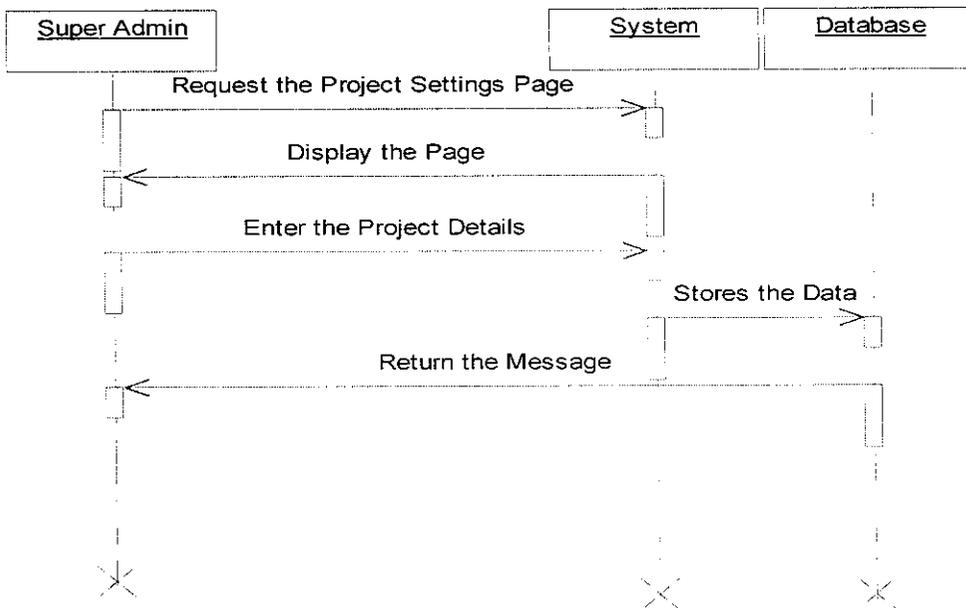


Figure 4.10: Project Settings

4.2.3 COLLABORATION DIAGRAM

Collaboration diagrams, like Sequence Diagrams, show how objects interact over the course of time. However, instead of showing the sequence of events by the layout on the diagram, collaboration diagrams show the sequence by numbering the messages on the diagram. This makes it easier to show how the objects are linked together, but harder to see the sequence at a glance.

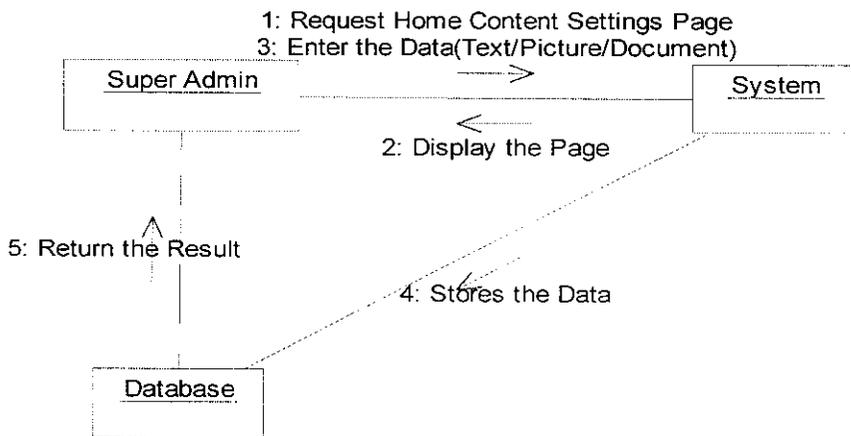


Figure 4.11: Add Home Content

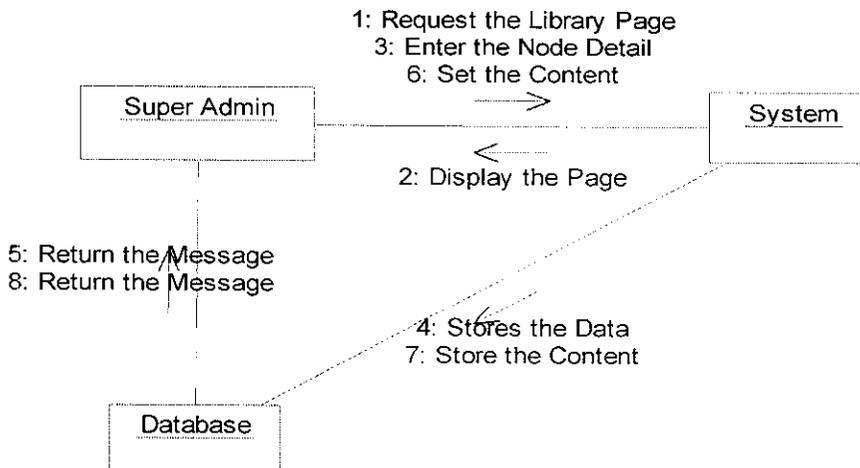


Figure 4.12: Add Library Content

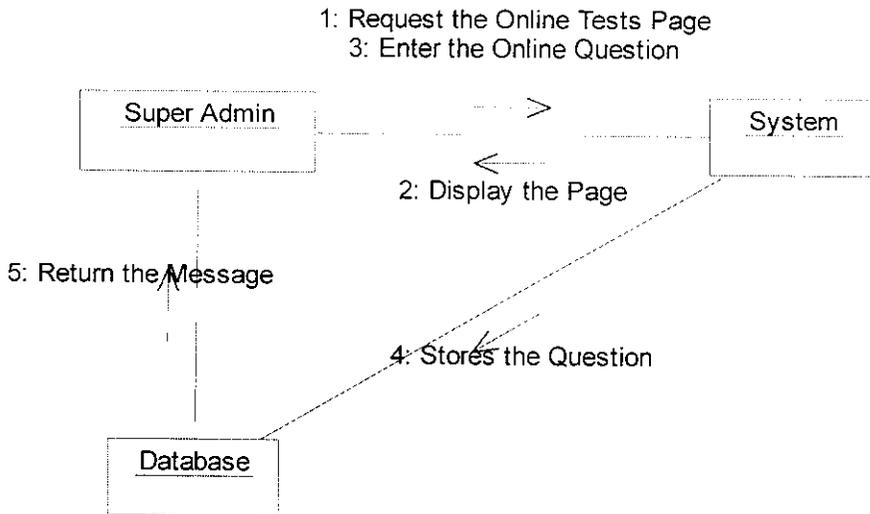


Figure 4.13: Add Online Questions

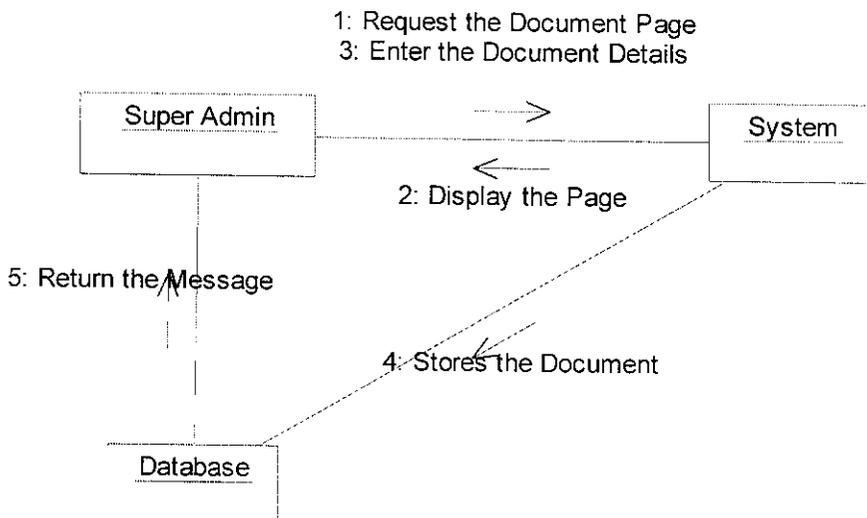


Figure 4.14: Add the Document

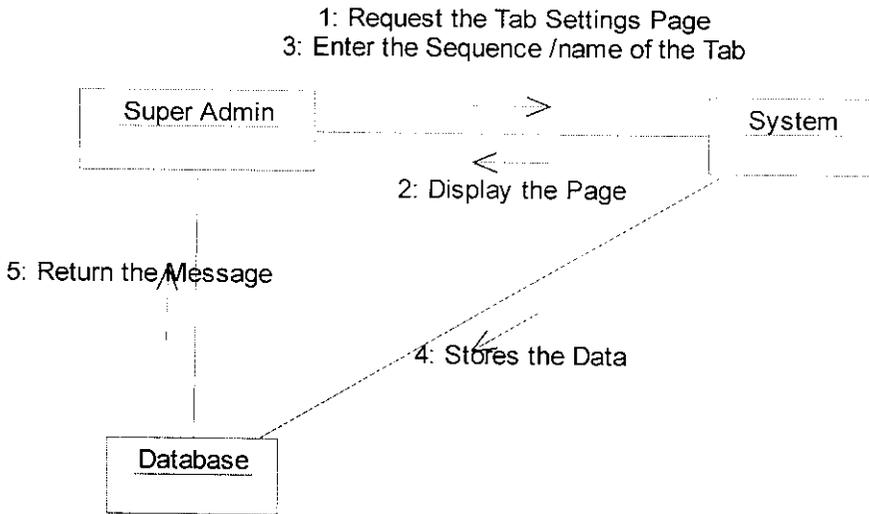


Figure 4.15: Tab Settings

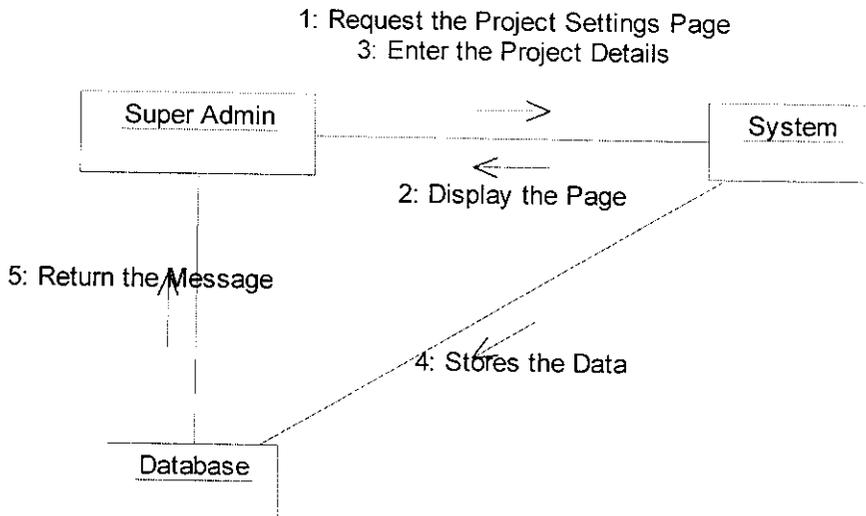


Figure 4.16: Project Settings

4.2.4 ACITIVITY DIAGRAM

Activity diagrams describe the workflow behavior of a system. Activity diagrams are similar to state diagrams because activities are the state of doing something. The diagrams describe the state of activities by showing the sequence of activities performed. Activity diagrams can show activities that are conditional or parallel.

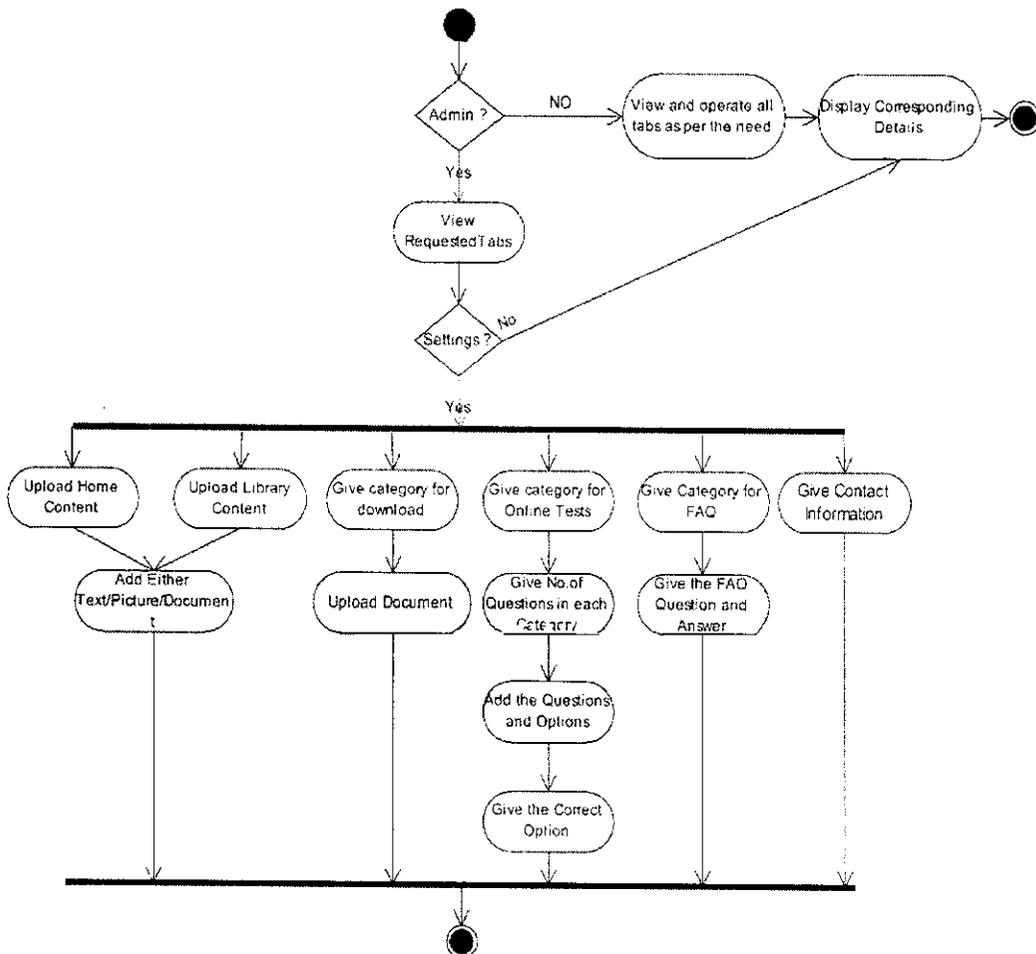
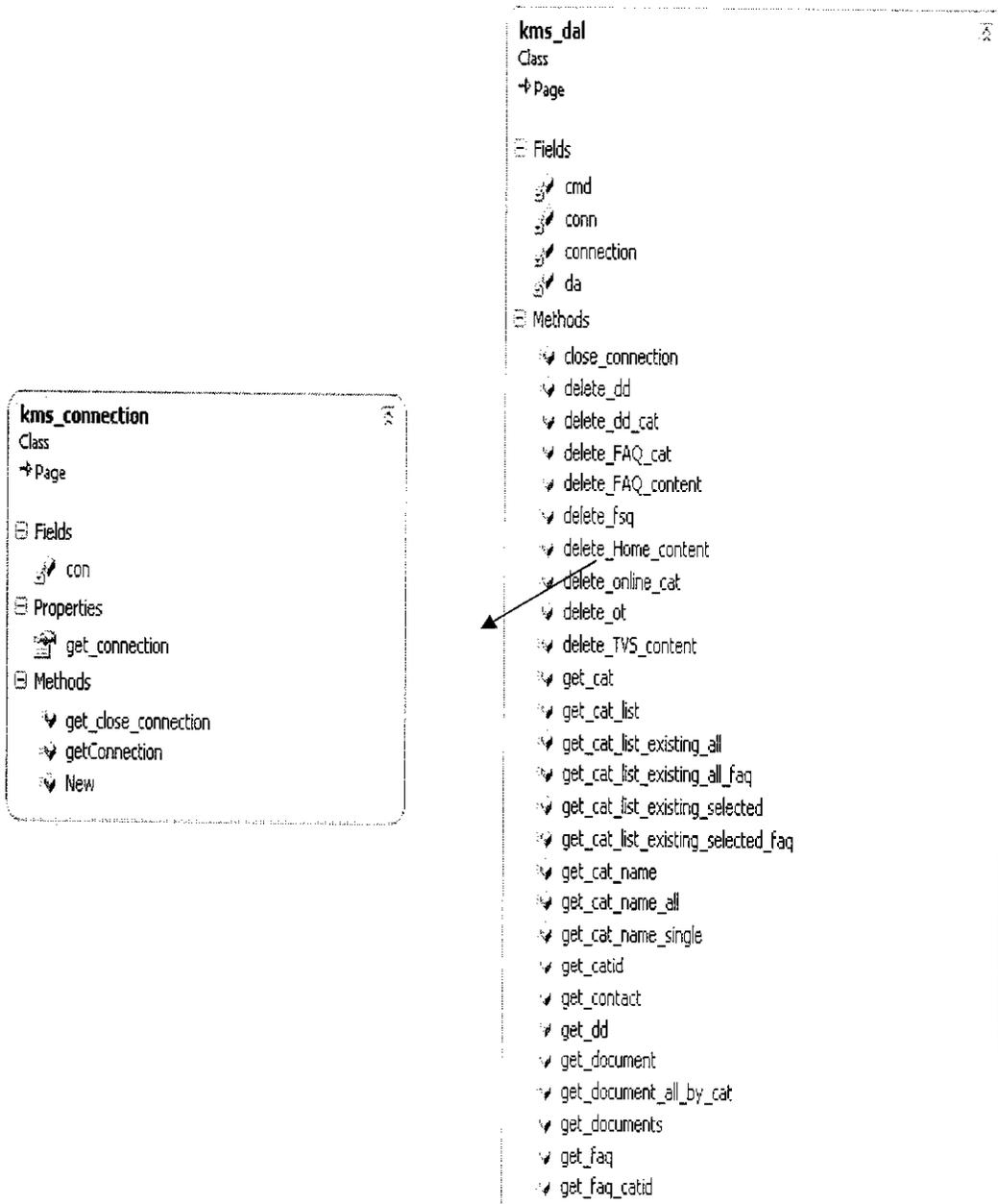


Figure 4.17: Activity Diagram

4.2.5 CLASS DIAGRAM

A **class diagram** is a type of **static structure diagram** that describes the structure of a system by showing the system's classes, their attributes, and the relationships between the classes. It can be used by analysts, business modelers, developers, and testers throughout the software development lifecycle.



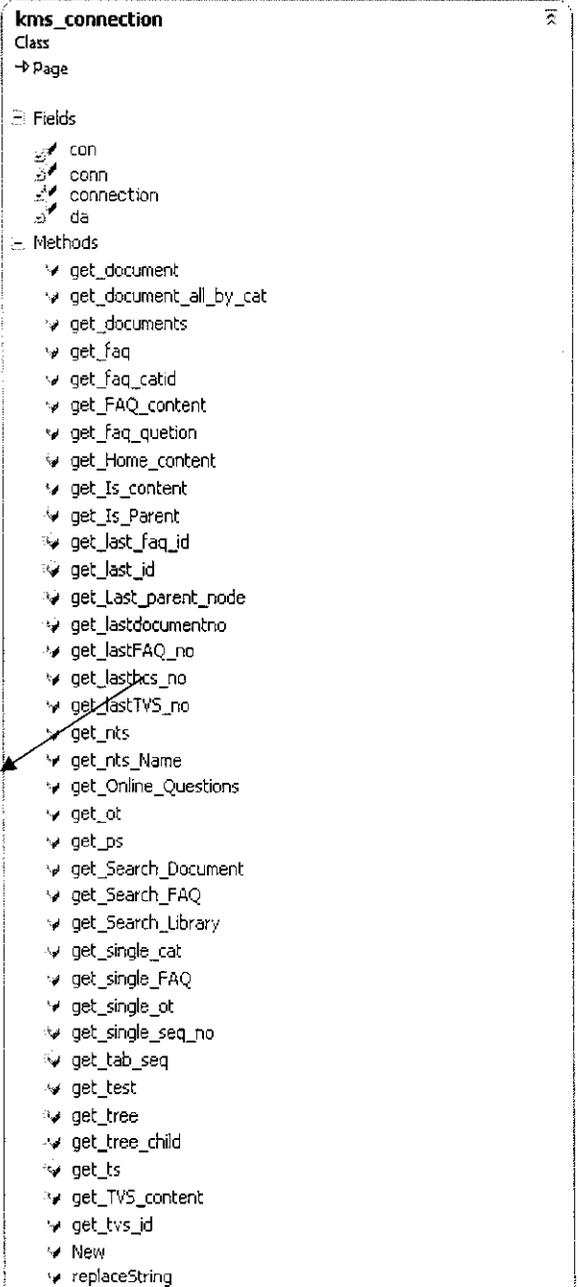
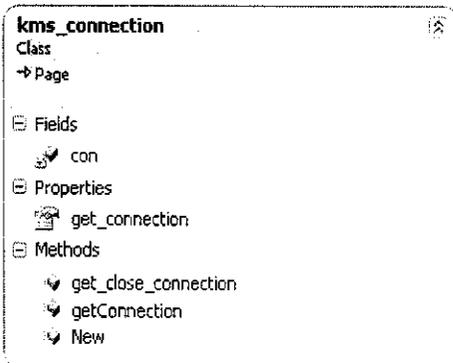


Figure 4.18 Class Diagram

CHAPTER 5

TESTING

Software testing is the process used to assess the quality of computer software. It is an empirical technical investigation conducted to provide stakeholders with information about the quality of the product or service under test, with respect to the context in which it is intended to operate. This includes, but is not limited to, the process of executing a program or application with the intent of finding software bugs. Software testing methods are traditionally divided into **black box testing and white box testing**.

Black box testing treats the software as a black-box without any understanding of internal behavior. It aims to test the functionality according to the requirements. Thus, the tester inputs data and only sees the output from the test object. **White box testing**, however, is when the tester has access to the internal data structures, code, and algorithms. White box testing methods include creating tests to satisfy some code coverage criteria.

Testing can be done on the following levels:

- Unit Testing
- Integration Testing
- System Testing

Unit Testing

Unit testing tests the minimal software component, or module. Each unit (basic component) of the software is tested to verify that the detailed design for the unit has been correctly implemented.

5.1 TEST CASE REPORTS

Home Module:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Add Home Content text Data	Required text data	Add Text Data	Data Added Successfully	Pass
2	Add Html Data	Text data with Html tags	Add Text Data	Data Added Successfully	Pass
3	Add Home Content Picture Data	Required Picture residing on the system	Add Picture Data	Data Added Successfully	Pass
4	Add Home Content Document Data	Required Document needed for the Module	Add Document Data	Data Added Successfully	Pass
5	Order the content	Press Up/Down Button	Content must be move according the input	Content Move Successfully	Pass
6	Delete the content	Press the delete button on particular data	Content must be delete	Content gets deleted	Pass
7	Edit the content	Press the edit button on particular data	Content must be modify	Content gets modified.	Pass

Library Module:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Add the node on below of the selected node	Select the particular node and choose Add Below and give the node name.	Node must be add	Node gets Added	Pass
2	Add the node on above of the selected node	Select the particular node and choose Add above and give the node name.	Node must be add	Node gets Added	Pass
3	Add the node as a child for the selected node	Select the particular node and choose Add as child and give the node name.	Node must be add	Node gets Added	Pass
4	Edit the existing node	Select the particular node and choose edit the node and give the new node name.	Node must be modify	Node gets modified	Pass
5	Delete the Existing node.	Select the particular node and choose delete the node	Node must be delete	Node gets deleted	Pass
6	Order the node	Select the particular node and choose Move up/Move down	Node must be move	Node gets moved	Pass
7	Associate the content for the node.	Select the particular node and choose set content. Then enter the content (Text, picture, Document)	Content must be added	Content gets added	Pass

Online Tests Module:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Add new category	Online Category details.	Online category must be added.	Online category gets added.	Pass
2	Edit the category	New category details	Online category must be modified.	Category gets modified.	Pass
3	Delete the category	Select the appropriate category to be deleted.	Category must be deleted.	Category gets deleted.	Pass
4	Add the online questions.	Question and options	Questions must be added	Question gets added.	Pass

Download Module:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Add new category	Download Category details.	Download category must be added.	Download category gets added.	Pass
2	Edit the category	New category details	Download category must be modified.	Category gets modified.	Pass
3	Add the document.	Document details and the link for the document.	Document must be added	Document gets added.	Pass

FAQ Module:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Add new category	FAQ Category details.	FAQ category must be added.	FAQ category gets added.	Pass
2	Edit the category	New category details	FAQ category must be modified.	Category gets modified.	Pass
3	Delete the category	Select the appropriate category to be deleted.	Category must be deleted.	Category gets deleted.	Pass
4	Add the FAQ questions.	Question Details	Questions must be added	Question gets added.	Pass
5	Associate the answer to the question.	Answer for the question(Text, Picture, Document)	Answer must be added.	Answer gets added.	Pass

Contact Us Module:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Add the contact us	Contact us details.	Contact us must be added.	Contact us gets added.	Pass
2	Edit the contact us	New contact us details	Contact us must be added	Contact us gets added.	Pass

Tab Settings:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Edi the tab	Enter the new name.	Name must be modified.	Tab name gets modified.	Pass
2	Edit the tab	Change the sequence.	Tab must be modified.	Tab gets modified.	Pass
3	Edit the tab	Check visible/invisible	Tab must be modified.	Tab gets modified.	Pass

Project Settings:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Add the project logo	Enter the project details	Project logo and name must be added.	Project logo and name gets added.	Pass
2	Edit the project logo	Enter the new project details.	Project logo and name must be modified	Project logo and name gets modified.	Pass

Integration Testing

Integration testing is the phase of software testing in which individual software modules are combined and tested as a group. It follows unit testing and precedes system testing. Integration testing takes as its input modules that have been unit tested, groups them in larger aggregates, applies tests defined in an integration test plan to those aggregates, and delivers as its output the integrated system ready for system testing.

Library Module and the content:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Add the content based on the node.	Content required for the node.	Content must be added based on the existing node.	Content gets added.	Pass
2	Delete the content.	Select the node to be deleted.	Delete the node will automatically delete the content.	Node and Content gets deleted.	Pass

FAQ Questions and answer:

S.No	Test Case	Input Data	Expected Result	Actual Result	Pass/Fail
1	Associate the answer for the particular question.	Required content for the question	Content must be added based on the question.	Content gets added.	Pass
2	Delete the answer.	Select the question to be deleted.	Delete the question will automatically delete the answer.	Question and Answer gets deleted.	Pass

CHAPTER 6

PERFORMANCE AND LIMITATION

6.1 MERITS OF THE SYSTEM

- Easy to use and simple.
- New modules can be added with ease without many modifications to the existing system.
- Flexible and Scalable.
- Data available on demand.
- Retrieval of data and reports will be much simpler.
- Consumes very less time when compared to the existing system.

6.2 LIMITATIONS OF THE SYSTEM

- Time Consuming.
- Wastage of Human resources.
- Unavailability of standard template.
- Difficulty in understanding needs from varied domains.
- Not user friendly.

6.3 CONCLUSION

The **Knowledge Management System** enables the customer to get rid of very tedious and time consuming process which has been followed by so far. By entering the value for home page systematically, implement the library, online tests, to make downloadable documents, create FAQs are helpful to get rid of work burden. It also eliminates the possibility of any error in manual feed of the data.

Once the system is deployed then the customer feel very comfortable and feeding the data dynamically. It makes the entire procedure faster, error free, simple, and efficient

and more performance enhancing one. This tool provides a uniform interface for conducting queries and generating reports on demand.

The information in the system should be maintained upto date with periodic updates. It prevents unauthorized access to important data.

Thus the Knowledge Management System increases the efficiency, performance of the work and customer satisfaction. Finally the system is one of the dynamically configurable website that provides creation of website for any kind of customers.

FUTURE ENHANCEMENT

- Implement the Discussion Forum, so that the user can get their own user access and discuss about his needs.
- Creation of multiple project on the single system, so that the customer can add multiple project on to the system.
- Dynamic theme settings, so that the administrator can change the color theme of the system too.

CHAPTER 7

APPENDICES

APPENDIX 1: SAMPLE SCREENS

Screen Description:

This user interface screen is used to check the authorized person because only the authenticated person will enter into the settings page

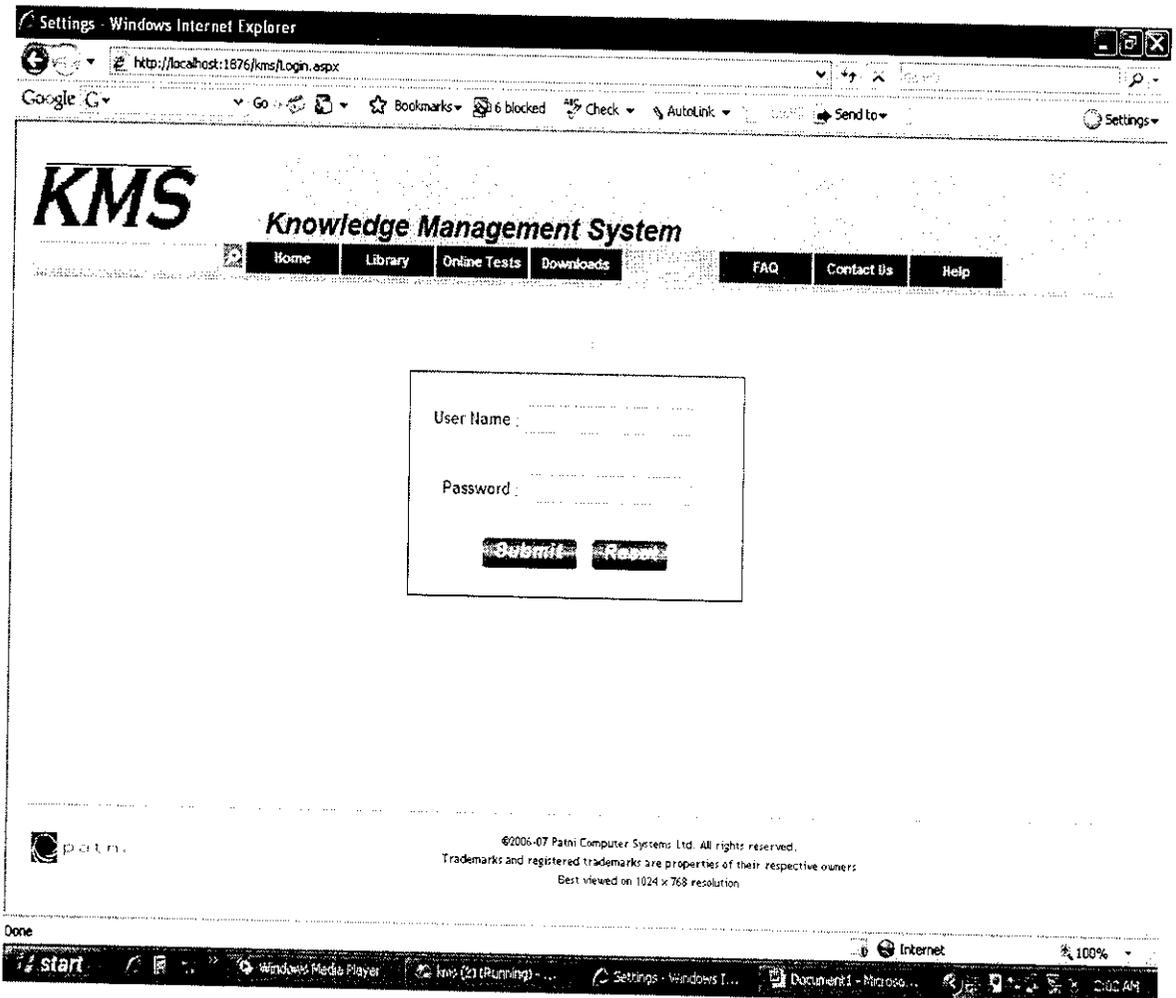


Figure A 7.1 Login Page

Screen Description:

It is the main settings page by using this page we can navigate into any settings page. By using this page we can configure the entire website.



Figure A 7.2 Main Settings Page

Screen Description:

It is used to configure the tab settings for the website. By using this page we can change the name of the tabs, change the sequence of the tabs and make it as visible/invisible so that user cannot see that tab if the administrator selects invisible.

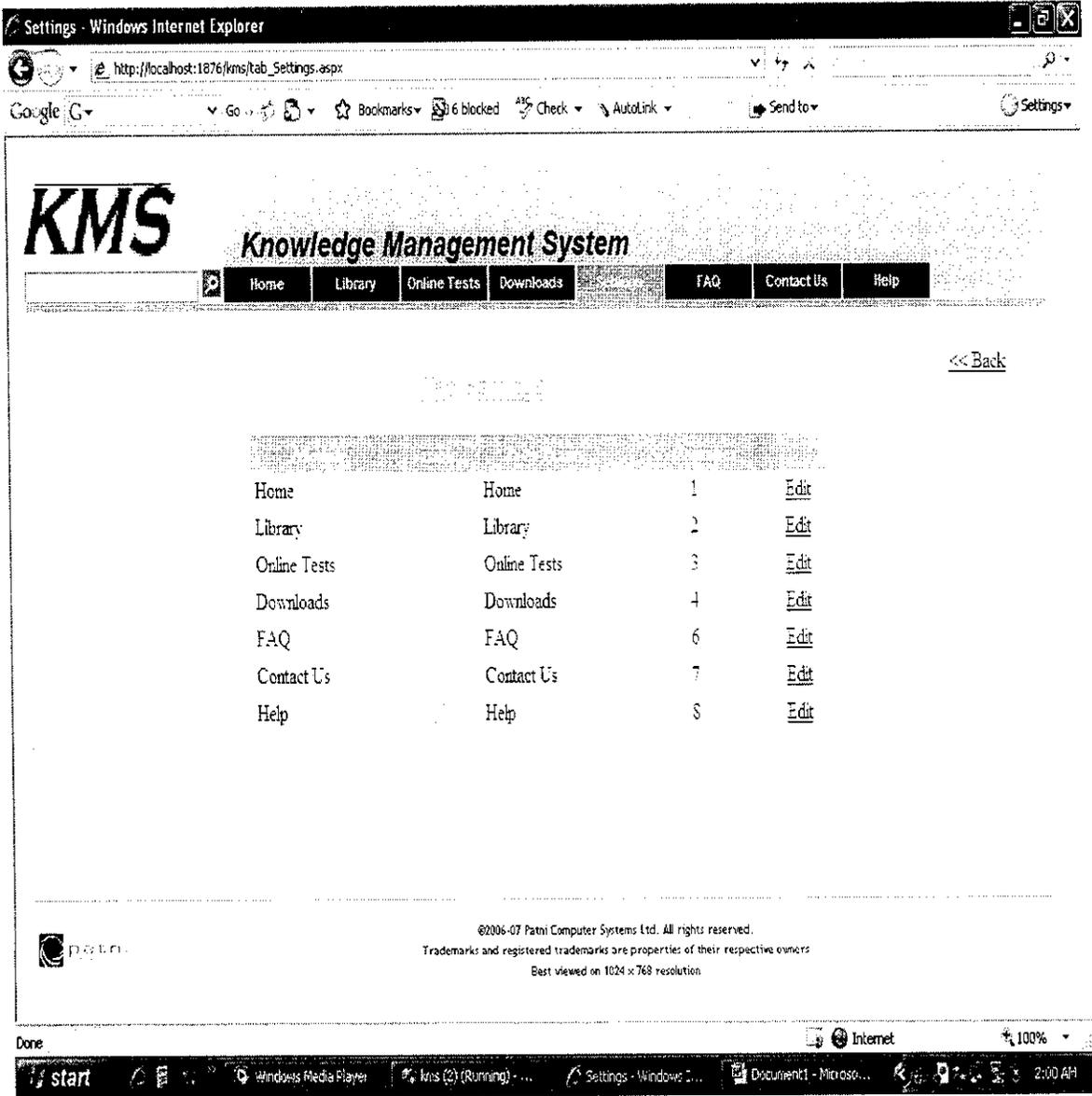


Figure A 7.3 Tab Settings Page

Screen Description:

By using this page we can configure the project name and project logo displayed on the tab of the website.

The screenshot displays the 'Project Settings' page for the Knowledge Management System (KMS). The browser window is titled 'Settings - Windows Internet Explorer' and the address bar shows the URL 'http://localhost:1876/kms/Project_settings.aspx'. The page features a navigation menu with links for Home, Library, Online Tests, Downloads, FAQ, Contact Us, and Help. The main content area includes a 'Company Logo' field with a 'Browse...' button and an 'Application Name' field set to 'Knowledge Management System'. A preview window below shows the updated website header with the 'KMS' logo and navigation menu. The footer contains the 'patni' logo, copyright information for '©2006-07 Patni Computer Systems Ltd.', and a resolution note: 'Best viewed on 1024 x 768 resolution'. The Windows taskbar at the bottom shows the start button, Windows Media Player, KMS (2) (Running), Settings - Windows..., Document1 - Microso..., and the system clock at 2:01 AM.

Figure A 7.4 Project Settings Page

Screen Description:

This is the home page of this website. When the site is opened then it will displayed to all.

Home - Windows: Internet Explorer

http://localhost:1876/kms/Default.aspx

Google G

Bookmarks 6 blocked Check Autolink Send to Settings

KMS

Knowledge Management System

Library Online Tests Downloads Settings FAQ Contact Us Help

Client Profile: Fiserv Insurance Solutions specializes in progressive software and outsourcing solutions for the insurance industry. Hundreds of carriers, managing general agents and third-party administrators rely on Fiserv for business process management, policy, rating, claims, billing and reinsurance administration, as well as point-of-sale solutions and straight-through processing. In addition, more than 3,000 clients use the company's market-leading financial and compliance solutions. Fiserv Insurance Solutions can be found on the Internet at www.fiservinsurance.com.

Project Overview: The Universal Reinsurance System (URS) is a comprehensive reinsurance processing application developed by Fiserv Insurance Solutions. This system provides insurance and reinsurance companies with an automated means of handling all facets of their reinsurance business, including reinsurance underwriting, claims processing, and accounting.

FISERV needs support for data conversion, CICS COBOL services Migration and Quality assurance (V&V services) for P&C Re-insurance product URS (Universal Reinsurance System) on J2EE platform

Project Start Date (offshore):04-Feb-2008

Project Start Date (onsite) :04-Feb-2008

patni

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Best viewed on 1024 x 768 resolution

Done Internet 100%

start Windows Media Player kms (C:) (Running) Home - Windows Inte... Document1 - Microsof... 1:47 AM

Figure A 7.5 Home Page

Screen Description:

This library page is the heart of this website. By using this page the user can view any kind of data provided by the administrator.

Library - Windows Internet Explorer

http://localhost:1876/kms/Library.aspx?nodeid=3

Google C

Go

Bookmarks

6 blocked

Check

AutoLink

Send to

Settings

KMS

Knowledge Management System

Home Online Tests Downloads Settings FAQ Contact Us Help

URS Product Overview

- Reinsurance
 - URS CICS Elimination**
 - URS Product Overview**
 - CICS Elimination
 - Technical Architecture
 - J2EE Migration
 - Database Re-design
 - Database Migration Learnings

URS - Universal Reinsurance System

One source for Ceded and Assumed Reinsurance Management Within this single, integrated systems, URS provides reinsurance administrative functions from contract definition through claims, accounting, and cash year-to-end statutory reporting. URS processes all types of reinsurance; ceded, assumed, retroceded, treaty, facultative, proportional, and non-proportional.

Automation is the key to streamlining reinsurance management processes. URS offers the following key system features:

- Manages reinsurance treaties for ceded, assumed, pools and affiliates
- Automates the attachment, calculation, and posting of premium and loss cessions and retrocessions Automatic split by pool retrocessional participants
- Identifies and calculates per risk, per occurrence, proportional, and catastrophic loss recoveries
- Manages reinsurance claims with customized billing, first notice of loss, and status requests as letters Creates and manages receivable, payable and funds withheld sub-ledger balances
- Management of LOC, funds held, trusts and deposits Cash management, including receipts, disbursements, cash application and check details

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 Best viewed on 1024 x 768 resolution

start

Windows Media Player

kms (2) (Running)

Library - Windows In...

Document1 - Microso...

Internet

100%

1:49 AM

Figure A 7.6 Library Page

Screen Description:

This page is for adding the node for library module. The added node will displayed in the tree view.

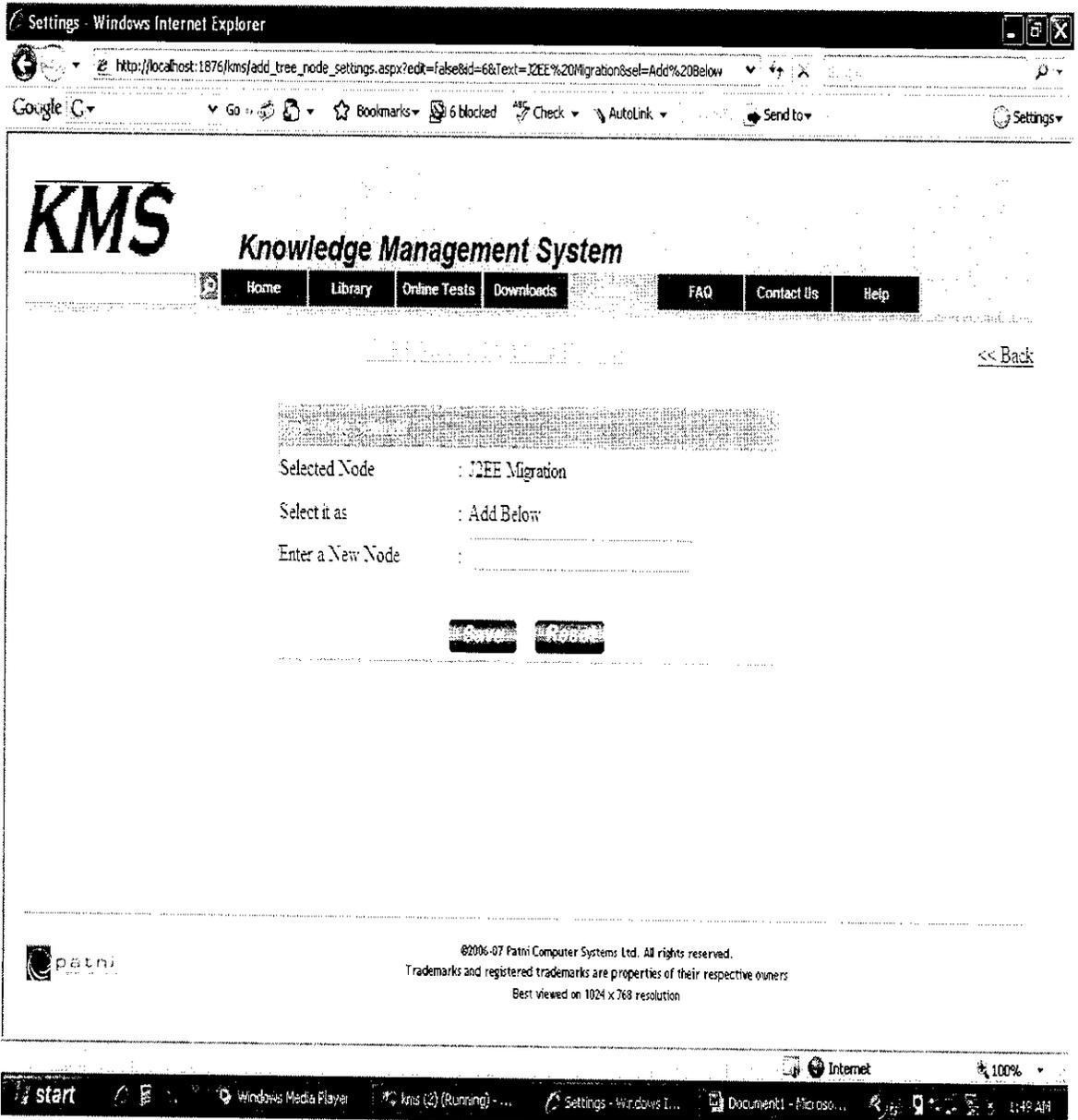


Figure A 7.7 Add the node Page

Screen Description:

By using this page we can set the content for particular node. After selecting the particular node we can associate the content for that node by using the following page.

The screenshot shows a web browser window titled "Settings - Windows Internet Explorer" with the address bar displaying "http://localhost:1876/kms/Set_Library_Content.aspx?nodeid=68&nodetext=J2EE+Migration". The page content includes the KMS logo and navigation menu (Home, Library, Online Tests, Downloads, FAQ, Contact Us, Help). The main area shows "Selected Node is J2EE Migration" and "Document Name : System and Admin Support". There is a "File Path" input field with a "Browse..." button and "Edit Delete" and "Update Cancel" links. At the bottom, there are buttons for "Add Document" and "Cancel", and a footer with copyright information for Patni Computer Systems Ltd.

Figure A 7.8 Library Content Settings Page

Screen Description:

This page is used to display the category of online tests. So by using this page we can select the category and attend the tests.

The screenshot shows a Windows Internet Explorer browser window displaying the 'Online Test Category Page' for a Knowledge Management System (KMS). The browser's address bar shows the URL: `http://localhost:1876/kms/Modules.aspx?name=Online`. The page header features the 'KMS Knowledge Management System' logo and a navigation menu with links for Home, Library, Downloads, Settings, FAQ, Contact Us, and Help. The main content area is titled 'Online Test Category' and lists two categories: 'Reinsurance' and 'Insurance Migration'. Under 'Reinsurance', there is a link for 'Questions on Resinsurance'. Under 'Insurance Migration', there is a link for 'Questions on Insurance Migration'. The footer includes the Patni logo, copyright information for 2006-07 Patni Computer Systems Ltd., and a note that the page is best viewed on 1024 x 768 resolution. The Windows taskbar at the bottom shows the Start button, several open applications including Windows Media Player, KMS (2) (Running), and the current browser window, along with the system clock showing 1:52 AM.

Figure A 7.9 Online Test Category Page

Screen Description:

This page is for conducting the online tests. By using this page the user can assess by them selves.

Online - Windows Internet Explorer

http://localhost:1876/fms/Online_Questions.aspx?id=3

Google G

Reinsurance

What is Reinsurance?

Contract between an insurer & a member of the public

Insurer deals with the insured

Contract between two insuring organizations

Reinsurer deals with the insurer

Total Questions	: 4
Questions Remaining	: 4
Questions Correct	: 0
Questions Wrong	: 0

Done Internet 100%

start Windows Media Player Ins (2) (Running) Online - Windows Int... Document1 - Microso... 1:52 AM

Figure A 7.10 Online Test Page

Screen Description:

This page is used to display the summary after the test conducted. So the user can analyse where they are, it will displays the result.

The screenshot shows a web browser window titled 'Test Summary - Windows Internet Explorer'. The address bar contains the URL 'http://localhost:1876/kms/summary.aspx?catname=Reinsurance'. The page content is as follows:

<u>Reinsurance</u>		<< Back
Total Questions in the test	: 4	
No of Questions Correct	: 1	
No of Questions Wrong	: 3	
Percentage	: 25	

* Thanks for using the test

The browser's taskbar at the bottom shows the start button, several open applications including Windows Media Player and Internet Explorer, and the system clock indicating 1:53 AM.

Figure A 7.11 Online Test Summary Page

Screen Description:

This page is for add or edit the question and this module is helpful to associate the particular question to multiple category.

The screenshot displays the KMS Knowledge Management System interface within a Windows Internet Explorer browser. The browser's address bar shows the URL: `http://localhost:1876/kms/Add_online_questions_settings.aspx?id=3&edit=true&otid=1&prepage=Category_display_setting`. The page features a navigation menu with links for Home, Library, Online Tests, Downloads, FAQ, Contact Us, and Help. A search bar is present above the menu.

The main content area is titled "Add Online Questions" and contains a form for editing a question. The question text is "What is Reinsurance?". Below the question, there are radio buttons for "2 in a Row" (selected) and "1 in a Row". The form lists four options:

- Option 1: Contract between an insurer & a member of the
- Option 2: Insurer deals with the insured
- Option 3: Contract between two insuring organizations
- Option 4: Reinsurer deals with the insurer

The "Correct Option" is set to "Option 3". Below the options, there is a "Category" section with two lists: "All Items" (containing "Insurance Migration") and "Selected Items" (containing "Reinsurance"). A right-pointing arrow button is visible between the lists. At the bottom of the form are "Save" and "Cancel" buttons.

The Windows taskbar at the bottom shows the Start button, several open applications (Windows Media Player, KMS (2) (Running), Settings - Windows I..., Document1 - Microso...), and the system clock showing 1:55 AM.

Figure A 7.12 Add the Online Questions

Screen Description:

This page helps the user to download the particular document provided by the system.

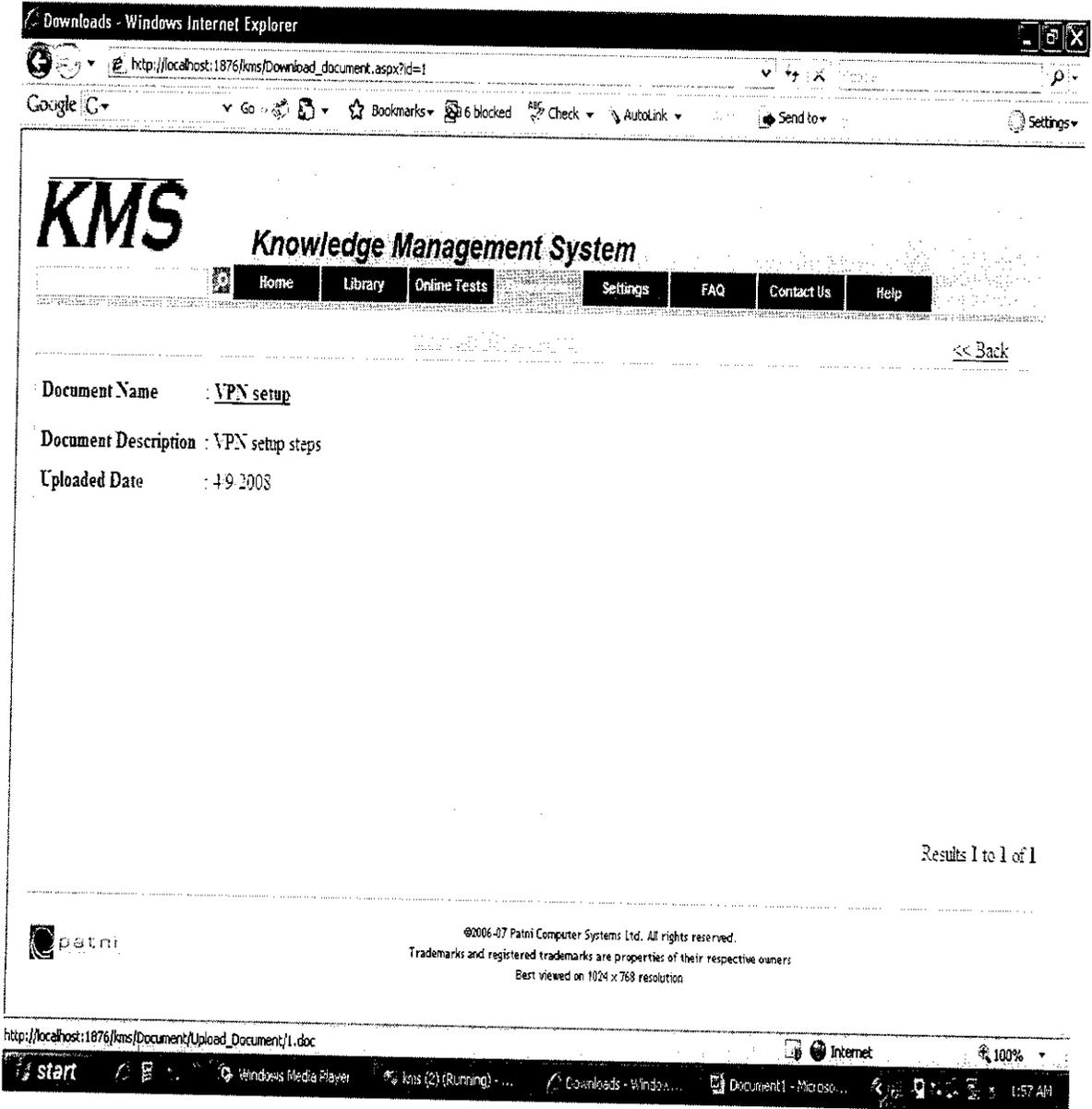


Figure A 7.13 Document Display Page

Screen Description:

This page is used to display the FAQ question.

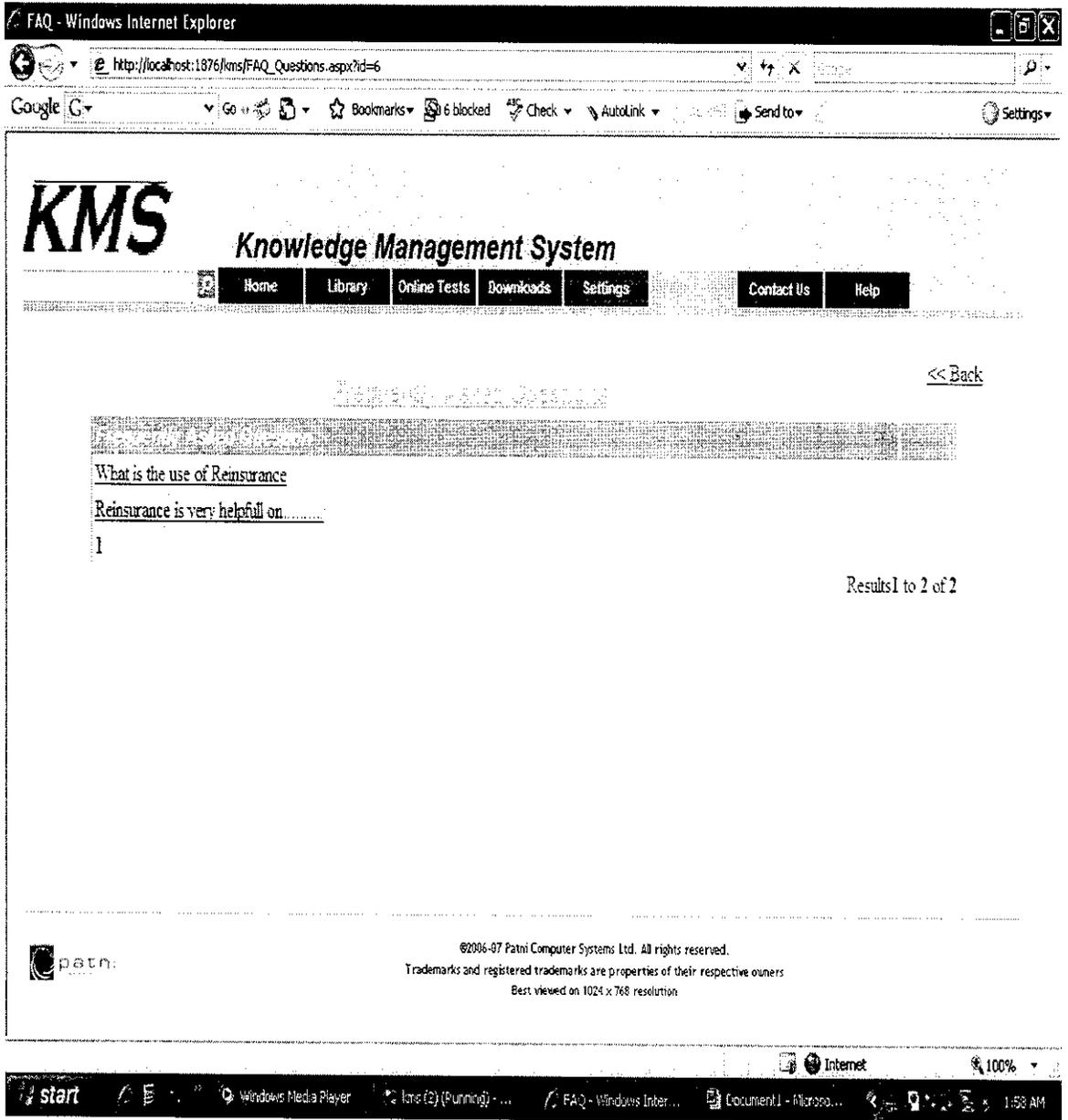


Figure A 7.14 FAQ Question Page

Screen Description:

This page is used to edit the contact us details on the website.

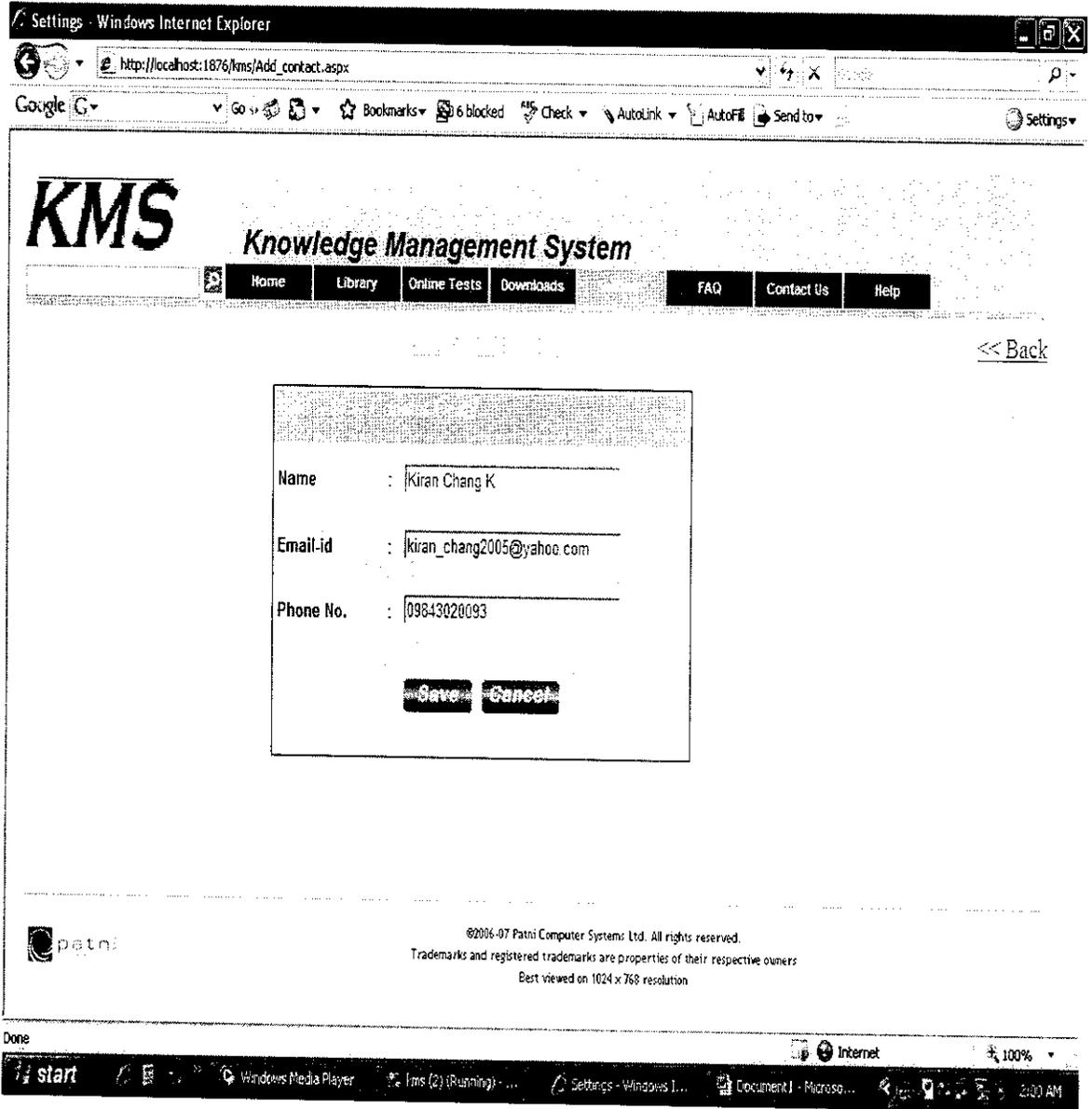


Figure A 7.15 Contact Us Edit Page

Screen Description:

This page is used to display the help for the website. So that the user can visit this page and gets the knowledge of how to look through the site.

Help - Windows Internet Explorer

http://localhost:1876/kms/Help.aspx

Google

KMS Knowledge Management System

Home Library Online Tests Downloads Settings FAQ Contact Us

The Homepage is the starting page for this Application. We have to set this content by clicking the settings tab. After that we can click the home content settings and give the content on the interface. It also contains tabs like Library, Online Tests, Downloads, Settings, Contact Us and Help which represents the modules existing in the application. By using that we can easily get into the appropriate module. The Homepage contains another utility for searching the content. By using that application.

[Home Page](#)

[Library](#)

[Online Tests](#)

[Downloads](#)

[Settings](#)

[FAQ](#)

[Contact Us](#)

FISERV

Reinsurance - URS CICS Elimination

Library Online Tests Downloads Settings FAQ

Fiserv Insurance Solutions specializes in progressive software and outsourcing solutions for the insurance industry. Hur and third-party administrators rely on Fiserv for business process management, policy, rating, claims, billing and reinsu sale solutions and straight-through processing. In addition, more than 3,000 clients use the company's market-leading f Insurance Solutions can be found on the Internet at www.fiservinsurance.com.

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Best viewed on 1024 x 768 resolution

javascript:helpcontent(1)

start Windows Media Player kms (2) (Running) Help - Windows Inter... Document1 - Microso... Internet 100% 2:00 AM

Figure A 7.16 Help Page

CHAPTER 8

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8.1 BOOK REFERENCE:

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