1. INTRODUCTION

Price comparison sites are designed to compare the price of goods and services from a range of providers, which will help consumers in making decision to choose products that will save their money through online.

Considering the customer's busy lifestyle especially those who are living in the city area, most of the consumers prefer to buy their needs through the internet because it saves their time. Besides, consumers always go for the cheaper price in purchasing products therefore by using price comparison website, customers do not have to travel from shop to shop only to survey the price offered by different shops for the same product.

They can just check it from the price comparison website itself and decide where they should buy the products they need. The best deals will be clearly highlighted. This way, paper aims to provide solution for online customers to buy products at good deal and save their valuable time, effort, and money.

The software should compare prices from multiple retailers and display them in a single list. This makes it easier for users to compare prices and find the best deals.

The software should have filter and sorting options to help users refine their search results. Filters could be based on price range, brand, store location, shipping costs, and other criteria. The software should display detailed product information, such as specifications, features, and images, to help users make an informed decision. User reviews and ratings can be a valuable resource for users to evaluate products and retailers. The software should display reviews and ratings from multiple sources, including the retailer's website, social media, and third-party review sites. The software should allow users to track the price of a product over time and receive alerts when the price drops. The software should allow users to create accounts to save their search results, set up price alerts, and receive personalized recommendations. The software should track user behavior and provide insights into user preferences, popular products, and other metrics to help retailers and manufacturers make data-driven decisions.

Front End : HTML,PHP, CSS

Price comparison

Back End : My SQL

Modular description

There are three modules in this project and they are as follows :

1. Administrator Module

2. provider Module

3. Users Module

2. SYSTEM SPECIFICATIONS

System Requirement Specification

Key information for programming, testing and implementing the project. The major document produced by the system analysis at the end of the system study stage. It provides complete details of the analyst's proposed solution to the problem outlined in terms of references. This is the description of the proposed new computer system in great detail, it specified how the system would do it, and the machinery needed the costs and benefits expected for the project. The system specification describes the hardware and software specification used to develop the software.

Hardware Specification

Processor	:	Pentium IV
RAM	:	2 GB
Hard Disk	:	500 GB
Keyboard	:	Standard 101/102 key
Mouse	:	Optical mouse
Monitor	:	Plug and Play monitor
Printer	:	Ink jet

Software Specification

Operating System	:	Windows 7
Front End	:	PHP
Back End	:	MySQL

Price comparison

Software technology

Over view

ABOUT FRONT END PHP

The original release of PHP was designed and created by Rasmus Lerdorf back in the middle of the 90s as a way of making various common web tasks easier and less repetitive. Back then, the main goal was to have the minimum amount of logic as was possible in order to achieve results, and this led to PHP being HTML- centric - that is, PHP code was embedded inside HTML.

The first popular version of PHP was called PHP/FI 2.0, for Personal Home Page / Form Interpreter, and, despite its parsing inconsistencies, managed to attract a fair few converts, including myself. The main issue with this version was that the PHP/FI parser was largely hand-written, and so users often encountered scripting errors that were not technically errors - they were just the PHP/FI parser screwing up. Furthermore, the parser was absolutely tied to the Apache web server, and was hardly renowned for its speed.

Some of these issues were resolved in version 3, when Zeev Suraski and Andi Gutmans re-wrote PHP from the ground up using standard "compiler compiler" tools like Flex and Bison. This made the parser itself all but bulletproof, which in turn gave sanity back to many PHP users! PHP 3 also finally made the language extensible - something that was seriously lacking from prior versions. Particularly keen developers were able to write their own modules for the language, adding functionality at the core level. The parser itself, though, was still tied to Apache, and, although speed was improved a great deal from PHP/FI, it still was not anything to shout about.

The only downside to upgrading to PHP 3 was that the language was a lot stricter - some code that worked on PHP/FI would no longer work after upgrading. The language was still young, though, so not many were affected.

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PHP 3 also finally made the language extensible - something that was seriously lacking from prior versions. Particularly keen developers were able to write their own modules for the language, adding functionality at the core level. The parser itself, though, was still tied to Apache, and, although speed was improved a great deal from PHP/FI, it still was not anything to shout about.

The all-round improvement brought about by the PHP/FI to PHP 3 upgrade brought in many new users eager to jump from the Perl ship to a system that was easier to use. At the time, there was no doubt at all that Perl was faster to execute, except perhaps among PHP zealots, however PHP still kept its lead in speed of development, and that was the key selling point.

With PHP 3, the language had gained limited object-oriented support, and this only added extra fuel to the fire of PHP's growth. By the time PHP 3 was replaced in the middle of 2000, it was installed on over 2,500,000 web-site domains, as compared to 250,000 just 18 months before.

In the middle of 2000, PHP 4 was released to the world, containing major differences to PHP 3 in all aspects. Extensive work had been done to ensure that backwards compatibility with older PHP scripts would remain - upgrading from PHP3 to PHP 4 was much smoother than the PHP/FI to PHP 3 upgrade.

Perhaps the most important change made for PHP 4 was the switch to what is called the Zend Engine. The Zend Engine, created by Zend, a company founded by Zeev Suraski and Andi Gutmans (the name Zend is a contraction of ZEev and aNDi) to promote PHP in the corporate environment, allowed much more flexibility than had ever been seen before in PHP. The engine took over the core of PHP and introduced reference counting, whereby all resources used in scripts (database connections, files, etc) are tracked automatically by the engine, and freed when no longer used to minimize memory usage and ensure there were no memory leaks.

Also introduced with PHP 4 was complete web server abstraction, meaning that PHP now runs on Apache 1.3.x, Apache 2, Microsoft's IIS, Zeus, AOL Server, and more. This opened use of the language up to the 40% of the world who do not use Apache for their web server.

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Performance took a gigantic leap forward due to two main factors. Firstly, PHP the execution paradigm was changed from prior versions. PHP 3 and before used an "execute while interpreting" paradigm which meant that PHP read a line of source code, interpreted it, executed it, read another, interpreted it, executed it, read another, etc. This meant that code was often re-read and re-interpreted twice or more, entirely unnecessarily.

PHP 4, with its new "compile first, execute later" paradigm read your entire script in and compiled it to byte code before execution, which produced a large speed increase - the average speed increase was about 100%, with some benchmarks showing up to a fifty-fold increase in speed when PHP 4 was pushed to its limits.

Furthermore, because PHP 4 compiled the entire script before executing it, it became possible to optimize and cache the compiled code before execution. We will be looking at how this works later on in the book.

Secondly, PHP 4 introduced multi-threading, which essentially allows particularly lengthy, but non-critical functions to be run independently from the main script process, further streamlining execution.

Since the release, PHP has continued its advance unabated - at the time of writing, the current version of PHP 4 is 4.3.9, and PHP is installed on 9,500,000 web servers around the world. PHP is the most popular Apache module available, surpassing even mod_perl, and continues to grow in popularity.

HTML Relationship

When used to output HTML content, PHP is embedded inside HTML in code islands, as opposed to in Perl, where HTML code is embedded inside the Perl script. The most common way to open and close PHP code blocks is by <?php and ?>. Here is an example of a simple page, shown in Perl first then in PHP - don't worry about what the code means for now:

```
#s!/usr/bin/perl
 print "<HTML>\n";
print "<BODY>\n";
```

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```
print "<P>Welcome,
$Name</P>\n";
print "</BODY>\n";
print"</HTML>";
And now in PHP:
<HTML>
<BODY>
<P>Welcome, <?php print $Name; ?></P>
</BODY>
</HTML>
```

As you can see, the PHP version is only a line shorter, but infinitely much easier to read because the majority of the page is just HTML. Some modules for Perl (particularly CGI.pm) help, but PHP continues to have a big lead in terms of readability. If you really wanted to, you could write your PHP script like the Perl script: switch to PHP mode and print everything out from there. However, it tends to get messy - as you can see!

Apart from editing legibility, another advantage to having most of the page in straight HTML is that it makes editing with commercial IDEs possible, whereas products like Dreamweaver and FrontPage trash Perl's print statements.

One key advantage to using PHP as opposed to some other solutions is that PHP code is all executed at the server, with the client only receiving the results of the script. What this means is that users never see your PHP source code because they are never sent it - they only see what you want them to see.

PHP uses a blend of interpretation and compilation in order to provide the best mix of performance and flexibility to programmers.

Behind the scenes, PHP compiles your script down to a series of instructions (called opcodes) whenever it is accessed. These instructions are then executed one by one until the script terminates. This is different from conventional compiled languages such as C++ where the code is compiled down to native executable code then that executable is run from then on. Instead, PHP re-compiles your script each time it is requested.

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This constant recompilation may seem a waste of processor time, but it is actually not all that bad because you no longer need to worry about hand recompiling your scripts when you make any changes. On the flip side, many scripts take longer to compile than they do to execute!

Furthermore, it provides very quick feedback during development. If you have an error somewhere in your file, PHP will refuse to compile the page until you have fixed the problem, and you are able to step through execution of your code line by line until you find the problem.

The speed hit of regular compilation is nullified entirely by the use of PHP accelerators. One major advantage to having interpreted code is that all memory used by the script is managed by PHP, and the language automatically cleans up after every script has finished. This means that you do not need to worry about closing database links, freeing memory assigned to images, and so on, because PHP will do it for you. That is not to say you should be lazy and make PHP do all the work - good programmers clean up themselves, and let PHP work as backup in case something is missed.

PHP offers a great deal of flexibility as to how you want to output your content. In general use, PHP is embedded inside HTML in code islands started with

<?php and ended with ?>. You can reverse this by writing your whole script as one big PHP code island and printing HTML as necessary. Going back to the example shown previously, we can make our PHP code look almost identical to the Perl code by printing the HTML from inside our PHP code:<?php

```
print "<HTML>\n";

print "<BODY>\n";
print "<P>Welcome, $Name</P>\n";
print "</BODY>\n";
print "</HTML>\n";
?>
```

"Print" is a simple function that outputs a chunk of text, enclosed in quotation marks, to the client. "\n" means "start new lines in the source code", and it serves to lay the source code out nicely. For the longest time, a debate raged on message boards and mailing lists as to whether it was faster to drop out of "PHP mode" to output large amounts of HTML, or whether it was just

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as fast to stay in PHP mode. The truth is that it is horses for courses - you will find little or no speed difference either way.

PHP also has great output buffering features that further increase your control over the flow of output. An output buffer can be thought of as a storage hole where you can queue up content for outputting. Once you start a buffer, any output you create is automatically put into that buffer, and is not seen unless the buffer is closed and flushed - that is, sent to your visitor.

The advantage to this output queuing is two-fold. First, it allows you to clean the buffer if you decide not to output the current output queue in the buffer. When a buffer is cleaned, all the output stored in there is deleted as if it were never there, and output for that buffer is started from scratch. Secondly, output buffering allows you to break the traditional ordering of web pages - that of headers first and content later. Owing to the fact that you queue up all your output, you can send content first, then headers, then more content, then finally flush the buffer. PHP internally rearranges the buffer so that headers come before content.

Output buffering is covered in much more depth later.

- The base of the PHP language is very simple, having just enough to set and retrieve variables, work with loops, and check whether a statement is true or not. The real power behind PHP comes with its extensions - add-ons to the base language that give it more flexibility. There are hundreds of extensions to PHP, and they can be broken down into five distinct types: core, bundled, PECL, third party, and DIY. Core extensions are extensions that are bundled with PHP itself, and enabled by default. For all intents and purposes they are part of the base language, because, unless you explicitly disable them (few people do, and sometimes you cannot), they are available inside PHP. For example, the mechanism to handle reading and saving files in PHP is actually handled by an extension that is automatically compiled into PHP.

- Bundled extensions are extensions that are bundled with PHP, but not enabled by default. These are commonly used, which is why they are bundled, but they are not available to you unless you specifically enable them. For example, the mechanism to handle graphics creation and editing is handled by an extension that is bundled with

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PHP, but not enabled by default.

- PECL stands for "PHP Extension Code Library", and is as a subset of the PHP Extension and Application Repository, PEAR. PECL (pronounced "pickle") was originally created as a place where rarely used or dormant bundled extensions could be moved if they were no longer considered relevant.

- Third-party extensions are written by programmers like you who wanted to solve a particular problem that was unsolvable without them creating a new extension. There is a variety of third-party extensions available out there, with the sole difference between a third-party extension and a PECL extension is that there are various rules about having code being submitted to PECL. Third-party extensions are frequently unstable, and often just downright crazy. That is not to say they are bad - give them a shot and see what you can do.

- Finally, Do-It-Yourself (DIY) extensions are simply extensions you created yourself. PHP has a remarkably rich extension creation system that makes it quite simple to add your own code as long as you know C. Later on we'll be going through the task of creating your first extension from start to finish. Note that creating your own extension requires that you have the ability to compile PHP - this is not a problem if you use Unix, but is very difficult for Windows users without the correct software.

PHP would not be where it is today without the help and effort of thousands of people. A particular few deserve special mention and thanks - if you see them around at a conference, buy them a drink!

PHP was originally created by Rasmus Lerdorf, and he oversaw production of the first release and PHP/FI 2.0. PHP 3 was rewritten from the ground up by Zeev Suraski and Andi Gutmans, and the three of them are the "language architects" behind PHP.

In the PHP group, the developers who primarily work on development of the language core, there are: Thies C. Arntzen, Stig Bakken, Shane Caraveo, Andi Gutmans, Rasmus Lerdorf, Sam Ruby, Sascha Schumann, Zeev Suraski, Jim Winstead, and Andrei Zmievski. Each of them has

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worked exceptionally hard, alongwith the help of many others, to put PHP where it is today.

Two other groups of people deserve special mention: Jouni Ahto, Alexander Aulbach, Stig Bakken, Rasmus Lerdorf, Egon Schmid, Lars Torben Wilson, and Jim Winstead collectively make up the PHP Documentation Team, who have done such an excellent job with the PHP manual. In addition, Ilia Alshanetsky, Stefan Esser, Moriyoshi Koizumi, Sebastian Nohn, Derick Rethans, Melvyn Sopacua, and Jani Taskinen run the Quality Assurance for PHP, making sure each release comes out as bug-free as possible.

If you have a little time on your hands, visit http://www.php.net/credits.php and read the full credits online yourself - you will see that PHP really is a community effort built by the collective desire to build the best language possible.

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ABOUT BACK END

MySQL

MySQL is the world's most popular open source database software, with over 100 million copies of its software downloaded or distributed throughout its history. With its superior speed, reliability, and ease of use, MySQL has become the preferred choice for Web, Web 2.0, SaaS, ISV, Telecom companies and forward- thinking corporate IT Managers because it eliminates the major problems associated with downtime, maintenance and administration for modern, online applications.Many of the world's largest and fastest-growing organizations use MySQL to save time and money powering their high-volume Web sites, critical business systems, and packaged software — including industry leaders such as Yahoo!, Alcatel-Lucent, Google, Nokia, YouTube, Wikipedia, and Booking.com.

The flagship MySQL offering is MySQL Enterprise, a comprehensive set of production-tested software, proactive monitoring tools, and premium support services available in an affordable annual subscription.

MySQL is a key part of LAMP (Linux, Apache, MySQL, PHP / Perl / Python), the fast-growing open source enterprise software stack. More and more companies are using LAMP as an alternative to expensive proprietary software stacks because of its lower cost and freedom from platform lock-in.

The MySQL database is owned, developed and supported by Sun Microsystems, one of the world's largest contributors to open source software. MySQL was originally founded and developed in Sweden by two Swedes and a Finn: David Axmark, Allan Larsson and Michael "Monty" Widenius, who had worked together since the 1980's. More historical information on MySQL is available on Wikipedia

- The best and the most-used database in the world for online applications
- Available and affordable for all
- Easy to use
- Continuously improved while remaining fast, secure and reliable
- Fun to use and improve

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- Free from bugs

Apache Web Server

Apache is generally recognized as the world's most popular Web server (HTTP server). Originally designed for Unix servers, the Apache Web server has been ported to Windows and other network operating systems (NOS). The name "Apache" derives from the word "patchy" that the Apache developers used to describe early versions of their software.

The Apache Web server provides a full range of Web server features, including CGI, SSL, and virtual domains. Apache also supports plug-in modules for extensibility. Apache is reliable, free, and relatively easy to configure. Apache is free software distribute d by the Apache Software Foundation. The Apache software Foundation promotes various free and open source advanced Web technologies.

Apache supports a variety of features, many implemented as compiled modules which extends the core functionality. These can range from server-side programming language support to authentication schemes. Some common languages interfaces support Perl, Python, Tcl, and PHP. Popular authentication modules include mod_access, mod_auth, and mod_digest, and mod_auth_digest, the successor to mod_digest. A sample of other features include SSL and TLS support (mod_ssl), a proxy module (mod_proxy), a URL rewriter (also known as a rewrite engine, implemented under mod_rewrite), custom log files (mod_log_config), and filtering support (mod_include and mod_ext_filter).

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3. SYSTEM ANALYSIS

Introduction about System Analysis

System Analysis is the process of gathering and interpreting facts, diagnosing the problems and using the information to recommend improvements on the system. System analysis is a problem solving activity that requires intensive communication between system user and system developers. System analysis or study is an important phase of any system development process. The system is viewed on a whole and inputs to the system are identified. The output from the organization is travel through various phases of the processing of inputs.

The system is viewed as a whole and inputs to the system are in defined the output from the system are traced through the various data are collected on available files.

Description points and transaction held by the present system. Based on analysis, a cost or benefit analysis are considered, cost of the system is calculated on the basis of analysis made on the solution is given as a proposal. The proposal is then weighed with the existing system analytically and the best on is selected. The proposal is presented to the user request and suitable changes are made. This is a loop that ends as the user is satisfied with the proposal. After all, this proposal becomes a biometric passports are to speed up clearance through immigration and the prevention of identity fraud.

A detailed study of these processes must be made by the various techniques like interviews, questionnaires, etc. The data collected by these sources must be scrutinized to arrive to a conclusion .The conclusion is an understanding of how the system functions. This system is called the existing system. Now, the existing system is subject to close study and the problem areas are identified.

The designer now functions on a problem solver and tires to sort out the difficulties that weighed with the existing faces. The solutions an given on a proposal. The proposal is then weighed with the existing system analytically and the best one is selected. The proposal is presented to the user for any endorsement by the user. The proposal is reviewed on user request and suitable changes that made. This is a loop that ends as soon as the user in satisfied with the

proposal.

Existing System

A traditional system of price comparison of various products involves physically visiting multiple stores or retailers to compare the prices of products you're interested in. It allows you to physically see and touch the products you're comparing and provides a more personalized shopping experience, with the opportunity to ask questions and get recommendations from sales associates. This can be time-consuming if you need to visit multiple stores to compare prices. You may not have access to a wide range of products, especially if you live in a smaller town or city. Prices may not be up to date or accurate, as they may not reflect current promotions or discounts.

Limitations of Existing System

- The proposed system reduces the paper work
- The system saves time
- Reduces the human error in accounting
- Services are provided quickly
- Stock management enables efficient services

Proposed System

Price comparison sites are designed to compare the price of goods and services from a range of providers, which will help consumers in making decision to choose products that will save their money through online. The software should compare prices from multiple retailers and display them in a single list. This makes it easier for users to compare prices and find the best deals.

The software should have filter and sorting options to help users refine their search results. Filters could be based on price range, brand, store location, shipping costs, and other criteria. The software should display detailed product information, such as specifications, features, and images, to help users make an informed decision. User reviews and ratings can be a valuable resource for users to evaluate products and retailers. The software should display reviews and ratings from multiple sources, including the retailer's website, social media, and third-party

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review sites. The software should allow users to track the price of a product over time and receive alerts when the price drops. The software should allow users to create accounts to save their search results, set up price alerts, and receive personalized recommendations. The software should track user behavior and provide insights into user preferences, popular products, and other metrics to help retailers and manufacturers make data-driven decisions.

Advantages of the Proposed System

- Easier entry of data through forms
- Easier modification of data entered
- User friendly interface
- Quick set rival of information and provides greater efficiency.
- User friendliness with improved efficiency for handling transactions.
- Performs computations, comparisons and verifications in an easiest way toreduce error risks.
- Tracking facility

Feasibility Study

Feasibility study is done in my software development as a part of preliminary investigation. Specific method used by the analysis for collecting data about requirements are fact finding techniques. These include record review, observations, interview and questionnaires. When the request is made, the first system activity, the preliminary investigation begins. This activity has 3 steps among them feasibility study is important. Feasibility study is an important outcome of the preliminary investigation and is the determination that the system request is feasible. And my software Military Canteen Management satisfies the different types of the feasibility studies. They are listed below:

Technical Feasibility

This is related to the technicality of the project. This evaluation determines whether the technology needed for the proposed system is available or not. It deals with hardware as well as software requirements. That is, type of hardware, software and the methods required for running the systems are analyzed. This involves financial consideration to accommodate technical enhancement. If the budget is a serious constraint, then the project is judged not feasible.

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The software Milatry Canteen Management software supports the technical feasibility to a great extends. That is, this software can be operated with the minimum technical support. It uses PHP as front end, MYSQL as database at windows platform and Mozilla Firefox and Google Chrome as browser. And also it provides accuracy, reliability, ease of access and data security.

Operational Feasibility

Proposed systems are beneficial only if they can be turned into information systems. That is it will meet the organizations operating requirements and also checks that whether the system will work when it is developed and installed.

The software Milatry Canteen Management software supports the operational feasibility to a great extends. The performance of this software is more accurate, more user friendly, effective, error free.

Behavioral Feasibility

The main problem faced during development of a new system is getting acceptance from the user. People are inherently resistant to changes and computers have been known to facilitate change. It is mainly related to human organizational and political aspects.

The points to be considered are:

- What changes will be brought with the system?
- What new skills will be required? Do the existing staff members havethese skills? If not, can they be trained due course of time?

Generally, project will not be rejected simply because of operational feasibility but such considerations are likely to critically affect the nature and scope of the eventual recommendations. This feasibility study is carried out by a small group of people who are familiar with information system techniques, who understand the parts of the business that are relevant to the project and are skilled in skilled analysis and design process.

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4. SYSTEM DESIGN

Introduction

Design is the second phase in the system development life cycle. Software design is the first of the three technical activities in the software development process such as design, code writing and testing.

During this phase, the analyst schedules design activities, works with the user to determine the various data inputs to the system, plans how data will flow through the system, designs required outputs and writes program specifications. Again the analyst's activities focus on solving a user's problem in logical terms.

During this second step, analysts employ a variety of tools such as data flow diagrams, entity-relationship diagrams, data dictionaries and Gantt chart.

The system's design converts the theoretical solution introduced by the feasibility study into a logical reality. During design the analyst:

- Draws a model of the new system, using data flow and entity-relationshipdiagrams.

- Develop methods for collecting and inputting data.

- Defines the detailed data requirements with a data dictionary.

- Writes program specifications.

- Specifies control techniques for the system's outputs, databases and inputs.

- Identifies and orders any hardware or software that the system will need.

In the physical design phase, necessary software is developed to accept input from the user, to perform necessary calculations through the manipulation of data stored in the databases to

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produce the appropriate result.

Input Design

Input design is the process of converting user oriented input into a computer based format. The data flow diagram indicates logical data flows, data stores source and destinations. Input data are collected and organized into a group of numbered data. Once identified appropriate input data media are selected for processing.

The goal of input design is to make data entry as easy and free from errors as much as possible. Proper data validation checking is exercised to correct the mistakes made during data entry.

The options for input data entry are as follows.

SUBMIT

The submit option in each of the forms helps in keying in data to the system. Web based features like emailing of the keyed in data to the user etc. are included in this. For commercial and security reasons some of the adding options are restricted to the administrator of the site.

EDIT

The editing option helps in updating the user data.. For commercial and security reasons some of the editing options are restricted to the administrators ofthe site.

DELETE

The deletion option helps in removal of data from the system. For commercial and security reasons some of the deletion options are restricted to the administrators of the site.

Output Design

Output design is an ongoing activity almost from the beginning of the project. Computer output is the most important and direct source of information tothe user. Output design is a process that involves designing necessary outputs that have to be given to various users according to their requirements. Efficient output design should improve the system's relationship with the user and help in decision making .The system has got the capability to display standard screen layouts. These layouts should be designed around the output requirements and they must be designed with utmost care and details in the screen layouts must be simple, descriptive and clear

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to the user.

While designing a system's output, the analyst must make several independent decisions. Every system produces some kind of reports. No matter what is the content of the report. The following guidelines can be applied to any report.
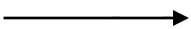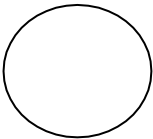
- The information should be clear, accurate, concise and restricted to relevant data.

- Reports should have titles, date and descriptive headings for columns of data, numbered pages and so on. If printed, they should also appear on standard size of paper.

- The report's contents should be in a logical arrangement so that user can easily locate what they need.

- The report should come on an output medium that best suits the user's needs.

Data Flow Diagrams

A DFD, also known as a "bubble chart" has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design. A DFD consists of a series of bubbles joined by lines. The bubbles represent data transformations and the lines represent data flow in the system. A data flow diagram may be used to represent a system or software at any level of abstraction. DFD's can be partitioned into levels that represent increasing information flow and functional details. A Data Flow Diagram (DFD) is a diagram that describes the flow of data and the processes that change or transform data throughout a system. It is a structured analysis and design tool that can be used for flowcharting in place of, or in association with, information oriented and process oriented system flowcharts. When analysts prepare the DFD, they specify the user needs at a level of detail that virtually determines the information flow into and out of the system and the required data resources. This network is constructed by using a set of symbols that do not imply a physical implementation. The DFD reviews the current physical system, prepares input and output specification, specifies the implementation plan etc.

Basic data flow diagram symbols are:

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- ☐ A "Rectangle" defines a source (originator) or destination of a system data.

- ⟶ An "Arrow" identifies data flow. It is a pipeline through which information flows.

- ◯ - A "Circle" represents a process that transforms incoming data flow(s) into outgoing data flow(s).

- ☐ - An "Open Rectangle" is a data store.

Three steps are commonly used to construct a DFD

- Process should be named and numbered for easy reference. Each name should be representative of the process.

- The direction of flow is from top to bottom and from left to right.

- When a process is exploded in to lower level details they are numbered.
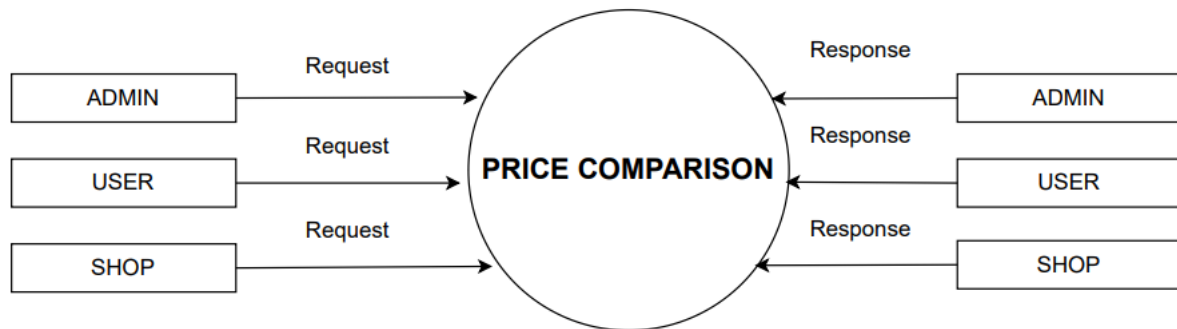
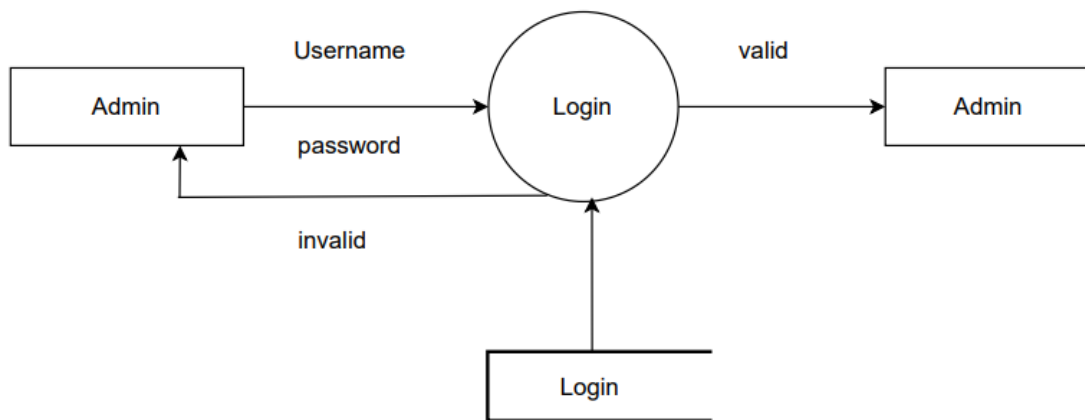# Price comparison

Figure 4.4.1 Context Level

Figure 4.4.2 Level 1: Login Process- Admin
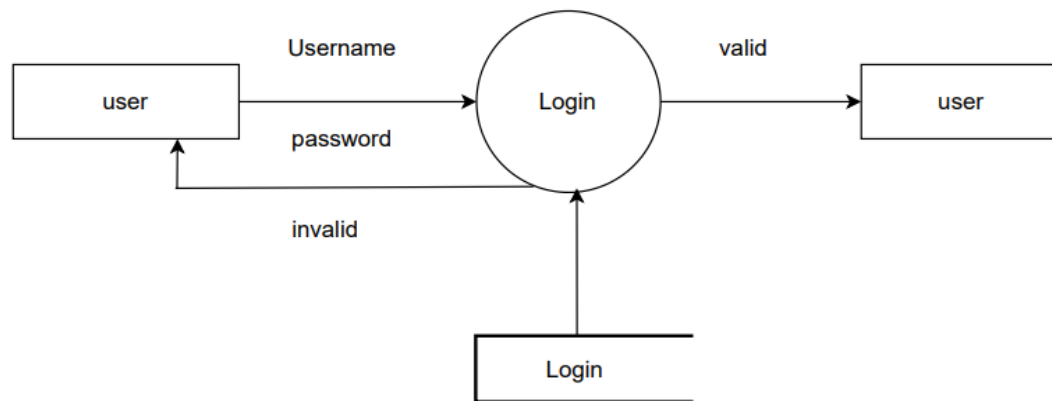
Price comparison

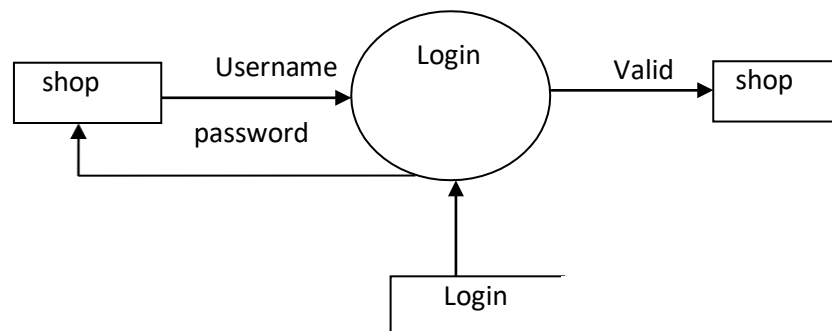**Figure 4.4.3 Level 1: Login Process- user Process**

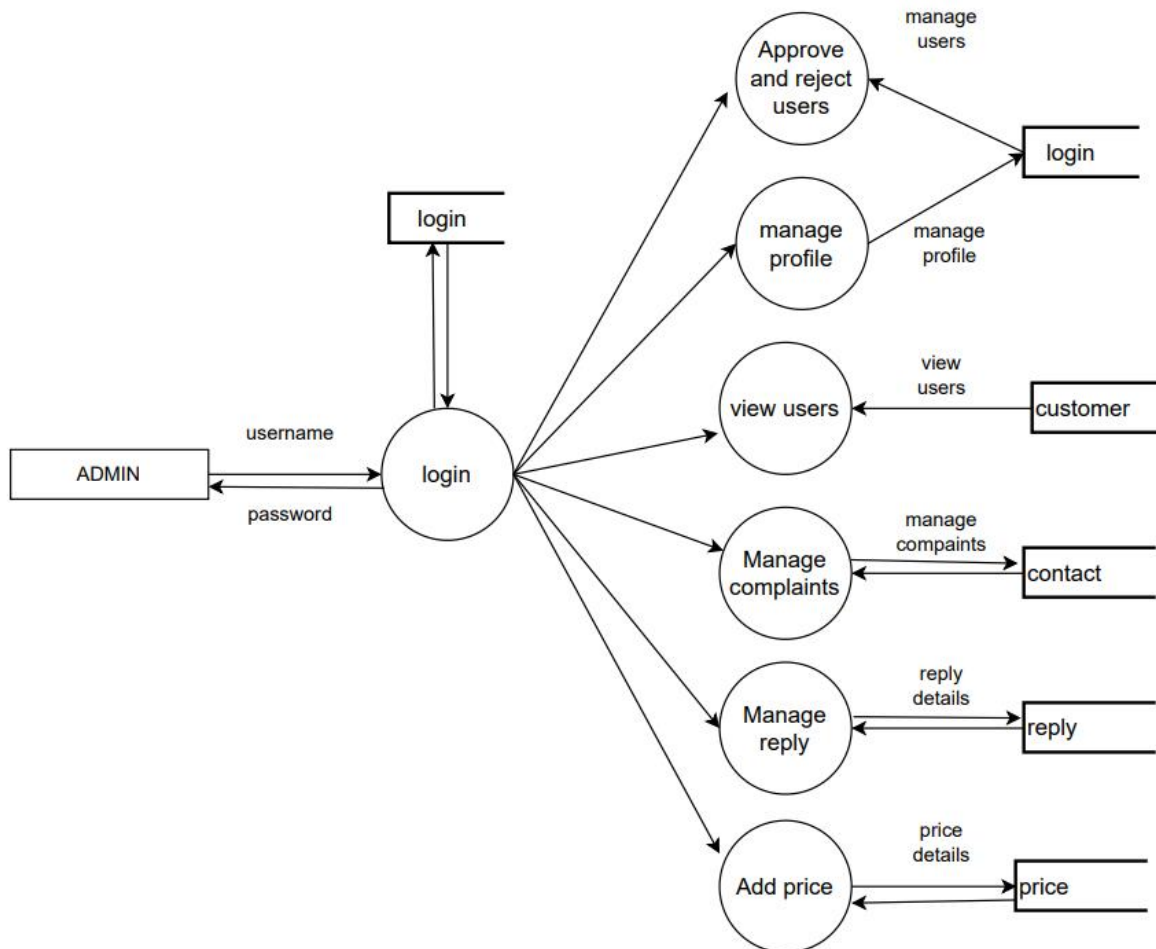**Figure 4.4.4 Level 1: Login Process- shop Process**

Price comparison

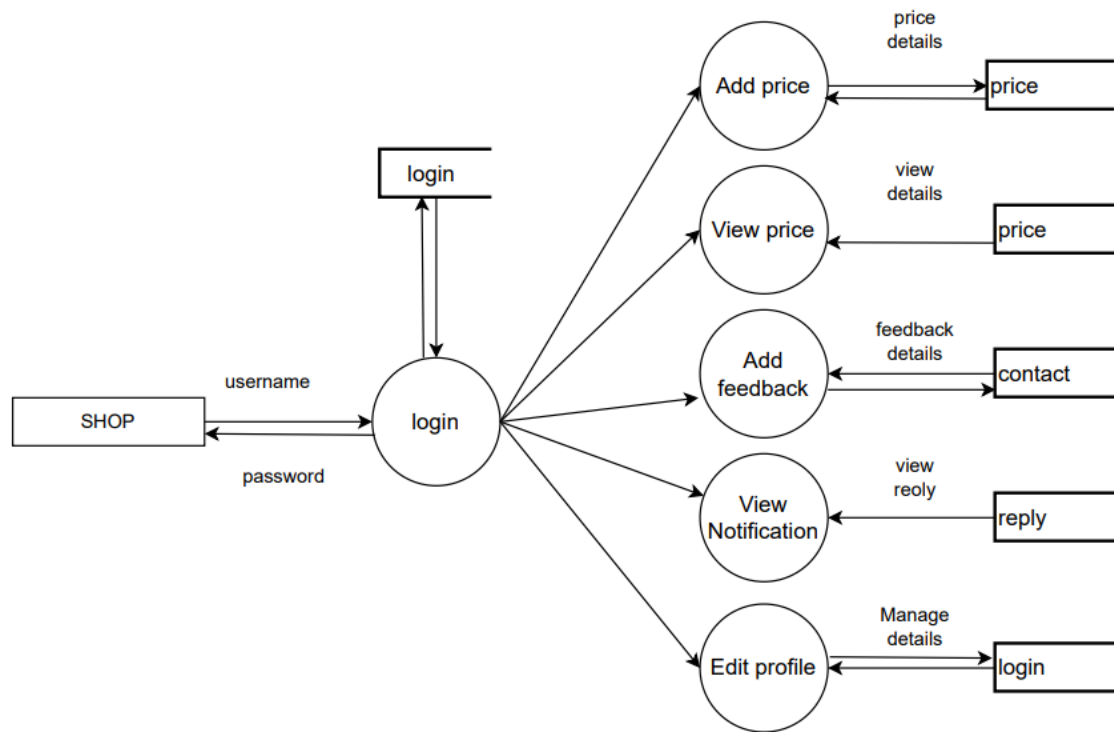**Figure 4.4.5 Admin Level**

Price comparison

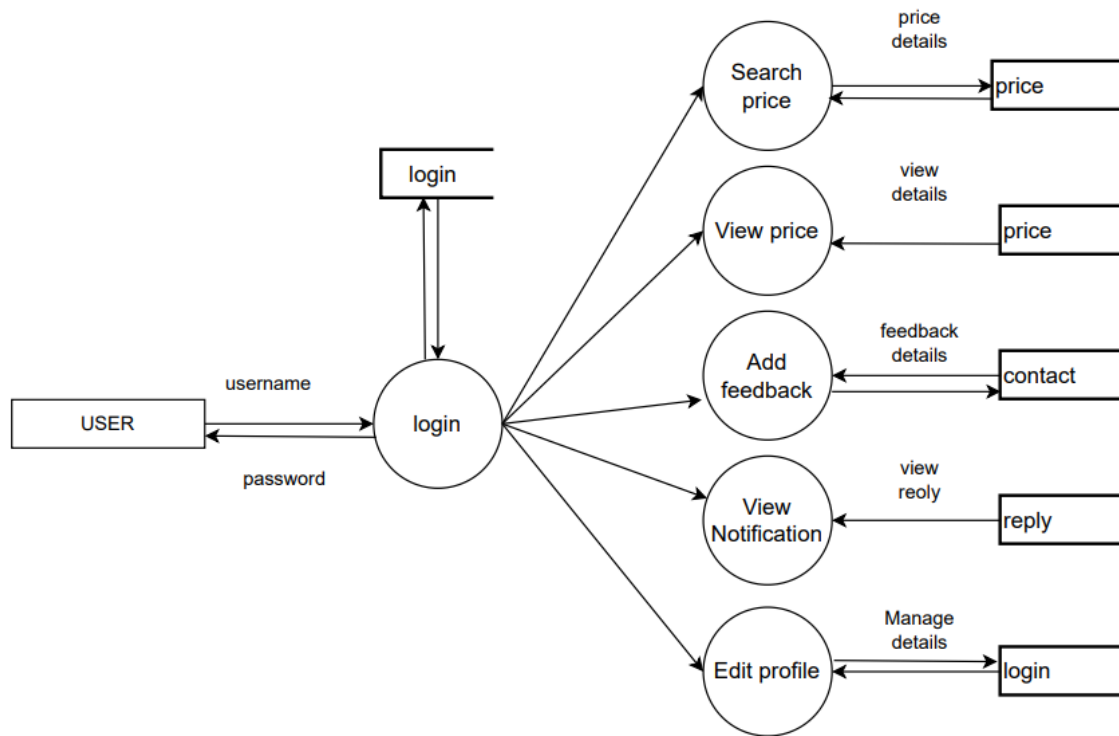**Figure 4.4.6** Shop Level

Price comparison

Figure 4.4.6 user Level

Price comparison

Database Design

Database Design is an important activity in design. The efficiency of the system lies in the efficiency of the database. The database design consists of predetermining number of tables that are to be used and fields that are to be used in each table. The efficiency of the system to retrieve the appropriate data depends on how the fields are specified and the coding mostly depends on format of the database. The database used in this project is MySQL. There are many tables in thisproject.

Normalization

Normalization is the process of decomposing the attributes in an application, which results in a set of tables with very simple structure. The purpose of normalization is to make tables as simple as possible;

Normalization is carried out inthis system for the following reasons

- To structure the data so that there is no repetition of data, this helps in saving space.

- To permit simple retrieval of data in response to query and report request.

- To simplify the maintenance of the data through updates, insertions and deletions.

- To reduce the need to restructures or reorganize data which new application requirements arise.

Primary Key is assign for this purpose. The primary Key fields in almost all the tables help to ease the search and improve efficiency. The proposed system is using second Normal form as it is found most suitable. In second normal from each row must contain associated field that describes an attribute of the entry that the table describes.

Price comparison

Table Structure for tbl_customer

Field Name	Data Type	Constraints	Description
customer_id	int(10)	Primary Key	user_id
loginid	int(10)	Not Null	User Login id
name	varchar(30)	Not Null	User name
email	varchar(40)	primary key	User email Id
address	varchar(300)	Not Null	User address
phno	bigint(50)	Not Null	User phone no

Table 4.5.1

Table Structure for tbl_contact

Field Name	Data Type	Constraints	Description
contact_id	int(10)	Primary Key	contact_id
senderid	int(10)	Primary key	sender id
name	varchar(50)	Not null	User name
email	varchar(60)	foreign key	User email Id
subject	varchar(100)	Not Null	subject
message	varchar(200)	Not Null	message
status	int(11)	Not null	status

Table 4.5.2

Price comparison

Table Structure for table tbl_login

Field Name	Data Type	Constraints	Description
lid	int(10)	Primary Key	login id
email	varchar(30)	Foreign Key	email
password	varchar(30)	Not Null	password
status	enum ('0''1''2''3')	Not Null	status
user	varchar(30)	Not Null	type of user

Table 4.5.3

Table Structure for table tbl_reply

Field Name	Data Type	Constraints	Description
author	varchar(10)	Primary Key	Author
senderid	varchar(50)	foreign key	sender
subject	varchar(15)	Not Null	subject
message	varchar(100)	Not Null	message

Table 4.5.4

Price comparison

Table Structure for table tbl_price

Field Name	Data Type	Constraints	Description
p_id	int(11)	Primary key	id of tutor
platform	varchar(25)	Not Null	type
email	varchar(50)	foreign key	email
p_category	varchar(25)	Not Null	category name
p_company	varchar(25)	Not Null	company name
p_model	varchar(25)	Not Null	Model name
price	int(10)	Not Null	model price
photo	varchar(50)	Not Null	model photo

Table 4.5.5

5.SYSTEM CODING

The coding is the process of transforming the design of a system into a computer language format. This coding phase of software development is concerned with software translating design specification into the source code. It is necessary to write source code & internal documentation so that conformance of the code to its specification can be easily verified.

Coding is done by the coder or programmers who are independent people than the designer. The goal is not to reduce the effort and cost of the coding phase, but to cut to the cost of a later stage. The cost of testing and maintenance can be significantly reduced with efficient coding.

Price comparison

5. SYSTEM TESTING & IMPLEMENTATION

Introduction to System Testing

Testing is vital to success of the system. System testing makes logical assumption that if all parts of the system are correct, the goal will be successfully achieved. Another reason for system testing is its utility as a user- oriented vehicle before implementation.

System testing is aimed at ensuring that system works accurately and efficiently before live operation commences. Testing is vital to success of the system.

A series of tests are performed for the proposed system before the system is ready for user acceptance testing.

VariousTesting Methods

A Software Test Plan is a document describing the testing scope andactivities. It is the basis for formally testing any software/product in a project   A test is a set of data that the system will process as normal input. However, the dataare created with the express intent of determining whether the system will processthem correctly. There are two general strategies for testing software. Code Testinghave to test cases that result in executing every instruction in the program or amodule; but is every path through the program is tested.

i) Unit Testing

In computer programming unit testing is a software verification and validation method in which a programmer tests if individual unit of source code arefit for use. A smallest testable part of an application in procedural programming in a unit may be an individual functions or procedure. Unit testing focus on the smallest unit of software design, the module. This is also known as "Module Testing". The modules are tested separately. This testing is carried out during the programming stage itself. In this step each modules found to be working satisfactorily. The forms in this project are tested one by one and errors arecorrected.

Price comparison

ii)Integration Testing

Data can be lost across an interface. One module can have an adverse effect on others. Sub-functions when combined may not produce the desired major functions. The objective is to take unit tested modules and to combine them and test it as a whole. In this step all errors encountered are corrected for next testing.

iii)User Acceptance Testing

User acceptance of a system is the key factor for the success of any system. The system under consideration is tested for user acceptance. Since the user interface of the system is very much user friendly the acceptance of the users were gained very easily.

iv)Output Testing

After performing the validation testing, the next step is output testing of the proposed system since no system could be useful if it does not produce the required output in specific format. Asking the users about the format required by them tests the outputs generated or displayed by the system under consideration. The output format of the screen is found to be correct as the format was designed in the system design phase according to the user needs. For the hard copy also, output comes out as the specified requirements by the user. Hence output testing does not result in any correction in the system. Various reports are generated in graphical output format and being pictorial representation it is found more convenient to understand by the users of the system.

v)Validation Testing

In validation testing, the requirements established as a part of software requirements analysis are validate against the software that has been constructed. Validation testing provides final assurance that the software meets all functional, behavioral and performance requirements. After each validation test case has been done, one of the two possible conditions exists:

 The function or performance characteristics conform to specifications and are accepted.

A deviation from specification is uncovered and a deficiency list is created.

Price comparison

System Implementation

The implementation is the final and important phase. It involves user training, system testing in order to ensure successful running of the proposed system. Once the system design phase is over, the next stage is to implement and monitors the operation of the system to ensure that it continues the work effectively and efficiently.

The three main phases in implementation take place in series. These are the initial installation, the test of the system as a whole and evaluation maintenance and control of the system. The implementation plan and action to implement should be bound closely together. The implementation plan is a function of line management atleast as far as key decision or alternative plans are concerned.

The implementation plan was to convert the existing clerical files to the computer. The implementation plan listed all sub tasks so that individuals in the organization may be assigned specific responsibilities.

The installation of the new system that is bound to replace the current one may require a major revision of computer facilities as well as completely new after space. Space planning took into account the space occupied by the people, space by equipment and the movement of people and equipment in the working investment. After conduction the initial testing the system is loaded on the client office's computer. Some of the user employees in this case are selected. These users are trained first and they run the system. A detailed documentation is prepared to this setof employees. There may be slight modifications to meet the organization.

After all modifications specified by the users in the documentation are made, the computer system is run along with manual system. Even though this kind of parallel run make extra burden to the employees and management, the system is run in parallel for the sake of checking reliability and efficiency. After this document, which compares the result of the manual system with those of the computerized is prepared. If there is any modifications are made as needed.

A procedure is developed for delivering instructions and forms to supervisors for coordination

Price comparison

and integrating the proposal with other parts of the organization, and for working out of problems with people involved. This procedure also helped for evaluation of hardware and software. A program was developed to emphasis the nature and goals of the new system on the management and the support personnel and train operation personnel in their new tasks.

In the case of management many of whom participated in the development of the system short seminars were given. Particular attention was paid to the training of end users. The training sessions were aimed at giving the user staff the specific skills required in their new jobs. They were given practical training to have a thorough understanding of what the new system is like and how it behaves.

Education involved creating the right atmosphere and motivation of user staff. It explained the need for changes and helped to overcome the resentment caused by the feeling that computers took away the responsibility from individual departments.

Various measures have been taken by department officials in order to find suitable solutions by the following issues:

About the skill to be acquired.

Reduction of man power in department

About the new form having all required option.

Price comparison

7.GANTT CHART

Gantt chart shows the time relationship between "price comparison" of the production program has been regarded as revolutionary in management. Gantt chart recognizes the total program goals and it should be regarded as a series of inter-related supporting plan (or events), that people can comprehend and follow. Gantt charts can be used to show current schedule status using percent complete shadings and a vertical "TODAY" line.

Following figure shows the project schedule Gantt chart of the project.

GANTT CHART								
MILITARY CANTEEN MANAGEMENT SYSTEM								
TASK	2022 July 11 To 2022 September 14							
	July 11-july 17	July 23-August 6	August7 August13	August 14- August 25	August -26 August- 30	31August-3 September	September4- September10	September11- September14
Requirement Gathering	←→							
Requirement Analysis								
System Design								
Coding and Unit testing								
System Testing								
Project and Report documentation								

Price comparison

8.SCREENSHOT

Price comparison

9.FUTURE ENHANCEMENT

The new system has overcome most of the limitations of the existing system and works according to the design specification given. The developed systems dispense the problem and meet the needs of by providing reliable and comprehensive information. All the requirements projected by the user have been met by the system.

The newly developed system consumes less processing time and all the details are updated and processed immediately. Since the screen provides online help messages and is very user-friendly, any user will get familiarized with its usage. Modules are designed to be highly flexible so that any failure requirements can be easily added to the modules without facing many problems.

Price comparison

10.CONCLUSION

Scope means adding, modifying, or developing the code to support the changes in the specification. It is the process of adding new capabilities such as reports, new interfaces with other systems and new feature such as better screen or report layout

The proposed system is developed and tested with some amount of sample data, which satisfy all the requirements. It has high degree of accuracy, user friendliness efficiency. The system is flexible and changes, if any can be made with out much difficulty. Further improvements and extensions can be made in the systemto make overall work easier.

Further modifications and extensions in the system can made to make overall work easier like the library make online. Those options are not in the software can be included to improve the efficiency of the software. The major enhancements are

- Online facility

- More report preparation

- Adding more option for searching

6. BIBLIOGRAPHY

Text books

- PHP complete reference   -   Steven Holzner
- PHP and MySQL Bible   -   Tim Converse, Joy Spark
- PHP Essentials   -   Julice Meloney
- Software Engineering   -   Pressman

Websites

- http://www.php.net
- http://www.sql.com