CONTENT MANAGEMENT SYSTEM FOR JEWELLERY SHOP WEBSITE

J.PAVITHRA
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A Project Report Submitted to

Avinashilingam Institute for Home Science and Higher Education for Women

University, Coimbatore-641043

In Partial fulfillment of the Requirements for the

Master's Degree in Computer Applications

March, 2015

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Signature of the Supervisor **Signature of the Head of the Department**

Signature of the External Examiner

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SYNOPSIS

The project work entitled as **“Content Management System for Jewellery Shop Website”** is developed as a suitable information system to enable content authors to publish or update information on the organization’s website without the need for web programming skills or help of a technical person. The process of publishing and updating information onto organization’s intranet in that way, proved time consuming to both web developers and content authors, therefore a requirement was identified to develop a prototype intranet to empower content authors to publish information onto the organization’s intranet without the need to web programming skills or help of a technical person.

A content management system (CMS) is a system used to manage the content of a Web site. Typically, a CMS consists of two elements: the content management application (CMA) and the content delivery application (CDA). The CMA element allows the content manager or author, who may not know Hypertext Markup Language (HTML), to manage the creation, modification, and removal of content from a Web site without needing the expertise of a Webmaster. The CDA element uses and compiles that information to update the Web site.

In this project, the content author investigates details about Content Management Systems, identifies that features, advantages and disadvantages of using them within organizations and classify available methods to obtain them, etc, it also develop a prototype intranet featuring Content Management Systems to allow department administrators update information on their department section of the organisation’s intranet without having knowledge in web programming nor receiving help from web development team, each administrator is provided with secure login details, and contents published and updated using simple web based user interface.

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1. INTRODUCTION

1.1 Problem Definition

The main problem in existing system is websites are static so it is difficult for the users to make changes. If they want to make any changes in websites they have to contact the web developer. This process takes more time to complete the changes and also increase the cost. To overcome this problem a new content management system has developed.

1.2 Overview Of The Project

Traditionally it is believed that the CMS is as a transformation process that takes set of inputs and transforms them into the output. The output can be the goods or services. This includes the effective planning, scheduling and control of the activities that produce the required outcomes CMS plays a key role in determining the success or failure of an organization. To carry forwards the inputs of each unit all together and getting turned it into the outputs is the real synergy, which helps organization to set the directions towards climbing the heights of success.

In the world of CMS, content and design are separated. By content we mean information that is to be organized and stored using some structure. For example, it may be the actual contents of a news article (title, intro, body, and images), the details of a jewellery (model, year, and rate) and so on. In other words, all custom information that is stored for the purpose of later retrieval is referred to as content.

Design

The information stored in a content structure must be presented somehow, preferably in a way that is easily understood by humans. While content means actual data, design is all about the way the data is marked up and visually presented. When talking about design, we're talking about the things that make up a web interface: HTML, style sheets, images that are not a part of the content, etc

Templates

CMS uses templates as the fundamental unit of site design. For example, a template might dictate that a page should appear with the site's title bar on the top, and then main content in the middle. When the page is accessed, it then becomes the content management system's job to "flow" the content into the appropriate places in the template. An CMS template is basically a custom HTML file that describes how some particular type of content should be visualized

The separation of content and design

While content is all about storing and structuring custom/raw data, the purpose of the design is to dictate how the content should be visualized. The result of a combination of these elements is a complete interface, as illustrated in the following diagram.

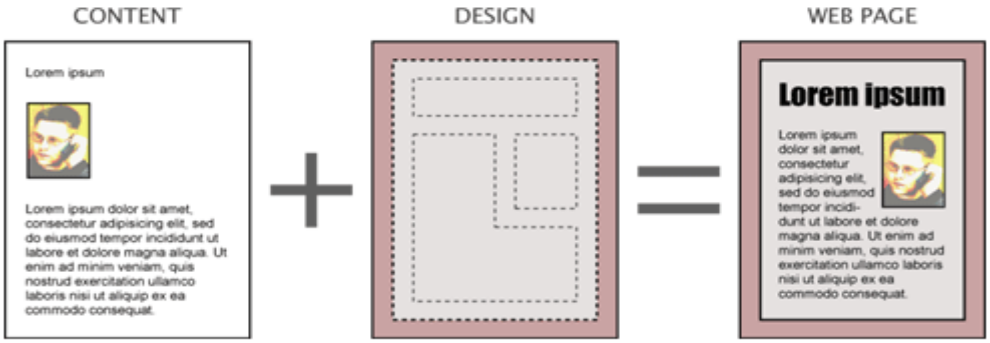

Fig 1. Content + Design = Web page

This distinction and the system's ability to handle it is one of the key features of CMS. The separation of content and design opens up an entire range of possibilities that simply cannot be achieved otherwise. The following list outlines some of the most important benefits of this technique:

- Content authors and designers can work separately without conflicts
- Content can be published easily in multiple formats
- Content can easily be transferred and re-purposed

Storage

This section explains where CMS stores information that belongs to a site (not the system itself). A typical CMS site consists of the following elements:

- Actual content
- Design related files
- Configuration files

Actual content is structured and stored inside a database. This is true for all content except for images and files, which are stored on the file system. The main reason for this is because the file system is much faster than the database when it comes to the storage and retrieval of large data chunks. Having the files on the files System allows the web server to serve them directly without the need of going through the database.

In addition, this technique makes it easier to use external tools to manipulate/scan/index the contents of the uploaded files. For example, the built in search engine is capable of using external utilities to index the contents of miscellaneous files (PDF, Word documents, Excel sheets, etc.). Having the files on the file system dramatically decreases the size of the database and thus makes it easier to copy and handle. Everything that is related to design (template files, CSS files, non content specific images, etc.) and configuration settings are also stored on the file system. A backup of a CMS site must therefore contain both a dump of the database and a copy of the necessary files. The following illustration shows an overview of how the system makes use of the database and the file system to store the different elements of a site.

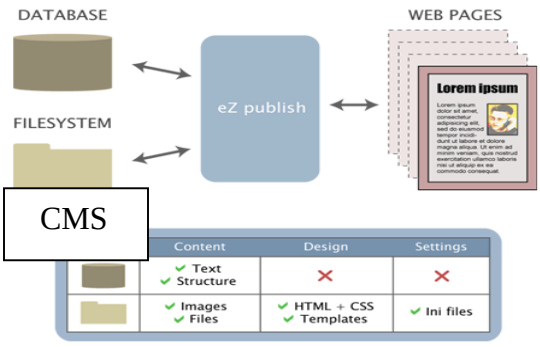

Fig 2. Storage overview

2. SYSTEM CONFIGURTION

2.1 Hardware Specification

Processor	:	Intel Pentium III
RAM	:	256 MB
Memory	:	64 Megabytes
Hard Disk	:	20 GB

2.2Software Specification

Operating System	:	Windows 98/2000/XP/NT
Server side Script	:	Php
Back-End Tool	:	Mysql

2.3 About the Software

2.3.1 PHP (Preprocessor Hypertext)

PHP is an "HTML-embedded scripting language" primarily used for dynamic Web applications. The first part of this definition means that PHP code can be interspersed with HTML, making it simple to generate dynamic pieces of Web pages on the fly. As a scripting language, PHP code requires the presence of the PHP processor.

PHP code is normally run in plain-text scripts that will only run on PHP-enabled computers. PHP takes most of its syntax from C, Java, and Perl. It is an open source technology and runs on most operating systems and with most Web servers.

PHP was written in the C programming language by Rasmus Lerdorf in 1994 for use in monitoring his online resume and related personal information. Lerdorf combined PHP with his own Form Interpreter, releasing the combination publicly as PHP/FI (generally referred to as PHP 2.0) on June 8, 1995.

Two programmers, Zeev Suraski and Andi Gutmans, rebuilt PHP's core, releasing the updated result as PHP/FI 2 in 1997. The acronym was formally changed to PHP: HyperText Preprocessor, at this time.

PHP 4 was released in May 2000, with a new core, known as the Zend Engine 1.0. PHP 4 featured improved speed and reliability over PHP 3.In terms of features, PHP 4 added references, the Boolean type, COM support on Windows, output buffering, many new array functions, expanded object-oriented programming, inclusion of the PCRE library, and more. Maintenance releases of PHP 4 are still available, primarily for security updates. PHP 5 was released in July 2004, with the updated Zend Engine 2.0.

The new features in PHP5 include Improved object-oriented programming, embedded SQLite, support for new MySQL features, exception handling using a try..catch structure , integrated SOAP support, the Filter library, better XML tools, iterators and much more.

PHP 6 has been in development since October of 2006. The most significant change will be native support for Unicode. Unpopular, deprecated features such as Magic Quotes, register_globals, safe_mode, and the HTTP_*_VARS variables will disappear in PHP 6. Although PHP is still primarily used for server-side generation of Web pages, it can also be used to perform command-line scripting or to create graphical applications with the help of GTK+.

Originally started in 1994 as a replacement for various Perl scripts used to maintain his Personal Web Page (thus the acronym PHP) by the Danish/Greenlandish programmer Rasmus Lerdorf, the project has since grown into an open source community effort. Initial uses of PHP were limited to basic tasks such as counting how many visitors a web site had received, the introduction of PHP/FI (The FI stands for Form Interpreter) added additional functionality including implementation for the C programming language.

In addition to the inclusion of C support, PHP/FI also introduced native support for database communications. These two features have become the bedrock for future versions of PHP and together allowed the relatively swift and easy construction of dynamic web sites. While sites created with PHP at that time may be considered simple by modern standards were still leaps and bounds more impressive than static content and certainly helped to pave the way for the internet to flourish and grow as a medium.

In 1995 Lerdorf made the project public in an effort to improve the PHP code base in both reliability and scope. This release would eventually be known as PHP 2.

PHP 3 began in 1997 when a pair of Israeli developers at Technion IIT decided to rewrite the parser. The two would later form Zend Technologies, a company named after blending their two names: Zeev (Suraski) and Andi (Gutmans). The company would eventually produce the Zend Engine, the first public version of which powered PHP 4 upon its release in 2000.

The successor to Zend Engine is the Zend Engine II which was the basis for PHP 5. PHP 5, released in 2004, is perhaps the most radical and some consider long overdue revamp to PHP as it finally brings true Object Oriented Programming (OOP) to developers who have long since grown used to writing object oriented code.

PHP Security

The National Vulnerability Database stores all vulnerabilities found in computer software. The overall proportion of PHP-related vulnerabilities on the database amounted to: 20% in 2004, 28% in 2005, 43% in 2006, 36% in 2007, and 35% in 2008. Most of these PHP-related vulnerabilities can be exploited remotely: they allow hackers to steal or destroy data from data sources linked to the web server (such as an SQL database), send spam or contribute to DOS attacks using malware, which itself can be installed on the vulnerable servers.

These vulnerabilities are caused mostly by not following best practice programming rules: technical security flaws of the language itself or of its core libraries are not frequent (23 in 2008, about 1% of the total).

Recognizing that programmers cannot be trusted, some languages include taint checking to detect automatically the lack of input validation which induces many issues. Such a feature is being developed for PHP, but its inclusion in a release has been rejected several times in the past.

Hosting PHP applications on a server requires a careful and constant attention to deal with these security risks. Its flexibility knows no end. There are advanced protection patches such as Suhosin and Hardening-Patch, especially designed for web hosting environments. Installing PHP as a CGI binary rather than as an Apache module is the preferred method for added security.

PHP - What Is It?

Taken directly from PHP's home, “PHP is an HTML-embedded scripting language. Much of its syntax is borrowed from C, Java and Perl with a couple of unique PHP-specific features thrown in. The goal of the language is to allow web developers to write dynamically generated pages quickly."

This is generally a good definition of PHP. However, it does contain a lot of terms you may not be used to. Another way to think of PHP is a powerful, behind the scenes scripting language that your visitors won't see! When someone visits your PHP webpage, your web server processes the PHP code.

It then sees which parts it needs to show to visitors (content and pictures) and hides the other stuff (file operations, math calculations, etc.) then translates your PHP into HTML. After the translation into HTML, it sends the webpage to your visitor's web browser.

PHP – What Does It Do?

It is also helpful to think of PHP in terms of what it can do for you. PHP will allow you to:

- Reduce the time to create large websites.
- Create a customized user experience for visitors based on information that you have gathered from them.
- Open up thousands of possibilities for online tools.
- Allow creation of shopping carts for e-commerce websites.
- HTML - Know the syntax and especially HTML Forms.
- Basic programming knowledge - This isn't required, but if you have any traditional programming experience it will make learning PHP a great deal easier.

2.3.2 MY SQL

The Structured Query Language (SQL) is a very popular database language, and its standardization makes it quite easy to store, update and access data. One of the most powerful SQL servers out there is called MySQL and surprisingly enough, its free.

Some of the features of MySQL Include:

- Handles large databases, in the area of 50,000,000+ records.
- No memory leaks. Tested with a commercial memory leakage detector (purify).
- A privilege and password system which is very flexible and secure, and which allows host-based verification.

MySQL is a powerful Relational Database Management System (RDBMS) which we will use to learn the basic principles of database and data manipulation using Structured Query Language (SQL) statements. SQL is a database language that is used to retrieve, insert, delete and update stored data. This is achieved by constructing conditional statements that conform to a specific syntax (i.e. the strict order required of elements for a statement to work).

How does MySQL work?

MySQL is a database server program and as such is installed on one machine, but can 'serve' the database to a variety of locations. To explain look at the following diagram.

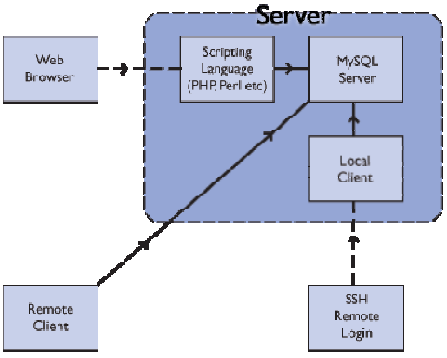

Fig 3: How does Mysql Works?

The MySQL Server is installed on a Server and can be accessed **directly** via various client interfaces, which send SQL statements to the server and then display the results to a user. Some of these are:

A Local Client – is a program on the same machine as the server. An example of this is the command line MySQL client software we will be using in the rest of the MySQL workshops (although there are other programs including graphical interfaces).

A Scripting Language - can pass SQL queries to the server and display the result.

A Remote Client – is a program on a different machine that can connect to the server and run SQL statements. We can also use two more indirect methods.

Remote Login - We may be able to connect to the Server Machine to run one of its local clients.

Web Browser - We can use a web browser and scripts that someone has written (we're going to use this method for the rest of the workshop).

History of MYSQL

It was started out with the intention of using the MySQL database system to connect to our tables using our own fast low-level (ISAM) routines. However, after some testing, we came to the conclusion that mSQL was not fast enough or flexible enough for our needs.

This resulted in a new SQL interface to our database but with almost the same API interface as MySQL. This API was designed to allow third-party code that was written for use with mSQL to be ported easily for use with MySQL.

MySQL is named after co-founder Monty Widenius's daughter, My. The name of the MySQL Dolphin (our logo) is “Sakila,” which was chosen from a huge list of names suggested by users in our “Name the Dolphin” contest.

The winning name was submitted by Ambrose Twebaze, an Open Source software developer from Swaziland, Africa.

The history of MySQL dates back to 1995. For those of you that don't know what MySQL is, MySQL is a database program. Best MySQL Web Hosting has written this short article on the history of MySQL. We hope you learn from this article.

As mentioned before, MySQL was started in 1995 under the name of MySQL AB. MySQL was founded by three guys, Michael Widenius, David Axmark, and Allan Larsson. The company was eventually sold in 2008 to Sun Microsystems at a cost of one billion dollars. MySQL has offices in Sweden and California.Throughout MySQL's history, there have been numerous highlights that have made the computer industry better and what it is today. Those highlights are the following:

1998: Windows decided to release their version for the Windows 95 and NT programs.

2001: MySQL released version 3.23.

2003: MySQL released version 4.0. Version 4.0 featured the union clause. The union clause allowed two data groups to be merged into one group.

2004: MySQL released version 4.1. Version 4.1 featured R-trees, B-trees, subqueries, and prepared statements. R-trees are data structures that are used for spatial access methods. B-trees are also data structures but their main purpose is to keep data sorted for easier access.

2005: MySQL released version 5.0. Version 5.0 contained cursors, triggers, views, stored procedures, and XA transactions. Cursors are important because they assist in the processing of rows within database queries. Triggers come in two different versions; row and statement. Basically, triggers are codes that are the end result of certain actions within the database.

2008: MySQL releases version 5.1. Version 5.1 includes partitioning, event scheduler, row based replications, server log tables, and plugin API.

MqSQL is not stopping with version 5.1. Just like they have done since 1995, they are continuing to improve MySQL. MySQL 6.0 is already in the works and it is going to contain referential integrity, additional unicodes, and a new storage engine.The MySQL database has become the world's most popular open source database because of its consistent fast performance, high reliability and ease of use.

Uses

Many web applications use MySQL as the database component of a LAMP software stack. Its popularity for use with web applications is closely tied to the popularity of PHP, which is often combined with MySQL. Several high-traffic web sites (including Flicker, Facebook, Wikipedia, Google. (though not for searches), Nokia and You Tube) use MySQL for data storage and logging of user data.

Platforms And Interfaces

MySQL code uses C and C++. The SQL parser uses yacc and a home-brewed lexer, sql_lex.ccMySQL works on many different system platforms, including AIX, BSDi, FreeBSD, HP-UX, i5/OS, Linux, Mac OS X, NetBSD, Novell NetWare, OpenBSD, Open Solaris, eComStation, OS/2 Warp, QNX, IRIX, Solaris, Symbian, SunOS, SCO Open Server, SCO UnixWare, Sanos, Tru64 and Microsoft Windows. A port of MySQL to OpenVMS also exists.

All major programming languages with language-specific APIs include Libraries for accessing MySQL databases.In addition, an ODBC interface called MyODBC allows additional programming languages that support the ODBC interface to communicate with a MySQL database, such as ASP or Cold Fusion. The MySQL server and official libraries are mostly implemented in ANSI C/ANSI C++.

2.3.3 Javascript

Java Script is the scripting language of the Web. JavaScript is used in millions of Web pages to add functionality, validate forms, detect browsers, and much more. JavaScript, despite the name, is essentially unrelated to the Java programming language even though the two do have superficial similarities. Both languages use syntaxes influenced by that of C syntax, and JavaScript copies many Java names and naming conventions. The language's name is the result of a co-marketing deal between Netscape and Sun, in exchange for Netscape bundling Sun's Java runtime with their then-dominant browser.[citation needed] The key design principles within JavaScript are inherited from the Self and Scheme programming languages.

"JavaScript" is a trademark of Sun Microsystems. It was used under license for technology invented and implemented by Netscape Communications and current entities such as the Mozilla Foundation.

What Is Javascript?

- JavaScript was designed to add interactivity to HTML pages
- JavaScript is a scripting language
- A scripting language is a lightweight programming language
- JavaScript is usually embedded directly into HTML pages
- JavaScript is an interpreted language (means that scripts execute without preliminary compilation)
- Everyone can use JavaScript without purchasing a license

What Can a Javascript Do?

- **JavaScript gives HTML designers a programming tool -** HTML authors are normally not programmers, but JavaScript is a scripting language with a very simple syntax! Almost anyone can put small "snippets" of code into their HTML pages
- **JavaScript can put dynamic text into an HTML page -** A JavaScript statement like this: document. Write("<h1>" + name + "</h1>") can write a variable text into an HTML page
- **JavaScript can react to events -** A JavaScript can be set to execute when something happens, like when a page has finished loading or when a user clicks on an HTML element

2.3.4 Hypertext Markup Language (HTML)

HTML, an initialism of Hypertext Markup Language, is the predominant markup language for web pages. It provides a means to describe the structure of text-based information in a document — by denoting certain text as headings, paragraphs, lists, and so on — and to supplement that text with interactive forms, embedded images, and other objects.

HTML is written in the form of labels (known as tags), surrounded by angle brackets. HTML can also describe, to some degree, the appearance and semantics of a document, and can include embedded scripting language code which can affect the behavior of web browsers and other HTML processors.

HTML is also often used to refer to content of the MIME type text/html or even more broadly as a generic term for HTML whether in its XML-descended form (such as XHTML 1.0 and later) or its form descended directly from SGML.

Basic HTML Tags

- <! -- --> specifies comments
- <A>…….</A> Creates hypertext links
- <B>…….</B> Formats text as bold
- <BIG>…….</BIG> Formats text in large font.
- <BODY>…</BODY> Contains all tags and text in the HTML document
- <CENTER>...</CENTER> Creates text
- <DD>…</DD> Definition of a term
- <DL>...</DL> Creates definition list
- <FONT>…</FONT> Formats text with a particular font
- <FORM>...</FORM> Encloses a fill-out form
- <FRAME>...</FRAME> Defines a particular frame in a set of frames
- <H#>…</H#> Creates headings of different levels(1 – 6)
- <HEAD>...</HEAD> Contains tags that specify information about a document
- <HR>...</HR> Creates a horizontal rule
- <HTML>…</HTML> Contains all other HTML tags
- <META>...</META> Provides meta-information about a document
- <SCRIPT>…</SCRIPT> Contains client-side or server-side script
- <TABLE>…</TABLE> Creates a table
- <TD>…</TD> Indicates table data in a table
- <TR>…</TR> Designates a table row
- <TH>…</TH> Creates a heading in a table.

3. SYSTEM STUDY AND ANALYSIS

3.1 Existing Methodologies

The existing system is being done only for the static category as well as for static menu. Each transaction is entered in a exiting menus only. The process can be prone to resulting in errors and in duplication of data. Apart from tedious process, there is a chance for missing data and reports. The existing system has the following drawbacks:

1. Need to add contents and images are manually.
2. Presents information and instructions could not be change as per the user wish.
3. Updations are very slower.

3.2 Proposed Methodologies

This project helps you maintain the details of the customer, products and dealers details in full fledged security. Unauthorized persons cannot access the data. The difficulties of the existing system and their requirements and the new system are developed with the following Advantages:

- Ability to add or edit pages on your website yourself
- Not have to pay your developer monthly maintenance or hourly rate for changes
- Useful in organizations, with many content contributors, that perhaps need to audit additions and changes to content being made

The right system along with getting the system right has been achieved. The system has been designed to perfectly fit into the organization. Features that support the organization's success strategy have been an integral part of the system. Thus the features included in the system would certainly help to ensure the organization's continued success. It strives to be engineered for people and to include economic features.

3.3 Feasibility Study

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential. Three key considerations involved in the feasibility analysis are

- ECONOMICAL FEASIBILITY
- TECHNICAL FEASIBILITY
- OPERATIONAL FEASIBILITY

3.3.1 Economical Feasibility

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased.

3.3.2 Technical Feasibility

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

3.3.3 Operational Feasibility

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it. His level of confidence must be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

4. SYSTEM DESIGN

Design is the first step in the development phase of any engineered system design can be defined as the transition from user's view to the view of programmers and database personnel. System design is a modeling process. It concentrates on transferring requirement specification to design specification. The inputs to the design are software requirements and the output will be the design specification applicable to all software design .This system design act as a bridge between the requirement specification and implementation phase.

This phase underwent preliminary and exhaustive design sub phases before implementation took over. The major steps in the phase are Input design, Output design.

4.1 Input Design

Input design is a part of overall system design. The main objective during the input designs the input designs is given bellow:

The main input stages can be listed below:

- Back Office
- Front office

The input forms are developed in a user-friendly way so that validation also can easily understand everything. Menus are provided to users and interactive dialogues are designed so that it navigation pages easy. So the forms are designed in such a way that the end-use can easily navigate through the entire web application.

The goal of designing for input data has been accomplished by making the entry easy, logical and free form errors. The form also displays the static and dynamic content that is being extracted from various website in order for the better understanding of the user. Links, Images, menus, animation text are provided to users and a slider is designed so the proposed system design looks decorative. Input design is the part of the overall system design.

Home Page which holds the common user interface functionality for the entire application. It uses the html controls like list and also uses the cascading style sheet properties margin, font, border, float, list-style-type, padding, height, width, background-colour, text-decoration to enhance the user interface functionality. The web forms also uses the web user interface controls like content placeholder, panel, label, text box, drop down box,button.

4.2 Output Design

Output forms are also designed in a specific manner as per the user requirements. Results are formatted to enhance clarity. Depending on the user web browser would generate appropriate output. The output forms are designed in such a way that the entire user required data is presented.

The readability and understandability of the output satisfies the customer. Therefore, the output should be such that the format is easy to understand and read for the customer. Output design is the most important part as it is the direct source for the censer efficiency and intelligence. The major form of the output is the hard copy, generated through the printers. The objectives to be fulfilled during the output design are:

- Output design should satisfy the needs of the information requirement.
- Select the appropriate methods for presenting the information.
- Create reports such that they are easily understandable and efficient.

For the end-users, the output is what they work for and so it must be useful for all the users. The output must satisfy all the needs of the users and the customer.

5. SYSTEM DEVELOPMENT

System development is a series of operations performed to manipulate data to produce output from a computer system. This is a highly dependent on the programming language used. The principal activities performed during the development phase can be divided into major related sequence. They are

Internal

Output

The major internal system development activities done for the system are computer program development and performance testing.

The major external system development activities are done by implementation, planning, equipment, acquisition and installation.

5.1Modules

- Back Office Pages
  - Menu
  - Gallery
  - Product
  - Content
  - Order Confirmation
- Front Office Pages
  - Homepage
  - Product Selection

5.2Module Description

5.2.1 Back office Process

In the Back office Process Admin will modify the details like menu, gallery images, product information, content etc .and then update into database.

- **Menu**

  In this module admin will create new menu and if there is any change or modification in the existing menu admin will make correction and he can also delete the menu in the organizational website.

- **Gallery**

  In this module admin has to add the images of the various designs according to the new arrivals. And he can also delete the images in the organizational website gallery.

- **Product**

  In this module admin will add and edit the products along with its details according to the category wise which is maintained by the shop. And he can also delete the sold product details.

- **Content**

  In this module the description about the content will be added, edited and deleted by the admin according to the current changes.

- **Order Confirmation**

  In this module admin view the customer's order details and process the customer orders. The acknowledgement about the orders will be sent to the customers.

5.2.2 Front office process

In the front office process the updated information (Back office process) of the website will be fetched from the database and can be displayed to the organizational website.

- **Home Page**

  Homepage will get data from the database - which is filled from the back office pages also will update and display to the organization website menu, gallery, products and content.

- **Product Selection**

  These modules deals with the Family-category-subcategory of the product and it will display the separate menu for the each category. And it will select from the user also it will add to the cart .After login the users can view the status of the product order details.

6. SYSTEM TESTING AND IMPLEMENTATION

6.1 System Testing

Testing Methodologies and Policies

Testing is an activity to verify that a correct system is being built and is performed with the intent of finding faults in the system .However not restricted to being performed after the development phase is complete. But this is to carry out in parallel with all stages of system development, starting with requirement specification. Testing results once, gathered and evaluated, provide a qualitative indication of software quality and reliability and serve as a basis for design modification if required a project be set to be incomplete without proper testing.

System testing is a process of checking whether the development system is working according to the original objectives and requirements. The system should be tested experimentally with test data so as to ensure that the system works according to the required specification. When the system is found working, test it with actual data and check performance.

All tests should be traceable to customer requirements. The focus of testing will shift progressively from programs. Exhaustive testing is not possible. To be more effective, testing should be one, which has probability of finding errors.

The Following are the attributes of good test

A good test has a high probability of finding an error

A good test is not redundant.

A good test should be “Best of Breed”.

A good test should neither too simple nor too complex.

6.2 Types of Testing

The details of the software functionality tests are given below

The testing procedures that has been used is as follows

1. Unit Testing
2. Validation Testing
3. Output Testing
4. Performance Testing

6.1.1. Unit Testing

The first level of testing is called as unit testing. Here the different modules are tested and the specifications produced during design for the modules. Unit testing is essential for verification of the goal and to the test the internal logic of the modules. Unit test was conducted to the different modules of the project. Errors were noted down and corrected down immediately and the program clarity was increased the testing was carried out during the programming stage itself. In this step each module is found to be working satisfactory as regard to the expected output from the module. The modules like Customer Module, Employee Module, Stock Module etc., were tested. In this project Unit testing is performed for face detection and face recognition separately.

6.1.2. Validation Testing

The next level of testing is validation testing. Here the entire software is tested the reference document for this process is the requirement and the goal is to see if the software meets its requirements.

The requirement document reflects and determines whether the software function as the user expected. At the culmination of the integration testing, software is completely assembled as a package, interfacing and corrected and final serious of software test and validation test begins. The proposed system under construction has been tested by using validation testing and found to be working satisfactory. After finishing the integration testing, the modules were tested for validation.

6.1.3. Output Testing

The output of the software should be acceptable to the system user. The output requirement is defined during the system analysis. Testing of the software system is done against the output requirements and the output testing was completed with success.

6.1.4. Performance Testing

This project is a system based project, and the modules are interdependent with the other modules, so the testing cannot be done module by module. So the unit testing is not possible in the case of this driver. So this system is checked only with their performance to check their quality.

6.2 System Implementation

Implementation is the stage in the project where the theoretical design is turned into a working system. The most crucial stage is achieving a successful new system & giving the user confidence in that the new system will work efficiently & effectively in the implementation state.

The stage consists of

- Testing the developed program with simple data.
- Detection's and correction of error.
- Creating whether the system meets user requirements.
- Testing whether the system.
- Making necessary changes as desired by the user.
- Training user personnel.

Implementation Procedures

The implementation phase is less creative than system design. A system project may be dropped at any time prior to implementation, although it becomes more difficult when it goes to the design phase.

The final report to the implementation phase includes procedural flowcharts, record layouts, report layouts, and a workable plan for implementing the candidate system design into an operational one. Conversion is one aspect of implementation.

- The conversion portion of the implementation plan is finalized and approved.
- Files are converted.
- Parallel processing between the existing and the new system are logged on a special form.
- Assuming no problems, parallel processing is discontinued. Implementation results are documented for reference.

User Training

User Training is designed to prepare the user for testing & convening the system. There are several ways to train the user. They are

1) User Manual.

2) Help Screens.

3) Training Demonstration.

1. User Manual:

The summary of important functions about the system and software can be provided as a document to the user.

2. Help Screens:

This features now available in every software package, especially when it is used with a menu. The user selects the “Help” option from the menu. The system accesses the necessary description or information for user reference.

3. Training Demonstration:

Another User Training element is a Training Demonstration. Live demonstrations with personal contact are extremely effective for Training Users.

Documentation Tools

Document production and desktop publishing tool support nearly ever aspect of software developers. Most software development organizations spend a substantial amount of time developing documents, and in many cases the documentation process itself is quite inefficient. It is not use unusual for a software development effort on documentation. For this reason, documentation tools provide an important opportunity to improve productivity.

Document Restructuring

Creating document is far too time consuming. If the system works, we'll live with what we have. In some cases, this is the correct approach. It is not possible to recreate document for hundreds of computer programs. Documentation must be updated, but we have limited resources. It may not be necessary to fully re-document an application. Rather, those portions of the system that are currently undergoing change are fully documented. The system is business critical and must be fully re-documented. Even in this case, an intelligent approach is to pare documentation to an essential minimum.

6.3 System Maintenance

Maintenance is actually the implementation of the review plan. As important as it is, many programmers and analysts are to perform or identify themselves with the maintenance effort. There are psychological, personality and professional reasons for this. Analysts and programmers spend far more time maintaining programs than they do writing them. Maintenance accounts for 50-80 percent of total system development.

Maintenance is expensive. One way to reduce the maintenance costs are through maintenance management and software modification audits.

- Maintenance is not as rewarding as exciting as developing systems. It is perceived as requiring neither skill not experience.
- Users are not fully cognizant of the maintenance problem or its high cost.
- Few tools and techniques are available for maintenance.
- A good test plan is lacking.
- Standards, procedures, and guidelines are poorly defined and enforced.
- Programs are often maintained without care for structure and documentation.
- There are minimal standards for maintenance.

7. CONCLUSION

This project “Content Management System for Jewellery shop website” is a simplified user interface; the content management system allows non experienced users to complete complex tasks without the working knowledge of HTML and CSS. It is exhausting, time-consuming to both web developers and content author. It also reduces the cost to content author.

Once simply a tool created to allow for non-technical staff to make edit content in a web site, the CMS now sits at the intersection of communications, customer service, reputation management and brand building.

Using the features of PHP the project proved to be successful in performing complex diagnostics, route data between screens and generate required responses. They were many tangible and intangible benefits in implementing the System. Thus the project was successfully developed and completed using PHP and MYSQL Server as the back end.

8. SCOPE FOR FUTURE ENHANCEMENT

The system has been designed and developed according to the current requirements of the user. At the same time the system is very flexible and extensible, Hence, future enhancements, if needed can be made without much difficulty, so new applications can be developed and it be integrated with the existing one very easily.

Here are two features that could be integrated to content management system in future:

- Move away from the tree-structured organization that forces users to traverse down and back through your navigation. Let users drag and drop the stuff they care about into a hub-and-spoke system of their own design.
- Include application programming interfaces (APIs) for easy customization of the application. These APIs will enable the incorporation of customer relationship management (CRM) functions with web publishing functions so web content can reflect the needs of specific users, not just specific types of user.

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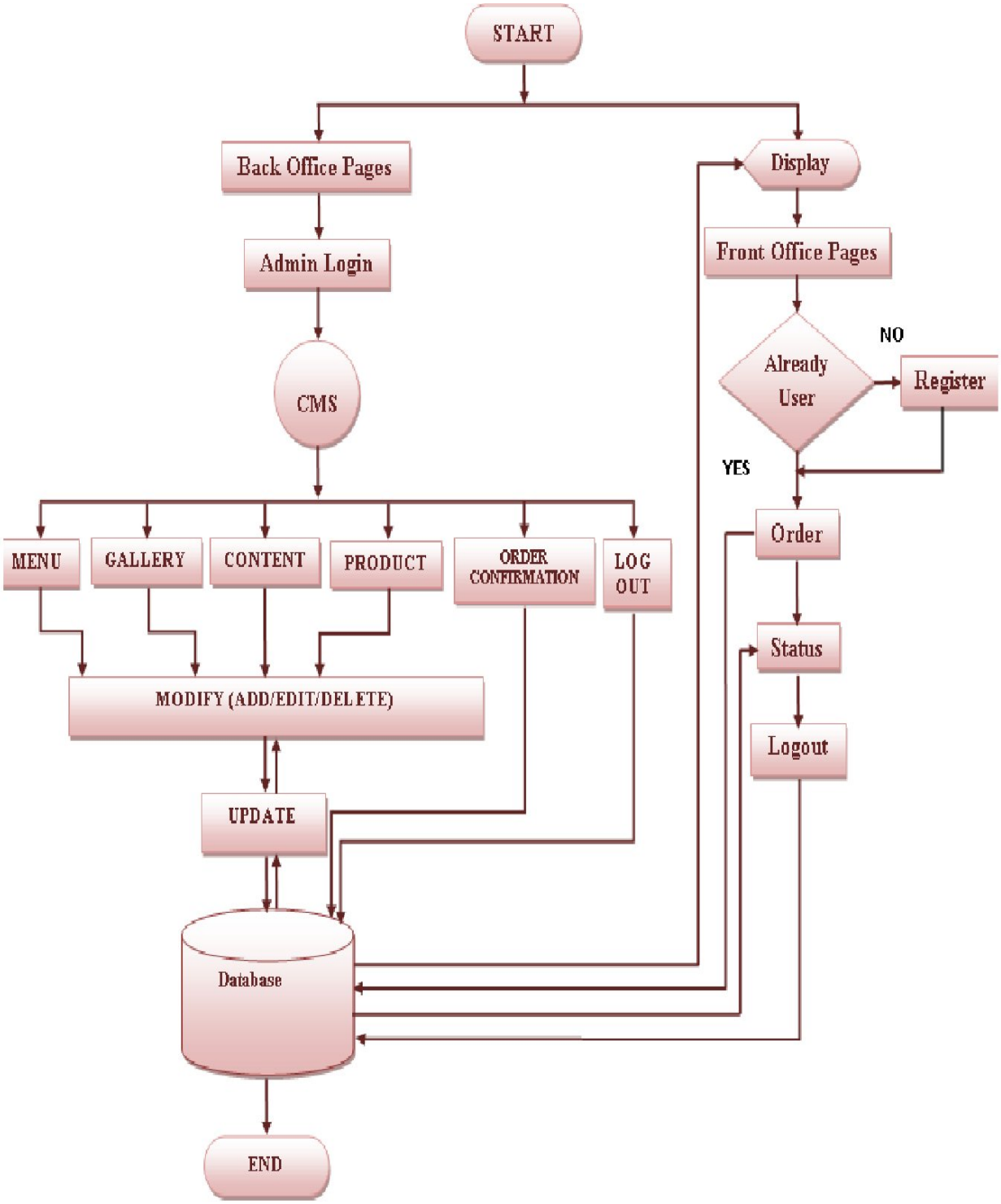
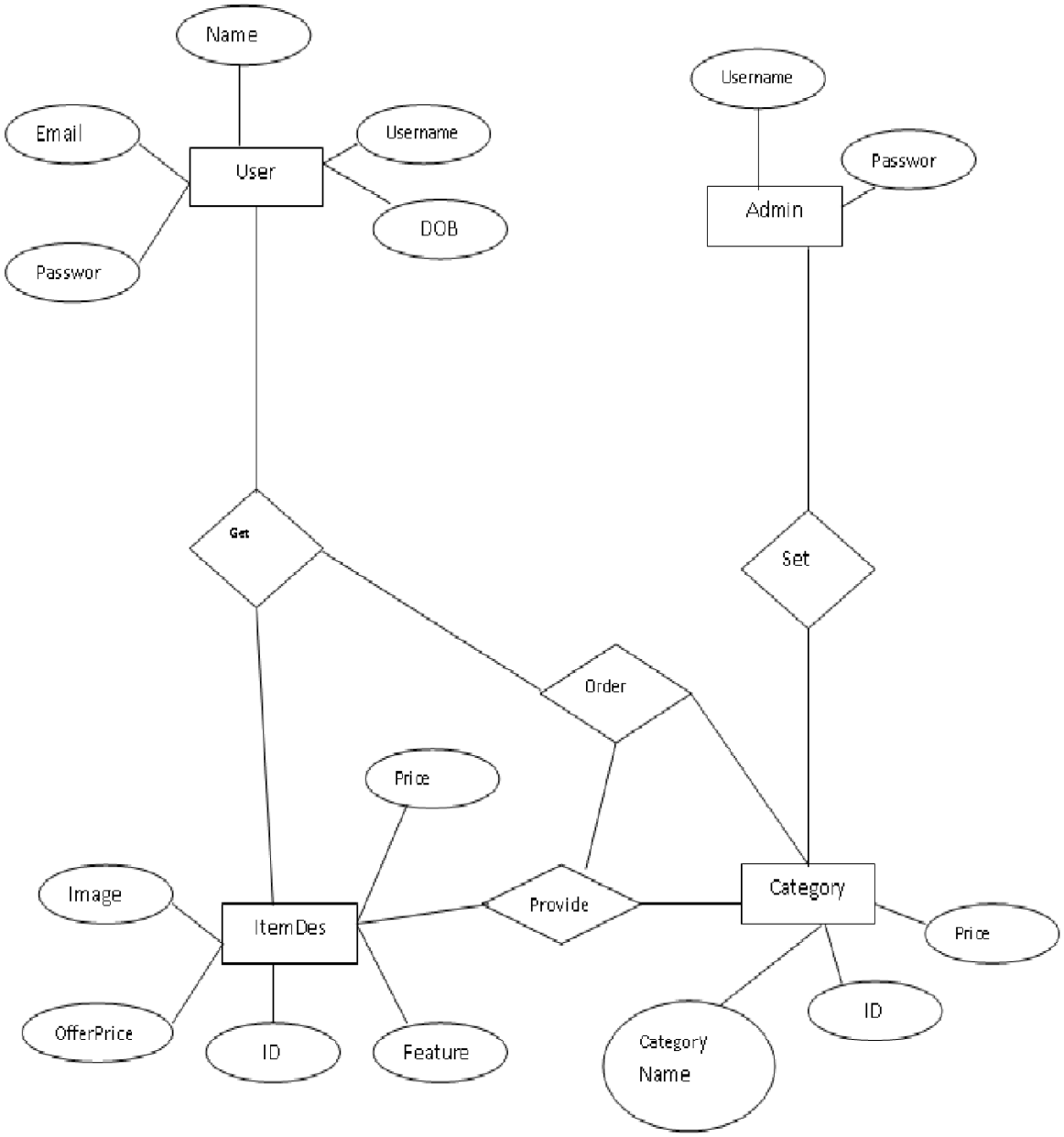
3. Http://A1code.com
4. http://www.zend.com/php/beginners/
5. http://www.devshed.com/c/b/JAVASCRIPT/

10. APPENDIX

A. SYSTEM FLOW DIAGRAM



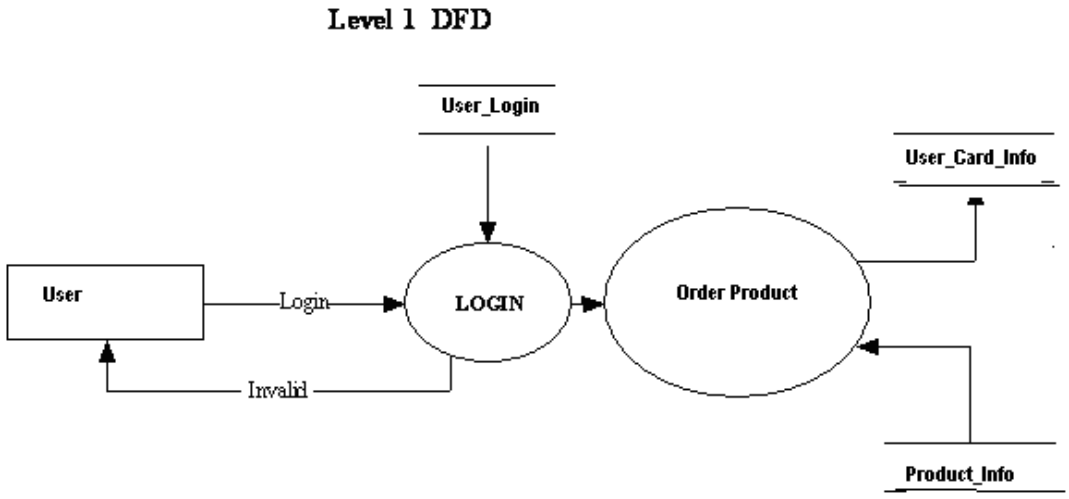
B. ENTITY RELATIONSHIP DIAGRAM



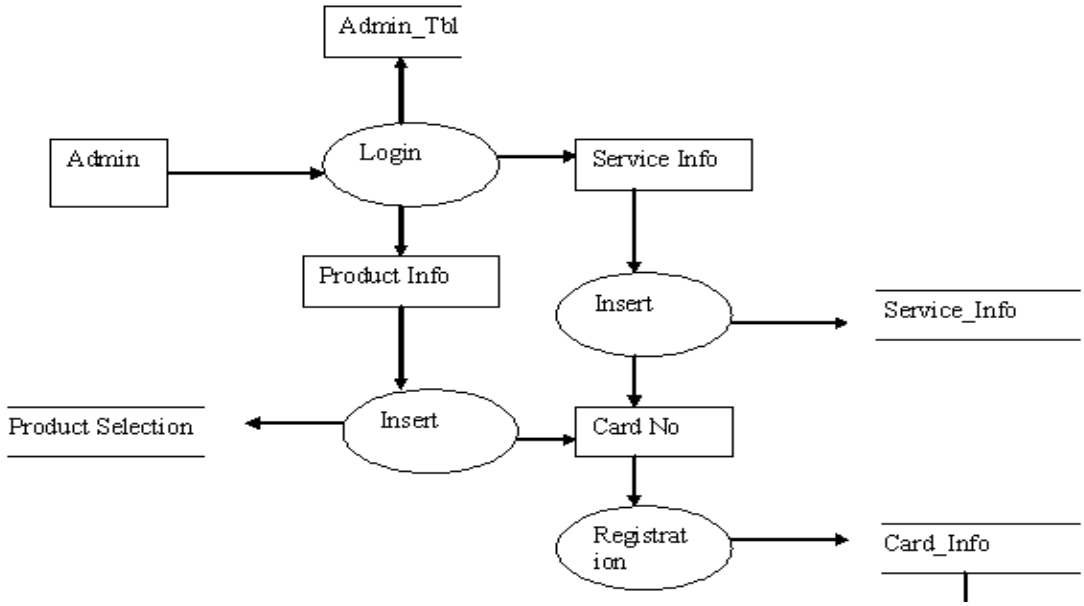
C. DATA FLOW DIAGRAM

The DFD is also called as bubble chart. It is a simple graphical formalism that can be used to represent a system in terms of the input data to the system, various processing carried out on these data, and the output data is generated by the system.

Level 1: User



Level 2: Admin



D. Database Design

- Database Design is a crucial factor in the performance of a system, both in terms of system timings and in the case with which the system can be maintained or modified.
- To permit simple retrieval of data in response to query and response requests.
- To simplify the maintenance of data through updates, insertions and deletions.
- To reduce the need to restructure or reorganize data when new application requirements

Table Name: admin

Description: Admin Login

Primary Key:Username

Field Name	Data Type	Size	Description
Username	Varchar	20	Username for admin login
Password	Varchar	20	Password for admin login

Table D.1: Admin Table

Table name: Menu

Description: Add, Edit and Delete a website menu

Primary key: Id

Field	Type	Null	Default
c_name	varchar(20)	No	Category of Jwellerey
Content	varchar(200)	No	Information of Category
Imagename	varchar(50)	No	Category Images
Id	int(20)	No	Category Id

Table D.2: Menu Table

Table name: Content

Description: Add, Edit and Delete a website Content

Primary key: Id

Field	Type	Null	Default
Id	int(50)	No	Id for Website Content
Text	varchar(500)	No	Website Content(Text)

Table D.3: Content Table

Table name: Image

Description: Add, Edit and Delete a website Gallery Images

Primary key: Id

Field	Type	Null	Default
Id	int(50)	No	Id For Gallery Image
Image_Path	varchar(500)	No	Gallery Image Path
Cap	varchar(30)	No	Information or comment of Gallery Images

Table D.4: Image Table

able name: Product

Description: Add, Edit and Delete the product in category wise

Primary key: Pid

Field	Type	Null	Default
c_name	varchar(30)	No	Product Category Type
Pro	varchar(500)	No	Product Details
Imagename	varchar(60)	No	Product Image
p_name	varchar(30)	No	Product Name
Pid	int(50)	No	Product Id

Table D.5: Product Table

Table name: user_registration

Description: User Registration Table

Primary key: u_id

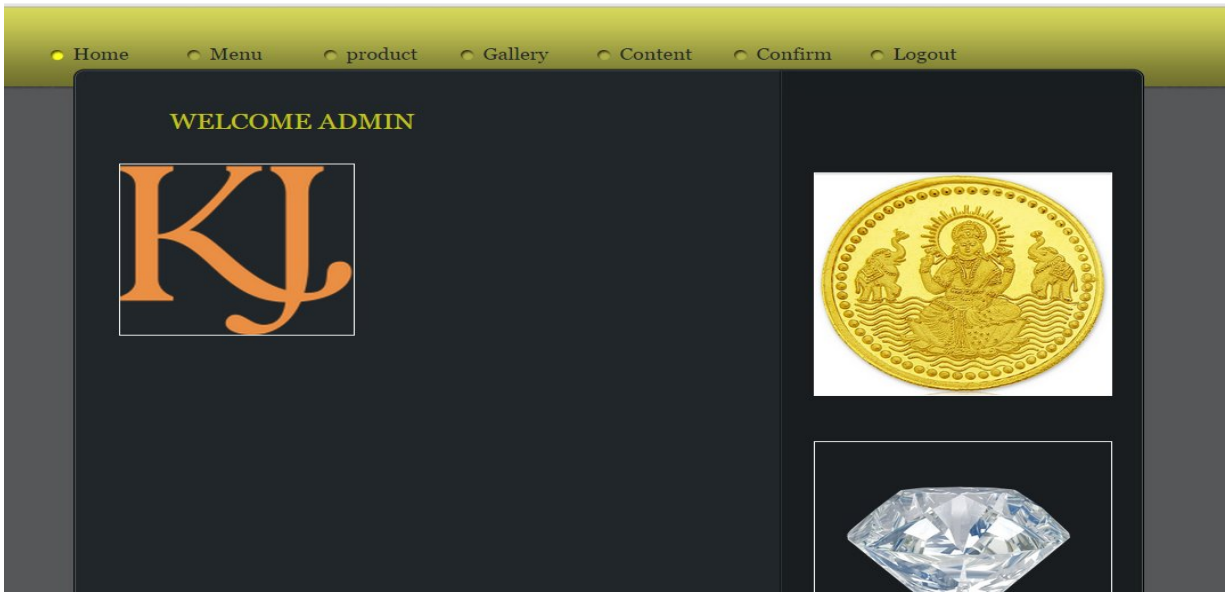
Field	Type	Null	Description
fullname	varchar(50)	No	User Fullname
email	varchar(50)	No	User Email Adderes
user	varchar(20)	No	Username for Customer
Password	varchar(20)	No	Password for Customer
Address	varchar(350)	No	User Address
phoneno	decimal(12,0)	No	Customer Phoneno
Uid	Int(50)	No	Id for User

Table D.6: User Registration Table

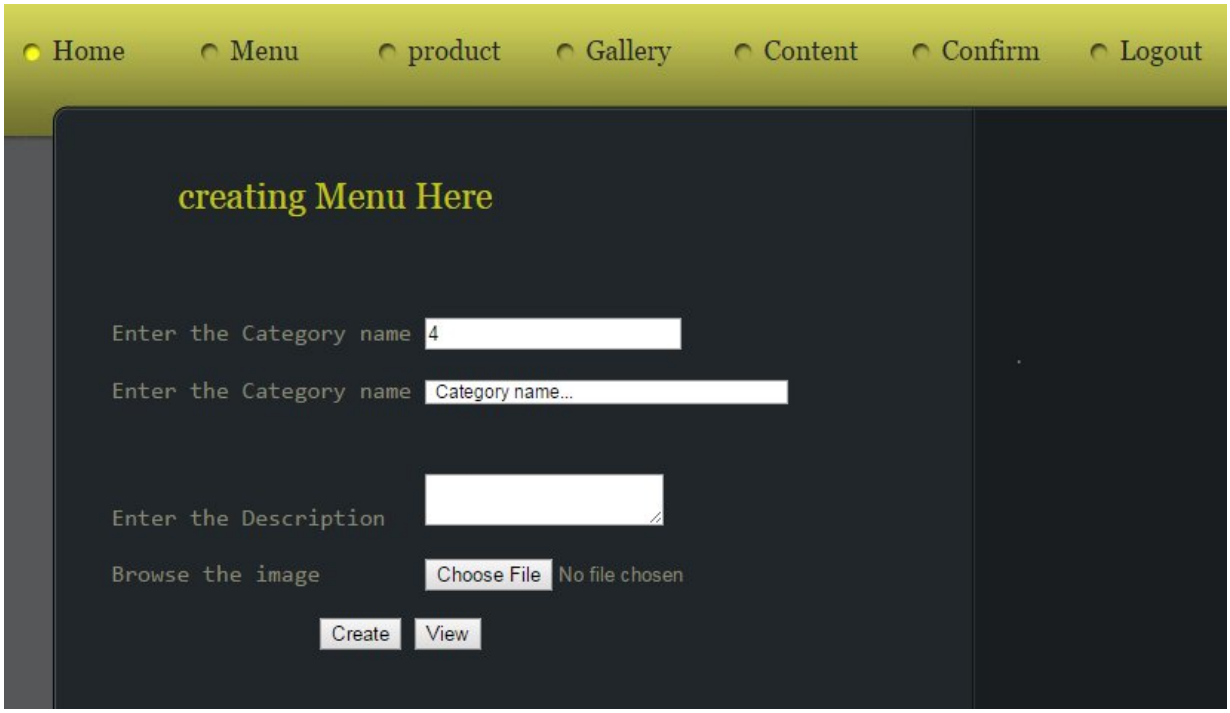
E. SCREEN SHOTS

BACK OFFICE PAGES

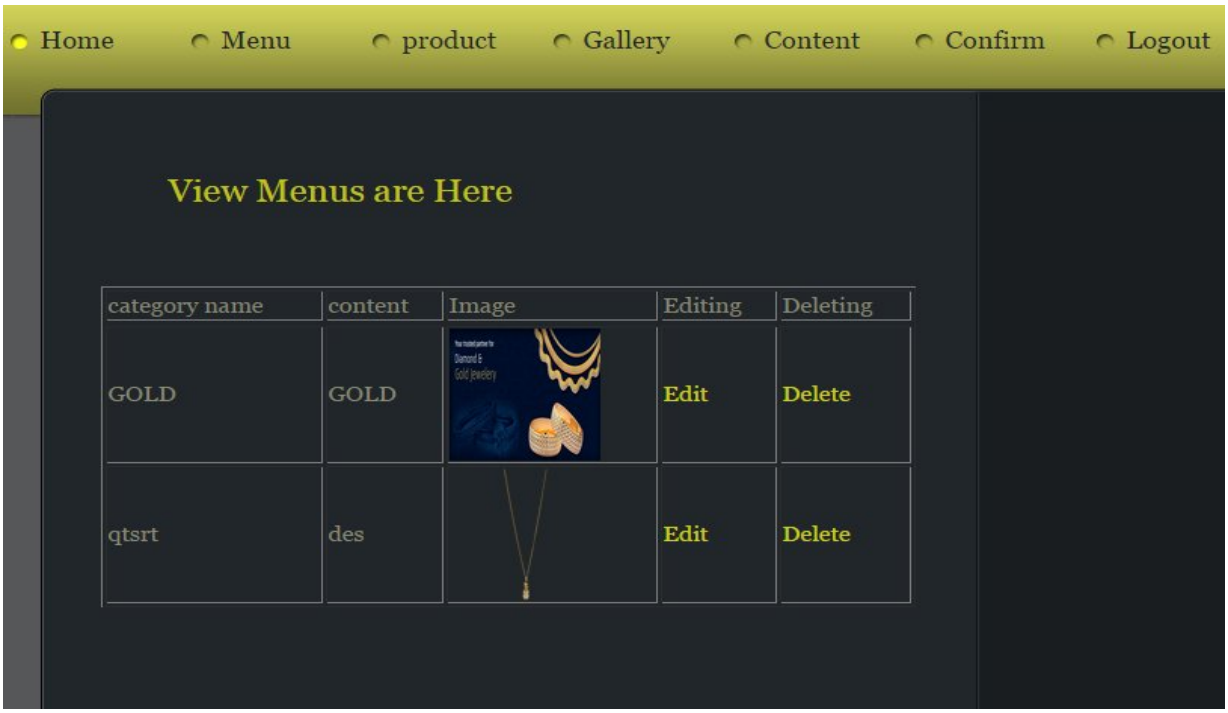
Screen E.1 Admin Page



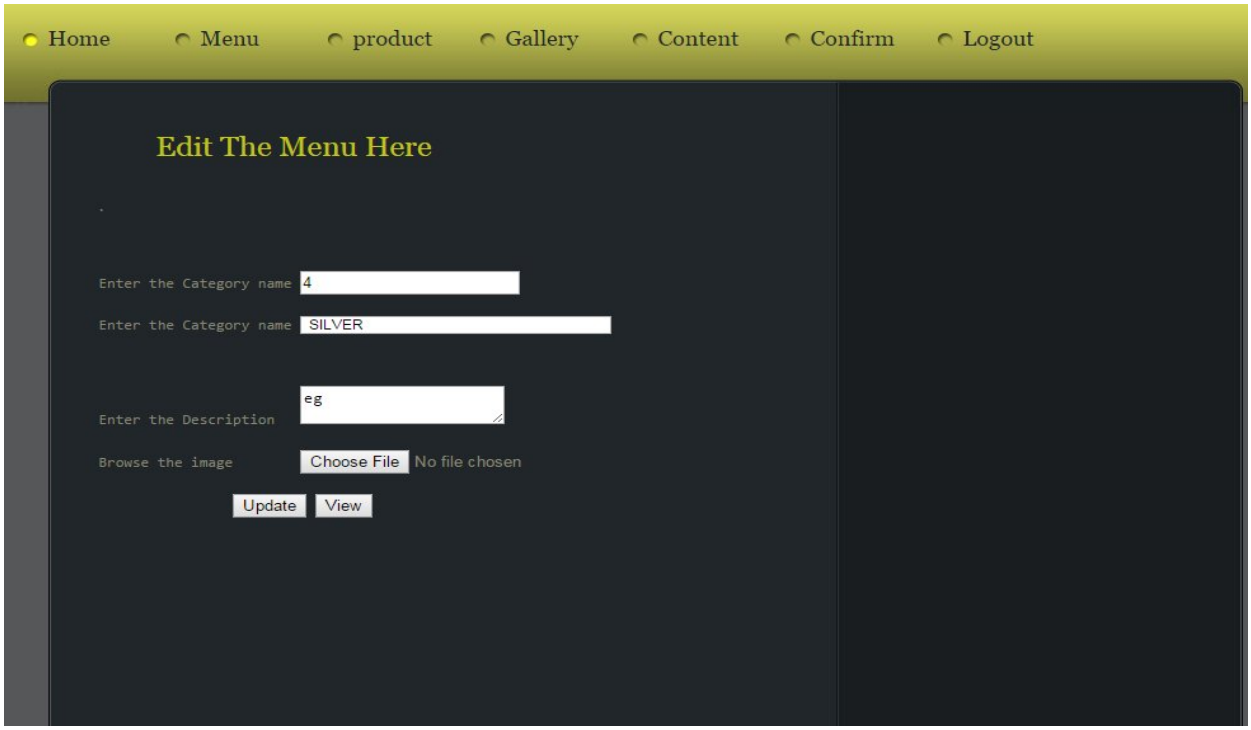
Screen E.2 CMS HomePage



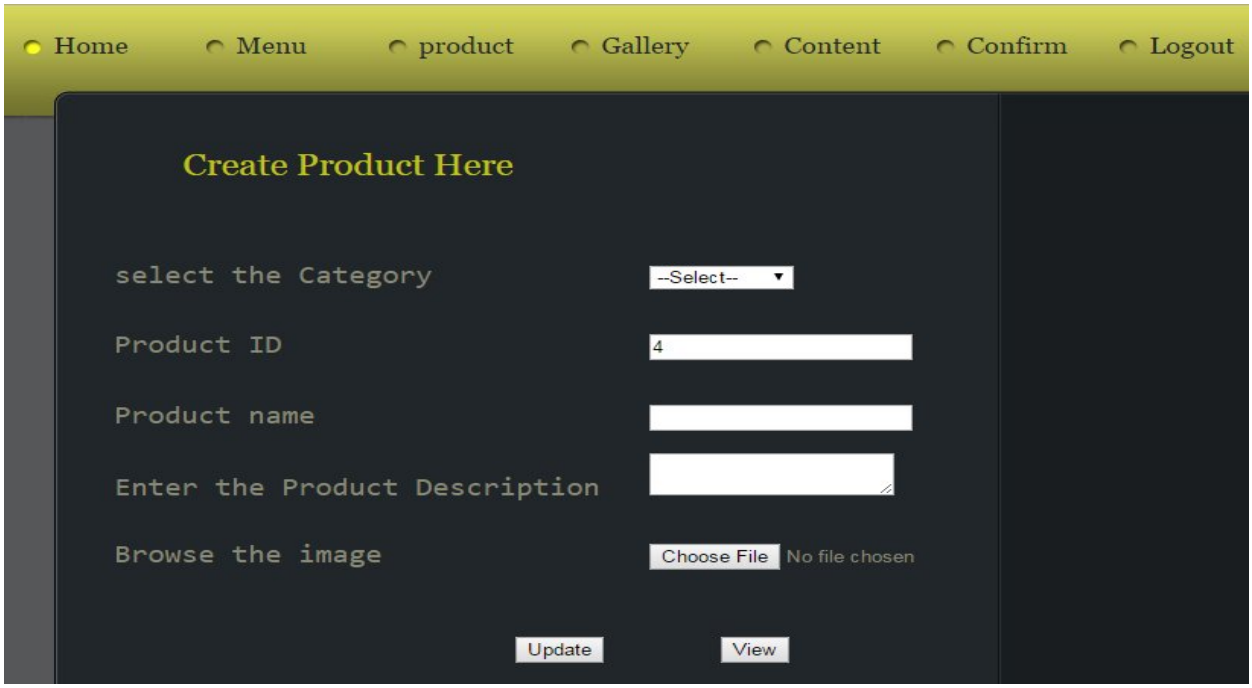
Screen E.3 Menu Creation



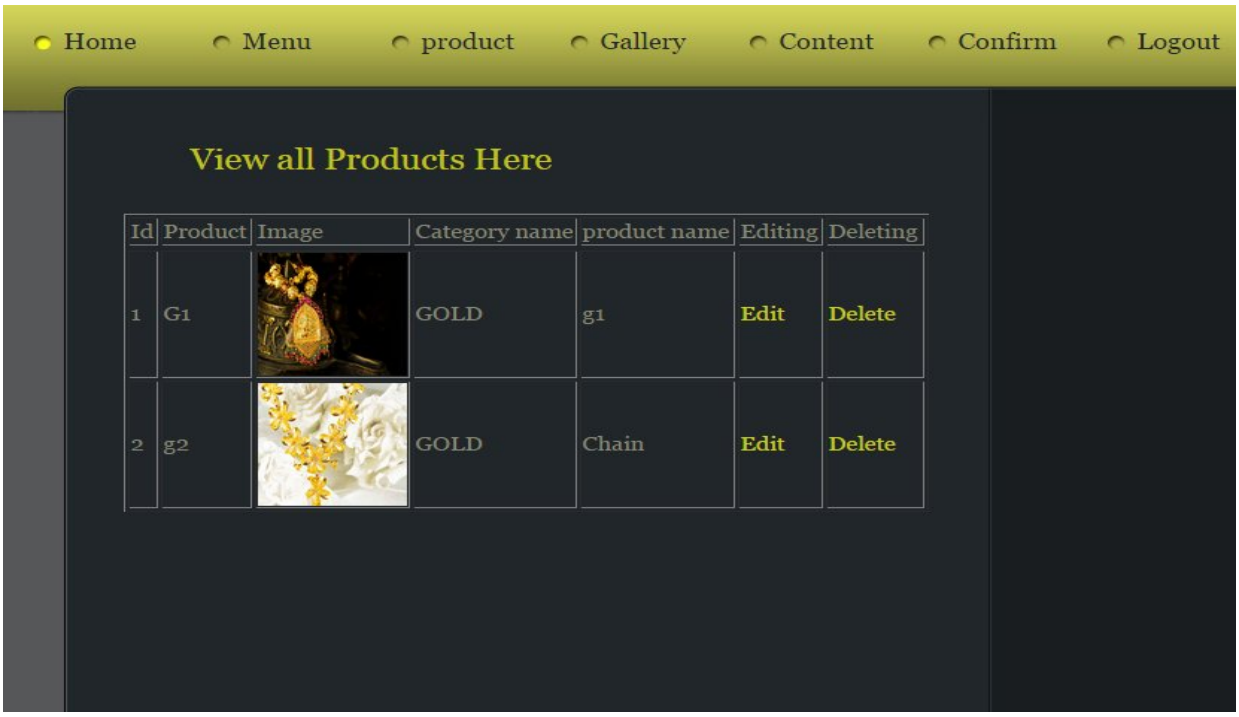
Screen E.4 View Website Menus



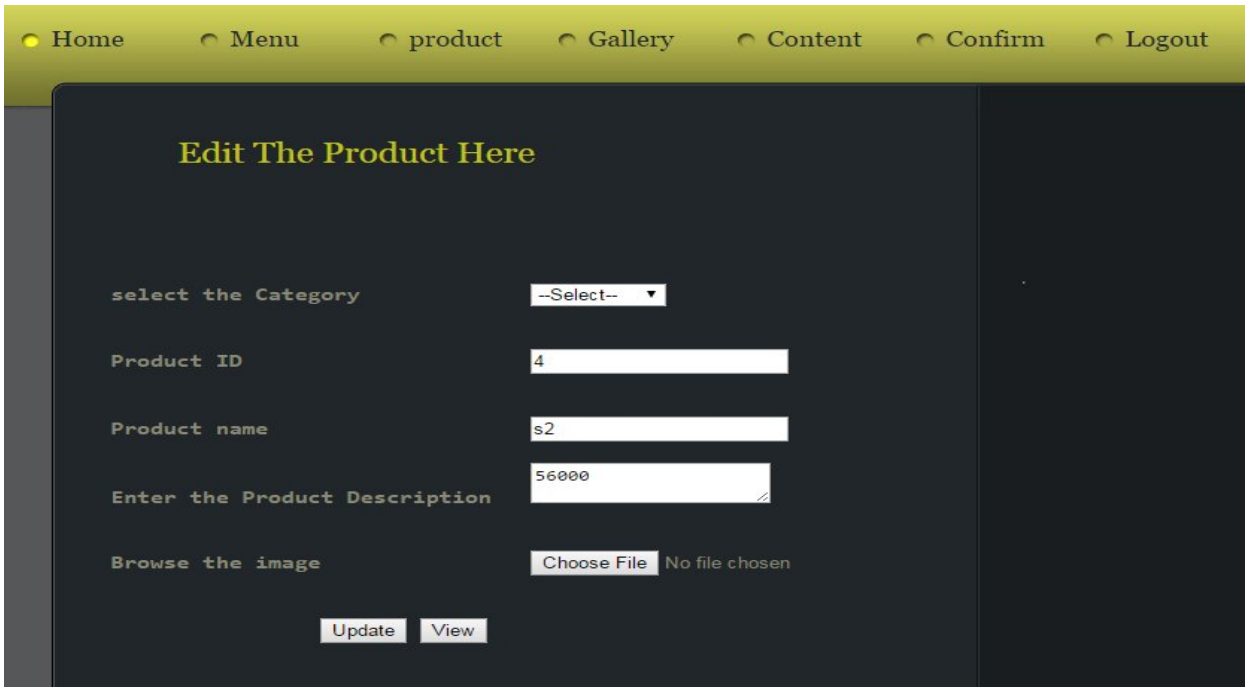
Screen E.5 Edit the Existing Menu



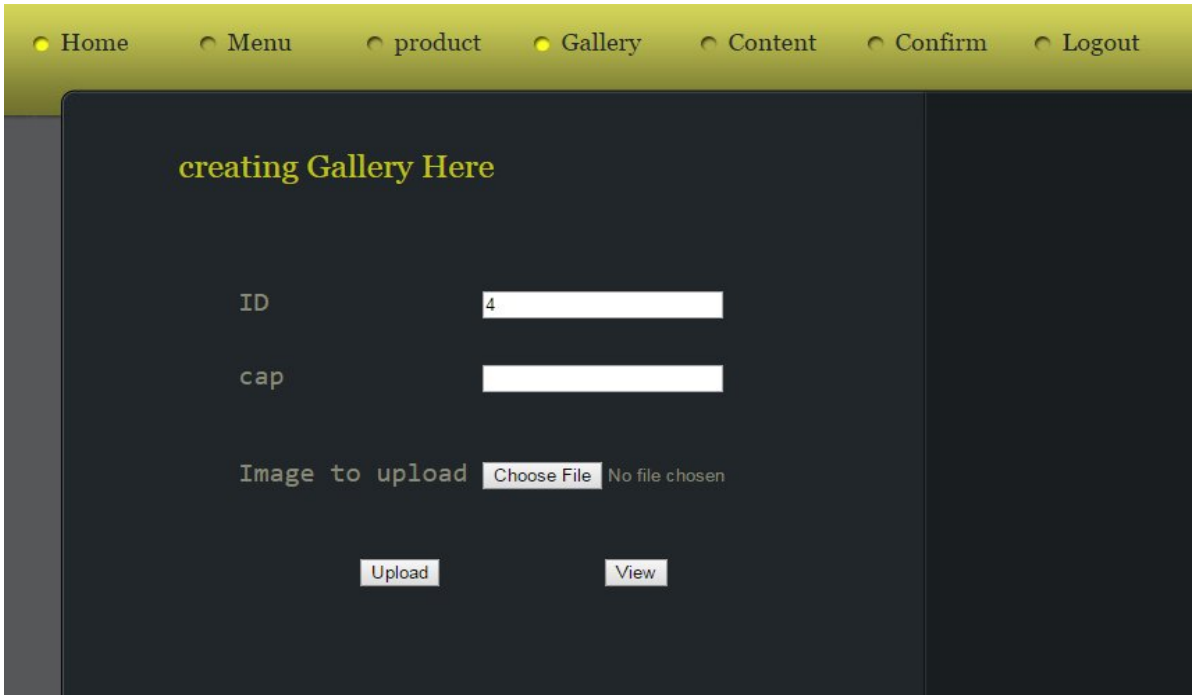
Screen E.6 Product Creation



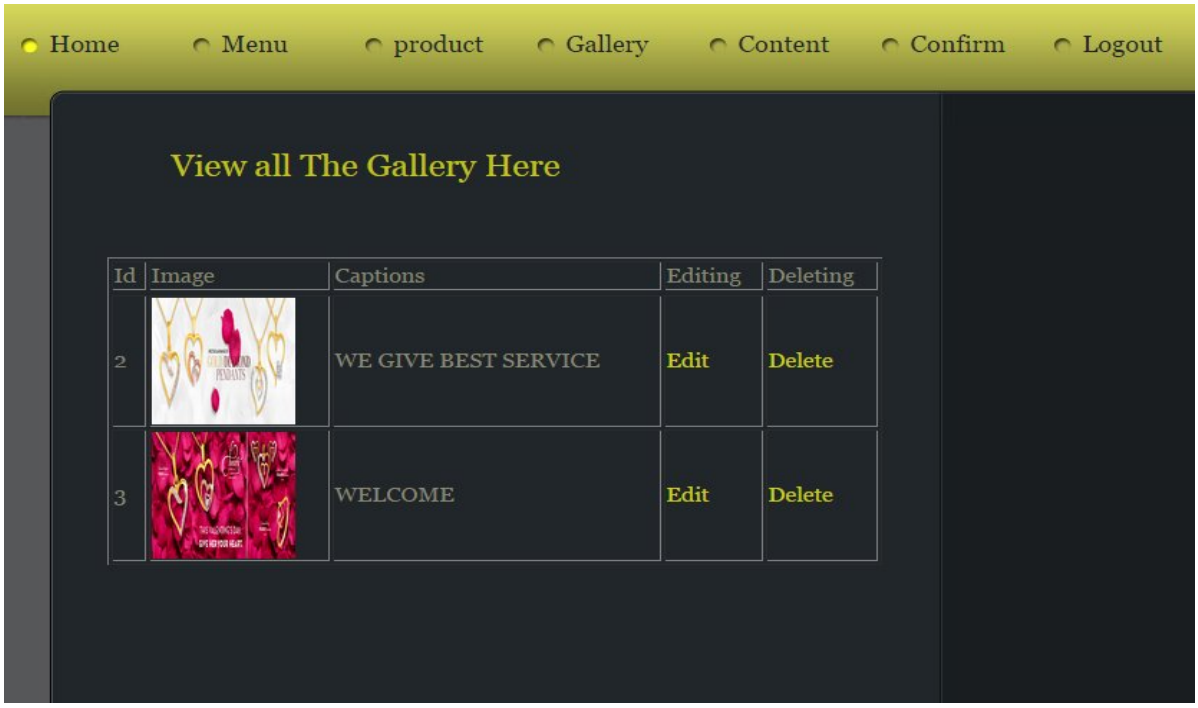
Screen E.7 View all Types of Products



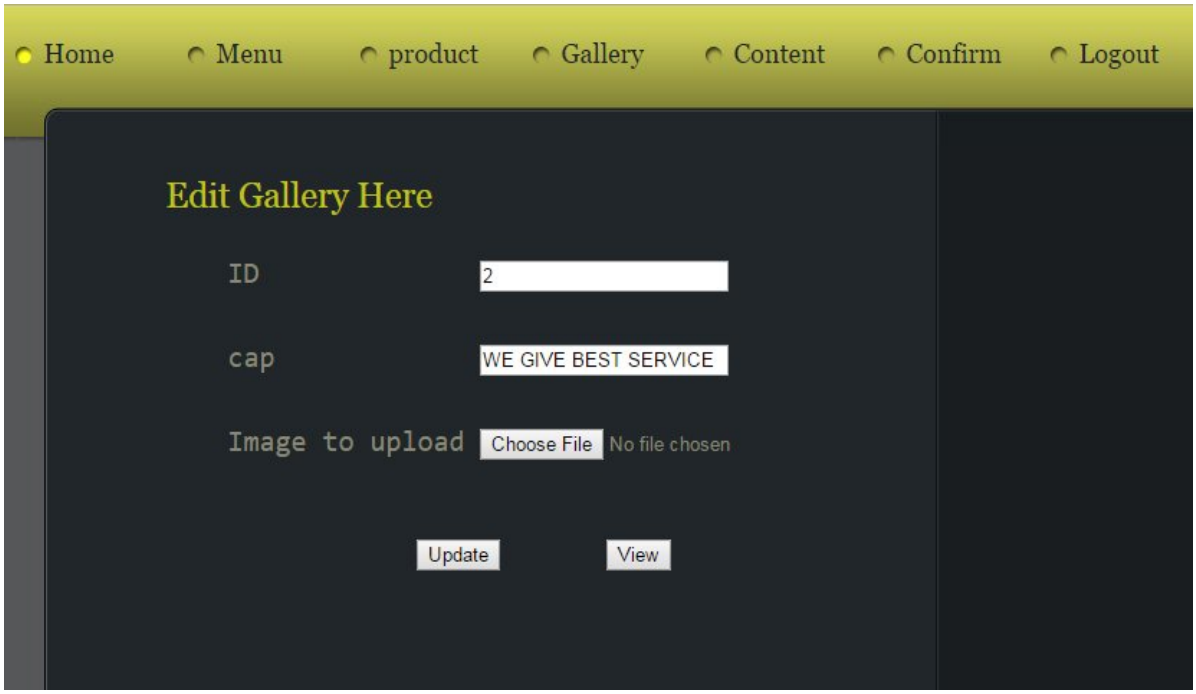
Screen E.8 Edit the Product Details



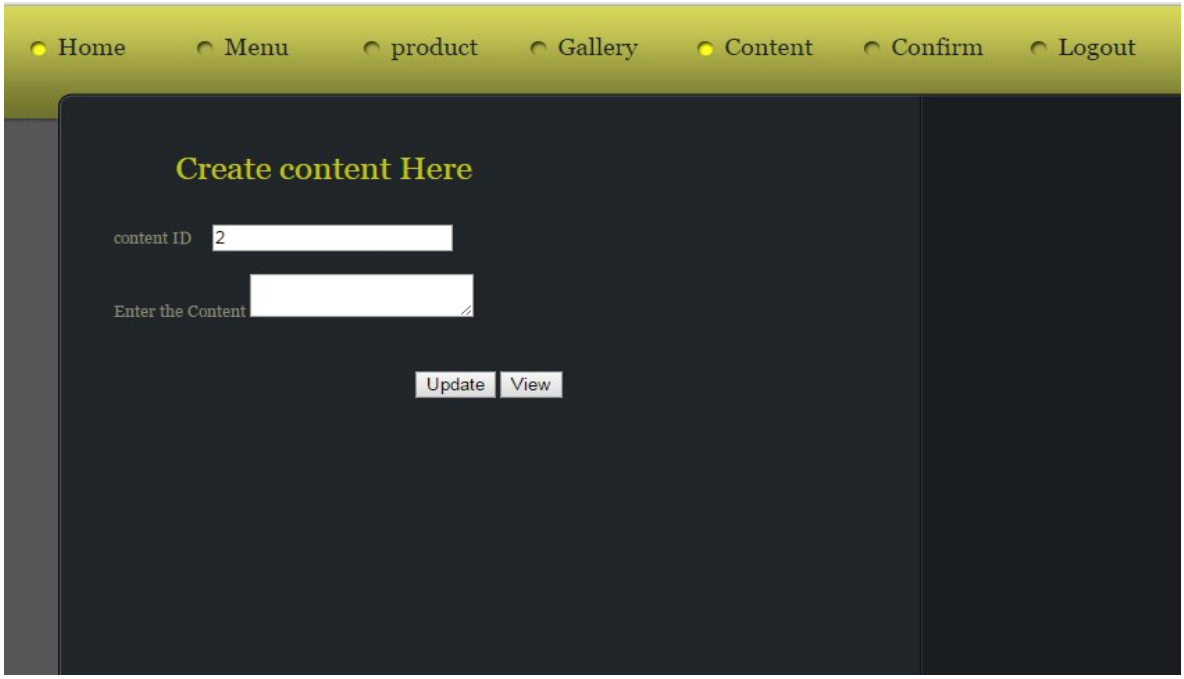
Screen E.9 Create New Gallery Image



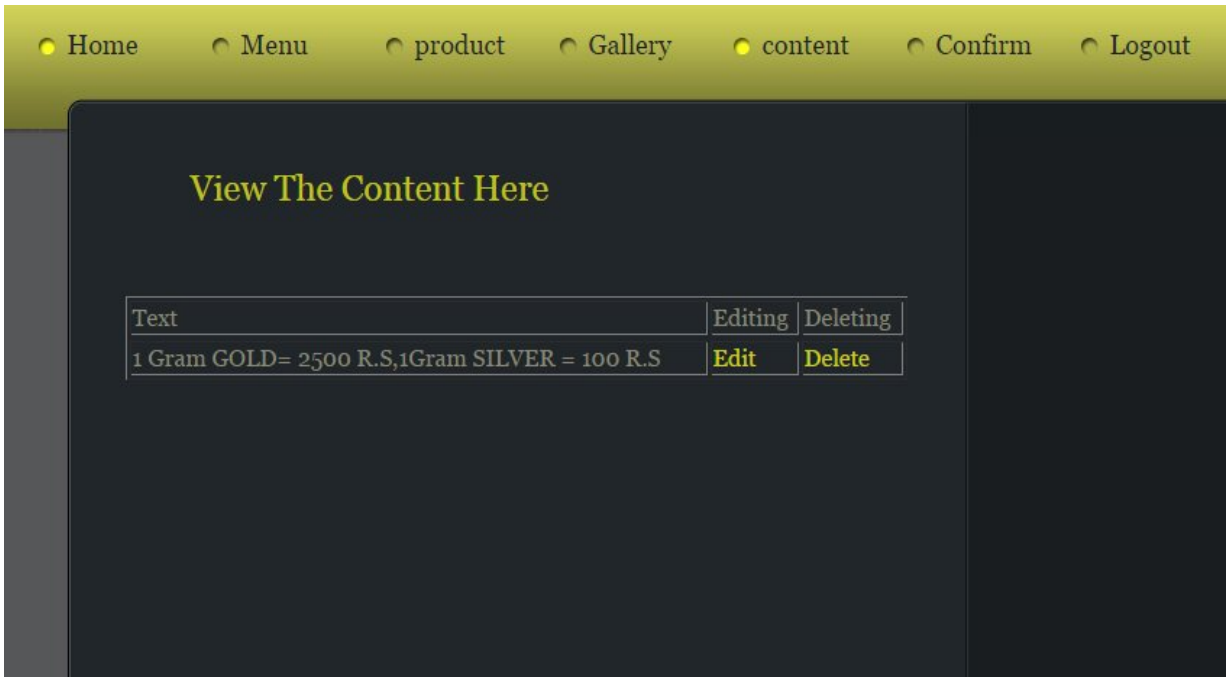
Screen E.10 View all Gallery Images



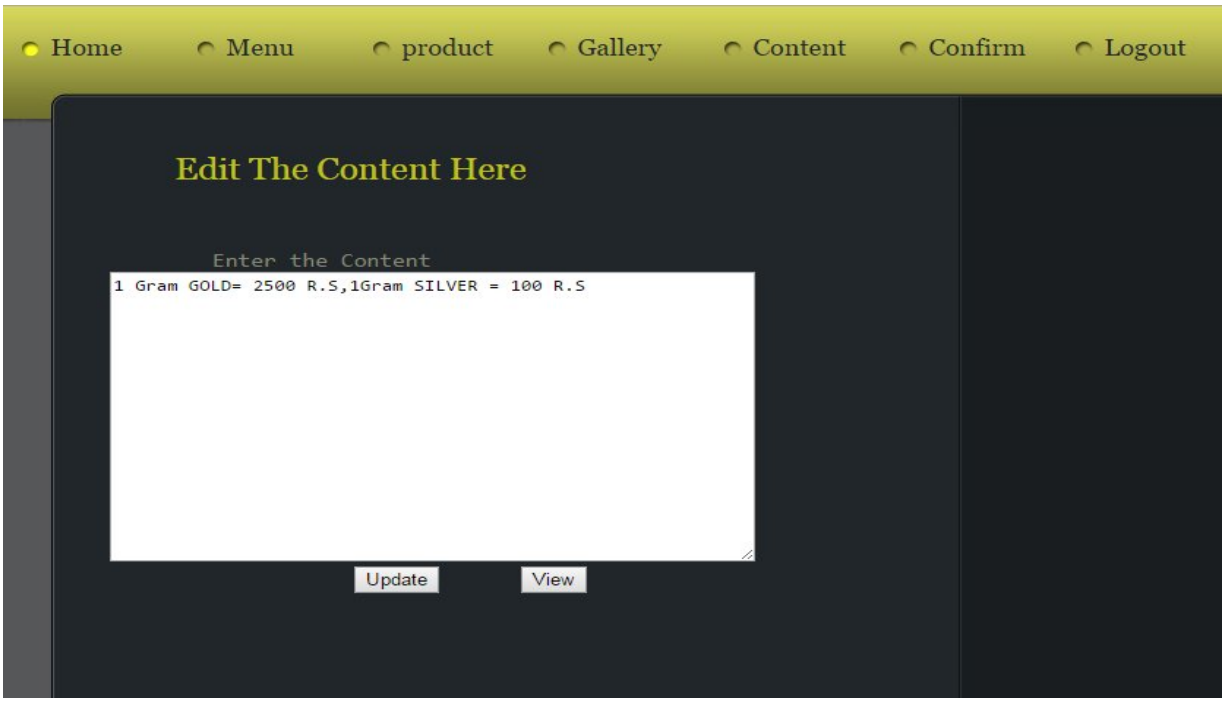
Screen E.11 Edit Already Existing Gallery Images Details



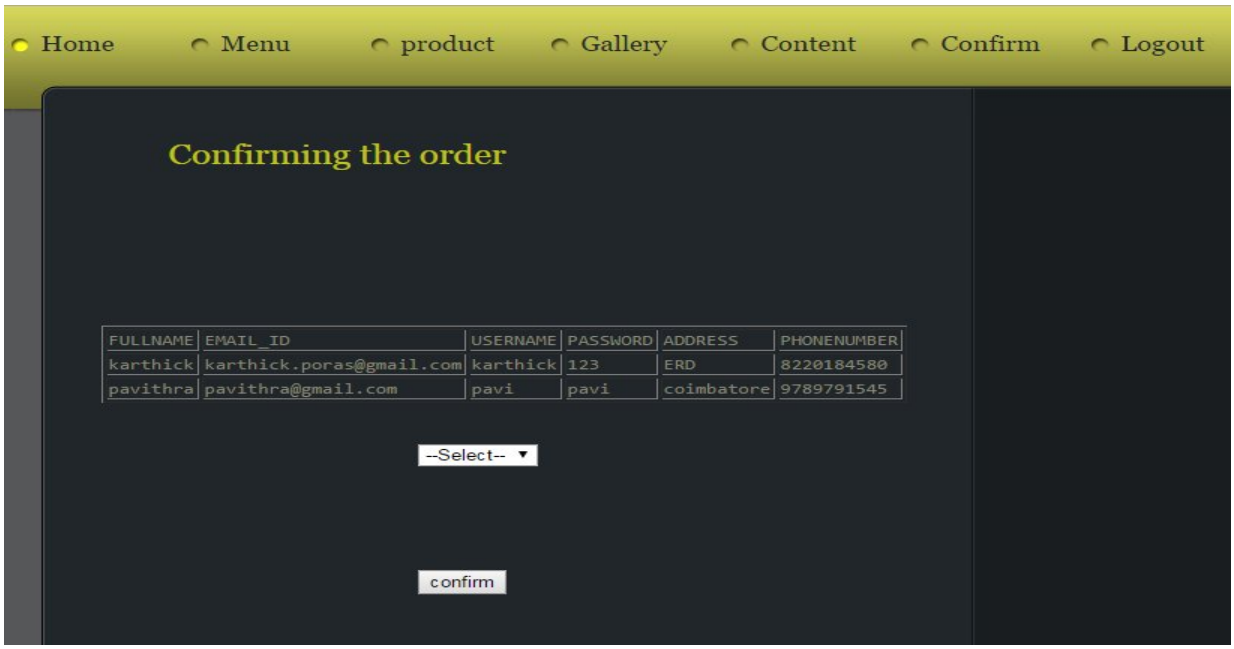
Screen E.12 Content Creation



Screen E.13 View all The Contents

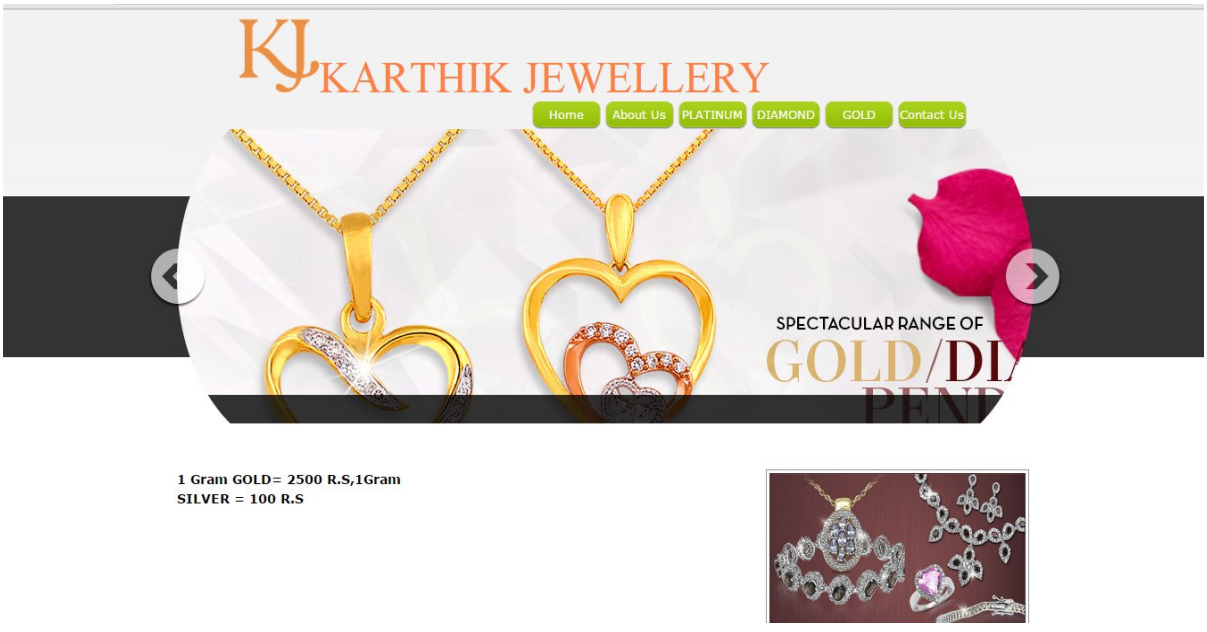


Screen E.14 Edit the Already Existing Contents

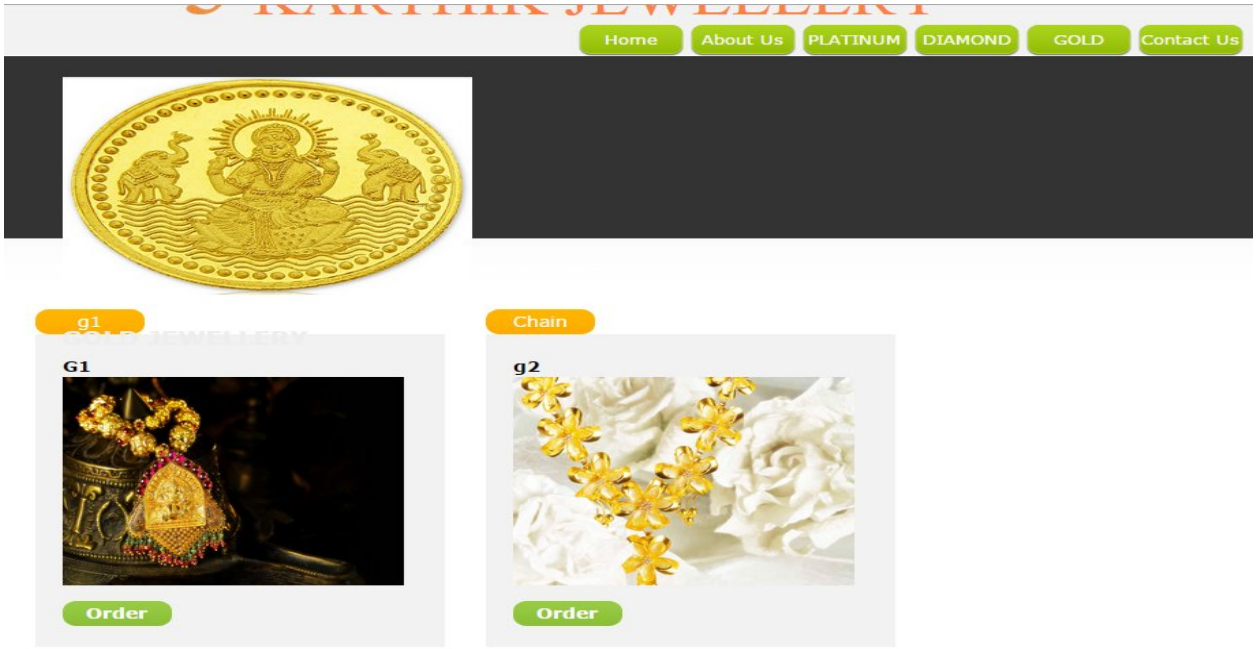


Screen E.15 View Customer Order Details and Confirming the Order

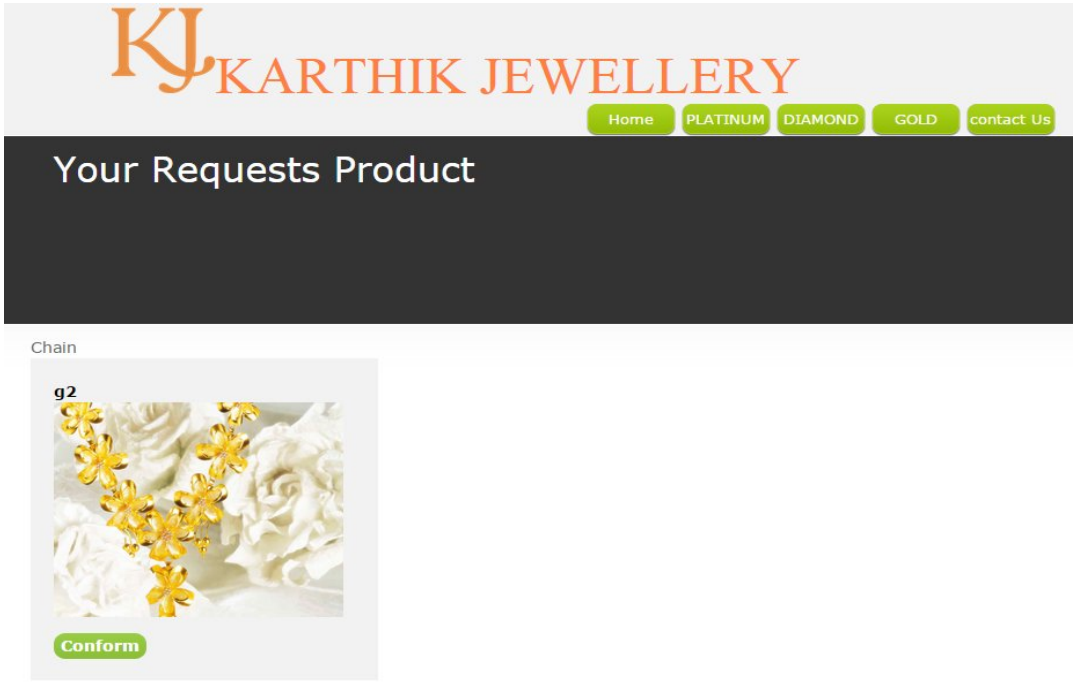
A.2 FRONT OFFICE PAGES



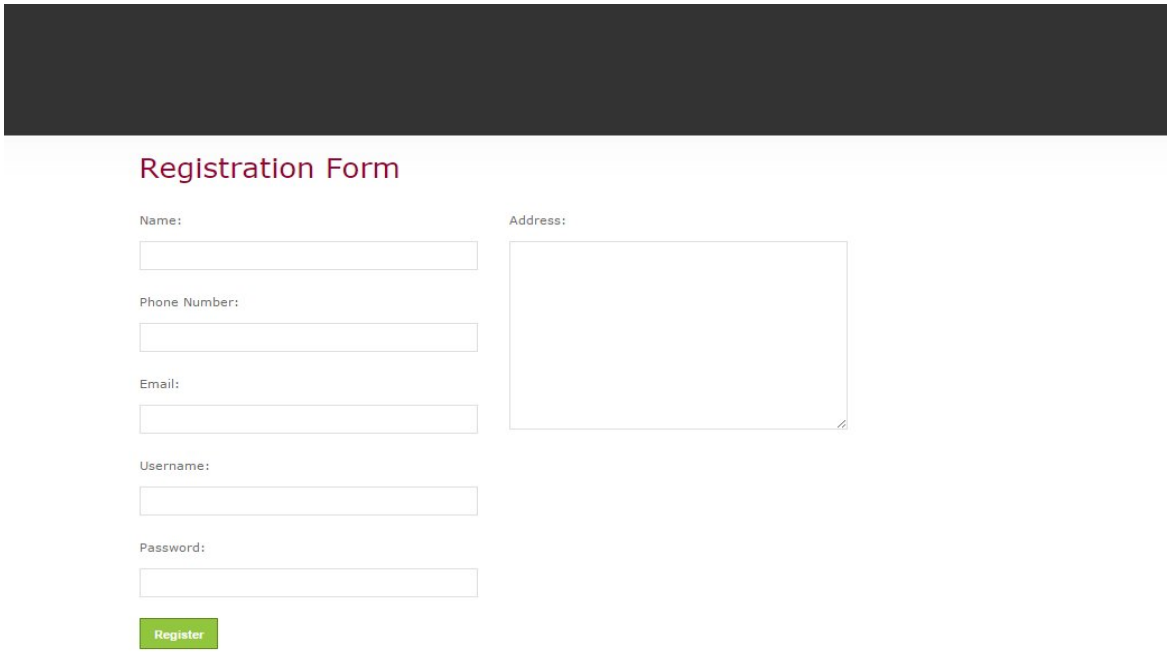
Screen E.16 Organization website Home Page



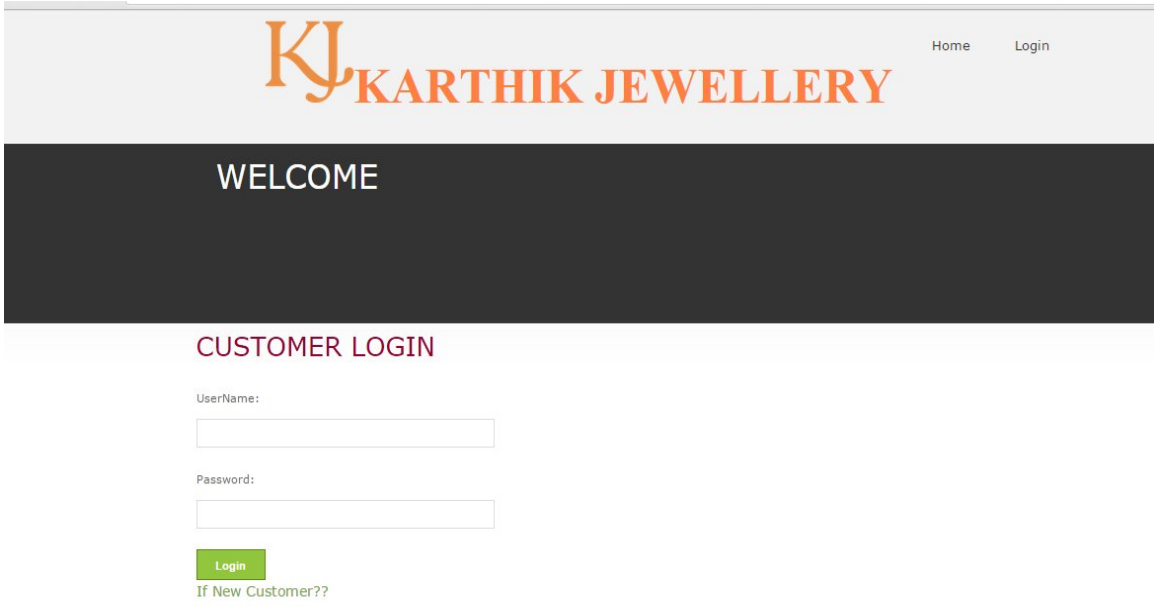
Screen E.17 Product Selection



Screen E.18 Order the Product



Screen E.19 Customer Registration



Screen E.20 Customer Login

Screen E.21 Customer Check the Order Status