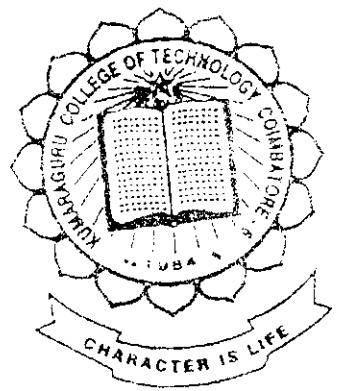
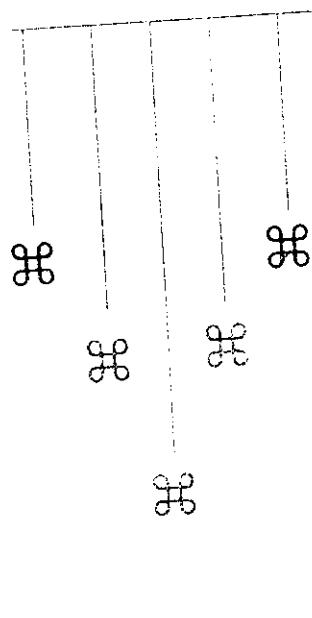


SMART OFFICE

Submitted in partial fulfillment of the requirements
for the award of the degree of
MASTER OF SCIENCE in
Applied Science - Software Engineering
of Bharathiar University, Coimbatore



Submitted by
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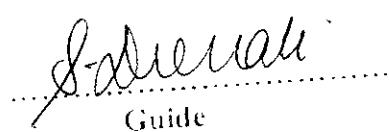
Department of Computer Science and Engineering
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COIMBATORE - 641 006.

September 2002

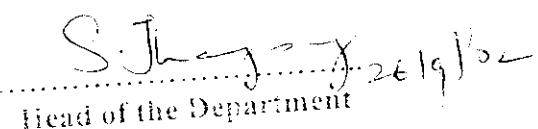
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CERTIFICATE

This is to certify that the project entitled "Smart Office" has been submitted by Mr.S.Abhisek in partial fulfilment of the award of the degree of Master of Science in Applied Science – Software Engineering of Bharathiar University, Coimbatore during the academic year 2002-2003

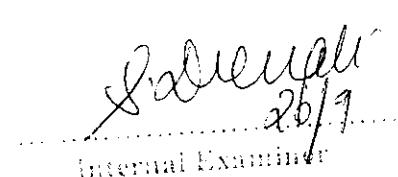

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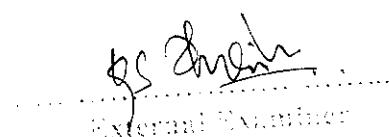
Guide


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S. Jayaraman
26/9/02

Head of the Department

Certified that the candidate was examined by us in the
Project Work Viva Voce Examination held on 26/09/2002
and the University Register Number was 9937S0073


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S. Devali
26/9/02
Internal Examiner


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G. Sankar
External Examiner

13th September 2002

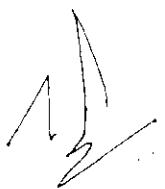
TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. S. Abhishek (Roll No. 99SEIZ 100) of the Department of ECE, Kumaruguru College of Technology, has successfully completed his Project "SMART OFFICE" which is part of his curriculum under the guidance of Mr.Muthuvuvenuppalai. Project duration between 10th June 2002 and the 13th September 2002.

He had demonstrated good competency in his work. We observed that during his training period he was highly enthusiastic and took a lot of initiative in accomplishing whatever task assigned to him.

We wish him all the best for his future career.

For Eutech Cybernetics (I) Pvt Ltd



Devakumar Sanyasi
Vice President

ACKNOWLEDGEMENT

An endeavor over a long period can be successful only with the advice and support of many well-wishers. I take this opportunity to express my gratitude and appreciation to all of them.

I am pleased to express my sincere and heartfelt gratitude to our esteemed Dr.K.K.Padmanabhan B.Sc. (Engg.,), M.Tech.,Ph.D, Principal of Kamaraguru College Of Technology, Coimbatore, TamilNadu for his constant encouragement throughout my course.

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I admit my heartfelt thanks to my External Project Guides, Mr. Jerome and Mr.Muthuveerappan Project Leaders, Eutech Cybernetics Pvt. Ltd. India, for being supportive throughout the tenure of my project.

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I thank my beloved parents and my friends who have extended their encouragement and help physically and mentally to complete and bring up this project successfully.

SYNOPSIS

Information is the backbone of any organization. Therefore, it has to be made available at all times to ensure proper decision-making and towards this end, information has to be accurate, current, timely, relevant and usable.

The project presented here is Smart Office. This has been developed for Eutech Cybernetics Pvt. Ltd, Chennai. This project was developed in Active Server Pages as Front-End and Sql Server 2000 as Back-End.

Smart Office has been developed for the management of the activities done by the organization. The Smart Office as the name suggests it is the computerization of the activities in the organization. This has been an intranet project, which is developed for the easy maintenance of the activities. The Smart Office, which is mostly used by the HR and the front office, is an easy tool to operate. And one more important thing about the project is that you are running a software company where you develop projects for your clients and you don't have a computerized solution for your company's activities, which is not fair. Hence, this project plays an important role as far as the company is concerned.

The Smart Office consists of various activities like Library management, Employee management, Leave management, Accounts management, Timesheet and Task Sheet management etc. Out of these activities only I developed the library, employee and timesheet and task sheet management. Within the time duration given to me, it was that much I could contribute on my part for the Smart Office. The company did the above-mentioned activities manually. Hence, this system would be much easier and more than that it is time saving process and error prone activity.

The Smart Office provides the overview of the activities that are handled by the company. The project details provided inside would definitely show the handling of the organization. This will consist of some terms of the library and accounts related information like issue, return, HRA, PF etc.

The will really make everyone accept that how important this kind of project helps to run a better organization with lot of well planned activities in much easier way.

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1. INTRODUCTION

1.1 PROJECT OVERVIEW

The use of computers in the front office of any recognized company has become an absolute necessity in the current trend. They are used in many activities like accounts, payroll, Contacts etc. The administrators of the company are faced with the challenge of utilizing the limited resources and provide quality service to the customers. The use of computers in companies for information processing and decision-making helps the authorized users like administrators in serving the customers better with less strain and more efficiency.

Presently, the Library management module is being done manually and has the usual problems associated with the manual systems. Manually in the sense that if any one has taken the book/CD then it is noted down in the register with name, title and the date in which it was taken. Hence an integral system which would solve all the problems and be much more efficient was absolutely required. Keeping this as objectives in view, this module is developed.

The project is segmented into several modules, but the modules in which I have involved alone are been listed down. They are Library management System, Employee Management System and Timesheet and Task sheet Management.

Library Management System deals with various activities like the issue, return, late return and the damage. All these activities are common to both the books and CDs. Before going into the detailed part of the various activities let me also give a brief introduction on the various users involved in this module. They are Librarian, Administrator and employee.

Employee Management System deals with various activities like User Configuration, Appraisals, Letters, Resume Builder and General Controls. As described in before part lets see the users involved in this important module. They are Administrator, manager and employee levels.

Timesheet and task sheet Management deals with various activities like Timesheet, task sheet, and admin and project details. The various users involved in this module are EVP or VP, PL or PM, TM and Admin.

Library Management System:

The flow of this module starts like this. This module starts with the search screen where the users can search for the books/CD, which they are looking for. Search Category is provided as follows: By Category, By Title, By Status, By Author, and By Publications. Hence, the users can search for their criteria and request for the books. The status mentioned above involves four status 1) Available 2) Issued 3) Not Available and 4) Damage. If the status is Available then the user can directly go get the book. If it is in the Issued status then he can request for the book where he will be put into the queue. Whoever is in the top of the queue will get the first preference. First Come First Serve. With that the employee role is over he cannot access any other activities.

Next, the librarian part is that he/she will have access to all the other activities. That is, issue process it is nothing but to keep track of the persons who have issued the books. Here is one more general constraint such that each person has his own criteria of how much books he or she can take. Even that constraint is also checked.

The return process is nothing but to keep track of the returning of the books. Here also a general constraint is checked that is whoever may be the user he cannot hold the book for more than 20 days.

If suppose it exceeds the 20 days mark then automatically it goes into the late return account where Rs.5 is considered as fine each day returned late. This will be deducted from salary.

The last process is the damage, this is very simple where if the book is damaged then it is tracked into the damage account and status of the book becomes damaged. The same flow is repeated for the CD also except a particular difference, which separates the role of admin and librarian. The difference is that for CD the user must get approval from higher authority where admin will provide the approval for the CD.

Employee Management System:

The flow of the employee management system goes like this: When the employee logs in then he will have rights to view his own personal details and to modify a certain fields like the address, phone number etc. When the changes are made the details are recorded in the log file. Then he will have rights to update his resume and the view of the resume will be shown in the Word Application where he can save or take a hard copy of it.

Next, comes the manager level entry where he will have rights to view and modify his details, view the details of his team members and update his own resume.

The last and most important role is that of the admin. Hence, this will be described in detailed manner. The flow for the administrator starts like this: he/she should first create a new employee if required. You just type the details of the employee and save it. Then the important thing of user configuration comes here, that is for a new user what will be his login name and password to enter into this application. This is done by the admin. Next, is that to change the password if required. Whoever enters the application can change their password as they like only if they remember the old password. Then the last thing under this category is that of the log file where the admin alone can see the details with three different categories 1) Employee-ID 2) Transaction Date and 3) Both.

The next part is the appraisals where this right is also provided by the admin. There are three different parts in which it is separated. First, the appraisal from the employee level to manager level. Second, the appraisal from the manager level to admin level. Third, is the group member's configuration. Here admin decides who are all the members come under one particular manager. If this is finalized then when a PM or PL logs in then he can see the details of his members alone.

The next part is the letters. The various letters that the company needs to keep track of is listed below:

- ↳ 1) Offer Letter
- ↳ 2) Appointment Letter
- ↳ 3) Revised Salary Letter
- ↳ 4) Pay Slip
- ↳ 5) Relieving Letter
- ↳ 6) Service Certificate
- ↳ 7) Exit Checklist
- ↳ 8) Letter of Declaration

For all these letters they will just fill in the details as required for the letters and then it will generate the letter as an html page which can be taken print out.

The next part is the general controls is that the 1) Add 2) View and 3) Search as the names suggests add operation is to add a new employee, view is to view all the employees and for flexibility we have provided three different views. First: all the employees will be listed with a link on the employeeid. Second, if the link is clicked then it will show all the details of the employee. Third, there is an option to change the view of the fields, as you like. Next, is search where all the fields are give to search so they can search with whatever may be search criteria.

The next part is the resume builder, which is provided for the employees to update their resume, and also an option is provided to view the resume in the word application. Here also the advanced search option is given to search for the multiple languages and skill set. For example, if you want employees who are having experience >1 year in VB and experience >2 year in ASP this search will provide you with the report of employees and also an option to view it in the word application.

Timesheet and Task sheet Management:

The basic idea about the timesheet and the task sheet is given below:

- ↳ The task sheet is the one, which is filled by the Project Leaders to assign the particular to an employee.
- ↳ The task sheet is filled only for the particular week with the unique generation of the taskid.
- ↳ The employees with reference to the task and taskid allocated to them fill the timesheet.
- ↳ The timesheet that is filled by the employees will be send to their respective PL or PM then they will verify the timesheet and approve it.

The flow starts with EVP or VP level where they will have rights to access the resource management. The resource management is nothing he/she only has rights to change an employee from one project to another. Then they will have rights to view the timesheet of the PL and they approve this timesheet.

Next, if the admin level makes an entry then he will have rights only to access the user configuration. The user configuration is nothing but creating a new user for this application.

Next, if the PL or PM makes an entry they will have access to the task sheet where they can fill and assign the tasks to the allocated employee. They will also have access to the timesheet that has been filled by the employees. They will approve those timesheets and in case of any correction they will send it back to the employee.

The last role is the employee, when he enters he will have access only to type his timesheet and update his timesheet and not anything else.

1.2 ORGANIZATION PROFILE:

EUTECH CYBERNETICS LIMITED is one of the well known software companies in Chennai. This is 100% software import and export unit. Eutech is one of the big corporate houses in India, which has annual turnover of Rs.400 crores. The organization carries forward 6 countries across the globe. It has strategic partnership with global giants like **Microsoft, Ericsson, Oracle, Lotus and Echelon.**

Eutech is a leader in end-to-end network-centric software solutions for Infrastructure Management, which includes Intelligent Buildings and Facilities Management. Established in 1990, Eutech Cybernetics has focused on software developments. Its flagship product, iviva.works, comprising a suite of Enterprise Management Applications, was developed to provide peer-to-peer networking infrastructure via Intranet, Internet and wireless media. The solution can easily integrate applications and/or systems together, and access applications through personal agents.

It is the leading exporter of software in India. Quality education and training is imparted here, some of the important areas covered by Eutech Cybernetics are as follows:

- ↳ Energy Services.
- ↳ Information Technology.
- ↳ Buildings and Facilities.
- ↳ Health.
- ↳ Communications.

Their humble beginning since a long time back illustrates, that success for them in their endeavors is a never ending journey and not a destination.

2. SYSTEM STUDY AND ANALYSIS

Information is an integrated, user machine system for providing information's to support the operations, and management and decision-making function is an organization.

2.1 Need for the System:

For the efficient and effective utilization of available resources, convenient availability of necessary as required information is very important. 'System Analysis' is conducted with the following objectives.

- ⇒ Identify the end-users need.
- ⇒ Evaluate the system concept feasibility.
- ⇒ Perform economic and technical analysis.
- ⇒ Allocate functions to hardware, software and other system elements.
- ⇒ Establish cost and schedule constraints.
- ⇒ Create a system definition that performs the foundation for all Subsequent engineering work.

Both hardware and software expertise are required to successfully attain the objective listed above.

2.2. EXISTING SYSTEM AND ITS LIMITATIONS

Presently, the system is being done manually and has the usual problems associated with the manual systems. The amount of data generated in an office is immense and maintaining of these data through a manual system is quite cumbersome.

The present manual system depends on large-scale manual data. Processing methods, which bring about an ever-increasing pyramid of paperwork, time and resources. As a result of this, the possibility of flaws and failures are often very common be it at the preliminary entry level or at the transaction or processing side.

Inquiries of processing references have to be made to the paper records be it employee details, book details, CID details or even task sheet details. In short much paperwork, manual work and search time office personnel have to work tediously to maintain these records in such a situation. Many more reasons prevail and as a result the management stresses on the need for the automation so that work is processed faster and flaws and errors are much more minimized.

Detailed view of the each system details is given below:

Library Management System:

- ↳ Currently the system process is carried out in the register to make note of who has taken the book, which book and the date at which it was taken.
- ↳ The limitation of this current system is that the reports of issue and returns cannot be produced much easier and also the search criteria before the user had to come search for the book manually and then if it is not there he had to enquire in the front office which was a tedious process.

P-829

Employee Management System:

- ↳ Currently the system process is carried out in the Excel Sheet to maintain the details of the employee and letters all those stuff.
- ↳ The limitation of this current system it is definitely not easy to produce the search results and for each and every simple thing the work becomes tedious and which is not easy to handle at all.

Timesheet and Task sheet Management:

- ↳ Currently the employees type their timesheet in the Excel and send it to their respective PL or PM.
- ↳ The limitation of the current system is that, think if there is some 200 lines/employee in front of your screen and you are asked to verify each and every character typed. It is definitely an ominous task.

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2.3 REQUIREMENTS OF NEW SYSTEM:

Based upon the specification by the users on various meetings and interviews and study of the problems of existing manual system following requirements have been identified:

Library Management System:

- ↳ Maintenance of the details of the books/CD available in the library.
- ↳ Maintenance of the details of the issued books/CD.
- ↳ Maintenance of the details of the returned Books/CD.
- ↳ List of books/CD with the title, author and its status.
- ↳ Allotment of books/CD.
- ↳ Detecting the late return and damage status.
- ↳ Provision for the requesting the issued book.
- ↳ Nomination felicities.
- ↳ Operation of reports.
- ↳ Re-allotment of books/CD.
- ↳ Maintenance of register for the late return and damage of books/CD with the necessary details of the employee involved.
- ↳ User specified password in operating the application.
- ↳ The book if it is late return then Rs.5 will be deducted from salary for everyday of late return.
- ↳ The minimum period to hold the book/CD is 20 days.

Employee Management System:

- ↳ Maintenance of the details of the employees.
- ↳ Maintenance of the details of the inactive employees.
- ↳ List of employees with the designation, department and division.
- ↳ Allotment of login and password to various users.
- ↳ Detecting the changes made to the details of the employee with the log file.
- ↳ Provision for the change in word file.
- ↳ Operation of reports.
- ↳ Maintenance of register for the letters that are given to the particular employee in the letter view.
- ↳ User specified password in operating the application.
- ↳ Provision for the updating of the resume.
- ↳ Provision for the letter templates.
- ↳ Provision for generating the salary slip.
- ↳ Provision for advanced search.
- ↳ Operation of search with the fields involved in the application.
- ↳ Provision for the posting the resume in word application.
- ↳ Provision for the posting the resume in word application.

Timesheet and Task sheet Management System:

- ↳ Maintenance of resource management involved in the project.
- ↳ Maintenance of user configuration involved in the application.
- ↳ Maintenance of project details.
- ↳ Maintenance of timesheet details.
- ↳ Maintenance of task sheet details.
- ↳ Provision of modification and deletion of task details.
- ↳ Provision for modification and deletion of timesheet details.
- ↳ Provision for changing the resources of the project.
- ↳ Provision for changing the resources of the project.
- ↳ Operation of reports.
- ↳ Provision for changes to be handled in user configuration.
- ↳ User specified password in operating this application.
- ↳ The task that is created by the PL or PM can be only for that particular week.

3. PROGRAMMING ENVIRONMENT

3.1 HARDWARE CONFIGURATION

Processor	: Intel Pentium MMX
Cache Memory	: 512 K
Monitor	: 14" SVGA Color
Hard Disk	: 2.1 GB
Keyboard	: Axis 104 Keys
Mouse	: Logitech Mouse

3.2 SOFTWARE CONFIGURATION

Platform	: Windows NT 4.0
Operating System	: Windows 95
Back End	: Sql Server 2000
Front End	: ASP 3.0

Software Overview

4. SOFTWARE OVERVIEW

SELECTION OF SOFTWARE:

This is an intranet project, which is been developed for the company. An integrated system on Windows'98 environment is ideal due to multi-user nature. ASP is flexible and application development is easy and is also portable. ASP is also more of the web nature. Hence ASP and Windows'98 environment is chosen for the project.

4.1 Active Server Pages 3.0 - An Overview

1. What is Active Server Pages?

ASP is many people's first choice for building dynamic Web pages, entire sites and web-based applications in a Windows server platform.

Hardware

A machine with windows 2000 installed to act as a web server. Probably this should be windows 2000 server or better. IIS and most of the associated services are included with windows 2000 Professional. For windows 2000 server, you should aim for a machine with at least a 233MHz processor and at least 128MB of RAM.

A client machine connected to the windows 2000 machine via TCP/IP. While you can develop directly on the web server, it's usually better to use a separate client machine. All you need is something capable of running a web browser.

Software

Almost all of the software you will need is included in a full installation of windows 2000 server. After the main OS installation has completed, and you reboot the server, Internet Explorer fires up with a page entitled windows. Now configure your server.

The Origins of ASP:

Markup Language:

A markup language is simply a series of elements, each delimited with special characters that define how text or other items enclosed within the elements should be displayed. HTML is a markup language broadly based on the Standard Generalized Markup language. SGML is a way of describing languages, and is not itself a language used to create pages.

Server-side Scripting Techniques

For a script to work with a web server there needs to be some kind of intermediate application, or add-in to connect the two. It has to be able to accept a request from the user, read and interpret the appropriate server-based script file, and then create the output page and communicate it to the web server where it is sent as the response to the client.

Dynamic Page Creation

Microsoft introduced their web server software with Windows NT 3.51. Internet Information Server (IIS) 1.0 was a fairly standard offering as far as features went, and it supported CGI. However Microsoft added another interface to allow executables written in compiled languages like c and c++ to operate more efficiently. This is the Internet Server Application Programming interface, or ISAPI. It provides much broader access to the web server than the simple stdin and stdout functions, upon which traditional Perl engines and many other technologies depend.

How ASP connects with IIS?

ASP itself consists purely of a single DLL named `asp.dll`, which is installed by default into your directory. This DLL is responsible for taking an ASP page and parsing it for any server-side script content. This script is passed to the appropriate scripting engine, and the results of executing the script are combined with any boilerplate text and HTML in the ASP page. The complete page is then sent to the web sever, where it is passed on to the client that originally requested it.

Processing an ASP File

The first step is to decide if there is any ASP server-side code that needs to be executed. If not, it can simply inform IIS of this fact, and allow IIS to send the page to the client. In fact, this is a new feature of Windows 2000 that allows you to use the `.asp` file extension for all your pages - including those that contain no server-side script code without sacrificing performance.

When ASP receives a page from IIS that does contain server-side script code, it parses it line-by-line. Anything that is not server-side script, or does not require server intervention by ASP, is sent back to IIS, and onwards from there to the client. As each section of script is reached, it is passed to the appropriate scripting engine. The results from the scripting engine are then inserted at the appropriate points into the page as it is sent to IIS.

Objects of ASP

Request Object:

The request object makes available to our script all the information that the client provides when requesting a page or submitting a form. This includes the HTTP variables that identify the browser and the user; the cookies that they have stored on their browser for this domain; and any values appended to the URL as a query string or in HTML controls in a `<form>` section of the page.

Response Object:

The response object is used to access the response that we are creating to send back to the client. It makes available to our script the HTTP variables that identify our server and its capabilities, information about the cookie we are setting on the user's browser, and any new cookies that will be stored on their browser for this domain.

Application and Session Object:

The application and session object are not directly concerned with managing requests and responses, but more with managing the environment in which our ASP pages run. The application object is the one which is used to store the information or maintain the data throughout the application. The session is also a bit similar to it. The session object is used to hold the value throughout the session. For example, the user name and password can be maintained throughout the session.

Server Object:

The Server object provides access to methods and properties on the server. Most of these methods and properties serve as utility functions. The server object provides us with a way of extending the capabilities of our ASP pages, by instantiating and using other external objects and components within our server-side script. In fact, many would say that this is the major factor for the growth of ASP.

ObjectContext:

You can use the ObjectContext object to either commit or abort a transaction, managed by Microsoft Transaction Server (MTS), that has been initiated by a script contained in an ASP page.

4.2 Sql Server 2000

Database Management System:

A database management system is essentially a collection of integrated data and a set of programs to access this data. This collection of data is called Database. This collection of data is called Database. The primary objective of a DBMS is to provide a convenient environment to retrieve and store database information. Database systems supports single user and multi-user environment. While on one hand DBMS permits only one person to access the database a given time.

It has two parts namely: Database Management System and Database application. Database Management System is the program that organizes and maintains the information where as the database application is the program that is used to view, retrieve and update information stored in the DBMS. DBMS has to protect database against intentional changes that could be caused by users and applications.

DBMS offers the following services:

Data Definition:

It deals with data definition and storage.

Data Maintenance:

It checks whether each record has fields containing all information about one particular item.

Data Manipulation:

Allows data in the database to be inserted, update, deleted and stored.

Data Display:

This method helps in viewing data.

Data Integrity:

This ensures the accuracy of the data.

Access Control:

Sql can be used to restrict a user's ability to retrieve, add, and modify data, protecting stored data against unauthorized access.

The Role of SQL

- ⇒ SQL is an interactive query language.
- ⇒ SQL is a database programming language.
- ⇒ SQL is a database administration language.
- ⇒ SQL is a client/server language.
- ⇒ SQL is an Internet data access language.
- ⇒ SQL is a distributed database language.
- ⇒ SQL is a database gateway language.

SQL Features and Benefits

SQL is both an easy-to-understand language and a comprehensive tool for managing data. Here are some of the major features of SQL and the market forces that have made it successful.

- ↳ Vendor independence.
- ↳ Portability across computer systems.
- ↳ SQL standards.
- ↳ IBM endorsement.
- ↳ Microsoft Commitment.
- ↳ Relational foundation.
- ↳ High-level, English-like structure.
- ↳ Interactive, ad hoc queries.
- ↳ Programmatic database access.
- ↳ Multiple views of data.
- ↳ Complete database language.
- ↳ Dynamic data definition.
- ↳ Client/server architecture.
- ↳ Extensibility and object technology.
- ↳ Internet database access.
- ↳ Java integration.

System Design & Development

5.1 INPUT DESIGN

In input design user oriented inputs are converted to computer-based format. In input design user oriented inputs are converted to computer-based format. The use of inaccurate data will lead to various kinds of flaws during processing. Commonly these mistakes are occurred at data entry level. These flaws if left uncontrolled and unchecked may lead to disastrous catastrophes like data collapse during execution which may prove fatal to the system. Such flaws can be scanned to some extent by accurate design of inputs. The core term of SMART OFFICE has incorporated the following:

Input Objectives in the Project are:

- ⇒ Minimize the number of input actions of the user.
- ⇒ Validating user input.
- ⇒ Maintain consistency between information display and data input.
- ⇒ Customize the user input.
- ⇒ Deactivate commands that are inappropriate in the context of current actions.
- ⇒ Provide help to assist with all input actions.
- ⇒ Handling errors and display error messages.

5.2 DESIGN METHODOLOGY

The system design is the last phase that indicates the final system, and the process of the file system. In the design phase of the SMART OFFICE, the database tables, input screen design and output record design etc. are designed.

- ↳ The database tables are designed by using all the necessary fields in a compact manner. The redundancy and duplication of fields are avoided.
- ↳ All input screens in this system are user friendly and are designed in an understandable format. The size of all screens is standardized.
- ↳ Menus are designed in this system, which are brief and self-explanatory. The menus are sharp and any novice user can invoice the system. Various sub menus are also used in this system.
- ↳ Reports generated here give the minute information, which helps manager to take vital decision.

The design is the solution, the translation of requirements into ways of meeting them. The design will determine the success of the system. The system design is the last phase that indicates the final system. In the design phase of SMART OFFICE, the database tables, input screens etc. are designed.

The importance of software design can be stated with a single word-quality. Design is place where quality is fostered in software development. Design is the only way where the requirements are translated into a finished software product or system. On executing SMART OFFICE, it prompts for the password and if it matches, he control passes to the main menu, which consists of three sections.

- ↳ Library Management System
- ↳ Employee Management System
- ↳ Timesheet and Task sheet

DATA ENTRY:

Library Management System:

Search Screen Entries:

- ↳ The first step is to select the search type where there are six categories for books and four categories for CDs. They are List All, By Category, By Title, By Status, By Author and By Publications & By Category, By Title, By Status and List All respectively.
- ↳ Then the second step is to fill the subject to search for and then click the search button, which will produce the search results for the particular criteria.
- ↳ The third step is to whether request for a issued book or to get the book if it is available.

Transaction Screen Entries:

- ↳ The first step is to select which of the transaction is to be made out of the three available lists. They are 1) Issue 2) Return and 3) Damage.
- ↳ If the issue process is selected then you can type details the book and the employee who is supposed to take the book and the save the transaction.
- ↳ If you want to modify or delete the transaction then the provision is given for that in the form of buttons.
- ↳ If the return process is selected then you can type details the book and the employee who is supposed to return the book and the save the transaction.
- ↳ If you want to modify or delete the transaction then the provision is given for that in the form of buttons.
- ↳ If the damage process is selected then you can type details the book and the employee who damaged the book and the save the transaction.
- ↳ If you want to modify or delete the transaction then the provision is given for that in the form of buttons.

Master Screen Entries:

- ↳ The master screen entries start with the book master. As it is obvious that the master screen almost consists of the same functionality.
- ↳ The functionality available are Add, Delete, View, Modify and Save. As the name suggests the operations are very clear.
- ↳ Then there is a master screen for the allotments of the books to the particular user.
- ↳ Then there is a master screen for the category in which the books are categorized.

Employee Management System:

Login Screen Entries:

- ↳ The login screen entry is not the entry to the application, but it is the user configuration. Hence this screen is accessible only to the admin. He/She will create the login name and password for the available employees.
- ↳ Next comes the change password screen where the logged person's name will already be generated. If he knows his old password then he changes to a new password he wants.
- ↳ Next comes the log file and this is accessible only to the admin level. Here there are no entries to type; it is just only a read-only screen.

Allotment Screen Entries:

- ↳ The allotment screen also doesn't have any details to type. The allotment screen is also accessible only by the admin. The screens are used for the appraisals and the resource management.
- ↳ First comes the admin allotment screen where the manager level employees will be listed on the left list box. Then the admin users will be listed on the right list

box. There are two buttons for add and remove any user and finally give finish, which will save the transaction.

- ↳ Next comes the manager allotment, which is same as the admin allotment.
- ↳ Next comes the group allotment, where the group members are assigned only here by the admin to a particular Project Manager.

General Control Screens:

- ↳ The first screen to come under the general controls is that the add employee screen. Here a new employee is added with all his details which are fully validated, nearly 45 to 50 fields are there to be filled up.
- ↳ Next comes the view screen where the admin will have the flexibility of three different kind of views which is already mentioned in the document.
- ↳ Next comes the search screen where the criteria is posted for all the 45 to 50 fields which will send its results to view screen and again the process continues.

Letters Screens:

- ↳ The letter screens are almost the same as that for all the 10 letters. The letter screens have the beautiful concept of merging the details with the template that is already created and which is ready for the print out.
- ↳ The letter view screen will give the report what are all the letters given to the particular employee at what time.

Resume Builders:

- ↳ The resume builders are nothing but the updating of the resume only for the employee who has logged in. The resume builder screen will have beautiful design pop-up windows for each and every category.

↳ Next comes the search screen, which allows the multiple search screens and produces the report who ever has matched the criteria. There is a provision to view the resume details in the word application.

Master Screen Entries:

↳ The master screen here also consists of the same functionality as Add, Modify, Delete, View and Save.

↳ The screens that are involved in this master category are

- 1) Designation
- 2) Department
- 3) Division
- 4) Education
- 5) City
- 6) State
- 7) Country
- 8) Language
- 9) Domain
- 10) Technology

Timesheet and Task sheet Management:

Timesheet Entries:

- ↳ The timesheet entries are been filled by each employee under the reference of the task and the taskid sent by your PL or PM.
- ↳ The timesheet entries are filled for each and every task assigned to him. Then these information after entered by the employee is then bulk saved.
- ↳ Then there is a provision for updating the timesheet details entered by the employee

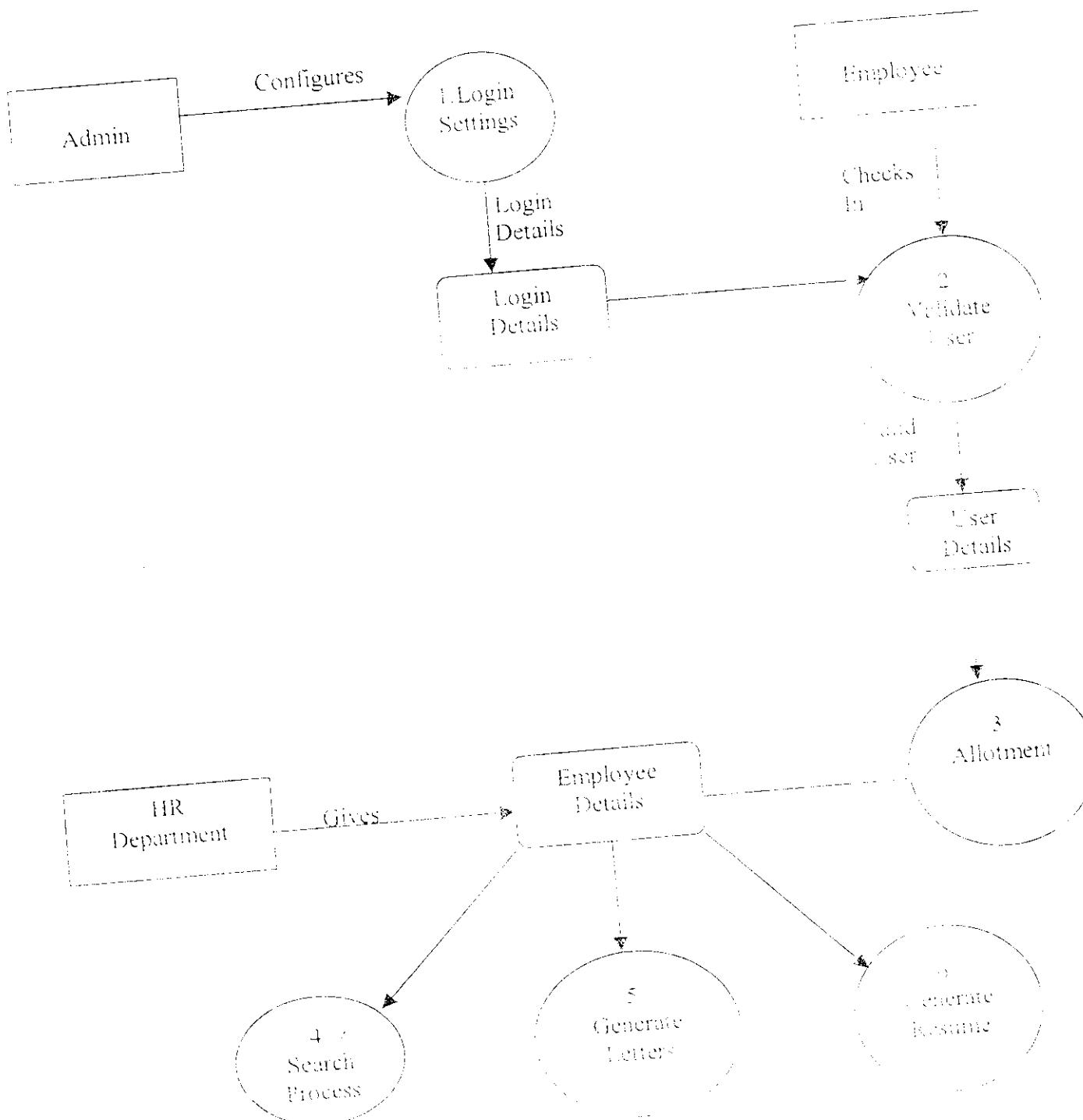
- ↳ Then the next screen is to approval of the timesheet. This screen is accessible only to the PL or PM. This screen is used to approve a particular timesheet sent by the employee.

Task sheet Entries:

- ↳ The PL or PM who creates the new task fills the task sheet entries and he/she assigns the task to particular employee.
- ↳ Here also the data is taken to the database only through the bulk save.
- ↳ There is a provision for the updating of the task sheet details.

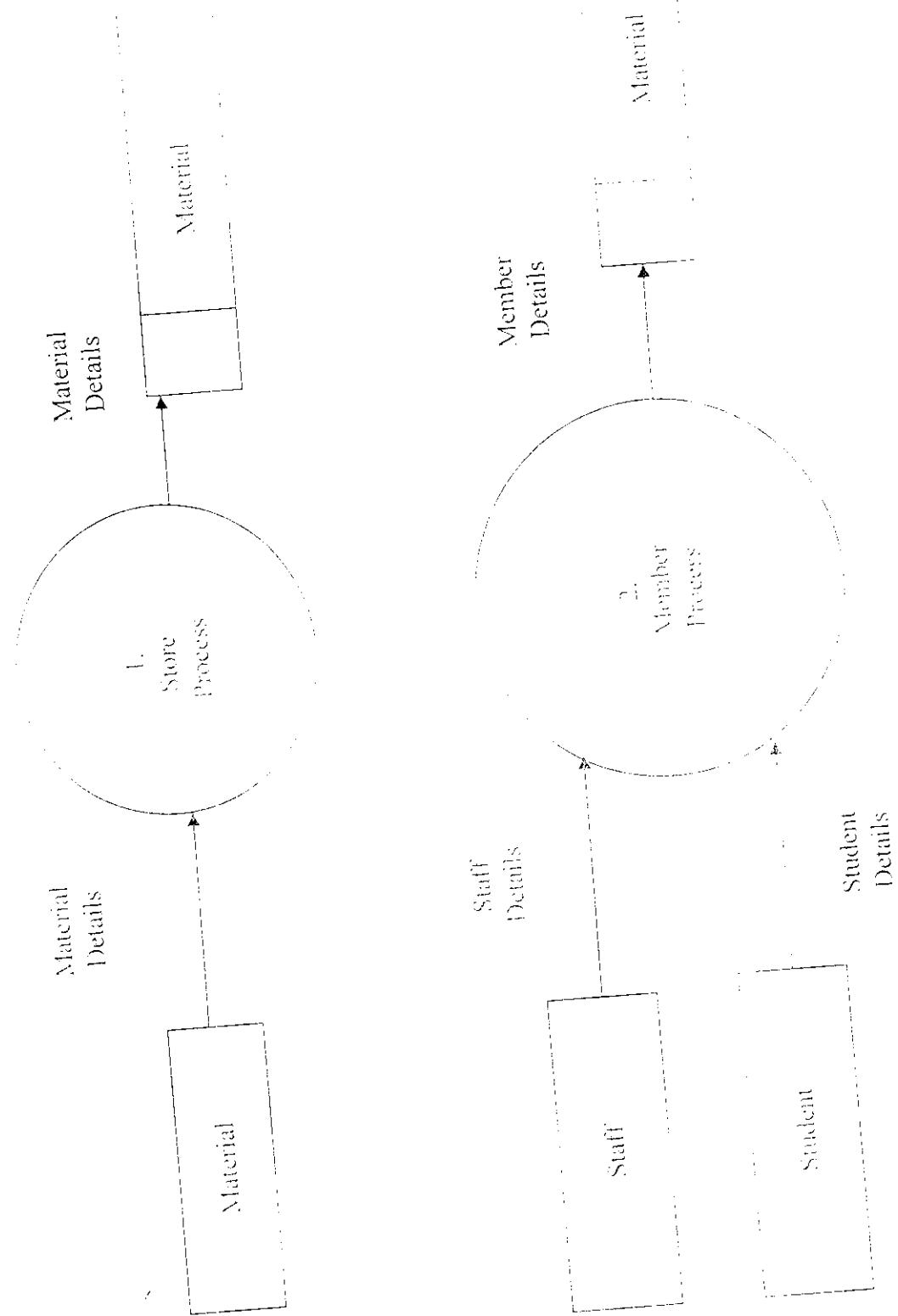
5.3 DATAFLOW DIAGRAMS

EMPLOYEE MANAGEMENT SYSTEM



DATAFLOW DIAGRAM FOR LIBRARY MANAGEMENT

Level 1



Level 2

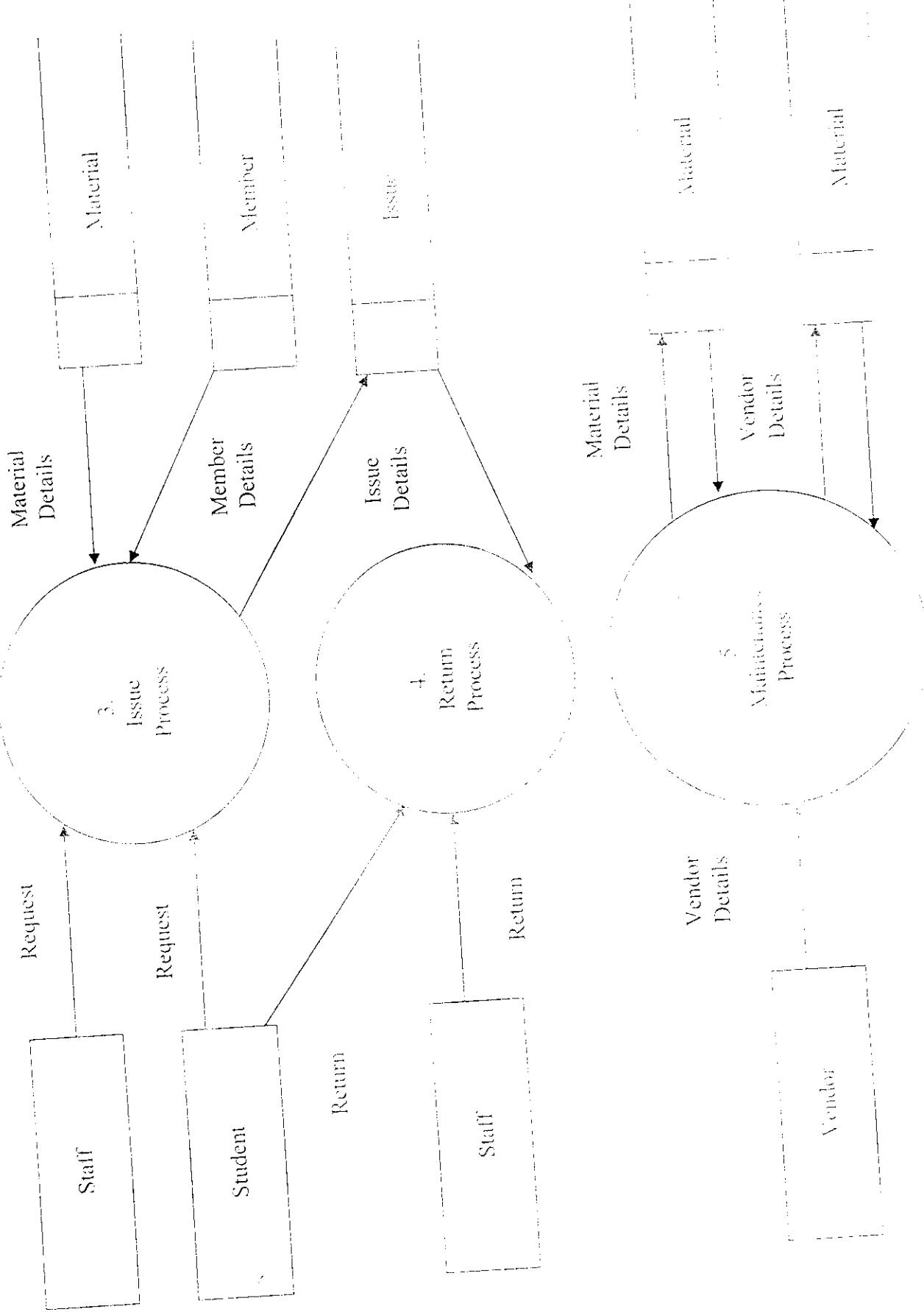
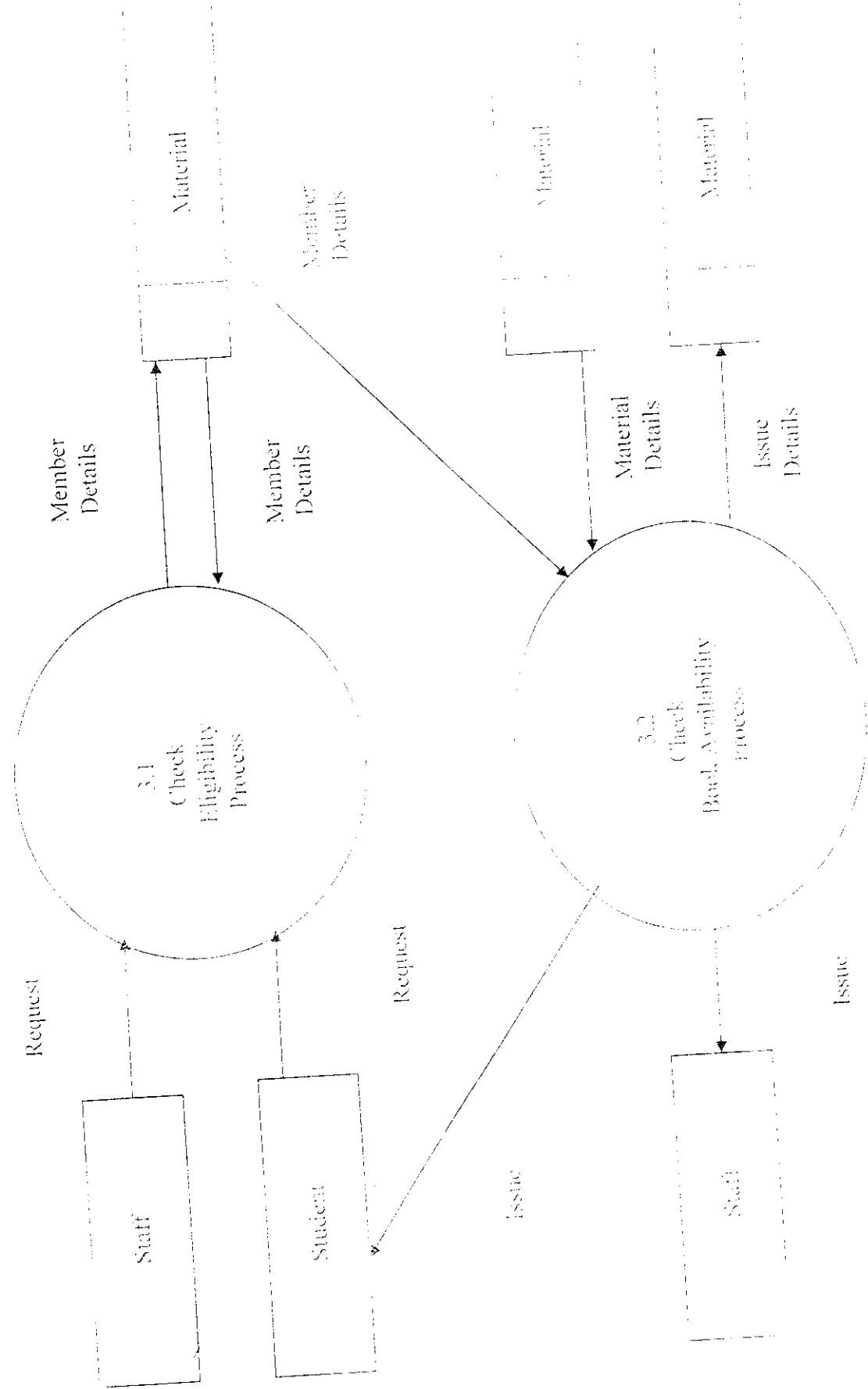


Figure 3



5.4 OUTPUT DESIGN

In output design the emphasis is on producing a hard copy of the information or displaying the output. One of the most important reasons which haunts tempts the user to go for a new system is the output. The outputs generated by the system are often regarded to be the criterion for evaluating the system usefulness. Hence a predetermined of output requirements is required before going for actual system design.

Following reports are generated by the system for smart office.

Library Management System:

Request Report:

This reports will generate the employee's name whoever has requested for a particular book.

Status Report:

This report will produce the details about the book which is under a particular status of the book.

Today's Return:

This report will produce the details of the employee and the book name that are to be returned today.

Allotment Report:

This will produce the details of the allotment of the number of books for all the employees in the organization.

Employee Management System

Log Report:

This will produce the details of the transactions or changes made to the application. This will generate report with regard to date and time.

Search Report

This will produce the details of the search results in the resume builder. This search screen provides the facility of multiple search. Hence all the employee matched to the criteria will be listed and their resumes will be posted in the word application.

Letter Templates

This will produce the letter in the HTML page so that it will be ready for the print out. The letters generated will be tracked by the system.

Timesheet and Task sheet Management

Timesheet Report

This will produce the timesheet of a particular employee for a particular time. So that with the help of this the PL or PMA can approve the timesheet.

Task sheet Report

This will produce the task that is created for the current week by default. After the start date and end date are entered the report is dynamically generated for that criteria.

5.5 DATABASE DESIGN

Database designs are designed to manage large bodies of information. The management of data involves both the definition of structure for the storage of mechanism for the manipulation. In addition, the database system must provide for the safety of the information solved despite system must crashes or due to attempts by unauthorized, we have to fulfill certain condition such as centralized redundancy.

- ↳ Easy of use
- ↳ Data Independence
- ↳ Accuracy and integrity
- ↳ Recovery from failure
- ↳ Privacy and Security
- ↳ Performance

For achieving the above-mentioned Criteria's, we have to make use of various features that are available by enforcing integrity constraints. we can ensure data integrity and reduce data inconsistency to a great extend.

- ↳ Recovery from failure using backup facility.
- ↳ By using table level locking facilities we can avoid concurrent access anomalies.
- ↳ To avoid data redundancy, we have used the concept of normalization extensively.

Normalization:

Normalization is the process of simplifying the relationship between data elements in a record. Through normalization a collection of data in a record structure is replaced by successive record structure that are simpler and can be managed efficiently.

Normalization is being carried out for four reasons.

- ⇒ To structure the data so that any pertinent relationship between entities can be represented.
- ⇒ To permit simple retrieval of data in response to query and reports required.
- ⇒ To simplify data maintenance procedures such as insertion, deletion and updation.
- ⇒ To reduce the need to be restructure or reorganize data when new application requirements arise.

Major normalization strategies are

First Normal Form

First normal form is achieved when all repeating groups in a record are removed, so that the record is of fixed length. A repeating group, reoccurrence of a data item or group of data item within a record actually at other relation. Hence, it is removed from the record and treated as an additional record structure or relation.

Second Normal Form

Second normal form is achieved when a record is in first normal form, and each item in the record is fully dependent on the primary key for identification. In other words, analyst seeks functional dependency. A data item is functionally dependent if its value is

uniquely associated with a specific data item. To achieve second normal form every data item in record should be removed and used to form a separate relation.

Third Normal Form

Third normal form is achieved when all transitivity dependencies are removed from a record i.e., if A is functionally dependent on B and B is functionally dependent on C then A is functionally dependent on C.

TABLES FOR LIBRARY MANAGEMENT SYSTEM

TABLE: book_mast

NAME	NULL?	TYPE	CONSTRAINTS
BookID	Not Null	Numeric(9)	
Book Name	Not Null	Varchar(70)	Foreign Key
Category	Not Null	Varchar(50)	
Status	Not Null	Varchar(30)	
Cost	Not Null	Numeric(8,2)	
Author Name	Not Null	Varchar(70)	
Publications	Not Null	Varchar(80)	

TABLE: cd_mast

NAME	NULL?	TYPE	CONSTRAINTS
CdID	Not Null	Numeric(9)	
Cd Name	Not Null	Varchar(70)	Foreign Key
Category	Not Null	Varchar(50)	
Status	Not Null	Varchar(30)	
Cost	Not Null	Numeric(8,2)	

TABLE: book_issue

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
Book ID	Not Null	Numeric(9)	Foreign Key
Issue Date	Not Null	Datetime	
Return Date	Not Null	Datetime	

TABLE: cd_issue

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
Cd ID	Not Null	Numeric(9)	Foreign Key
Issue Date	Not Null	Datetime	
Return Date	Not Null	Datetime	

TABLE: book_return

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
BookID	Not Null	Numeric(9)	Foreign Key
Return Date	Not Null	Datetime	

TABLE: cd_return

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
CdID	Not Null	Numeric(9)	Foreign Key
Return Date	Not Null	Datetime	

TABLE: book_latereturn

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
BookID	Not Null	Numeric(9)	Foreign Key
Return Date	Not Null	Datetime	

TABLE: cd_latereturn

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
CdID	Not Null	Numeric(9)	Foreign Key
Return Date	Not Null	Datetime	

TABLE: book_damage

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
BookID	Not Null	Numeric(9)	Foreign Key

TABLE: cd_damage

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
CdID	Not Null	Numeric(9)	Foreign Key

TABLE: category_mast

NAME	NULL?	TYPE	CONSTRAINTS
CategoryID	Not Null	Numeric(6)	Primary Key
Category	Not Null	Varchar(50)	

TABLE: book_request

NAME	NULL?	TYPE	CONSTRAINTS
Employee Name	Not Null	Varchar(50)	
MailID	Not Null	Varchar(100)	
BookID	Not Null	Numeric(9)	Foreign Key

Employee Management System

TABLE: Employee

NAME	NULL?	TYPE	CONSTRAINTS
EmployeeID	Not Null	Numeric(9)	Primary Key
DOJ	Not Null	Datetime	
DOB	Not Null	Datetime	
DOI	Not Null	Datetime	
BGI	Not Null	Varchar(6)	
TotalExperience	Null	Numeric(3)	
PassportNumber	Null	Numeric(10)	
Remarks	Null	Varchar(1000)	
MaritalStatus	Not Null	Varchar(10)	
Gender	Not Null	Varchar(1)	
DeptID	Not Null	Numeric(9)	Foreign Key
DesgnID	Not Null	Numeric(9)	Foreign Key
DivisionID	Not Null	Numeric(9)	Foreign Key
EducationID	Not Null	Numeric(9)	Foreign Key

TABLE: EmployeeName

NAME	NULL?	TYPE	CONSTRAINTS
EmpnameID	Not Null	Numeric(9)	Primary Key
FirstName	Not Null	Varchar(50)	
MiddleName	Not Null	Varchar(50)	
LastName	Not Null	Varchar(50)	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: City

NAME	NULL?	TYPE	CONSTRAINTS
CityID	Not Null	Numeric(9)	Primary Key
CityName	Not Null	Varchar(50)	

TABLE: State

NAME	NULL?	TYPE	CONSTRAINTS
StateID	Not Null	Numeric(9)	Primary Key
StateName	Not Null	Varchar(50)	

TABLE: Country

NAME	NULL?	TYPE	CONSTRAINTS
CountryID	Not Null	Numeric(9)	Primary Key
CountryName	Not Null	Varchar(50)	

TABLE: EmployeeDetails

NAME	NULL?	TYPE	CONSTRAINTS
DetailsID	Not Null	Numeric(9)	Primary Key
AccessCard	Not Null	Varchar(50)	
Login	Not Null	Varchar(50)	
Password	Not Null	Varchar(10)	
Keynumber	Not Null	Numeric(9)	
MailPassword	Not Null	Varchar(10)	
TelephoneNo	Null	Numeric(8)	
MobileNo	Null	Numeric(8)	
PersonalMail	Null	Varchar(70)	
OfficialMail	Not Null	Varchar(70)	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Address

NAME	NULL?	TYPE	CONSTRAINTS
AddressID	Not Null	Numeric(9)	Primary Key
Address1	Not Null	Varchar(100)	
Address2	Not Null	Varchar(100)	
CityID	Not Null	Numeric(9)	
StateID	Not Null	Numeric(9)	
CountryID	Not Null	Numeric(9)	
Pincode	Not Null	Numeric(6)	
Type	Not Null	Varchar(1)	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Department

NAME	NULL?	TYPE	CONSTRAINTS
DeptID	Not Null	Numeric(9)	Primary Key
Department	Not Null	Varchar(50)	

TABLE: Designation

NAME	NULL?	TYPE	CONSTRAINTS
DesignID	Not Null	Numeric(9)	Primary Key
Designation	Not Null	Varchar(50)	

TABLE: Division

NAME	NULL?	TYPE	CONSTRIANTS
DivisionID	Not Null	Numeric(9)	Primary Key
Division	Not Null	Varchar(50)	

TABLE: Education

NAME	NULL?	TYPE	CONSTRIANTS
EducationID	Not Null	Numeric(9)	Primary Key
Education	Not Null	Varchar(50)	

TABLE: Country

NAME	NULL?	TYPE	CONSTRIANTS
CountryID	Not Null	Numeric(9)	Primary Key
CountryName	Not Null	Varchar(50)	

TABLE: Language

NAME	NULL?	TYPE	CONSTRIANTS
LanguageID	Not Null	Numeric(9)	Primary Key
Language	Not Null	Varchar(50)	

TABLE: Domain

NAME	NULL?	TYPE	CONSTRIANTS
DomainID	Not Null	Numeric(9)	Primary Key
Domain	Not Null	Varchar(50)	

TABLE: Technology

NAME	NULL?	TYPE	CONSTRIANTS
TechnologyID	Not Null	Numeric(9)	Primary Key
Technology	Not Null	Varchar(50)	

TABLE: LetterView

NAME	NULL?	TYPE	CONSTRIANTS
LetterID	Not Null	Numeric(9)	Primary Key
Letter	Not Null	Varchar(50)	
SavedDate	Not Null	Datetime	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Log

NAME	NULL?	TYPE	CONSTRIANTS
LogID	Not Null	Numeric(9)	Primary Key
TransactionTime	Not Null	Datetime	
Description	Not Null	Varchar(200)	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Login

NAME	NULL?	TYPE	CONSTRIANTS
LoginID	Not Null	Numeric(9)	Primary Key
LoginName	Not Null	Varchar(50)	
Password	Not Null	Varchar(10)	
Type	Not Null	Varchar(10)	
RoleID	Not Null	Numeric(9)	Foreign Key
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Role

NAME	NULL?	TYPE	CONSTRIANTS
RoleID	Not Null	Numeric(9)	Primary Key
Role	Not Null	Varchar(50)	

TABLE: Certificate

NAME	NULL?	TYPE	CONSTRIANTS
CertificateID	Not Null	Numeric(9)	Primary Key
CertificateName	Not Null	Varchar(50)	
LanguageID	Not Null	Numeric(9)	Foreign Key
EmpId	Not Null	Numeric(9)	Foreign Key

TABLE: DomainExperience

NAME	NULL?	TYPE	CONSTRIANTS
DomID	Not Null	Numeric(9)	Primary Key
Work	Not Null	Varchar(50)	
YOE	Not Null	Numeric(9)	
DomainID	Not Null	Numeric(9)	
EmpID	Not Null	Numeric(9)	

TABLE: Experience

NAME	NULL?	TYPE	CONSTRAINTS
ExpID	Not Null	Numeric(9)	Primary Key
Organization	Not Null	Varchar(50)	
Designation	Not Null	Varchar(50)	
FromTime	Not Null	Varchar(20)	
ToTime	Not Null	Varchar(20)	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: ExtraCurricular

NAME	NULL?	TYPE	CONSTRAINTS
EventID	Not Null	Numeric(9)	Primary Key
Event	Not Null	Varchar(50)	
Achievements	Not Null	Varchar(50)	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Project

NAME	NULL?	TYPE	CONSTRAINTS
ProjectID	Not Null	Numeric(9)	Primary Key
ProjectName	Not Null	Varchar(50)	
Client	Not Null	Varchar(50)	
Organization	Not Null	Varchar(50)	
Software	Not Null	Varchar(50)	
Role	Not Null	Varchar(50)	
Duration	Not Null	Varchar(10)	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Qualification

NAME	NULL?	TYPE	CONSTRAINTS
QualificationID	Not Null	Numeric(9)	Primary Key
University	Not Null	Varchar(50)	
YearOfPassing	Not Null	Varchar(20)	
Percentage	Not Null	Numeric(3)	
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Skill

NAME	NULL?	TYPE	CONSTRAINTS
SkillID	Not Null	Numeric(9)	Primary Key
Proficiency	Not Null	Varchar(50)	
Yearofexperience	Not Null	Numeric(8,2)	
LanguageID	Not Null	Numeric(9)	Foreign Key
EmpID	Not Null	Numeric(9)	Foreign Key

TABLE: Relieving

NAME	NULL?	TYPE	CONSTRIANTS
RelieveID	Not Null	Numeric(9)	Primary Key
DORL	Not Null	Datetime	
DOCS	Not Null	Datetime	
ChequeDate	Not Null	Datetime	
Chequeno	Not Null	Numeric(9)	
Rupees	Not Null	Numeric(8,2)	
Empld	Not Null	Numeric(9)	Foreign Key

Timesheet and Task sheet Management

TABLE: Autonum

NAME	NULL?	TYPE	CONSTRIANTS
EmpID	Not Null	Numeric(9)	
TaskID	Not Null	Numeric(9)	
LogentryID	Not Null	Numeric(9)	
ProjectID	Not Null	Numeric(9)	

TABLE: Privilege

NAME	NULL?	TYPE	CONSTRIANTS
RoleID	Not Null	Numeric(9)	Primary Key
Role	Not Null	Varchar(50)	

TABLE: TaskDetails

NAME	NULL?	TYPE	CONSTRIANTS
TaskID	Not Null	Numeric(9)	Primary Key
TaskDescription	Not Null	Varchar(50)	
Tasktype	Not Null	Varchar(20)	
DeliverableID	Not Null	Numeric(9)	Foreign Key
StartDate	Not Null	Datetime	
EndDate	Not Null	Datetime	
EstimatedHours	Not Null	Numeric(2)	
EmployeeID	Not Null	Numeric(9)	Foreign Key
ProjectLeaderID	Not Null	Numeric(9)	Foreign Key
ProjectID	Not Null	Numeric(9)	Foreign Key
TaskComplexity	Not Null	Varchar(25)	

TABLE: EmployeeDetails

NAME	NULL?	TYPE	CONSTRAINTS
EmployeeID	Not Null	Numeric(9)	Primary Key
EmployeeName	Not Null	Varchar(50)	
RoleID	Not Null	Numeric(9)	Foreign Key
Loginname	Not Null	Varchar(25)	
Password	Not Null	Varchar(10)	

TABLE: Deliverables

NAME	NULL?	TYPE	CONSTRAINTS
DeliverableID	Not Null	Numeric(9)	Primary Key
Description	Not Null	Varchar(100)	
StartDate	Not Null	Datetime	
EndDate	Not Null	Datetime	
ActualDelivery	Not Null	Datetime	
ProjectID	Not Null	Numeric(9)	Foreign Key

TABLE: ProjectDetails

NAME	NULL?	TYPE	CONSTRAINTS
ProjectID	Not Null	Numeric(9)	Primary Key
ProjectName	Not Null	Varchar(50)	
Description	Not Null	Varchar(50)	
StartDate	Not Null	Datetime	
EndDate	Not Null	Datetime	
ProjectManagerID	Not Null	Numeric(9)	Foreign Key

TABLE: Resource

NAME	NULL?	TYPE	CONSTRAINTS
ProjectID	Not Null	Numeric(9)	Foreign Key
ReportingDate	Not Null	Datetime	
ReleaseDate	Not Null	Datetime	
EmployeeID	Not Null	Numeric(9)	Foreign Key

TABLE: TimesheetDetails

NAME	NULL?	TYPE	CONSTRAINTS
LogEntryID	Not Null	Numeric(9)	Primary Key
EmployeeID	Not Null	Numeric(9)	Foreign Key
ProjectID	Not Null	Numeric(9)	Foreign Key
TaskID	Not Null	Numeric(9)	Foreign Key
ActivityDate	Not Null	Datetime	
ActivityDescription	Null	Varchar(100)	
DeliverableID	Not Null	Numeric(9)	Foreign Key
ActualHour	Not Null	Numeric(2)	
Status	Not Null	Varchar(20)	
Comments	Null	Varchar(200)	

System Testing & Implementation

6. SYSTEM TESTING AND IMPLEMENTATION

Implementation is the final and very important phase. It involves user training, system testing and successful running of the developed proposed system. The user tests the developed system and changes are made according to their needs. The testing phase involves the testing of developed system using various kinds of data.

An elaborate testing of data is prepared and the system is tested using that test data. While testing, errors are noted and corrections are made. The corrections are also noted for future use. The users are trained to operate the developed system successfully in future.

DEVELOPMENT

Development is one of the important steps in the design process and this is the only material that will show how the user should run the system. It gives the layouts of the various fields, their types and length in each of the file used by the system.

TESTING

System testing is the stage of implementation, which is aimed at ensuring that the system works accurately and efficiently. Each module in the system is tested individually and then these modules are put together to form a subsystem. The subsystem is also tested. Then the subsystems are integrated to form complete system. Using test data the whole system is tested in order to verify that the programs link together in the way specified to produce the outputs specified. Test data is fed to the system and the output obtained is compared with the manually obtained results for verification. The reports are also tested.

IMPLEMENTATION

After the system analysis and design phase completion, coding for the project work is carried out. This was followed by the implementation phase.

The implementation phase is an important period where the project is tested for its validity and connection at real-time environment. There are three types of implementation like:

- ↳ Implementation of a computer system to replace a manual system.
- ↳ Implementation of a new computer system to replace the existing one.
- ↳ Implementation of modified application to replace the existing one using the existing one.

The first type of implementation was undergone. The users, that is the crews were given an idea about the project works and how different it was from the existing one. Sample data were entered and tested for its validity. Thus the project was implemented to the user satisfaction.

Conclusion

7. CONCLUSION

The Smart Office has been developed for the present requirements. This gives the user flexibility to maintain the data in a well organized manner and also to generate reports very easily. The developed system has succeeded in rectifying the problems that are present in the existing system.

Reports generated with live data have proved to be informative. The system can be further enhanced to accommodate a host of features that are currently not included in the system.

The newly developed system consumes less processing time and productivity is increased. All transactions are processed and posted immediately. Since screens provide help messages that are user friendly, any end users get familiarized with its usage.

The goals that have been achieved by the developed system are,

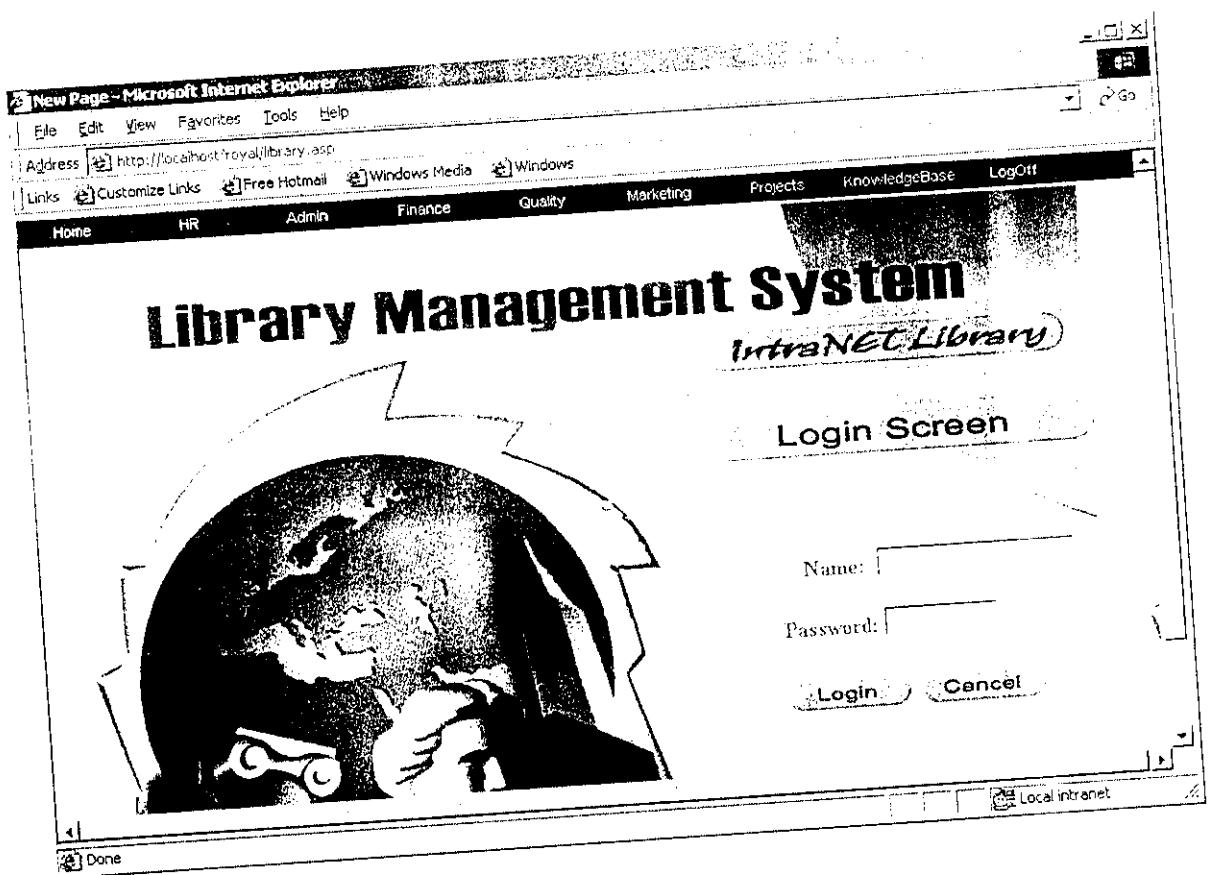
- ⇒ It simplifies the operation.
- ⇒ It reduces the processing time and increase productivity.
- ⇒ User-friendly screens are there to enter data and enquire the database tables.
- ⇒ Help messages to operate the system.
- ⇒ Portable and flexible for further enhancement.

8. REFERENCES

1. BOOK: Professional ASP 3.0, Alex Homer, wrox publications, 1998
2. BOOK: ASP in a nutshell, Brian Francis, wrox publications, 1999
3. BOOK: Complete Reference SQL, Paul N. Weinberg, Tata McGraw-Hill, 2000

WEB LINKS:

1. www.google.com
2. www.jobstreet.com
3. www.india.stepstone.com



Searching Screen

New Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://localhost/royal/library.asp

Links Customize Links Free Hotmail Windows Media Windows

Home HR Admin Finance Quality Marketing Projects KnowledgeBase LogOff

Library Details

Books Search Transaction Books Reports CDS Master

Search Type: List All Subject: Request

Search Results: 7 books

Book-Id	Book Name	Author Name	Publications	Category	Status
1	MTS	Havid	Josh	Logic	damage
2	DataStructures	Havid	Josh	Logic	damage
3	DataStructures	Havid	Josh	Logic	damage
4	ASP	Reilly	Sover	Program	issued
5	CNET	Flyer	Gyimy	WebServices	damage

Click to collapse

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ISSUE FORM

Library Details

Books	Employee Name	Book-ID	4
CDs	Book Name	AuthorName	Reilly
Magazines	Publication	Category	Program
Videos	Issued Date	Date To Return	09/25/2002

Save View

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RETURN FORM

Library Details

Employee Name: Book Id:
Book Name: Oracle Author Name: Sub:
Publication: Devya Category: Database
Issued Date: Returning Date:

Save View

Click to expand

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LATERETURN FORM

Library Details:

Employee Name:	Book-Id:
Book Name:	AuthorName:
Publication:	Category:
Issued Date:	Returning Date:

Save View

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DAMAGE FORM

Library Details

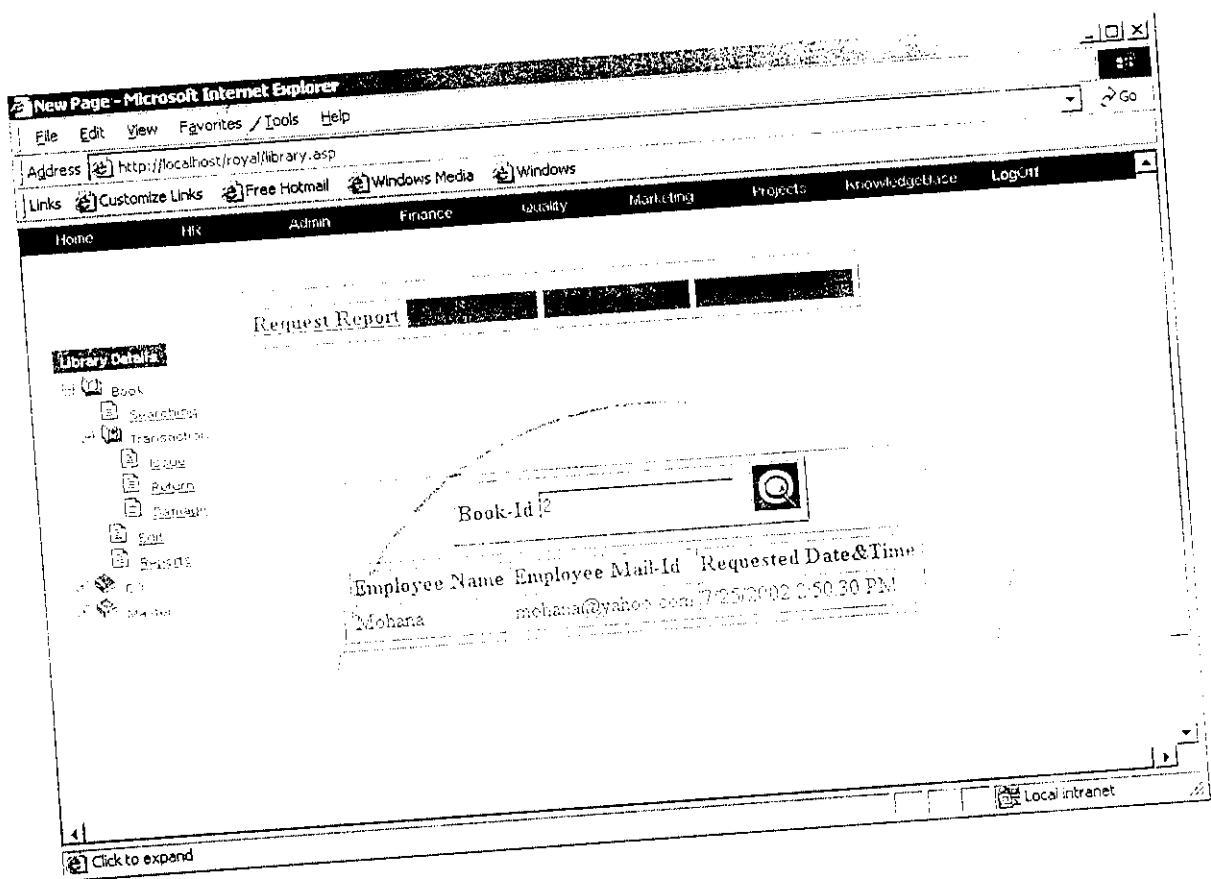
- Book
- Search
- Transaction
- Books
- Authors
- Category
- Cost
- Barcode
- CO
- Master

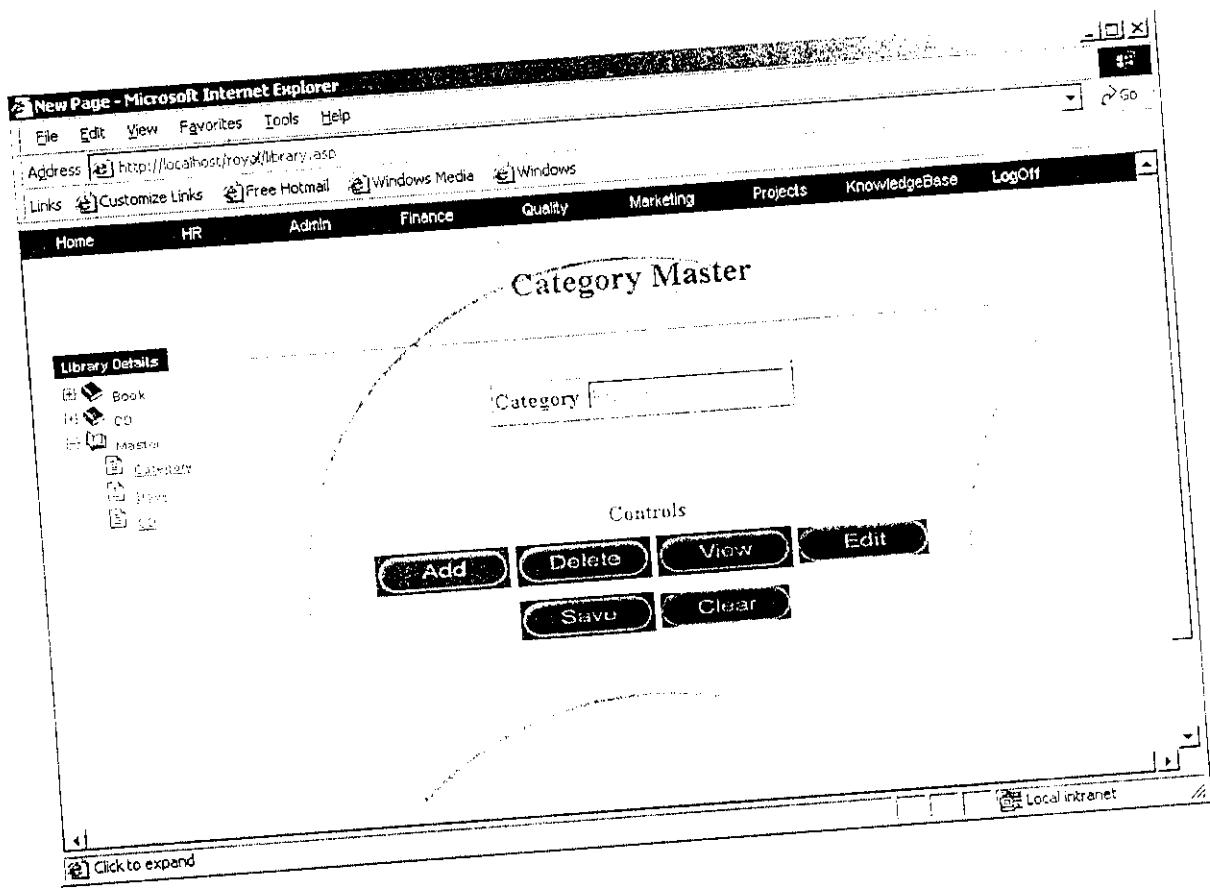
Employee Name	Abhishek	Book-Id	14
Book Name	ACT	Category	Program
Author Name	Partha	Publications	Sever
Status	available	Cost	150.00

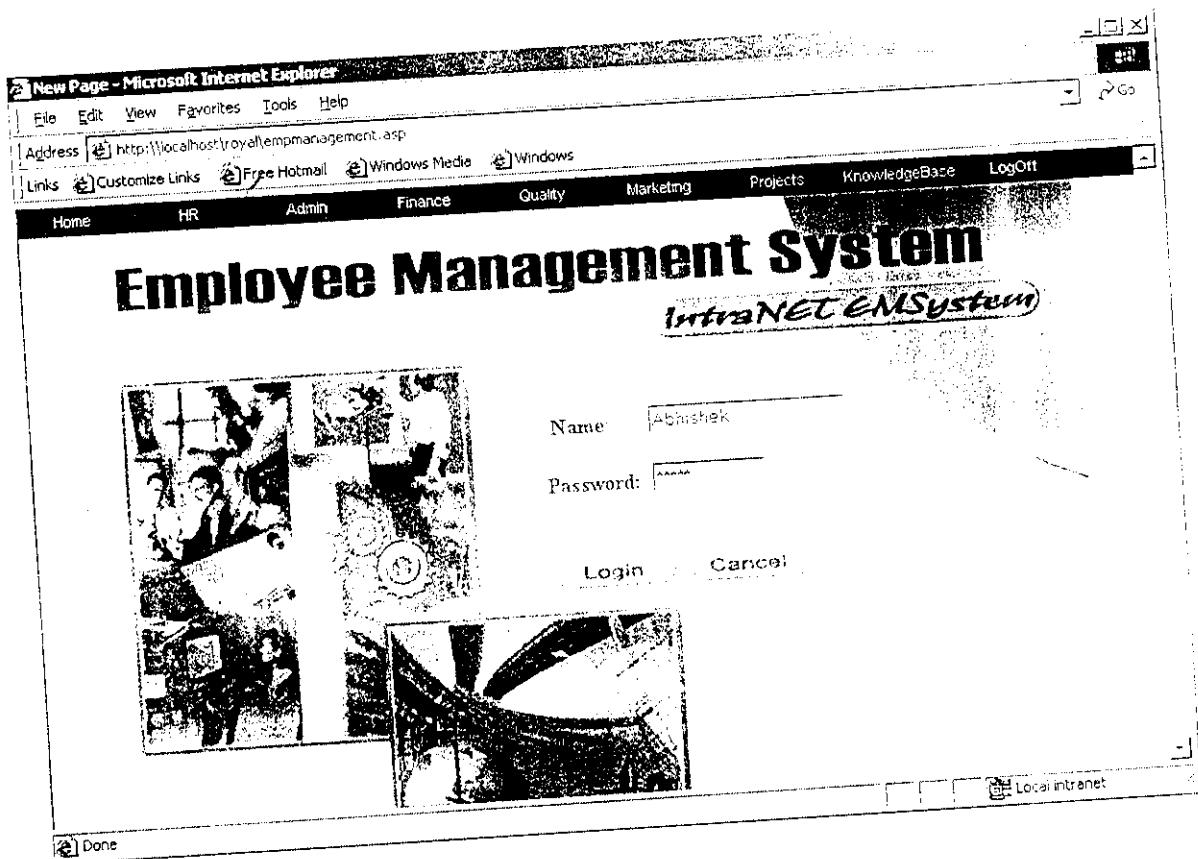
Buttons: Save, View, Home

Click to expand

Local intranet







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Login Settings

Controls

- Login
- Login Settings
- Change Password
- Log Off
- Allotment
- Operations
- Letters
- Resume
- Master
- Controls

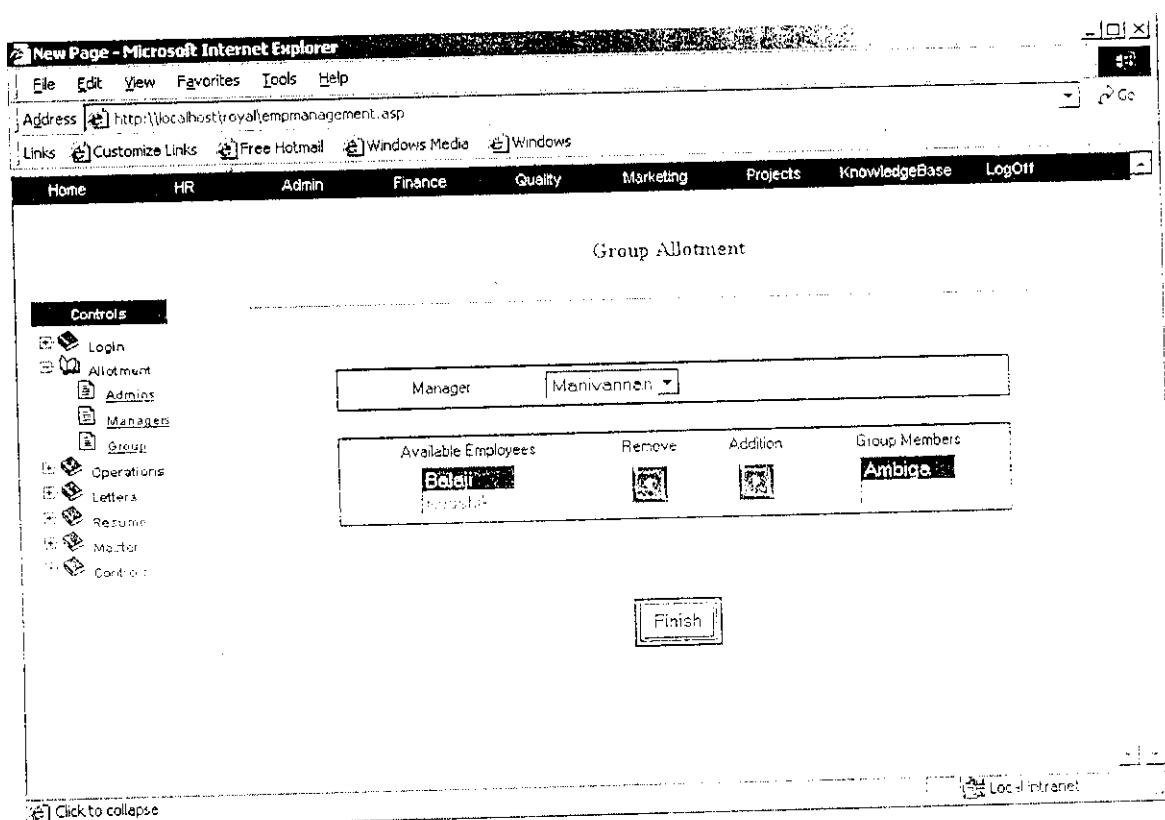
Employee-ID	1108	Login Name	<input type="text"/>
Password	<input type="password"/>	Retype Password	<input type="password"/>
Type	<input type="text"/>	Role	<input type="text"/>

Controls

Click to collapse

Local Intranet

This screenshot captures a Microsoft Internet Explorer window displaying a web-based application for managing employee login settings. The interface is organized with a top navigation bar, a menu bar, and a central content area. On the left, a sidebar titled 'Controls' lists various management functions. The main content area features a form for updating login credentials, including fields for Employee-ID, Login Name, Password, Retype Password, Type, and Role. Below the form are three action buttons: Save, Edit, and View. The status bar at the bottom indicates the connection is to a local intranet.



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Employee Registration

Controls

- Login
- Assignment
- Operations
 - Add
 - View All
 - Searching
- Letters
- Resume
- Master
- Controls

EmployeeId: First Name:
Middle Name: Last Name:

Permanent Address

Address Line1: Address Line2:
City: Pin Code:
State: Country:

Communication Address

Address Line1: Address Line2: Local Intranet

Click to collapse

New Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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View All Employees

Controls

- Login
- Allotment
- Operations
 - Add
 - View All
 - Searching
- Letters
- Resume
- Master
- Controls

View

Emp-ID	Emp-Name	Department	Designation	Division
1065	Ablishek	Facility Office	Project Manager	GSD
1066	Manivannan	Facility Office	Software Trainee	GSD
1067	Anjiga	Facility Office	Software Trainee	GSD
1068	Murali	Development	Project Manager	GSD
1069	Kuchik	Development	Software Trainee	GSD

Click to collapse Local Intranet

New Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address Go

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Appointment Letter Details

Controls

-
-
-
- -
 -
 -
 -
 -
 -
 -
 -
 -
-
-
-

Employee-ID: Employee Name:
Address1: Address2:
City: Pincode:
DOJ: Designation:
Basic: House Rent Allowance:
Conveyance Allowance: Medical Allowance:
Food Allowance: Children Allowance:

Local Intranet

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Home HR Admin Finance Quality Marketing Projects KnowledgeBase LogOff Date: 13/7/2002

To
Abhishek,
Eutech,
Chetpet,
Chennai-636009

Dear Abhishek,

Subject: Offer for Probationary Employment

Position: Project Manager

With reference to your application for the above position, we have pleasure in offering you employment from, 19/6/2002, on the following terms and conditions:

1. (a) You will be on probation for 6 months from the date of commencement of your service, which period may be further extended at the discretion of the company. At the end of the probation period, provided that your services have been found satisfactory, your appointment will be confirmed i.e. writing by the company.

(b) During the probation period, your services are terminable by seven days notice on either side or

[Click to collapse](#)

Local Intranet

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Resume Details

Controls

- Login
- Assignment
- Operations
- Letters
- Resume
- Detail
- Search
- Master
- Controls

EmployeeId: First Name:
Middle Name: Last Name:

Contact Details

Address1: <input type="text"/>	Address2: <input type="text"/>
City: <input type="text"/>	Pin Code: <input type="text"/>
State: <input type="text"/>	Nationality: <input type="text"/>
Resi Ph No(with code): <input type="text"/>	Mobile Ph No: <input type="text"/>
Personal Email: <input type="text"/>	Official Email: <input type="text"/>

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Search Screen

Controls

- Login
- Allotment
- Operations
- Letters
- Resume
- Details
- Search
- Master
- Controls

Search Type By Language

Visual Basic 6.0
Visual Basic 5.0
C

Languages	Operator	Experience	Logical
Visual Basic 6.0	>	1	And
Visual Basic 5.0	>	1	And
C	>	1	End

Search

Click to collapse Local intranet

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TaskSheet And TimeSheet

Home Task Sheet Time Sheet Admin Project Details LogOff

Project Name Calmester Project ID GSD_1012
Deliverable ID GSD_1012_0001 Deliverable Date 04/02/02

Task ID	Task Description	Task Complexity	Estimated Hours	Task Type	As Per Plan	Name	Start Date	End Date	Action	Delete	Modification
851	OF	2	2	Dafdas	GOT				<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	<input type="button" value="Modification"/>

Done Local intranet