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**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
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**SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF  
BACHELOR OF ENGINEERING (COMPUTER SCIENCE & ENGINEERING)**

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BACHELOR OF TECHNOLOGY

in

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of

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## **ACKNOWLEDGEMENT**

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## **COMPANY PROFILE**

Established in the year 2004, the Acme Ceramics has emerged with development in design and technology. Its leadership is marked by many successful challenges our incessant pursuit of excellence. Company have reported 35% growth rate from 2004 to 2014 in just 10 years, it is India's fastest growing ceramic, vitrified tile company and considered among the world's best ceramic tile manufacturing companies.

Acme Group has managed by young entrepreneurs, Who have an esteemed knowledge of industry. At Acme we understand the changing needs of ceramic industry. From Elegant Wall Tiles & Floor Tiles to decorative elevation tiles.

The ACME GROUP is recognized for its exquisite new collections which bears the exceptionality of high definition digital printing. We have quality since long and for eternity, we believe in uninterrupted modernization and consolidation of service. Being a prominent exporter and supplier, our accessibility, unswerving supply and sensible pricing charms national and international clients bearing in mind that our ceramic products are premium in all aspects.

The industry enjoys the unique distinction of being exceedingly indigenous with an abundance of raw materials, technical skills, infrastructural facilities despite being reasonably capital intensive. As the consequence of this continued growth, now Acme Group is the key drivers for all ceramic tiles in India. With our technology advancements many new tile designs and tile applications are available for both home owner and commercial facilities situated in the nation as well as at international entity. This is a promise that here a wide range of excellent and designer entities will amaze you in all the way.

To improve to grow, new times, ACME CERAMIC thinks that there is just one way straight ahead.

We are now advancing with new product range. More than 10 years of experience, and developments grants and guarantees us to reach our goals.

The Indian Consumer is becoming more and more design & decor conscious by the day. A home is no more a mere necessity but it is a reflection of one's per quality & taste. Therefore, the demand for premium quality ceramic tiles with beautiful designs and perfect craftsmanship has increased by leaps & bounds.

ACME CERAMIC fulfills the ever expanding needs and expectations of the Indian consumer. ACME range of ceramic tiles in an extensive array of designs in the 200 x 300 mm, 250 x 375 mm, 300 x 300 and 300 x 600 mm size available through a wide distribution network of more than 125 direct dealers.

Thanks to the supports of the entire customer all over the nation. ACME CERAMIC enjoyed a rapid stable growth in Digital Wall Tiles HONESTY, CREDIT and MUTUAL BENEFIT has always been the Company's spirit.

HONESTY: We have established a nationwide distribution channel covering 20 states and regions. CREDIT: We built up a quality control system according to ISO 9001 Certificates. MUTUAL BENEFIT: Working on the basis MUTUAL BENEFIT is always our principle. In the 21 Century, we will continue to dedicate ourselves to customer's needs through our passion and efforts, and we promise you a better future!

## **DECLARATION**

I hereby declare that the project work entitled “**WEB DEVELOPMENT**” submitted to SRM University, Chennai is a record of an original work done by me under the guidance of **Mr. Dipak M Patel** (Head, Dept Of Marketing, Acme Ceramics, Morbi) and this project work is submitted in the fulfillment of the requirements for for my summer Internship project. The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

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# **TECHNOLOGY**

## **1.0 Introduction**

In order to make websites look and function a certain way, web developers utilize different languages. The three core languages that make up the World Wide Web are HTML5, CSS, and JavaScript.

In the IT world, the internet is an essential platform, whether its for developing or for consumer use. When developing a website, typically three main languages come into play. These languages are JavaScript, CSS, and HTML. HTML is the backbone of most webpages. Essentially, it is used to create the structure of how a specific website would look like, from the headings, to the paragraphs, the body, links, and even images.

Markup languages are the languages in which the web is written. The most common markup language used is HTML, which uses tags to annotate text so that a computer can then manipulate the text. Most markup languages are human readable, and use annotations that are distinguishable from the annotated text. There are many different kinds of markups and languages, but all are consistent in the way in which they annotate documents.

Hypertext is defined as the arrangement of information inside a database that allows the user to receive information and to navigate from one document to another by clicking on highlighted words or pictures inside the primary document. Hypertext is the base of the World Wide Web, because it enables user to click on other links to get more information. Hypertext is a term used for all links, whether is appears as texts or other graphical part.

## 2.0 History and features

The first public mention of HTML was in the year 1991 as Tim Berners-Lee described the 18 tags that were initially available in the markup language. It was 1994 when a working group was established for HTML - The Internet Engineering Task Force (IETF). They believed the web belonged to the people (an idea that still holds strong today, especially with the battles over net neutrality), and so their doors were open to anyone who wished to join. By the year 1995 we were graced with many new tags and attributes, such as being able to set the font and background color. This drew some criticism as the argument was that HTML should only be used for describing the structure of a document, and not for styling which went outside the scope of this. At this time, browser vendors were tearing ahead of the HTML working group, and finding consensus on new features came very slowly. To tackle this, the vendors came together to dedicate themselves to standardizing HTML, and a month later the HTML working group was disbanded due to its slow-moving nature.

Ever remember slicing up a PSD, then firing up Dreamweaver to create a table to hold all those images? It's something we wouldn't dream of doing today, but oh how we still yearn for that level of simplicity. We've come a long way when looking at HTML 5. It no longer refers to just the tags, but also an API that lets us grab information such as geolocation, or a device's battery level. It's important to keep an eye on your own battery level when keeping up to date as well.

It wasn't long ago that all our styles were usually confined to a single CSS file. We'd construct styles without giving them too much thought compared to the specificity minefield we know it as today. Sass (Syntactically Awesome Stylesheets) arrived in 2006, but it wasn't until a few years later when methodologies like OOCSS (Object-Oriented CSS) really took hold of the web for scalable, maintainable and re-usable styles. Nowadays we may use naming methodologies such as BEM (Block, Element, Modifier), or SUIT CSS, but what results is good old CSS in the browser. What's coming in the future looks promising with CSS variables, and hopefully element queries.

Of the 3 cornerstones of front-end development, JavaScript is the one that has undergone the most radical transformation. It saw daylight in the year 1995 after being in development for only 10 days. To this day we either love it, or hate it (we love it). Server-side JavaScript was also implemented in 1995, but the true champion of server-side JS is Node which was released in 2009.

Since Node, it seems everything is running on JavaScript. Our build tools are using it, native apps utilise it... it has been embedded in almost every single aspect of development. JavaScript itself is growing stronger every year with a newly refreshed release cycle. ES2015 has been the biggest upgrade to the language recently, with yearly releases to follow suit. Thankfully these next releases won't be as far reaching as ES2015, which gives us a chance to catch up.



### **3.0 Application and Usage**

The web is considered to be a mine house of knowledge. Using the search engines like Google, you can literally find out information on almost everything that exists. While most knowledge base websites offer information free of cost, a few might require a fee to provide them.

All the popular internet giants like Google, Yahoo, and Bing offer free email and chat services. With email you can simply reach someone in the other end of the world with a click. Live chat can enable you to have real-time experience with your loved ones living in a far away land.

Websites like MySpace, Facebook, Twitter, LinkedIn, and Orkut enable users to connect with friends and fans. Today social networking is very popular among businesses and individuals.

Video websites such as YouTube and Megavideo that offer free video hosting are one of the most visited places in the web. They are used for both promotional and entertainment purposes.

Websites like eBay and Amazon have literally everything on sale. While these are giants, you can find countless online stores selling all that you can imagine right from web-based products like web 2.0 web templates, modern design for brochures, to other products ranging from electronics to vegetables and fruits. They also offer custom poster design templates on demand. Web development companies even offer free website templates as promotional measure.

Websites like CareerBuilder and Monster are also visited by professionals and business. You can find both job seekers and employers under one roof.

There are a number of websites that act as online encyclopedias, Wikipedia is an apt example. Media is yet another one that uses internet to the full. You can literally find all of the news channels live streaming their content in the web.

Now it is possible for the common man to buy or sell almost anything websites such as craigslist provide classified ad service for free.

Blogging has become the trend of the day. Blogger, WordPress and lot more service providers offer it for free. You can just vent out your feelings, display your skills, or even gossip without restrictions.

There are several websites that allow free downloads of software, computer updates, music, mobile phone back grounds, movies, and other mobile applications. Membership sites often are simply amazing with their value for money products.

Websites like PayPal and Moneybookers have become a great boon to people who transact purchase products using different currencies of the world. Even small businesses have become greatly dependent on these services for eCommerce.

Websites like 4shared, megaupload, and media fire provide file sharing facilities that are very convenient to use.

Gaming sites are one other most used websites in the web. They offer both online entertainment as well as gambling.

Online Dating sites too are much visited ones. It enables you to pick your right pair from millions of profiles available online. If you are one above caste creed and culture, online dating sites can server you better.

Web has a lot more uses than you can ever imagine, if you are bit creative you can even generate good online money from the web without having to own a business.

## **TOOLS USED**

### **Front-End :**

- HTML
- CSS
- JavaScript
- jQuery
- BootStrap

### **Back-End :**

- PHP
- MySQL
- XAMPP

# HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects, such as interactive forms, may be embedded into the rendered page. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as `<img />` and `<input />` introduce content into the page directly. Others such as `<p>...</p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript which affect the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), maintainer of both the HTML and the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.

# CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

CSS is designed primarily to enable the separation of presentation and content, including aspects such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

Separation of formatting and content makes it possible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. It can also display the web page differently depending on the screen size or viewing device. Readers can also specify a different style sheet, such as a CSS file stored on their own computer, to override the one the author specified.

Changes to the graphic design of a document (or hundreds of documents) can be applied quickly and easily, by editing a few lines in the CSS file they use, rather than by changing markup in the documents.

The CSS specification describes a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities (or weights) are calculated and assigned to rules, so that the results are predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) `text/css` is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.

# JavaScript

JavaScript, often abbreviated as JS, is a high-level, dynamic, weakly typed, object-based, multi-paradigm, and interpreted programming language. Alongside HTML and CSS, JavaScript is one of the three core technologies of World Wide Web content production. It is used to make webpages interactive and provide online programs, including video games. The majority of websites employ it, and all modern web browsers support it without the need for plug-ins by means of a built-in JavaScript engine. Each of the many JavaScript engines represent a different implementation of JavaScript, all based on the ECMAScript specification, with some engines not supporting the spectrum fully, and with many engines supporting additional features beyond ECMA.

As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative (including object-oriented and prototype-based) programming styles. It has an API for working with text, arrays, dates, regular expressions, and basic manipulation of the DOM, but does not include any I/O, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded.

Initially only implemented client-side in web browsers, JavaScript engines are now embedded in many other types of host software, including server-side in web servers and databases, and in non-web programs such as word processors and PDF software, and in runtime environments that make JavaScript available for writing mobile and desktop applications, including desktop widgets.

Although there are strong outward similarities between JavaScript and Java, including language name, syntax, and respective standard libraries, the two languages are distinct and differ greatly in design; JavaScript was influenced by programming languages such as Self and Scheme.

## jQuery

jQuery is a cross-platform JavaScript library designed to simplify the client-side scripting of HTML. It is free, open-source software using the permissive MIT License. Web analysis indicates that it is the most widely deployed JavaScript library by a large margin.

jQuery's syntax is designed to make it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax applications. jQuery also provides capabilities for developers to create plug-ins on top of the JavaScript library. This enables developers to create abstractions for low-level interaction and animation, advanced effects and high-level, theme-able widgets. The modular approach to the jQuery library allows the creation of powerful dynamic web pages and Web applications.

The set of jQuery core features—DOM element selections, traversal and manipulation—enabled by its selector engine (named "Sizzle" from v1.3), created a new "programming style", fusing algorithms and DOM data structures. This style influenced the architecture of other JavaScript frameworks like YUI v3 and Dojo, later stimulating the creation of the standard Selectors API.

Microsoft and Nokia bundle jQuery on their platforms. Microsoft includes it with Visual Studio for use within Microsoft's ASP.NET AJAX and ASP.NET MVC frameworks while Nokia has integrated it into the Web Run-Time widget development platform.

## BootStrap

Bootstrap is a powerful front-end framework for faster and easier web development. It includes HTML and CSS based design templates for common user interface components like Typography, Forms, Buttons, Tables, Navigations, Drop downs, Alerts, Modals, Tabs, Accordion, Carousel and many other as well as optional JavaScript extensions. Bootstrap also gives us an ability to create responsive layout with much less efforts.

The biggest advantage of using Bootstrap is that it comes with free set of tools for creating flexible and responsive web layouts as well as common interface components. Additionally, using the Bootstrap data APIs we can create advanced interface components like Scroll-spy and Typeahead's without writing a single line of JavaScript.

Here are some more advantages, why one should opt for Bootstrap:

- Save lots of time

We can save lots of time and efforts using the Bootstrap predefined design templates and classes and concentrate on other development work.

- Responsive features

Using Bootstrap we can easily create responsive designs. Bootstrap responsive features make your web pages to appear more appropriately on different devices and screen resolutions without any change in markup.

- Consistent design

All Bootstrap components share the same design templates and styles through a central library, so that the designs and layouts of your web pages are consistent throughout your development.

- Easy to use

Bootstrap is very easy to use. Anybody with the basic working knowledge of HTML and CSS can start development with Bootstrap.

- Compatible with browsers

Bootstrap is created with modern browsers in mind and it is compatible with all modern browsers such as Mozilla Firefox, Google Chrome, Safari, Internet Explorer, and Opera.

- Open Source

The best part is, it is completely free to download and use.



# PHP

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994. PHP is a recursive acronym for "PHP: Hypertext Preprocessor".

PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.

PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time. PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time. PHP is forgiving: PHP language tries to be as forgiving as possible. PHP Syntax is C-Like. PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them. PHP can handle forms, i.e. gather data from files, save data to a file, through email we can send data, return data to the user. We can add, delete, modify elements within your database through PHP. Access cookies variables and set cookies. Using PHP, we can restrict users to access some pages of your website. It can encrypt data.

# MySQL

MySQL is a Relational DataBase Management System (RDBMS).

RDBMS means R--DB--MS.

- DB stands for Database, a repository for the information store.

The data in a database is organized into tables, and each table is organized into rows and columns.

Each row in a table is called a record. A record may contains several pieces (called fields) of information, and each column in a table is known as a field.

-MS stands for Management System, the software that allows us to insert, retrieve, modify, or delete records.

-R stands for Relational, indicates a particular kind of DBMS that is good at relating information stored in one table to information stored in another table by looking for elements common to each of them. Relational DBMS has the advantage of efficient storage, and retrieval mechanisms for data, and uses normalization process during design of RDBMS. Database normalization process is beyond the scope of this article, and several references are available.

-MySQL operates using client/server architecture in which the server runs on the machine containing the databases and clients connect to the server over a network. The server operating systems is usually a Linux (like Redhat 9.0 etc.) or Windows 2000 operating system. Typically mySQL is supported on Windows XP, Windows Server 2003, Red Hat Fedora Linux, and Debian Linux, and others. As with any other client/server application, MySQL is a multi-user database system, meaning several users can access the database simultaneously. Here:

- The server (MySQL server) listens for client requests coming in over the network and accesses database contents according to those requests and provides that to the clients.

- Clients are programs that connect to the database server and issue queries in a pre-specified format. MySQL is compatible with the standards based SQL (SQL stands for Structured Query Language) language. The client program may contact the server programmatically (meaning a program call the server during execution) or manually. For example, when we are issuing commands over a telnet session to a MySQL server, we are issuing the requests to the server by typing commands at your command prompt manually. On the other hand, if we have input some data (say your credit card information on the Internet towards purchase of some goods) in a form, and the form is processed by using a server side program, then the MySQL server is contacted programmatically. This is often the case in credit card approvals, member subscriptions etc.

# **XAMPP**

XAMPP is a free and open source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes. Everything needed to set up a web server – server application (Apache), database (MariaDB), and scripting language (PHP) – is included in an extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server extremely easy as well.

## **MODULES OF TRAINING**

<b>Modules</b>	<b>Work Done</b>
1.0 Elemental design	Designed the hand sketched layout into a dynamic, fully animated website developed from scratch
2.0 Ground up development	Developed the full website using framework like bootstrap and designed it from scratch using HTML, CSS, JavaScript.
3.0 Backend Development	Implemented backend using PHP
4.0 Database Establishment	Used XAMPP for reliable database integration
5.0 Search Engine Optimization	For increment of digital marketing and sale purpose
6.0 Security Essentials	Ensured an OTP authentication key for a secure customer login
7.0 Connecting User	Developing a better connection towards a customer through social media platform and give our service to customer.
8.0 Customer Feedback	Most important segment for a company which defines its market value are their customer. So this module was specially designed for quality assurance of the customer.

## 1.0 Elemental Design

User interface design patterns are well-thought out and reusable solutions to the layout and interface problems we encounter every day. For instance, the majority of users are accustomed to seeing a website's main navigation displayed horizontally along the top of a website. Placing it anywhere else on the page would likely result in confusion.

Like many things in life, a website's interface benefits from patterns because they help create consistency for the user. While creativity and thinking outside the box are elemental to good design, so is conformity. If common UI design patterns are ignored, impatient or frustrated users can give up and switch to your competitor with the click of a button. That's why design patterns are so important today paired with good design principals they provide proven recipes for making a website as user-friendly as possible.

The challenge was to implement an easily scalable design that would be convenient to the everyday user.

The UI should be naturally intuitive to navigate and have the comfort of all features laid out in a minimalistic yet elegant way, at the same time being competitive enough for the existing market challenge.

Company had demanded for a best quality design and which must be user-friendly to user. So to overcome their current problem I had to redesign according to them. The UI was implemented from scratch using hand sketched layouts and custom designed buttons for immersive user experience.

## 2.0 Ground up Development

Anything made custom from ground level will be powerful and elegant. So company needed something different from the current market and also had a challenge to increase their market sale via digital source. Basically they gave me an opportunity to develop a full custom website which has different UI and a modern appearance and should be made with 100% original design and best quality user Interface. They handed me layout of a website design and I further add many more functionalities.

The development of design is initial state of any kind of website. It was design and developed with the help of html and css. But the company denied my initial design. So again I had to redesign the whole website again due to lack of proper graphical user interface. So the company asked me again to redesigned it and make the user interface more eye pleasing to the customer and users.

The next design meet the expectations of the company and proved to develop it further. Every small and minute detailing was designed and developed from the scratch for making it look beautiful and simple to use.

I had used bootstrap for sliding images and further used animation for loading website. Every single element was given equal focus and that helped me to grab the company's attention on my project. Animation was also build using JavaScript and little use of JQuery

To survive in today's world there must be a uniqueness in the company. So build a catalogue for a company has a lot to say about itself and it's not easy to design it. Designer is hired at the company which is most crucial for maintain the lead in market which helps to increase sale. So taking notes on this, I had provided an idea to the company that we should only give the design catalogue to customers directly and not avail it on website to reduce the chance of piracy on the design by third party companies. This was done through a small process, where customer were given a small form to fill it on website and company's product was directly mailed to them. This method had two benefits. Firstly it will impact exponentially on increase in market sale and secondly it was much easier for company to contact the person, those who had applied for viewing company's catalogue.

## 3.0 Backend Development

The back-end also known as CMS (content management system) or back office is the part of the website that remains hidden to users (but not to the admin or developers). Its job is to

- 1) access the information that users require through the website
- 2) combine and transform such information
- 3) return the information in its new shape to the requester.

To put it another way, the back-end makes its entrance into the website in order to give life to the front-end. Now that we know the difference between the front-end and the back-end and understand the relationship between the two, we will further see how I implemented the database in backend Development.

PHP was used to connect the database and XAMPP was the tool where the database was maintained. It included query processing at the time when the user inputs its information. This was automatically stored in the database created using XAMPP. To fetch a data from dataset it needs a primary key and every time it is not convenient for user to write a unique id for their register entry. So to overcome this problem I developed a primary key in database which had an ability to auto generate every time when the user filled form. Hence create a user friendly interaction with the website.

The company was also concerned about the user privacy and also asked me to tell our users that why we need to collect their personal information. Company wanted their process to be transparent and did not want to violate user's privacy. So I had used POST method in my website to fetch the data from user. POST method has lot more benefits than traditional GET method. Advantage of POST method is that requests are never cached, requests do not remain in the browser history, requests cannot be bookmarked and requests have no restrictions on data length.

## **4.0 Database Establishment**

Database is a systematic collection of data. Databases support storage and manipulation of data. We can provide countless number of examples for usage of databases .

The data base used in this project was RDBMS (Relational DBMS)- this type of DBMS defines database relationships in form of tables, also known as relations. Unlike network DBMS, RDBMS does not support many to many relationships. Relational DBMS usually have pre-defined data types that they can support. This is the most popular DBMS type in the market. Examples of relational database management systems include MySQL, Oracle, and Microsoft SQL Server database.

This database were created and maintain through the help to XAMPP tool and were link to front-end of the website using php. Data-warehouse was created under the name of student which had database of contact information and customer report.

This both data base had a specific usage. One of the data was used for collection of data and another was used for providing the customer feedback and query. This made company provide more efficient way for increase their market sale.



## 5.0 Search Engine Optimization

Search engine optimization (SEO) is the process of affecting the visibility of a website or a web page in a web search engine's unpaid results—often referred to as "natural", "organic", or "earned" results. In general, the earlier (or higher ranked on the search results page), and more frequently a site appears in the search results list, the more visitors it will receive from the search engine's users; these visitors can then be converted into customers. SEO may target different kinds of search, including image search, video search, academic search, news search, and industry-specific vertical search engines. SEO differs from local search engine optimization in that the latter is focused on optimizing a business' online presence so that its web pages will be displayed by search engines when a user enters a local search for its products or services. The former instead is more focused on national searches.

As an Internet marketing strategy, SEO considers how search engines work, what people search for, the actual search terms or keywords typed into search engines and which search engines are preferred by their targeted audience. Optimizing a website may involve editing its content, HTML, and associated coding to both increase its relevance to specific keywords and to remove barriers to the indexing activities of search engines. Promoting a site to increase the number of backlinks, or inbound links, is another SEO tactic. By May 2015, mobile search had surpassed desktop search. Google is developing and pushing mobile search as the future in all of its products. In response, many brands are beginning to take a different approach to their internet strategies.

So to apply SEO I had to find a technique which was done thorough the help of meta keyword in html. This technique basically allowed to type a keyword under meta tag which helps the search engine by knowing the purpose of the website. At the time of searching, if the user wants to buy the product then a specific keyword will be present in meta tag which will make our website to appear at first. This whole process come under hyper text markup language.

## 6.0 Security Essentials

In the ever changing world of global data communications, inexpensive Internet connections, and fast-paced software development, security is becoming more and more of an issue. Security is now a basic requirement because global computing is inherently insecure. As your data goes from point A to point B on the Internet, for example, it may pass through several other points along the way, giving other users the opportunity to intercept, and even alter it. It does nothing to protect your data center, other servers in your network, or a malicious user with physical access to your EnGarde system.

The Company wanted to be loyal and transparent towards it's customer, So they asked me to integrate a security feature for protection of the database and also make it fool proof from getting the website hack. The website should work under heavy loads of traffic and this also demanded to use the heavy servers which would be costly to maintain it.

To overcome this problem, I had to rethink all the worst case scenario as a hacker. Hacking a website is simple done by bombarding so many request to a website, which makes very difficult for a sever to handle a so many request at a single time. Hence cause a hacker to steal data from our data base which could be devastating for a company. So, I found a quite simple problem. It was to build an OTP (One Time Password) System integrated in website so at a time there will be less request to sever. This method would reduce 80% risk of website getting attacked by the hacker.

The company appreciate that idea an approved me to further work on this security feature. This was done with the help of self generating random string which consists of several level of security using PHP language for generation of various passwords. OTP was send to a user who had filled the form and hence they were able to receive latest news and company's product. One special feature of one time password is that as soon as a user writes a OTP(receive on mail ID) on website that password or OTP cannot be used again by any other user.

## 7.0 Connecting User

The company wanted to make there excellent fame in market and also thy wanted to make sure about a good community fan base. This demand was fulfilled by creating a new page for getting connected to user fan base.

Social Media is the latest buzz word in Internet Marketing the last couple of years. The success of the new generation of social media platforms, mainly Facebook and Twitter, changed the way we socialize, interact and shop. This also brought new channels to digital marketing as well. Social media is the term we use to describe platforms that bring people together for the exchange of information. The most popular social media platforms are: Facebook, Twitter, Google+, Pinterest, Instagram, Tumblr, LinkedIn, StumbleUpon and YouTube.

This made company easier for connecting directly to user and this could let to better growth in sale, achieving good user interaction and making overall market value of company to increase dramatically. So I Had included the contact information, social platforms such as FaceBook, Twitter, LinkedIn etc. and also gave a map location view directly on google Maps making it easier for user to locate our offices. An additional helpline number was also added to directly speak with the company's executive which would assists the user for better experience.

## 8.0 Customer Feedback

The need of customer Feedback is to :

- 1) Improve a product or service: Listening to your customers is the only way to guarantee you create a product or service that they actually want to buy. Customer feedback is commonly used throughout the product development process to ensure that the end product is something that solves a customer's problem or fulfils a need.
- 2) Offers the best way to measure customer satisfaction: Measuring customer satisfaction helps you determine whether your product or service meets or surpasses customer expectations. Customer feedback surveys help you measure customer satisfaction.
- 3) Provides actionable insight to create a better customer experience: Improving the customer experience should be the primary reason you gather customer feedback. The process of winning new business and retaining existing customers is getting harder and harder. Offering an amazing experience that keeps your customers coming back and referring their friends to you is the best way you can stand out from your competition.
- 4) Improve customer retention: Customer feedback offers a direct line of communication with your customer so you can determine if they are not happy with the product or service you are delivering before you lose their business.
- 5) Delivers tangible data that can be used to make better business decisions : The best business decisions are based off data, not hunches. Too many times business owners and marketers make big calls based off inaccurate data. Customer feedback is the holy grail of tangible data. You can gather real insight into how your customers really feel about the product or service you deliver.

This all demands were fulfilled by create a database in a website which would take all the feedback of a customers who had bought a product or any queries related product was solved successfully. Each of the feedback would be carefully examined by a company's marketing department for their own betterment and leaping a way ahead from their current competitors.

## DAILY DIARY

Day (JUNE 2017)	Work Done
Day 1-3	Worked on the looks and design of the website
Day 4-7	Content to be shown on website of a company
Day 8-9	Company rejected my design so I had to rebuild it from scratch. Gave me sketch of a website.
Day 10-12	Redesigning the website with completely modern look. Added a background music for nice interaction with website
Day 13-16	Modal box was created for controlling background music
Day 17	Made a custom button for the website
Day 18	Developed a design with addition video feature
Day 19	Added a static heading look of a website for accessing menu faster
Day 20	Created a slide show using bootstrap
Day 21	Created database using Xampp and PHP for catalogue
Day 22	Developing a technique for generation of One Time Password using PHP
Day 23	Added Company's profile page
Day 24	Implemented the slide show of manufacturing plant
Day 25	Create a new database for collection of user's feedback and linked it through php on website
Day 26	Contact information was created and also social media platforms were linked to the website
Day 27	Location of a maps and a custom made loading window screen was designed and developed using JavaScript
Day 28	Small animations were created for elegant view of website
Day 29	Font was made eye pleasing and every content had a unique texture and color provided
Day 30	Every small and remaining detailing was done at end

## **CONCLUSION**

The website was developed as demand by company which successfully met with their expectation by creating an elegant design and build a immersive user experience with boosting up of their digital and social communication and market.

Several testings and debugging were done before time of submission of final project. I had used various tools of for development of this project such as XAMPP and PHP mailer. Other various technique were used to protect the database from a malicious user which could harm company's development. Animation were created custom by using JavaScript which added a beauty towards interacting with website.

Various method can be used to increase the market-scale which could help the company grow faster in this digital era of our society.