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WEB CONTENT MANAGEMENT SYSTEM

PROJECT REPORT

Submitted By

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in partial fulfillment for the award of the degree of

MASTER OF COMPUTER APPLICATIONS

in

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KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Coimbatore)

KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Coimbatore)

COIMBATORE — 641 006.

Department of Computer Applications

PROJECT WORK

MAY 2010

This is to certify that the project entitled

WEB CONTENT MANAGEMENT SYSTEM

is the bonafide record of project work done by

P. KEERTHANA

Register No: 0720300018

of MCA (Computer Applications) during the year 2009-2010.

Project Guide

Head of the Department

Submitted for the Project Viva-Voce examination held on 17. 05. 2010

Internal Examiner

External Examiner

DECLARATION

I affirm that the project work titled WEB CONTENT MANAGEMENT SYSTEM being submitted in partial fulfilment for the award of MASTER OF COMPUTER APPLICATIONS is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

> P. Keeth (Signature of the Candidate)

> > P. KEERTHANA

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I certify that the declaration made above by the candidate is true

Run-isto Signature of the Guide,

R. K. KAVITIAA SENIOR LECTURER

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With Name & Designation



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Apr. 30, 2010.

CERTIFICATE

This is to certify that Ms.P.Keerthana(07203000018) has undertaken a project with us entitled "Web Content Management System" and completed successfully on Apr. 30.

2010. She is a sincere and hardworking project student and reported regularly about her progress.

V.Govindaraju, Partner

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ABSTRACT

This system "WEB CONTENT MANAGEMENT SYSTEM" mainly aims at managing the web content of the companies and organizations. It also focuses on the communication between the companies/organizations and users.

This system is maintained by the Administrator. Administrator can view the details of each and every company/organization and their web contents. Administrator can also communicate with the companies if some necessity occurs.

The Company/Organization must first register themself in this website. Each company will be identified by their unique identity code and every webpage will also be identified by unique code. The content in the web pages will be stored in the database with id, so that we can easily identify the content and easily can be edited by the particular company.

Company/Organization can select any template provided by the system for their website and then add the content to the appropriate web pages. Registered company can edit the content already in the website, also can delete the content. They can add text, images and links into the content.

After the verification of administrator, the website created by the company will be added to the viewers list. Administrator having the rights to add or delete the content in the web pages of a particular company. User can view the websites by clicking the link provided at the webpage and they can ask any queries about the company or products/services of the particular company/organization.

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List of Abbreviations:

| Abbreviation | Expansion | | |
|--------------|---|--|--|
| PHP | Personal Home Pages/PHP Hypertext Pre-processor | | |
| UI | User Interface | | |

CHAPTER 1

INTRODUCTION

This chapter is organized into two parts. The first part deals with the organization profile. It provides a brief insight into the history of the organization and the products. The second part gives an introduction about the project.

1.1 ORGANIZATION PROFILE

Bannari Research consultancy (Barindia.net) was started in the year of 2008 by two. PSG tech alumni, as a training and research institute. They have trained more than 15. Students in various platforms and on various applications. Their areas of specialization are E-LEARNING and TAMIL COMPUTING. They also concentrate on software development on free open sources software platforms. This project work experience is to be illustrated at Tamil internet conference 2010 to be held at Coimbatore.

1.2 PROJECT OVERVIEW

This project "Web Content Management System" for companies and organizations to create their websites for developing business and their services. This system also maintains the personal details of each company. Each company is allotted an unique name and password. They should register into this system by giving personal details like company name, slogan, address, contact no, etc. They can select the template and type of their company like product or service based. After that they can give the details about company, their products/services and testimonials. Once they completed their details will be stored in the database.

Company can logon in to the site using their username and password. They can view their web pages for further modifications. If they made any changes in their web pages, it can be updated in the database. They can enter the payment details and also this system gives them a provision to change their password when they want to change.

Entire system is maintained by the administrator. Administrator is able to view the details about companies. Only administrator can permit the company websites after his/her verification. After the verification the sites will be imported into this system. All users can view the websites of the companies without doing any login process. Administrator can

unpermit the companies in any cost. Also the web pages can be removed from the system when the validity is over. The report will be send to the particular company's mail. At the stage of registration each company can be provided with the trail period of one month.

CHAPTER 2

SYSTEM STUDY AND ANALYSIS

A complete understanding of the requirement is essential for the success of software development. The software scope, initially established by the system engineer and refined during the project planning, is refined in detail. Model of the required data, information and control flow, and operational behaviour are created. Alternative solution are analyzed and allocated to various software elements. The feasibility study evaluates the viability of the project and presents the recommended strategy adopted for the development.

2.1 EXISTING SYSTEM

In existing system, if the company want to create their websites they have to create their own templates or download the templates from other websites. Also they have to manage their contents of the web pages through the code.

2.1.1 Drawbacks of the Existing System

- It is very difficult to change the web content manually if it is a large web site.
- It takes more time and lot of energy.
- ♦ It needs webmasters to manage more content from more contributors.
- ♦ Have to change the content in each and every page in a website.
- It needs programmers for editing the content.
- ♦ Have to pay for some templates if we download them from other websites.
- Users should open each company's websites separately.

2.2 PROPOSED SYSTEM

This project aims at making the work for managing the web content of the company's web pages very simpler. The details about various companies and organization can be maintained at one place. This makes to add and browse every detail at one stop. The agent can use these facilities by just registering in this site.

2.2.1 Advantages of Proposed System

The expected benefits of the proposed system are

- ♦ Makes company's work very simpler.
- The whole content of web page is stored using MySQL database.
- Easy to extract data.
- It gives different types of template designs.
- Easy to update content of the web pages without changing code.
- ♦ Provide the details about expiry dates to each company or organization.

CHAPTER 3

DEVELOPMENT ENVIRONMENT

3.1 HARDWARE REQUIREMENTS

The hardware support required for deploying the application

Processor

Intel Pentium IV

Speed

3.1 GHZ

Memory

1 GB RAM

Hard Disk Capacity

80 GB

Monitor

15" inch SVGA

Mouse

Logitech Mouse (Scroll)

Keyboard

108 Keys

3.2 SOFTWARE REQUIREMENTS

The software support required for deployment is

Operating System

Windows

Designing Tool

HTML, CSS

Scripting Language :

PHP

Web Server

WampServer2.0i

Database

MY SQL

3.3 SOFTWARE OVERVIEW

PHP:

PHP: Hypertext Pre-processor is a widely used, general-purpose scripting language that was originally designed for web development to produce dynamic web pages. For this purpose, PHP code is embedded into the HTML source document and interpreted by a web server with a PHP processor module, which generates the web page document. Originally designed to create dynamic web pages, PHP now focuses mainly on server-side scripting, and it is similar to other server-side scripting languages that provide dynamic content from a web server to a client, such as Microsoft's Active Server Pages, Sun Microsystems' Java Server Pages, and mod_perl.

PHP only parses code within its delimiters. Anything outside its delimiters is sent directly to the output and is not processed by PHP (although non-PHP text is still subject to control structures described within PHP code). The most common delimiters are <?php to open and ?> to close PHP sections. The first form of delimiters, <?php and ?>, in XHTML and other XML documents, creates correctly formed XML 'processing instructions'. This means that the resulting mixture of PHP code and other markup in the server-side file is itself well-formed XML.

Variables are prefixed with a dollar symbol and a type does not need to be specified in advance. Unlike function and class names, variable names are case sensitive. Both double-quoted ("") and heredoc strings allow the ability to embed a variable's value into the string. PHP treats newlines as whitespace in the manner of a free-form language (except when inside string quotes), and statements are terminated by a semicolon. PHP has three types of comment syntax: /* */ marks block and inline comments; // as well as # are used for one-line comments. The echo statement is one of several facilities PHP provides to output text (e.g. to a web browser).

In terms of keywords and language syntax, PHP is similar to most high level languages that follow the C style syntax. If conditions, for and while loops, and function returns are similar in syntax to languages such as C, C++, Java and Perl.

MYSQL:

MySQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by Sun Microsystems, Inc.

MySQL is a database management system.

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

MySQL is a relational database management system.

A relational database stores data in separate tables rather than putting all the data in one big storeroom. This adds speed and flexibility. The SQL part of "MySQL" stands for "Structured Query Language." SQL is the most common standardized language used to access databases and is defined by the ANSI/ISO SQL Standard. The SQL standard has been evolving since 1986 and several versions exist. In this manual, "SQL-92" refers to the standard released in 1992, "SQL:1999" refers to the standard released in 1999, and "SQL:2003" refers to the current version of the standard. We use the phrase "the SQL standard" to mean the current version of the SQL Standard at any time.

MySQL software is Open Source.

Open Source means that it is possible for anyone to use and modify the software. Anybody can download the MySQL software from the Internet and use it without paying anything. If you wish, you may study the source code and change it to suit your needs. The MySQL software uses the GPL (GNU General Public License, to define what you may and may not do with the software in different situations.

The MySQL Database Server is very fast, reliable, and easy to use.

MySQL Server was originally developed to handle large databases much faster than existing solutions and has been successfully used in highly demanding production environments for several years. Although under constant development, MySQL Server today offers a rich and useful set of functions. Its connectivity, speed, and security make MySQL Server highly suited for accessing databases on the Internet.

MySQL Server works in client/server or embedded systems.

The MySQL Database Software is a client/server system that consists of a multithreaded SQL server that supports different backends, several different client programs and libraries, administrative tools, and a wide range of application programming interfaces (APIs). We also provide MySQL Server as an embedded multi-threaded library that you can link into your application to get a smaller, faster, easier-to-manage standalone product.

A large amount of contributed MySQL software is available.

It is very likely that your favourite application or language supports the MySQL Database Server.

WAMP SERVER:

WAMP2.0i (WAMP means Windows Apache Mysql PHP) is a platform of Web development under Windows. WAMP is a form of mini-server that can run on almost any Windows Operating System. WAMP includes Apache 2, PHP 5 (SMTP ports are disabled), and MySQL (phpMyAdmin and SQLitemanager are installed to manage your databases) preinstalled.

WampServer is a Windows web development environment. It allows you to create web applications with Apache, PHP and the MySQL database. It also comes with PHPMyAdmin and SQLiteManager to easily manage your databases.

An icon on the taskbar tray displays the status of WAMP, letting you know if; a) WAMP is running but no services are opened (the icon will appear red), b) WAMP is running and one service is opened (the icon will appear yellow) or c) WAMP is running with all services opened (the icon will appear white). Apache and MySQL are considered to be

services (they can be disabled by left-clicking on the taskbar icon, guiding your cursor over the service you wish to disable and selecting "Stop Service").

The files/web pages that are hosted on your WAMP server can be accessed by typing http://localhost/ or http://127.0.0.1/ in the address bar of your web browser. WAMP must be running in order to access either of the above addresses.

HTML and CSS:

HTML, which stands for HyperText Markup Language, is the predominant markup language for web pages. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists etc as well as for links, quotes, and other items. It allows images and objects to be embedded and can be used to create interactive forms. It is written in the form of HTML elements consisting of "tags" surrounded by angle brackets within the web page content. It can include or can load scripts in languages such as JavaScript which affect the behavior of HTML processors like Web browsers; and Cascading Style Sheets (CSS) to define the appearance and layout of text and other material.

Cascading Style Sheets (CSS) is a fantastic tool to add layout to your websites. It can save you a lot of time and it enables you to design websites in a completely new way. CSS is a must for anyone working with web design.

CHAPTER 4 SYSTEM DESIGN

4.1 DIAGRAMS

4.1.1 USE-CASE DIAGRAMS

A use case diagram in the Unified Modelling Language (UML) is a type of behavioural diagram defined by and created from a Use-case analysis. Its purpose is 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. The main purpose of a use case diagram is to show what system functions are performed for which actor. Roles of the actors in the system can be depicted.

Fig 4.1(a): Users Use-Case Diagram

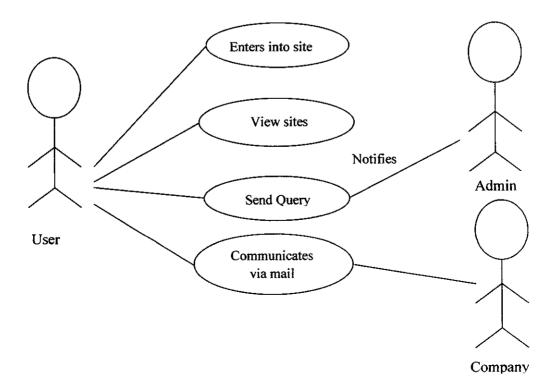


Fig 4.1(b): Company Use-Case Diagram

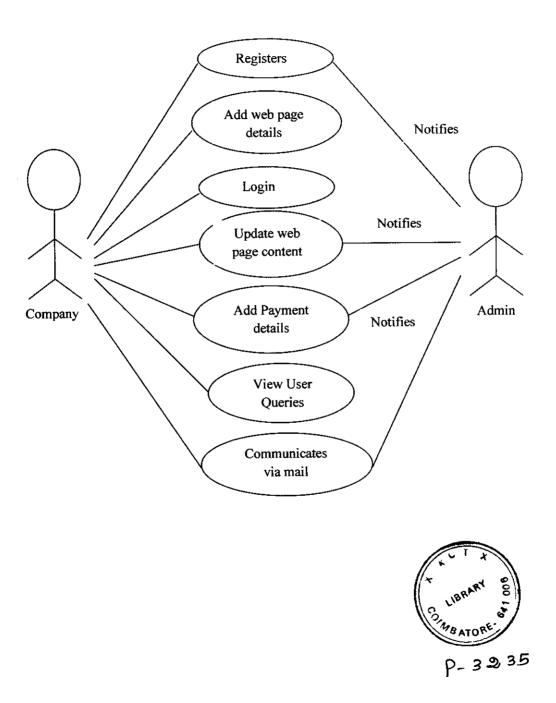
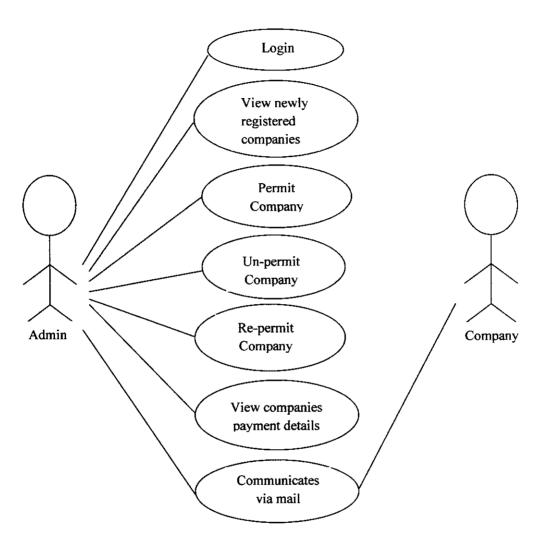


Fig 4.1(c): Admin Use-Case Diagram



4.2 ELEMENTS OF DESIGN

System Design is the most creative and challenging phase in the development of a software system. The first step is to determine what input data is needed for the system and then to design a database that will meet the requirements of the proposed system. The next step is to determine what outputs are needed from the system and the format of the output to be produced.

During the design of the proposed system some areas where attention is required are:

- ♦ How are the inputs required and the outputs produced?
- ♦ How should the data be organized?
- ♦ What will be the processes involved in the system?
- ♦ How should the screen look?

The steps carried out in the design phase are as follows:

- ✓ Input Design
- ✓ Output Design
- ✓ Database Design

4.2.1 INPUT DESIGN

Input design is a part of the system design and hence must be carefully designed which otherwise lead to serious errors in the later stages of development. Inaccurate input data is the most common cause of errors in data processing. The main objective of designing input focus on

- ☼ Controlling the amount of input required
- ♣ Avoiding delayed responses
- [™] Keeping process simple
- ♣ Controlling and avoiding errors

4.2.2 OUTPUT DESIGN

Output generally refers to the results and information that are generated by the system. For many end-users, output is the main reason for developing the system and the basis on which they will evaluate the usefulness of the application. Most end-users will not actually operate the information system or enter data through workstations, but they will use the output from the system. When designing output, system analysis must accomplish the following.

- Determine what information to present
- Decide whether to display, print or speak the information and select the output medium
- Arrange the presentation of information in an acceptable format.
- Decide how to distribute the output to intended recipients.

The arrangement of information on a display or printed document is termed as layout. Accomplish the general activities listed above will require specific decisions, such as whether to use pre-printed forms when preparing reports and documents, how many lines to plan on a printed page or whether to use graphics and colour.

The output design is specified on layout performs, sheets that describe the location characteristics, and format of the column headings and pagination.

The output must be provided in a format easily understandable even by a novice user. After analyzing the operations of the system, output information required for each jobs are determined. In addition to this, these outputs may be in format suitable as inputs for subsequent processing.

4.2.3 DATABASE DESIGN

A database is a collection of inter-related data stored with minimum redundancy to serve many users quickly and efficiently. The general objective of database design is to make the data access easy, inexpensive and flexible to the user. An elegantly designed database can play a strong foundation for the whole system.

The details about the relevant data for the system are first identified. According to their relationship, tables are designed through the following method.

- The data type for each data item in the table is decided.
- The tables are then normalized.

The tables are normalized so that they can provide better response time, have data integrity, avoid redundancy and be secure.

DATABASE STRUCTURE:

This system uses many numbers of tables to store the details of companies, their web page contents and the payment details etc.

4.3(a): Table Name: useraccounts

This table contains the account details of the administration people.

| Field Name | Data type | Size | Constraint |
|------------|-----------|------|-------------|
| Sno | Int | 2 | Primary key |
| Name | Varchar | 30 | |
| Uname | Varchar | 15 | |
| Pwd | Varchar | 15 | |
| Email | Varchar | 50 | |

4.3(b): Table Name: profile

This table contains the list of companies who are registered into the system.

| Field Name | Data type | Size | Constraint |
|------------|-----------|------|------------|
| cidno | int | 6 | Primary |
| cname | Varchar | 60 | |
| Clogo | Longblob | | |
| cslogan | Varchar | 60 | |
| cperson | Varchar | 25 | |
| Address1 | Varchar | 150 | |
| Address2 | Varchar | 150 | |
| Country | Varchar | 100 | |
| Pincode | Varchar | 15 | |
| Phno | Varchar | 20 | |
| Mobile | Varchar | 20 | |
| Email | Varchar | 100 | |
| Uname | Varchar | 20 | |
| Pwd | Varchar | 15 | |
| Sdate | Date | | |
| Edate | Varchar | | |
| Permit | Varchar | 5 | |
| Туре | Varchar | 10 | |

4.3(c): Table Name: content

This table contains the web page contents of the companies.

| Field Name | Data type | Size | Constraint |
|------------|-----------|------|-------------------------------------|
| Cidno | lnt | 6 | Foreign key referenced from profile |
| About1 | Varchar | 255 | |
| About2 | Varchar | 255 | 4.30 |
| About3 | Varchar | 255 | |
| Mission | Varchar | 255 | |
| Vision | Varchar | 255 | |
| Goal | Varchar | 255 | |
| Image | LongBlob | | |

4.3(d): Table name: testimonials

This table contains the list of testimonials entered by each company.

| Field Name | Data type | Size | Constraint |
|------------|-----------|------|-------------------------------------|
| Sno | Int | 10 | Primary Key |
| Cidno | Int | 6 | Foreign key referenced from profile |
| Query | Varchar | 250 | |
| Name | Varchar | 30 | |
| Email | Varchar | 50 | |

4.3(e): Table name: uquery

This table consists of the queries list passed by the users to the companies.

| Field Name | Data type | Size | Constraint |
|------------|-----------|------|-------------------------------------|
| Sno | Int | 10 | Primary key |
| Cidno | Int | 6 | Foreign key referenced from profile |
| Name | Varchar | 30 | |
| Email | Varchar | 50 | |
| Query | Varchar | 250 | |

4.3(f): Table Name: unpermit

This table contains the list of unpermitted companies.

| Field Name | Data type | Size | Constraint |
|------------|-----------|------|-------------------------------------|
| Sno | Int | 5 | Primary key |
| Cidno | Int | 6 | Foreign key referenced from profile |
| Cname | Varchar | 60 | |
| Reason | Varchar | 200 | |

4.3(g): Table Name: template

This table contains the type of each company and the name of the template they selected.

| Field Name | Data type | Size | Constraint |
|-------------|-----------|------|-------------------------------------|
| Sno | Int | 10 | Primary key |
| Cidno | Int | 6 | Foreign key referenced from profile |
| Tempname | Varchar | 10 | |
| Companytype | Varchar | 10 | |

4.3(h): Table Name: payment

This table contains the payment details of each company .

| Data type | Size | Constraint |
|-----------|--|---|
| Int | 10 | Primary key |
| Int | 6 | Foreign key referenced from profile |
| Varchar | 25 | Referred from profile |
| Varchar | 25 | |
| Int | 5 | |
| Int | 2 | |
| Int | 4 | |
| Int | 3 | |
| Varchar | 30 | |
| Int | 5 | |
| | Int Int Varchar Varchar Int Int Int Int Varchar Int Int Int Int Int Int Int In | Int 10 Int 6 Varchar 25 Varchar 25 Int 5 Int 5 Int 5 Int 2 Int 4 Int 3 Varchar 30 |

4.3(i): Table Name: product

This table contains the list of products made by the companies.

| Field Name | Data type | Size | Constraint |
|-------------|-----------|-------|-------------------------------------|
| Sno | Int | 10 | Primary key |
| Cidno | Int | 6 | Foreign key referenced from profile |
| Product | Varchar | 100 | |
| Description | Varchar | 250 | |
| Price | Float | (9,2) | |
| Image | Longblob | | |

4.3(j): Table Name: service

This table contains the list of services provided by the organizations.

| Field Name | Data type | Size | Constraint |
|-------------|-----------|------|-------------------------------------|
| Sno | Int | 10 | Primary key |
| Cidno | Int | 6 | Foreign key referenced from profile |
| Service | Varchar | 100 | |
| Description | Varchar | 250 | |
| Image | Longblob | | |

4.2.4 MODULAR DESIGN

Modular design — or "modularity in design" — is an approach that subdivides a system into smaller parts (modules) that can be independently created and then used in different systems to drive multiple functionalities. Besides reduction in cost (due to lesser customization, and less learning time), and flexibility in design, modularity offers other benefits such as augmentation (adding new solution by merely plugging in a new module), and exclusion.

This system is also modularized to reduce the complexity of the system. This contains various modules.

A) User Modules:

User modules are modelled based on the users of the system. This module contains three users:

i) Admin

- administers the entire system.
- can view the details of all companies and organizations.
- check the payment details of each company and also checks the content in each webpage of the company.
- can communicate with other two users to notify some details.

ii) Company/Organization

- Registers into system and adds their company/organization details.
- Adds the content for each page by selecting the template provided by the system, also adds their payment details.
- can view the user queries posted to their company/organization.
- can communicate with other two users to notify/query some details.

iii) User

- can view company's/organization's website.
- can communicate with the companies/organizations to query some details.

B) Registration Module

- This module takes care about user sign in and sign up process.
- New company should register into the system by submit their details along registration form provided by the system.
- Each company can be identified using their unique username and password.

- Registered user can sign in to the system using their username and password.

C) Content Module

- This module contains the process with the content in the web pages.
- Company can add the content to their selected template and save it into this system.
- The contents in the web page will be stored into database with the unique id of each company.
- User can edit their page, delete their page. That will be updated in the database by this system.

D) Reports Module

Reports forms the main output of any system. This system too has many reports which will help administrator to take many important decisions. This system contains many reports based on company id, dates, etc.

CHAPTER 5 SYSTEM IMPLEMENTATION AND TESTING

5.1 IMPLEMENTATION

The system is implemented using PHP and MYSQL.

5.1.1 Implementation of Business Logic

The business logic is implemented using PHP script. Web pages and forms are designed by Dreamweaver(CS3). It contains many controls which make the website very user friendly. The data are entered using the controls and the output is displayed very effectively. The controls are made visible and invisible at needed times. The communication between the UI and Database is through the Scripting language named PHP. PHP script is interpreted with the HTML code when the forms needed scripting. UI uses an HTTP Object to send the data to the Scripting language. After processing of PHP file, the results are returned to UI which can be displayed using various controls and containers.

5.1.2 Implementation of Database Communication

For database communication, MYSQL is used along with PHP. MYSQL is the most popular Open Source SQL database management system. MYSQL has many inbuilt functions to carry out the operations with database. These functions are used as a part of PHP file. Using these functions the queries are executed and the operations on database are carried out. The inputs are received from action script file. The operations are performed according to the command received from the script. Those operations are performed and the results are returned to the forms.

5.2 SYSTEM VERIFICATION

System Verification is the process of evaluating software to determine whether the products of a given development phase satisfy the conditions imposed at the start of that phase. Verification is ensuring that the product has been built according to the requirements and design specifications- i.e., you built it right. Verification is the assurance

that the products of a particular development phase are consistent with the requirements of that phase and preceding phase(s).

In this website, review of interim work steps is done to ensure they are acceptable. In data access, it verifies whether the right data is being accessed in terms of the right place and in the right way.

5.3 SYSTEM VALIDATION

System Validation is the process of evaluating software during or at the end of the development process to determine whether it satisfies specified requirements. Validation checks that the product design satisfies or fits the intended usage (high-level checking) — i.e., you built the right product. This is done through dynamic testing and other forms of review. Validation ensures that the product actually meets the user's needs, and that the specifications were correct in the first place.

In this project, validation checks whether the developer is moving towards the right product. Validation coding is written using scripting language called javascript. Each field in registration form are validated such that the right username, password, personal details etc., is added. Any wrong entry display error messages or warnings. The login form is validated such that the valid registered user only can login to this system. Fields such as email id mobile no are checked for its format. Validation also determines if this project complies with the requirements and performs functions for which it is intended and meets the organization's goal and user needs.

5.4 TESTING

Testing is a critical element of software quality and assurance and represents the ultimate—review of specification design and coding. It is a vital activity that has to be enforced in the development of any system. This could be done in parallel during all the phases of system development. The feedback received from these tests can be used for further enhancement of the system under consideration. The main type of test carried out in Web Content Management System is Unit Testing and Integration Testing.

5.4.1 Unit Testing

A series of stand-alone tests are conducted during Unit Testing. Each test examines an individual component that is new or has been modified. A unit test is also called a module test because it tests the individual units of code that comprise the application. Unit tests focus on functionality and reliability, and the entry and exit criteria can be the same for each

module or specific to a particular module. Unit testing is done in a test environment prior to system integration. If a defect is discovered during a unit test, the severity of the defect will dictate whether or not it will be fixed before the module is approved.

In Web Content Management System each component i.e. each form is tested individually to verify that the detailed design for unit has been correctly implemented. Initially the flow of control and data through that page is checked. In a page, each control is further tested in unit testing. The process is done in all the forms of the system.

5.4.2 Integration testing

Integration testing is a logical extension of unit testing. In its simplest form, two units that have already been tested are combined into a component and the interface between them is tested. A component, in this sense, refers to an integrated aggregate of more than one unit. In a realistic scenario, many units are combined into components, which are in turn aggregated into even larger parts of the program. The idea is to test combinations of pieces and eventually expand the process to test your modules with those of other groups. Eventually all the modules making up a process are tested together. Beyond that, if the program is composed of more than one process, they should be tested in pairs rather than all at once. Integration testing identifies problems that occur when units are combined.

Many forms in the system have communication between each other. This helps in testing integration testing. For ex: if the company logins, first system should check whether they are the valid user and then it should move to the company home page and display the possible links of the company. Here more than a single process is involved and so it needs integration testing.

CHAPTER 6 CONCLUSION AND FUTURE ENHANCEMENT

6.1 CONCLUSION

Web Content Management System is developed to help the companies/organizations with the idea of reducing their work in creating their web sites and managing those contents. They can easily manage the contents of the each page in their website created by using this system. This system helps in easy communication between the companies and the users. This system gives many provisions to add the content such as text, images and links.

This system also helps the company to know the expiry date of their website, in advance through mail. Users can also communicate with companies to clarify their doubts by sending queries to the particular company.

Web sites are imported into the system after the verification of administrator. So that illegal information provided by the companies is strictly avoidable. User can view many websites at one spot.

It is designed to be highly flexible, so that any future modification and requirements can easily be incorporated.

6.2 FUTURE ENHANCEMENT

This project has been developed as a Master's project and is constrained by time. There is scope for extending the system as per the need.

More templates can be added, if the need arises. Also web pages will be added dynamically as per companies need. A functionality can be designed that will help companies to maintain their account system through this website and communicate with their business partners, etc.

Provision to search templates, download templates can be provided in future. Provision to maintain mailbox for each company to communicate with this system and users and they can import their profile as a document instead of filling the registration form.

As this is a website project, we can include some useful links in each page of the site.

APPENDIX

SCREEN SHOTS

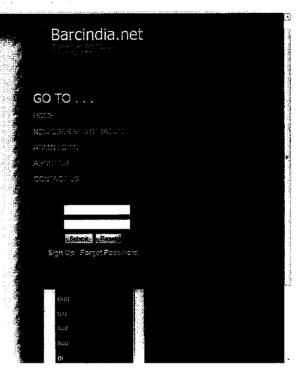
Home Page:

Web Content Management System

A Web content management system (WCM, WCMS or Web CMS) is content management system (CMS) software, implemented as a Web application, for creating and managing HTML content it is used to manage and control a large, dynamic collection of Web material (HTML documents and their associated images). A WCMS facilitates content creation, content control, editing, and essential Web maintenance functions.

The software provides authoring (and other) tools designed to allow users with little knowledge of programming languages or markup languages to create and manage content with relative ease. Most systems use a database to store content, metadata, or artifacts that might be needed by the system. Content is frequently, but not universafy, stored as XML, to facilitate reuse and enable flexible presentation ontrops.

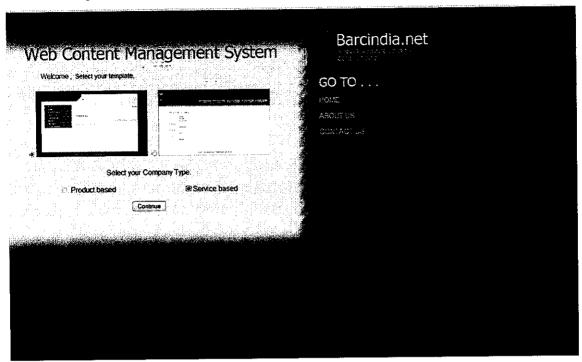
This content management system provides several templates to design the webpages. User should login to the system to make use of it.



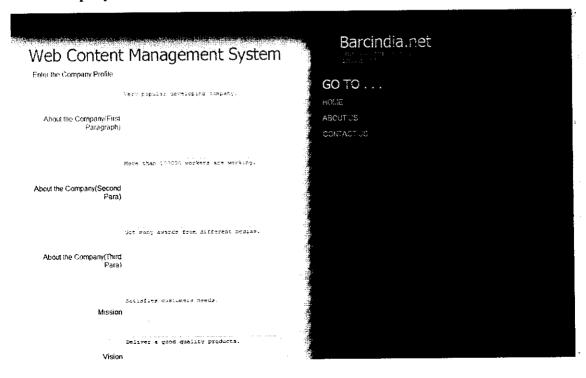
Company Registration:

Barcindia.net Web Content Management System GO TC . . . USER REGISTRATION Company Name introve Company slogan, make an simple Contact Person, Rusi N. Address Line 1 22 kk nagar Address Line2 chemiai Country India Pinicode (3862) Phone Number 044 2000543 Mobile Number, 9940075123 E-Mail Address ചർത്വനാലാന User Name intosys Conform Password **** Ok Reset " Trail for one month

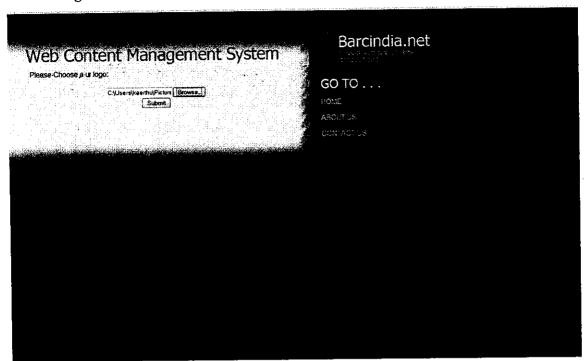
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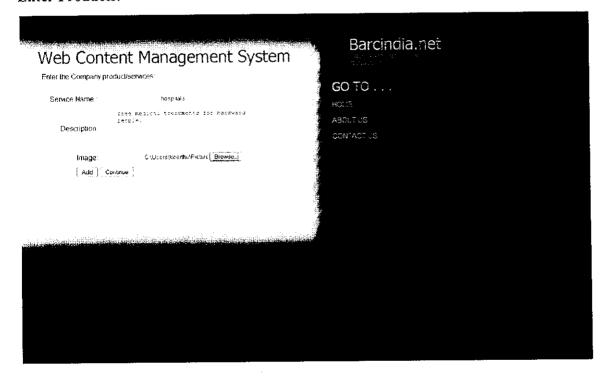
About company:



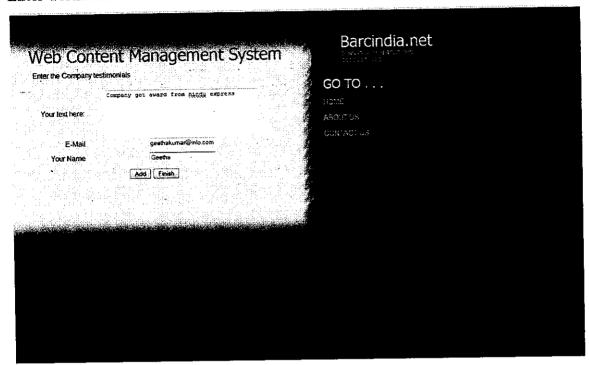
Choose Logo:



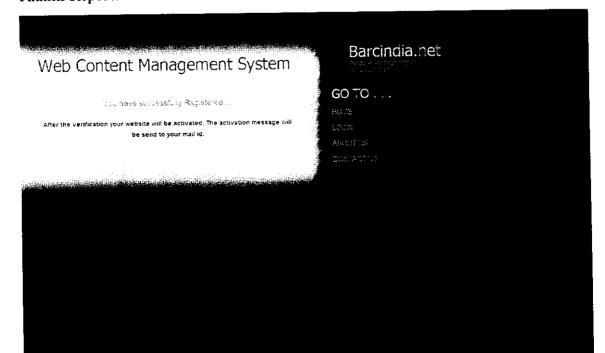
Enter Products:



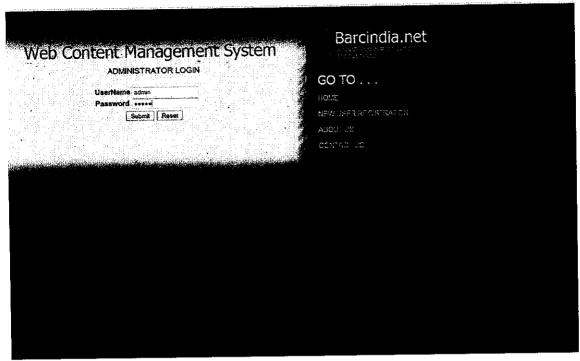
Enter Testimonials:



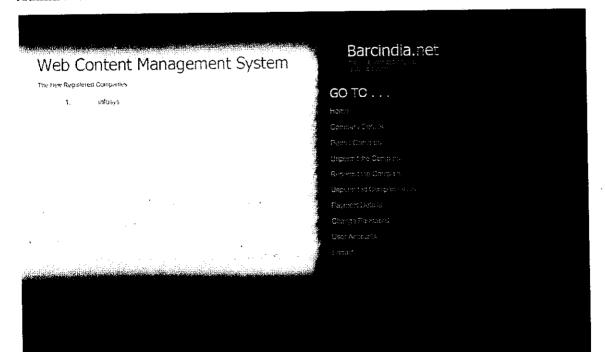
Thanks Report:



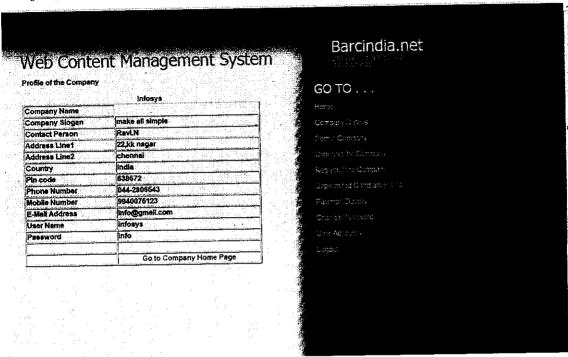
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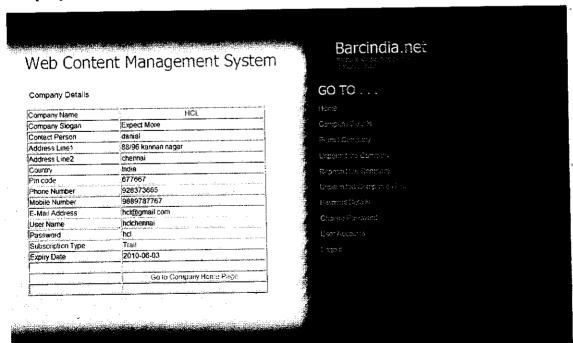
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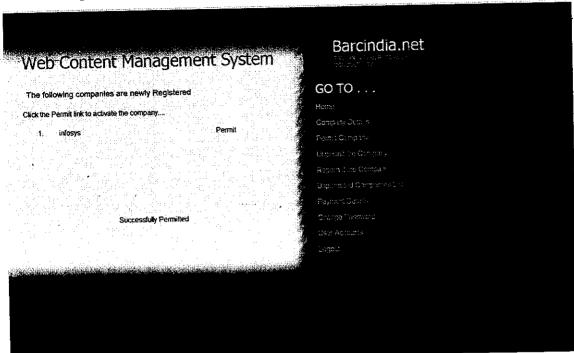
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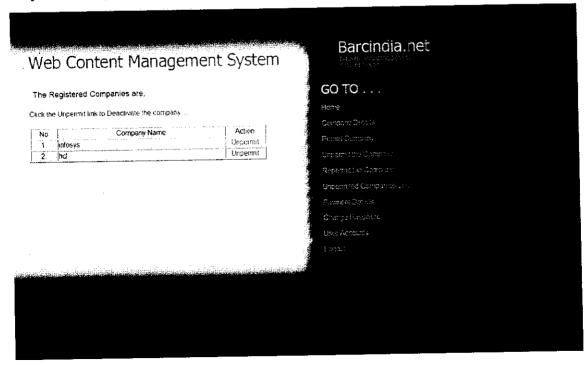
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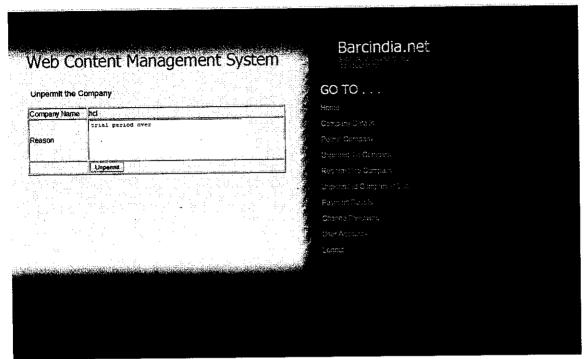
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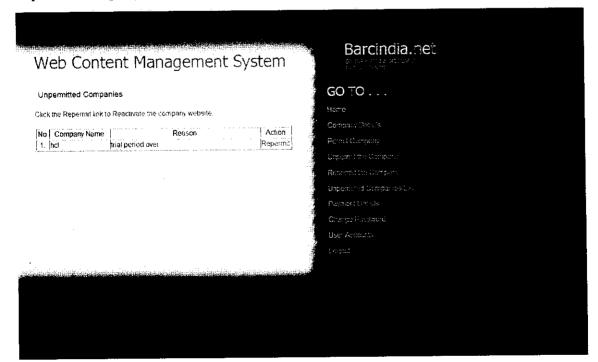
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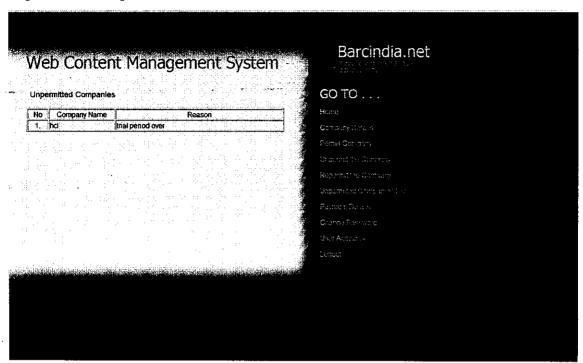
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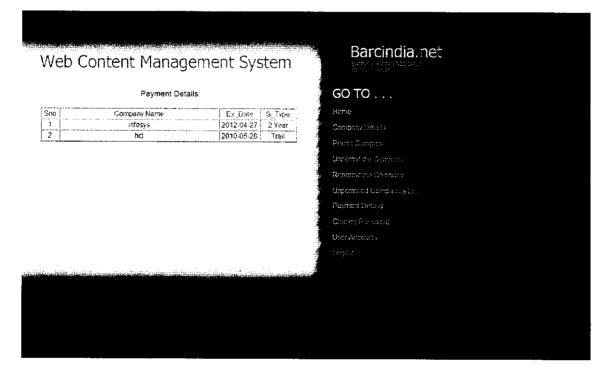
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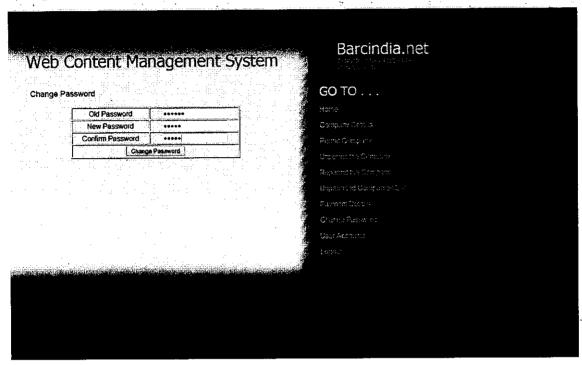
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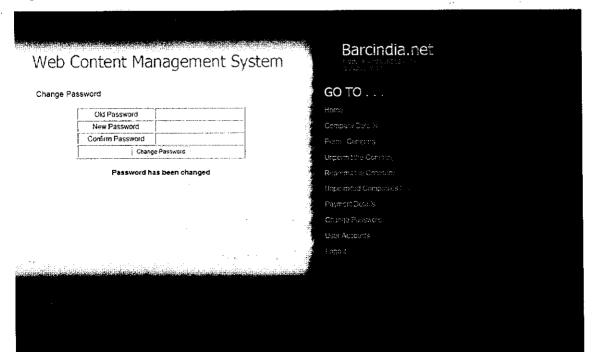
Payment Details:



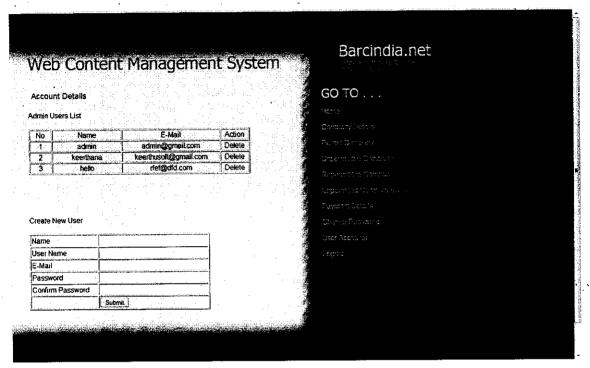
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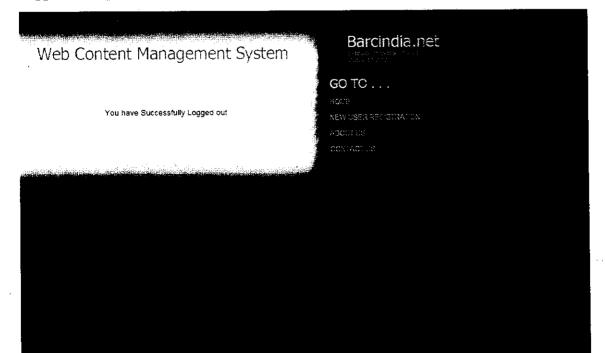
Report about changed password:



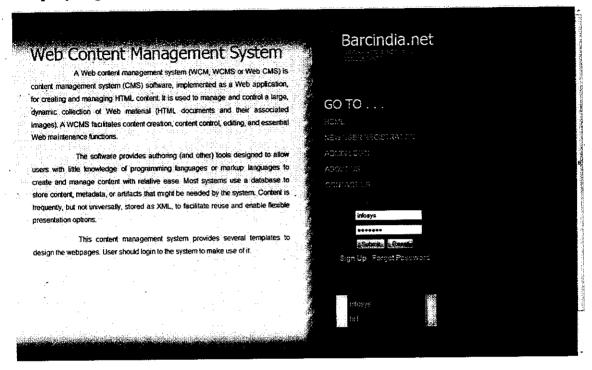
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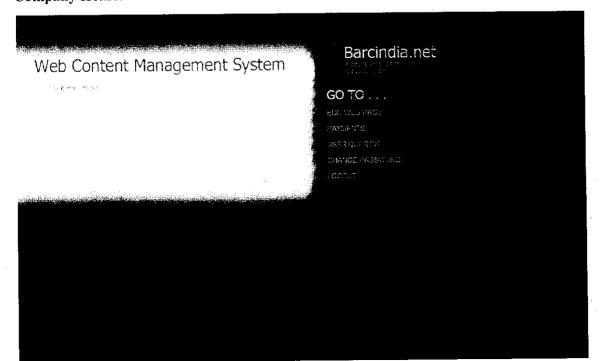
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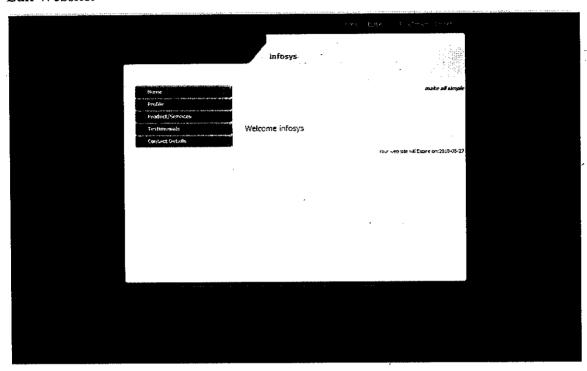
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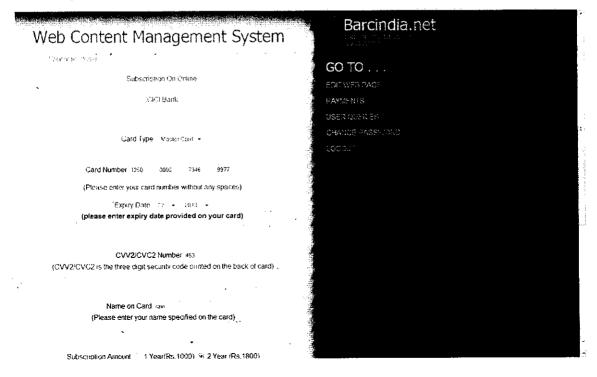
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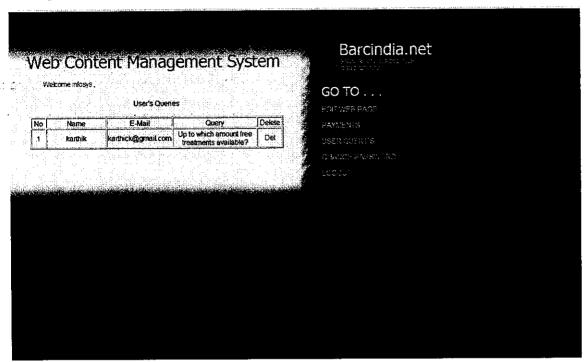
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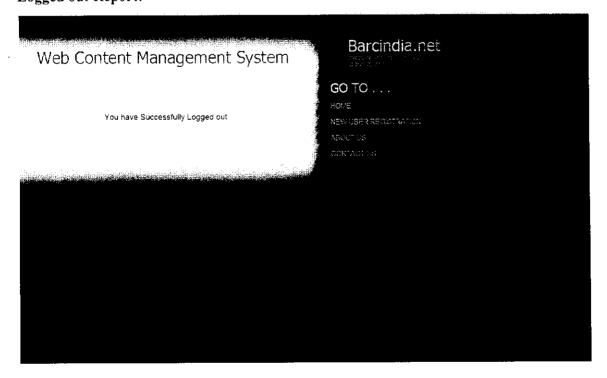
Make Payment:



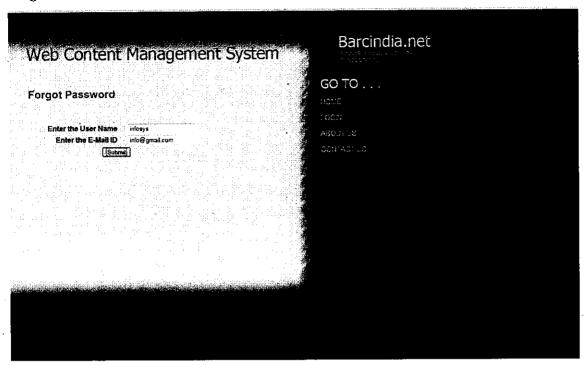
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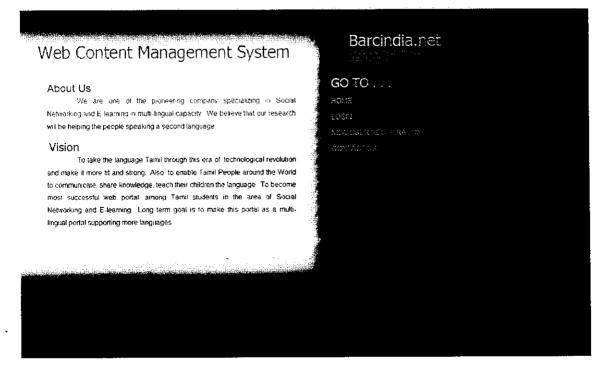
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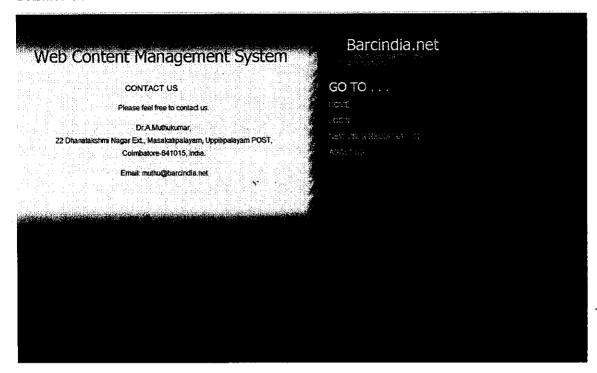
Forgot Password:



About Us:

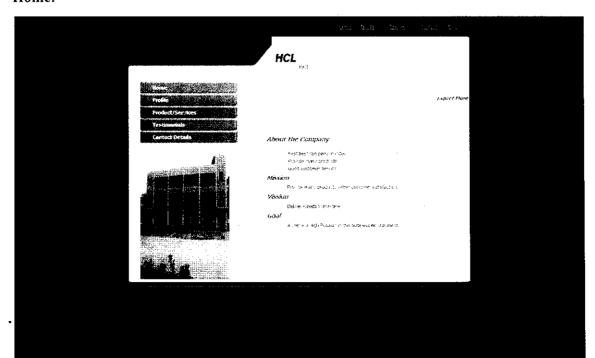


Contact Us:

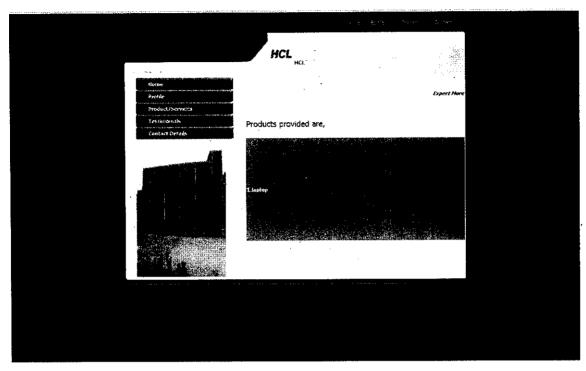


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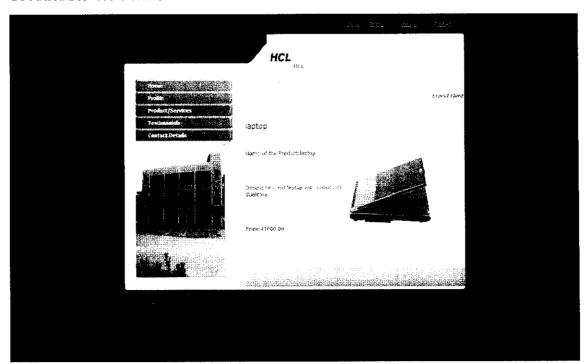
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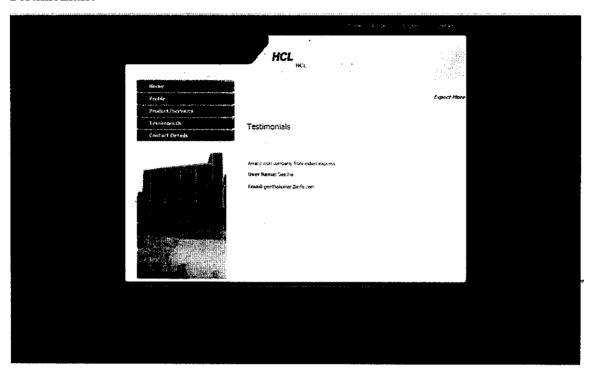
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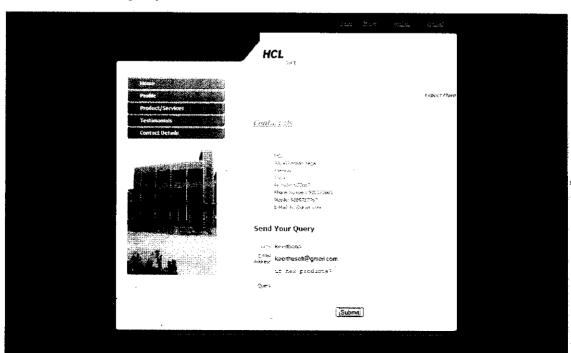
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Testimonials:

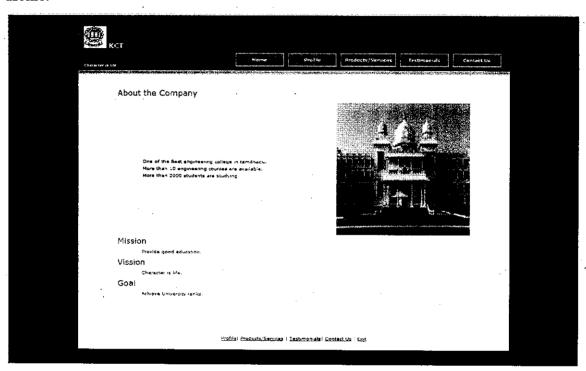


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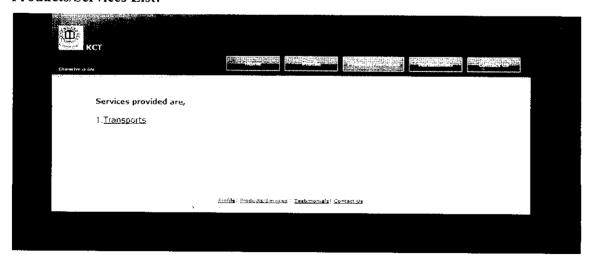


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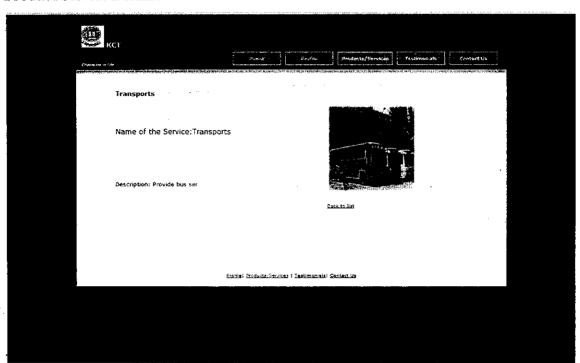
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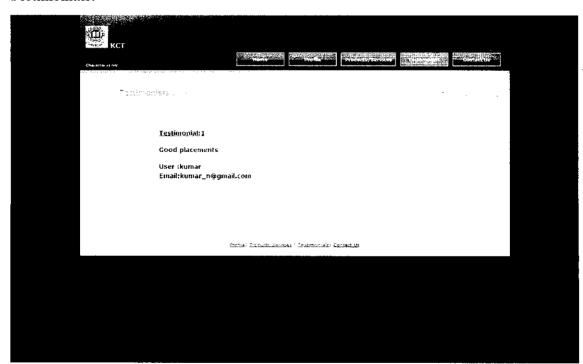
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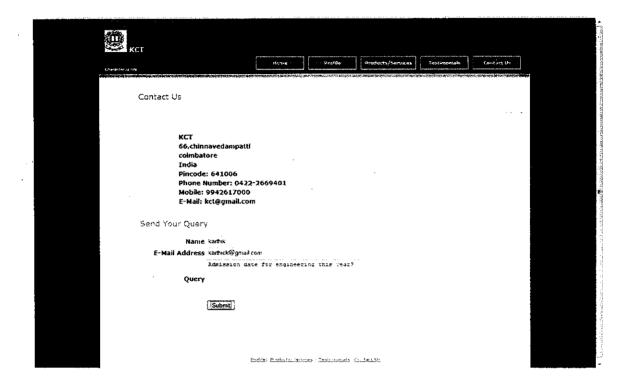
Product/Service Details:



Testimonials:



Contact and User Query:



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- 5. http://www.w3schools.com (Many Tutorials Available)
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