A Project Report

on

Electro-Shop Management System

Submitted in partial fulfillment of the
requirement for the award of the degree of

Bachelor Of Technology

GALGOTIAS UNIVERSITY
(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

Under The Supervision of

Dr. Meenakhsi Sharma
Professor
School of Computer Science & Engineering
Galgotias University,Greater Noida

Submitted By

Vikash Kumar Gupta(18SCSE1010323)

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
GALGOTIAS UNIVERSITY, GREATER NOIDA
INDIA
MAY 2022

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING
GALGOTIAS UNIVERSITY, GREATER NOIDA

CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the project, Electo- Shop Management System in partial fulfillment of the requirements for the award of the B tech-submitted in the School of Computing Science and Engineering of Galgotias University, Greater Noida, is an original work carried out during the period of month, Year to Month and Year, under the supervision of Dr. Meenakhsi Sharma, School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the project has not been submitted by me/us for the award of any other degree of this or any other places.

Vikash Kumar Gupta
18SCSE1010323

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Dr. Meenakhsi Sharma
Professor
School of Computer Science & Engineering
Galgotias University,Greater Noida

CERTIFICATE

The Final Project Viva-Voce examination of Vikash Kumar Gupta has been held on 13 May, 2022 and his/her work is recommended for the award.

Signature of Examiner(s) **Signature of Supervisor(s)**

Signature of Project Coordinator **Signature of Dean**

Date: 13 May, 2022
Place: Greater Noida

Acknowledgement

I would like to convey my heartful thanks Dr. Meenakshi Sharma (Professor) who always gave valuable suggestions & guidancefor completion of my project. He helped me to understand & rememberimportant details of the project. My project has been a success only because of his guidance.

I am especially indented & I am also beholden to my friends. And finally I thank to the members of my family for their support & encouragement.

Abstract

The Electro- Shop management System is designed & developed for a computer shop to manage their records of selling and purchasing of the computer parts from the dealers and sell them to the customers. This system make the work of the computer shopkeepers easy as it keep all the records of the computer product and also keep the records of the product that is sold to the customers. This system first check the availability of the computer parts and their quantity then enter the record to the record table after deducting number of the computer parts from the quantity and then print the invoice after adding all the discounts and VAT% and save the record for future use if needed. It also print the reports in a tabular form as well as according to the search of a particular computer product available at that time ,if product is less than it provide the facility to modify the product by adding more. It automates the Systems records, their Selling and Maintenance, Balance evaluation, due to calculation other functions. In other words you can say it a complete Electo- shop management System. In this project we can easily maintain systems sales details.

Contents

Introduction

In Electro- Shop Management System, it store records of suppliers, hardware, software, sale, purchase and customer's records are maintained and manipulated. There is now some investigations are involved to find out or to correctly done the work. Generally these works are done and managed, manually hence leading to the chances of human errors that may create some problems. Thus, a secured and reliable system is required to handle it.

Electro - Shop Management System, as described above, can lead to error free, secure, reliable and fast management system.

It can assist the staff to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources.

Objective of the Project

This project deals with the management and transaction criteria of the **Electro-Shop Management System.** Shop is a place where the work is to sale the hardware prepare bill, maintain purchasing and stock in shop and keeps their records, and prepare reports. The aim is to automate its existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements.

The main objectives behind the development of this project are as follows:

1) To assist the staff in capturing the effort spent on their respective working areas.

2) To utilize resource of the institution in an efficient manner by increasing their productivity through automation.

3) To keep and manipulate suppliers information.

4) To keep and manipulate hardware details.

5) To provide facility to sale at shop and prepare customer bill.

6) To make enquiry of a particular sale

7) To maintain the purchase and stock at shop.

TOOL/LANGUAGES TO BE USED

a) Operating System

The proposed software is targeted to run on Windows Xp, Windows NT version 2.0 b (Server/Workstation) and Windows 2000 (Professional/Server) editions.

b) Front End

JSP is being used as Front End due to its productivity and maintainability. Java Server Pages (JSP) is a technology for controlling the content or appearance of Web pages through the use of servlets, small programs that are specified in the Web page and run on the Web server to modify the Web page before it is sent to the user who requested it. Sun Microsystems, the developer of Java, also refers to the JSP technology as the Servlet application program interface (API).

c) Back End (Central Repository)

MY-SQL is being used as Back End for application's central repository. The reasons to choose it as back-end are:

I. It is very simple to maintain.
II. It is highly secured.
III. It can be integrated with JSP very easily.
IV. It can support and manage a large amount of data.
V. It is a very scalable product and can support as many number of users as supported by the infrastructure.

SYSTEM ANALYSIS

The analysis model is a concise, precise abstraction of what the desired system must do, and not how it will be done after the study of the existing system is completed. This basically includes system study and the requirement analysis. Interacting with the clients regarding their requirements and expectations from the system does requirement analysis.

The steps, which are essential for system analysis, are:

1. Research and define essential components.
2. Analyse current processes and identify gaps.
3. Interview users, shopkeepers, customers and other concerned personnel regarding essential components and current processes.
4. Write requirements document.
5. Define standards for standards, policies, and procedures.
6. Review draft requirements document with users, shopkeeper, customers and other concerned personnel.
7. Update and expand project plan.

LITERATURE SURVEY

It is to serve as a decision document. It has three questions to answer.

Since, the present system is manual all the work is done in papers and ink by hand so it is much costly and difficult to use and to operate and it is also time consuming.

So our automated computerized computer shop system is much feasible, in cost, time, and efforts as compare to the previous manual system.

It is economically feasible, it will only require a single operator to operate the system, who is responsible for entering the data into the database via a user interface provided to him, who can also able to show all the data in tabular form so to provide information regarding the products that is purchased or that is sell to the customer, since it requires only a single person to operate the whole system thus reduces the cost to operate the system.

It is technically feasible, since the whole system is designed using the technologies like C++ and file handling which is been used. It uses the latest hardware technologies so easy to operate.

It is Behavioral feasible, since the system is providing a attractive user interface to the operator/end user, so he feel very easy to work onto it. Response to operator/end user is very fast and very good. Since, as we mentioned above that it requires much less amount of cost, it uses computer work so it is very fast to operate and it is very easy for user to work on it.

FEASIBILITY STUDY

The feasibility study is the important step in any software development process. This is because it makes analysis of different aspects like cost required for developing and executing the system, the time required for each phase of the system and so on. If these important factors are not analyzed then definitely it would have impact on the organization and the development and the system would be a total failure. So for running the project and the organization successfully this step is a very important step in a software development life cycle process.

In the software development life cycle after making an analysis in the system requirement the next step is to make analysis of the software requirement. In other words feasibility study is also called as software requirement analysis. In this phase development team has to make communication with customers and make analysis of their requirement and analyze the system.

By making analysis this way it would be possible to make a report of identified areaof problem. By making a detailed analysis in this area a detailed document or report is prepared in this phase which has details like project plan or schedule of the project, the cost estimated for developing and executing the system, target dates for each phase of delivery of system developed and so on. This phase is the base of software development process since further steps taken in software development life cycle would be based on the analysis made on this phase and so careful analysis has to be made in this phase.

Though the feasibility study cannot be focused on a single area some of the areas or analysis made in feasibility study is given below. But all the steps given below would not be followed by all system developed. The feasibility study varies based on the system that would be developed.

- Feasibility study is made on the system being developed to analyze whether the system development process require training of personnel. This help in designing training sessions as required in later stage.

- Is the system developed has scope for expanding or scope for switching to new technology later if needed in ease. In other study is made to find the portability of the system in future. .

- Is the cost of developing the system high or does it meet the budgeted costs. That is a cost benefit analysis is made. In other words an analysis is made on cost feasibility of the project. This helps in identifying whether the organization would meet the budgeted costs and also helps the organization in making earlier and effective plans for meeting extra costs because of the system development.

- Analysis is made on what software to use for developing the system. This study and analysis would help to choose the best implementation for system and the organization. This feasibility study includes factors like scalability, how to install, how to develop and so on. This feasibility study in short includes the analysis of technical areas. This analysis helps the efficiency of the system developed to get

improved. This is because by choosing the correct technology by making analysis on the needs of system helps in improving the efficiency of the system.

- The above feasibilities are analysis which helps in development of the system. But the scope of feasibility study does not end with this. Analysis or feasibility study also includes the analysis of maintenance stage. In other words feasibility study is made to analyze how one would maintain the system during maintenance stage. This helps sin planning for this stage and also helps in risk analysis. Also the analysis helps in making analysis about what training must be given and how and what all documents must be prepared to help users and developers to face maintenance phase.

Advantages of making Feasibility study:

There are many advantages of making feasibility study some of which are summarized

- This study being made as the initial step of software development life cycle has all the analysis part in it which helps in analyzing the system requirements completely.

- Helps in identifying the risk factors involved in developing and deploying the system.

- The feasibility study helps in planning for risk analysis

- Feasibility study helps in making cost/benefit analysis which helps the organization and system to run efficiently.

- Feasibility study helps in making plans for training developers for implementing the system.

- So a feasibility study is a report which could be used by the senior or top persons in the organization. This is because based on the report the organization decides about cost estimation, funding and other important decisions which is very essential for an organization to run profitably and for the system to run stable.

.

Problem Statement

The problem is to design and develop software to handle the Computers, company details, cost prices, customer's details in the Shop and prepare the report of a particular Computer and company and to handle the records of other enquiries which come to shop. There is lack of coordination among various related processes of the shop that should be checked out. Besides, there exist various problems in data handling such as a large number of registers to be maintained separately, loss of data due to inefficient entry, data redundancy and complex manipulation of data in searching particulars entry.

The problem can be divided into sub problems like…

1. To keep and manage Computer detail.
2. To keep and manage company information.
3. To prepare price details.
4. To manage customers and billing process.
5. To maintain salary record of all the employee.

Requirement Analysis

The organization requires computerizing its shop to fully automate its corresponding activities. The requirements from the proposed software are as follows:

1) To keep and manage Computer detail.
2) To keep and manage company information.
3) To prepare price details.
4) To manage customers and billing process.
5) To maintain salary record of all the employee

Design

The table structure for the various tables to be used in the proposed software is described in Data Structure part of this proposal.

The data flow in the software is depicted in Data Flow Diagram (DFD).

DATABASE STRUCTURE

- **Balance Table**

Key	Column Name	Data Type	Width
Primary key	InvoiceNo.	Alphanumeric	5
	Customername	Alphanumeric	25
	Customer address	Alphanumeric	6
	Customer phone no.	Numeric	6
	Paidamount	Numeric	8
	Totalamount	Numeric	
	Date	Date	

- **Computer part Detail**

	Column Name	Data Type	Width
	Itemname	Alphanumeric	15
	Brandname	Alphanumeric	25
	Type	Alphanumeric	5
	Price	Numeric	6
Primary key	Serialno.	Alphanumeric	5
	warranty	Numeric	1

- **Customer**

Key	Column Name	Data Type	Width
	Customer_name	Alphanumeric	25
	Customer_Address	Alphanumeric	30
Primary key	Customer_Phone.no.	Numeric	10
	Customer_Balance	Numeric	8

- **Computer system detail**

Key	Column Name	Data Type	Width
	Systemname	Alphanumeric	15
	Brandname	Alphanumeric	25
	Categary	Alphanumeric	5
	Price	Numeric	6
Primary key	Model no.	Alphanumeric	5

	warranty	Numeric	1
	Ram	Alphanumeric	8
	Mother-board	Alphanumeric	10
	Monitor	Alphanumeric	10
	Processor	Alphanumeric	10
	Other description	Alphanumeric	45

5. Troubleshoot

Key	**Column Name**	**Data Type**	**Width**
Primary key	Invoice no	Alphanumeric	5
	Customer_name	Alphanumeric	25
	Customer_Address	Alphanumeric	30
	Customer_phoneno.	Numeric	10
	Problem	Alphanumeric	25
	Service_date	Date	8
	Charge	Numeric	10

6. Employee Table

Key	**Column Name**	**Data Type**	**Width**
Primary key	Employee-id	Alphanumeric	12
	Employee_name	Alphanumeric	15
	Employee_address	Alphanumeric	45
	Employee_phoneno	Numeric	10
	Email_id	Alphanumeric	20

7. Warranty

Key	**Column Name**	**Data Type**	**Width**
	Invoice_no.	Alphanumeric	8
Primary key	Serial_no.	Alphanumeric	20
	Bill_no.	Alphanumeric	10
	New_Serial no	Alphanumeric	15
	Problem	Alphanumeric	25
	Service_date	Date	8
	Delivery_date	Date	8

SYSTEM REQUIREMENT AND SPECIFICATION

The Software Requirements Specification is produced at the culmination of the analysis task. The function and performance allocated to software as part of system engineering are refined by establishing a complete information description, a detailed functional and behavioral description, an indication of performance requirements and design constraints, appropriate validation criteria, and other data pertinent to requirements.

The proposed system falls under RDBMS (Relational Data Base Management System) category. I have adopted JSP as front end for the software and MYSQL as back end.

JSP is at present one of the most popular development platform for web based system that is efficient for web programming.

MYSQL is at present the most reliable and secure RDBMS tool. MYSQL Server works to efficiently manage its resource, a database of information, among the multiple clients requesting and sending data in the network. MYSQL has many important features that make it not only an exceptional database management system but also an excellent database server choice for client/server database computing.

So the overall system will prove to reliable, secure and efficient for the organization.

A client/server can deliver the better performance than the file server system because a client application and database server work together to split processing load of applications (thus the term distributed processing). The server manages the database among the number of clients, while the client send, request, and analyse the data entry form with small specific data set, such as rows in a table not file as in the file server system. A database server is intelligent enough so that it lock and return only the rows a client request, which ensure concurrency, minimize the network traffic and increase the system performance.

Life Cycle Model – I am using SDLC model that begin at system level and progresses through analysis, design, coding, testing, implementation and maintenance. A process model for software engineering is chosen based on the nature of the project and application, the methods and tools to be used, and the controls and deliverables that are required. Here for the proposed project model of Automation of School Administration, we are using Linear Sequential model for Software engineering.

This model suggests a systematic, sequential approach to software development that begins at the system level and progresses through analysis, design, coding, testing and maintenance.

The Linear sequential model encompasses the following activities:--

2.4.1. System engineering and modeling: This system view encompasses requirements gathering at the system level with a small amount of top-level analysis and design.

: Software requirement analysis: To understand the nature of the program(s) to be built, the software engineer must understand the information domain for the software as well as required function, behaviour, performance and interfacing.

: Design: This process focuses on design of data structures, software architecture, interface representation and procedural detail.

: Code generation: This step translates the design into a machine readable form.

: Testing: The testing process focuses on the logical internals of the software, assuring that all statements have been tested, and ensure that defined input will produce actual results that agree with required results.

: Maintenance: Software will undoubtedly undergo changes after it is delivered to the customer. Software maintenance reapplies each of the programs rather than a new one.

2. External Interface Requirements

User Interfaces – It has been required that every form's interface should be user friendly and simple to use. Besides, there should be facility of accessing the system through keyboard along with the mouse i.e. keyboard shortcuts.

Software Interfaces – It has been required that there could be a necessity of using the stored data for some kind of report that is not supported by proposed system at present. So the proposed system is required to export its data as text file so that some other application software can import the data.

3. System Future Requirement – Other than descriptions provided above, the following features were required by the client:

(1) The system should be secured enough to rely upon.

(2) Users should not be allowed to delete/modify any records.

(3) Users should not be allowed to take financial reports.

(4) Every users report should keep the tracks of user inputting the record.

(5) System should provide facility of exporting its data in text format.

(6) System should be able to integrate with its Phase II developments.

HARDWARE REQUIREMENT

Administrator

The hardware requirements for all the platforms are:

Since the project is based on the jsp, so it can run all platforms and basic hardware requirements are:

1. 512 MB RAM
2. 4 GB HDD (normally)
3. Pentium family processor
4. 1 Laser Printer
5. Network Adapter CardAnd other related peripherals.

Modules of the Project

1. Login Form

In this form, existing user/administrator enters the user-name and password and access the main form. If user forgets his password then he can click on button forget password and then entering his e-mail id can get user name and password. This form contains user name and password as sub module.

2. Main Form

If administrator accesses this form using authentic login-name and password then the administrator has administrative power as add the product, create user

account, add new branded computer system, add company, change the shop record . Administrator have full power But user have some restricted power only which is provided by administrator.

In this main form user can sell computer part/assemble computer system/branded computer system, update customer record, change the password, make quotation. Using this form the user/administrator can see the report of sold computer part, branded computer system in any time duration. In this form, there is option to exit & log-off

3. Sell Computer System Module

There are two sub modules:

1) Sell branded computer system
2) Sell assembled computer system/computer part

In sell branded computer system module, user/administrator can sell available branded computer system. In this form, the user/administrator enters the customer name, address & phone number and chooses any branded computer system to sell. This form also so the all information of chosen branded computer system as category, model number, monitor type, hard-disk range, ram, processor, price etc. After selling, the user/administrator can print and save the receipt.

In sell assembled computer system/computer part module, user/administrator can sell available computer part and assembled computer system. In this form, the user/administrator enters the customer name, address & phone number and chooses all computer part to sell according to request of customer. The user/administrator can chose any product, its type, range, its serial number using combo-box. After choosing the serial number of product the price of the product and total price (including vat, tax) automatically generate. After selling, the user/administrator can print and save the receipt. The invoice number and customer number automatically generate by this software when this form is loaded.

4. Update Customer Balance Module

In this module, there is information related to balance of customer, customer name and address. In future if any customer paid the balance amount then it can be update.

5. Make Quotation Module

In this module, the user/administrator makes quotation according to request of the customer. This quotation provide information about the price, range, type & company name of all product to customer before purchasing the computer parts/assembled computer system. This quotation also provides total price (including vat) assembled computer system.

6. Change Password Module

In this module, the user/administrator can change his/her password by entering login-name and old password and new password. So this provide security from unauthorized access.

7. Create user account Module

In this module, the administrator can create new user by providing him login-name and password. In this module, the administrator can update user information as name, address and phone number of exiting user. He can delete exiting user account. The administrator can see the entire exiting user. The administrator can also give administrator power to any user. In this module, there is information related to the entire user working in the computer-shop as name, address, e-mail id, phone number etc. Here admin can take information related to user.

8. Add Product Module

In this module, the administrator can add new product by entering its name, company name, range, type, serial number, and its price. Here administrator can also see the available product and its information. And the administrator can also delete any product.

9. Add computer system Module

In this module, the administrator can add new branded computer system by entering its category, model number, company name, ram capacity and its speed, monitor type, Hard-disk capacity and its interface, processor clock speed and its L2cach, motherboard company-name and its chipset, its selling and buying price and other description. Here administrator can also see the available computer system and its information. And the administrator can also delete any computer system.

10. Add company Module

In this module, the administrator can add any company information whose product are available at the computer shop. This module contains the name of company, contact person, address, phone number, website, and fax number.

11. Change Shop information Module

In this module, the administrator save/update the information related to his computer-shop as name of computer-shop, address, phone-number, and registration number.

12. Product Price Report:

This report shows the price of all available products and its detail as item-name, company-name, type, range, and serial-number.

13. Sold computer part Report:

This report show the sold computer part in any time duration. The administrator/user can see the detail of sold computer part in specified time duration. This report show the name of customer, item-name, company-name, type, range, serial-number, and price of sold product.

14. Sold computer system Report:

This report shows the sold computer system in any time duration. The administrator/user can see the detail of sold computer system in specified time duration. This report shows the name of customer, category, company-name, model-number, ram capacity and its speed, monitor type, Hard-disk capacity and its interface, processor clock speed and its L2cach, motherboard company-name and its chipset, its price and other description

TESTING OF THE SOFTWARE

Testing is the process in which the system is run on manually created input so that the system is correctly working as desired or not.

During systems testing, the system is used experimentally to ensure that the software does not fail. In other words, we can say that it will run according to its specifications and in the way users expect. Special test data are input for processing, and the results examined.

A limited number of users may be allowed to use the system so that analyst can see whether they try to use it in unforeseen ways. It is desirable to discover any surprises before the organization implements the system and depends on it.

Testing of a system is generally done in two phases – One is **Unit Testing** which is done for each module independently on its completion and the other one is **System Testing** which is done at the end of a project.

IMPORTANCE OF TESTING

During systems testing, the system is used experimentally to ensure that the software does not fail. In other words, we can say that it will run according to its specifications and in the way users expect. Special test data are input for processing, and the results examined.

The importance of system testing is that the system is expected to run according to customer's requirement before delivering it to the customer.

The System is tested on the basis of specification so that it does not fail on user site.

THE STEPS IN THE SOFTWARE TESTING

The steps involved during Unit testing are as follows:

a) Preparation of the test cases.
b) Preparation of the possible test data with all the validation checks.
c) Complete code review of the module.
d) Actual testing done manually.
e) Modifications done for the errors found during testing.
f) Prepared the test result scripts.

The unit testing done included the testing of the following items:

1) Functionality of the entire module/forms.
2) Validations for user input.
3) Checking of the Coding standards to be maintained during coding.
4) Testing the module with all the possible test data.
5) Testing of the functionality involving all type of calculations etc.
6) Commenting standard in the source files.

After completing the Unit testing of all the modules, the whole system is integrated with all its dependencies in that module. While System Integration, We integrated the modules one by one and tested the system at each step. This helped in reduction of errors at the time of the system testing.

The steps involved during System testing are as follows:

a) Integration of all the modules/forms in the system.
b) Preparation of the test cases.
c) Preparation of the possible test data with all the validation checks.
d) Actual testing done manually.
e) Recording of all the reproduced errors.
f) Modifications done for the errors found during testing.
g) Prepared the test result scripts after rectification of the errors.

The System Testing done included the testing of the following items:

1) Functionality of the entire system as a whole.
2) User Interface of the system.
3) Testing the dependent modules together with all the possible test data scripts.
4) Verification and Validation testing.
5) Testing the reports with all its functionality.

After the completion of system testing, the next following phase was the Acceptance Testing. Clients at their end did this and accepted the system with appreciation. Thus, we reached the final phase of the project delivery.
There are other six tests, which fall under special category. They are described below:

i. **Peak Load Test:** It determines whether the system will handle the volume of activities that occur when the system is at the peak of its processing demand. For example, test the system by activating all terminals at the same time.

ii. **Storage Testing:** It determines the capacity of the system to store transaction data on a disk or in other files.

iii. **Performance Time Testing:** it determines the length of time system used by the system to process transaction data. This test is conducted prior to implementation to determine how long it takes to get a response to an inquiry, make a backup copy of a file, or send a transmission and get a response.

iv. **Recovery Testing:** This testing determines the ability of user to recover data or re-start system after failure. For example, load backup copy of data and resume processing without data or integrity loss.

v. **Procedure Testing:** It determines the clarity of documentation on operation and uses of system by having users do exactly what manuals request. For example, powering down system at the end of week or responding to paper-out light on printer.

vi. **Human Factors Testing:** It determines how users will use the system when processing data or preparing reports.

Limitation of the Project

Although I have put my best efforts to make the software flexible, easy to operate but limitations cannot be ruled out even by me. Though the software presents a broad range of options to its users some intricate options could not be covered into it; partly because of logistic and partly due to lack of sophistication. Paucity of time was also major constraint, thus it was not possible to make the software foolproof and dynamic. Lack of time also compelled me to ignore some part such as storing old result of the candidate etc.

Considerable efforts have made the software easy to operate even for the people not related to the field of computers but it is acknowledged that a layman may find it a bit problematic at the first instance. The user is provided help at each step for his convenience in working with the software.

Future Scope of the Project

In a nutshell, it can be summarized that the **future scope** of the project circles around maintaining information regarding:

- In future the project can be extended to maintain the accounting in shop.
- The future version can also combine the facility to handle staff detail and salary detail.
- The future version can run on network too.

The above mentioned points are the enhancements which can be done to increase the applicability and usage of this project

Conclusion

In the end We wish to say that computers should be put to such use where not only their capabilities are fully exploited but, what is more important, serve the society by raising the standard of living of people, thereby making the world better place to live and work in.

At the end it is concluded that we have made effort on following points…

1. A description of the background and context of the project and its relation to work already done in the area.
2. Made statement of the aims and objectives of the project.
3. The description of Purpose, Scope, and applicability.
4. We define the problem on which we are working in the project.
5. We describe the requirement Specifications of the system and the actions that can be done on these things.
6. We understand the problem domain and produce a model of the system, which describes operations that can be performed on the system.
7. We included features and operations in detail, including screen layouts.
8. We designed **user interface and security issues** related to system.
9. Finally the system is implemented and tested according to test cases.

Bibliography

The books referred during the development of this project are as follows:

- JSP: The Complete Reference, by Phil Hanna (Osborne)
- Making use of JSP,by Madhushree Ganguli
- The definitive guide to MySQL, byMichael Kofler, David Kramer
- MySQL: the complete reference, by Vikram Vaswani
- Software Engineering from IGNOU block
- Database Management System from IGNOU block
- Software Engineering by Roger Pressman
- www.Google .com
- www.java.sun.com
- www.mysql.com