P-773

INTRANET EXPRESS

PROJECT WORK DONE AT

ABAN INFORMATICS (P) LIMITED,
CHENNAI

PROJECT REPORT

Submitted in partial fulfillment of the
Requirements for the award of the degree of
Master Of Computer Applications
Of Bharathiar University

Submitted By

Seenivasan.T.
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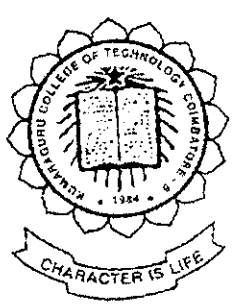

Department of Computer Science and Engineering
KUMARAGURU COLLEGE OF TECHNOLOGY
Coimbatore – 641 006

May 2002

CERTIFICATE

Department of Computer Science and Engineering

KUMARAGURU COLLEGE OF TECHNOLOGY

(Affiliated to Bharathiar University)

Coimbatore – 641 006

CERTIFICATE

This is to certify that the project work entitled

"INTRANET EXPRESS"

Done By

Seenivasan.T.

Reg. No. : 9938M0637

Submitted in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications** of **Bharathiar University.**

29/4/02

Professor and Head

29/4/02

Internal Guide

Submitted to University Examination held on 09.05.2002

9/5/02

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CERTIFICATE

This is to certify that the project work entitled 'INTRANET EXPRESS' being submitted by Mr. SEENIVASAN.T (9938M0637) in partial fulfillment of the requirement for the award of the degree of MCA (Master of Computer Application) is a bonafied record of network carried out at Aban Informatics Private Ltd., Chennai from 23/12/2001 to 05/04/2002 under my supervision and guidance.

During the above period his performance, conduct and character were found to be GOOD.

For **Aban Informatics Private Ltd.**

Maria Antony Irudhayaraj

DECLARATION

DECLARATION

I hereby declare that the project entitled "**INTRANET EXPRESS**" submitted to Bharathiar University as the project work of Master Of Computer Application Degree, is a record of original work done by me under the supervision and guidance of **Mr.Mariya Antony**, Project Manager, **Aban Informatics**, Chennai and **Mrs.L.S.Jayashree M.E**, Senior Lecturer, Department of Computer Science and Engineering, Kumaraguru College Of Technology, Coimbatore and this project work has not found the basis for the award of any Degree/ Diploma/ Associate ship/ Fellowship or similar title to any candidate of any University.

Place: COIMBATORE
Date: 29-04-2002

(Seenivasan.T.)
Reg. No. 9938M0637

Countersigned By

29/4/02

(Internal Guide)

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I am greatly privileged to express my deep gratitude to my guide **Mrs. L.S.Jayashree M.E,** Senior Lecturer, *Dept of Computer Science and Engineering, Kumaraguru College of Technology*, for her valuable advice and encouragement.

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I wish to extend my gratitude to **Mr. MARIYA ANTONY,** project *Manager Aban Informatics private Limited, Chennai,* for allowing me to carry out the project at their organization and guiding me in completing the project successfully.

I also take immense pleasure in thanking everyone who were directly or indirectly involved in the success of this project.

Seenivasan.T

SYNOPSIS

SYNOPSIS

The project entitled *"Intranet Express"* is developed for Aban Informatics private limited.

Intranet express is designed to meet all LAN and Intranet email needs using a single http service. It has the features of all mailing facility, group chatting facility and forwarding various forms of letters to the respective authority.

Mailing facility includes sending a letters to the valid members of the organization, Maintains a address book for each member and the members can able to send leave, permission, and material requisitions letter to the respective authority.

Group chatting facility allows sharing their ideas, thoughts of the members in a friendly environment. And it will display the company profile, annual progress, and financial results in a diagrammatic manner.

CONTENTS

1. INTRODUCTION

1.1 PROJECT OVERVIEW

The primary objective of intranet Express is to provide the mailing, chatting facility inside the organization. using the HTTP server holds the mails downloaded from the intranet account, to the respective users in their respective areas. HTTP server allows any email client such as outlook Express, Netscape Communicator etc., to receive and send mails from the http server. When a user sends a mail from his email client, the mail client contacts the http server, which accepts the mail. if the mail is for valid user, it instantly transferred to the users mail box.

The group chatting facility allow the members to share their common ideas, thoughts inside the organization it also allow to expose the company profiles, financial results, company progress in a diagrammatic manner.

Some of the features of the Intranet Server include

- Unlimited personal e-mail ids over the intranet account
- High speed data transfer
- Usage of any compatible clients (Eudora, outlook Express…)
- Storing mails in a secure form.
- Unlimited mail size
- Can be installed and run on windows 9x,windows NT

The administrator is the sole authority to activate the intranet mail server. when the new users are added, the intranet server adds them to the list of users. The inbox contain all the mails received for the users. The outbox holds all the mails send by the users. The user can use his mail client to delete his mail from the inbox.

1.2.ORGANIZATION PROFILE

Started in 1966 as a Mechanical Engineering Construction Company, Aban has grown into a multifaceted group with a workface of over 5000 people and assets crossing us$180 million]

The key to Abans success lies in its ability to pick the right people steadfastly holding on to the groups work culture, rooted in innovation, flexibility and ingenuity, these people are the mainstay of Abans success.

Of course, there's also the fact that every single one of Aban's ventures has one thing in common. The fact that they are uncommon. Mechanical Engineering, Construction, Offshore and Onshore oil exploration, Power Plants, Wind Energy, Tea Plantations Software, Hotel and Resorts, just a few of the ventures that Aban has a stake in.

Aban Informatics - a Solution Provider

- At the technology center in Chennai, a dedicated team of IT professionals is put into vigorous clients specific training programs.
- The management of Aban Informatics. has assembled a team of professionals skilled in the delivery of our core competencies, which includes consulting services, software development and product development.
- Aban Informatics branch offices are located adjacent to client locations to provide optimum customer service.
- Aban Informatics has already won the confidence of its clients in great measure around the United States with its high quality professional dedication.

2. SYSTEM STUDY & ANALYSIS

System study is the phase in which the problems are identified, the existing system, if any are studied, various alternate solutions to the problem are defined and the most feasible solution are is recommended considering the cost factors, hardware, software and human resources. During the study phase a preliminary analysis is carried out insufficient depth to permit a technical and economical evaluation of the proposed system. At the conclusion of the study phase, a decision is made whether or not to proceed with the design phase.

2.1 EXISTING SYSTEM

Electronic communication, because of its speed, turnaround time and broadcasting ability, is exploding the world much faster then expected by industry experts. Email is cheaper and faster then a letter, less intrusive then a phone call, less hassle then a FAX. Using email, differences in location and time zone are less of an obstacle to communication; the above said advantages clearly state that email is exploding. Let us examine how an organization can provide with the facility of email to its employees.

If an organization is able to provide individual accounts to all its employees then there is no doubt that any of these facilities will be denied. We speak of an organization, which really cannot afford to get individual mail account to its entire employee. There are two possible ways through which an organization can provide the facility of email to its employees.

Case 1:Single Internet Account and one pop3 Account

Case 2:Multiple pop3 Accounts

Limitations of Existing System

- The organization has to provide a Internet account for their employees this will increase the communication cost.
- Requires a machine that is dedicated for mailing purpose. No doubt that all the users within a department or within an organization will use the facility of email. So it is absolutely necessary to dedicate a system so that an organization can ensure it provides mailing facility to all its employee.
- The employees submit their letters through hard copy manually to the respective authority.
- There is no group chatting in the existing system. So the employees cannot share their ideas in an interactive manner.
- The organization may not have any control over the mail transfer. If the organization wishes to enforce some restrictions to all its employee, then with the above existing cases it is almost impossible.

These are the serious limitations that are faced when an organization is not able to provide individual account to all its users. Both the organization and the employee have their own reason to comment on the limitations.

2.2 PROPOSED SYSTEM

The following diagram helps in understanding the system that is proposed. The proposed system acts as an intermediate between web server and the users. The default port in which the HTTP server will be waiting is 8080. When the user send mail the mail client contacts HTTP server and sends the mail. To receive a mail the mail client contact the HTTP server and checks whether there is any mail for the particular user, it is not necessary for a user to be aware of all these facts. These things will be taken care by the mail client. But the system must be able to respond to the client request. When the system receives the mail it should store all the mails in a database. When the connection is made the HTTP server contacts the user's mailbox.

Modules in the proposed system

There are two modules in the mail server,

HTTP Server: waits at port 8080 and accepts connections from the mail client(both user and administrator) and collects the mails send by the users.

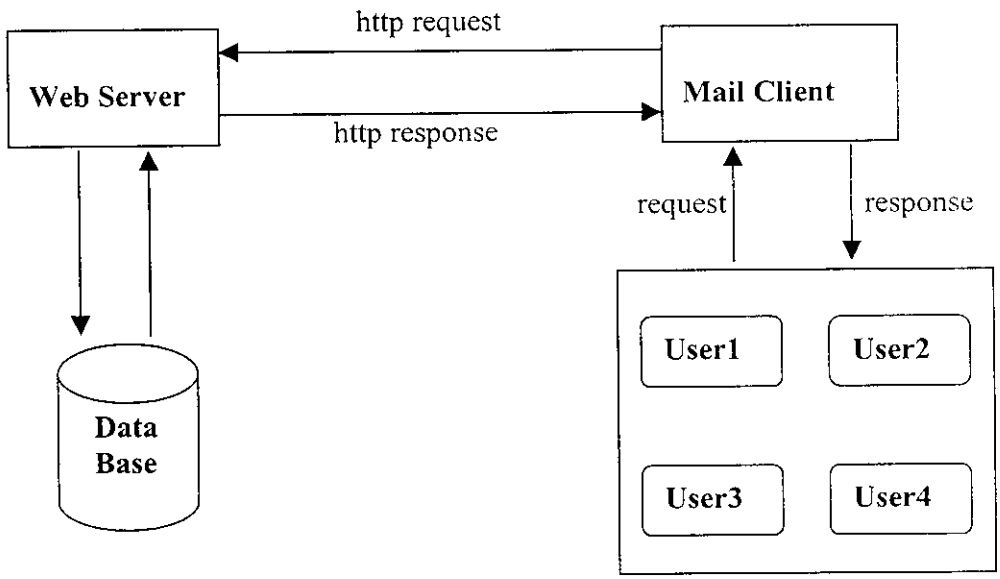
Mail Client: sends the mails that are collected from the users to the web server.

Chat Server: The server program will create a thread to each client and allow the group chat facility to each user

Chat Client: The client will provide the user interactive screens and allow the communication inside the organization

When a user composes a mail and clicks the send button the mail client configured to the web server opens a connection at port 8080 and request for sending mail. The web server receives the mail and places all the mails in its inbox. This is done only after validating the user who is sending the mail similarly, there may be many users sending their mails. The web server collects all the mails and stores it in its mailbox.

This is basic operation involved in sending mail



2.3 USER CHARACTERISTICS

The mail server requires an administrator to configure the system. He is the sole authority who is responsible for adding new users and deleting existing users. There is nothing the end user has to learn except to compose a message and send through his mail client software. Two of the popular mail clients in the market are Internet Explorer and Outlook express. Every mail client should be configured before using them to send and receive mails. These configurations are absolutely necessary, as this will instruct the client to send mails to the web server and receive the mails from the web server. After creating the user name and password for the particular employee, the administrator must let the user know all the details so that he can enjoy the facility of the system. Then it is Upto the user, to keep his user name and password confidential, to make sure that his mails are secured. Then if the email client is unable to establish the connection to the mail server the user should know the configurations of the mail client.

2.4 REQUIREMENTS OF NEW SYSTEM

Because of software is always a part of a largest system; work begins by establishing the requirements for all the system elements. The requirement gathering process in case of intranet server is intensified and focused on the programs to be built, required function, behavior, performance and various interfaces with the external system, intranet server has to meet.

The primary objective of the system to be developed is defined after studying the initial requirement that the system has to meet. The objective of the system is, to provide multiple individual email accounts inside an organization. The normal requirements of the system can be stated as

The system should have well defined user interface. Even though there will be only one user, administrator, using the system the system should be able to guide him to configure with the necessary details. Each user must be provided with a separate account to make sure that individual mails are secured.

Any user who wishes to check his mail must be validated before he is given with his mail box status, i.e., only after user authentication is done, the system should provide the user with his mail box status.

The system must be able to accept any number of connections simultaneously there may be a number of users within a department or within a organization connecting to the system to send or receive a mail. The system should provide the mechanism to handle all these facilities.

The system should have the provision to enforce restrictions on mails that are send and received.

The administrator must be the sole authority that must be given with all the resources of the system.

Any user who wishes to chat with others to share the ideas. He or she is given with his specific names to enter the chat room. Once the user enter into the chat room the chat server will maintain the record for the user .any user wishes to check the current chatters. it will allow to view the current users in the chat room.

The system must be able to accept any number of connections simultaneously there may be a number of users within a department or within a organization connecting to the system to chat with others. The system should provide the mechanism to handle all these facilities.

3. PROGRAMMING ENVIRONMENT

3.1 HARDWARE CONFIGURATION

Server

- Intel Pentium III
- 10GB Hard Disk
- 64MB RAM
- Cache Memory 512 KB

Client

- Intel Pentium III
- 10GB Hard Disk
- 64MB RAM
- Cache Memory 512KB

3.2 DESCRIPTION OF SOFTWARE & TOOLS USED

Never before has any new programming language attracted so much attention and becomes so popularly so quickly. In the first year of its existence, java took the web by storm and became its adapted programming language. Since then, java has become the language of choice for developing both Internet and intranet applications, and is used for both business and consumer software development. The java phenomenon has captivated the imaginations of programmers around the world and is leading a way towards the next era of distributed application development. Java's appeal lies in its simplicity, its familiarity, and careful selection of features that it includes and excludes. A government comity or a clique of academics did not design java. Its shares the spirit with c more than any syntactical similarities. It is programming language that was designed by programmers for programmers.

The reason that so much attention has been paid to java is summarized in the following list. Java allows the developer to do

- Write robust and reliable programs
- Built an application on almost any platform and run that application on any other supported platform without recompiling the code.
- Distribute the application over the network in a secured fashion.
- Java is simple
- Java is object oriented
- Java is platform independent
- Java is safe
- Java is reliable

Networking

A network socket is like an electrical socket. Network sockets are TCP/IP packets and IP address. Internet protocol is a low level routing protocol that breaks data into small packets and sends them to address across a network. Transport control protocol is a higher level protocol that manages a robustly string together these packets, sorting and retransmitting then as necessary.

Servlets

Servlets are small programs that executes on the server side of a web connection. Servlets offer several advantages

- Servlets executes within the address space of the web server.
- Servlets are platform independent, because they are written in java.
- The full functionality of java class libraries are available to a Servlet.

JDBC characteristics

JDBC is a "call - level" SQL interface for java. This interface is totally independent of the available database management systems.

SQL conformance

JDBC does not restrict the type of queries passed to an underlying DBMS drivers. JDBC may be implemented on top of the common SQL level APIs, in particular on top of ODBC.JDBC provides a java interface that stays consistent with the rest of the java system. There are no conflicts. The JDBC mechanisms are simple to understand and use.

The simplicity does no mean functionality suffers.

JDBC components

- Application
- Driver manager
- Driver
- Bridge Driver

4 SYSTEM DESIGN & DEVELOPMENT

4.1 INPUT DESIGN

Mailing

The objective of input design is to create an input layout that is easy to follow. In many applications keyboard remains the primary input medium. But this is not the case in the mail server. It requires a very minimal input from the administrator to begin its operation. To avoid errors made by the operators, all the input made to the system are validated properly and is made in such a way that user is given with the option of minimal typing work. The data validations are done by making the screen design in such a way that user commits or no errors. Define privilege levels govern access to applications ranging from input screens to file access and updating. The input to the system is more oriented towards configuring the system. The system has been with details of the server from where it should download the mails, details of the users from whom the system should accept the mails and distribute the mails.

The following section helps in understanding the input to the system.

User Name - username of the employee

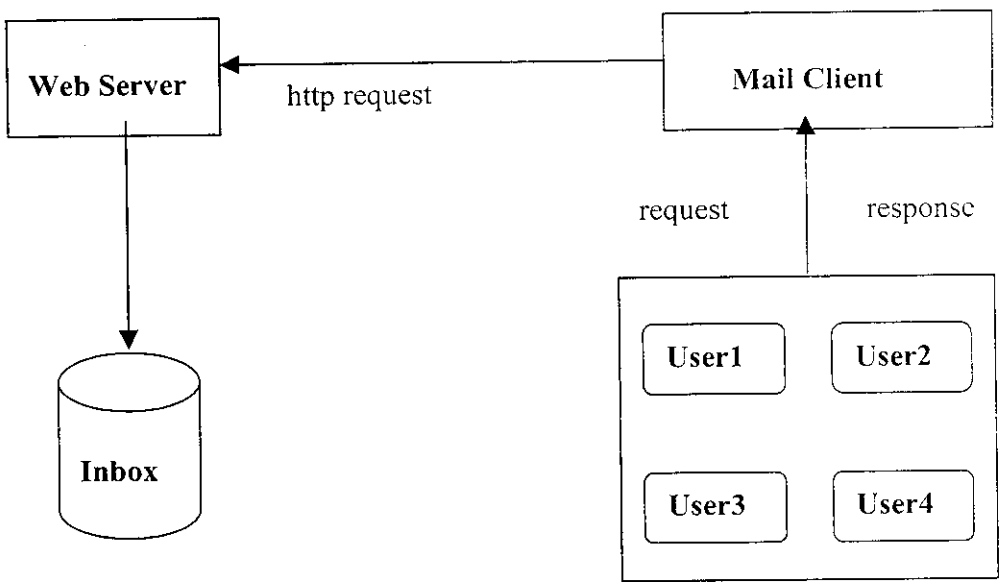
Password - Password can be needed to validate the employee of the organization

Forgot Password -this will help to remind the password of the employees account

New User - New user registration provided by the administrator

Sending the Mails

When the user sends mail the mail client contacts HTTP server and sends the mail. The incoming mails are stored in inbox of the employees account. The following diagram will shows the process involved in sending mail



Chat

Chatting requires a very minimal input from the user to begin its operation. To avoid errors made by the operators, all the input made to the system are validated properly and is made in such a way that user is given with the option of minimal typing work. The data validations are done by making the screen design in such a way that user commits or no errors. Define privilege levels govern access to applications ranging from input screens to file access and updating. The input to the system is more oriented towards configuring the system. The system has been with details of the server from where it should download the user information, details of the users from whom the system should accept the message and distribute the message to others.

The following section helps in understanding the input to the system.

User Name - username of the employee

Join - Join function will make a request to the chat server in order to establish the connection

Who -This will displays the current chatters in the organization

Send -This will send the current message to the chat server

Leave -This will remove the client from the current chat.

Chatting

When the user wishes to chat with others. He or she explicitly enter the name and make the request by pressing the join button. The input area will be used to get the user message and it will be forwarded by pressing the send button. The output area will show the message along with the user name. The users in the organization can share their ideas and thoughts via this facility.

4.2 OUTPUT DESIGN

The output from the system will be

- Sending mail to the users in the organization
- Maintaining the address book for each user
- Chatting with group of organization member

Sending the Mails

There may be many users within an organization sending the mails. The HTTP server receives the request made by the email client and posting their letters to the appropriate inbox. The HTTP server also provides address book for each mail client account. A client can store the personal information in his address book. The mail client can manipulate the address book.

Chatting

The users of the organization can get the facility of the chatting by specifying his/her name to join in the group. The user of the chat room can view the current members in the chat room. The user can type the message in the input area and sends the message to chat server. The chat server will append the message in the output area of the chat client. The user can also leave the chat room from the group. The administrator can also send a message to every users of the organization.

4.3 DATABASE DESIGN

As such the system needs considerably good amount of storage space to store the mails collected from the users. The database design plays vital role in the development of the system. The system creates and maintains files for each incoming and out going mails. The file names of all incoming mails are stored in the table inbox, which acts as the inbox of the mail server. The file names of the out going mails are stored in a table outbox which acts as a outbox of the mail server. The details of the incoming and out going mails can be maintained or deleted by the administrator or the user.

Signup Table

This table is used to store the details of the new user the fields included in this table are as follows

- Loginid :login id of the user - Text(30)
- Fname :first name for new user - Text(25)
- Mname :middle name for the new user - Text(25)
- Lname :last Name for the use - Text(25)
- Age :age of the user - Number
- Sex :sex of the user - Text(6)
- Address :address of the user - Text(50)
- City :city of the user - Text(25)
- State :state of the user - Text(25)
- Country :country of the user - Text(25)
- Pincode :pincode of the city - Text(10)
- Password :password set for the account - Text(25)
- Cpassword :confirm password - Text(25)
- Question :hint question mentioned by the user - Text(50)
- Answer :answer given by the user for the hint question- Text(30)

Login Table

This table is used to validate the user the fields included in this table are as follows

- Loginid :login id of the user - Text(30)
- Password :password set for the account - Text(25)
- Question :hint question mentioned by the user - Text(50)
- Answer :answer given by the user for the hint question - Text(30)

Compose Table

This table is used to store the message of the user the fields included in this table are as follows

- Sno :Sequence number - autonumber
- From :from address of the user - Text(30)
- Subject :subject of the message - Text(30)
- Date :date of message send - date/time
- To :recipients address - Text(30)
- Message :sender message - Text(500)
- Size :size of the message - Text(50)

Logfile Table

This table is used to store the informatione about the users activity.

- Source IP source IP address - Text(25)
- DesiURL Destination url address - Text(30)
- Size size of the message - Text(50)
- Date Message posting date - Date/time
- Time Time of message send - Date/time
- Sub subject of the message -Text(30)

Address book Table

This table is used to store the information about the users the fields included in this table are as follows

- Sno :Sequence number - autonumber
- nickname :nick name of the user - Text(30)
- name :name of the user - Text(30)
- emailid :email address of the user - date/time
- address :personal address of the user - Text(50)
- city :city of the user - Text(25)
- pincode :pincode of the city - Text(10)
- phoneno :phone number of the user - Text(15)

4.4 PROCESS DESIGN

Software engineering process is the glue that holds the technology layer together and enables the rational and timely development of the computer software. Process defines a framework for a set of key process areas that must be established for effective delivery of the software. The key process areas form the basis for management control of software projects.

Login Processing

Existing user

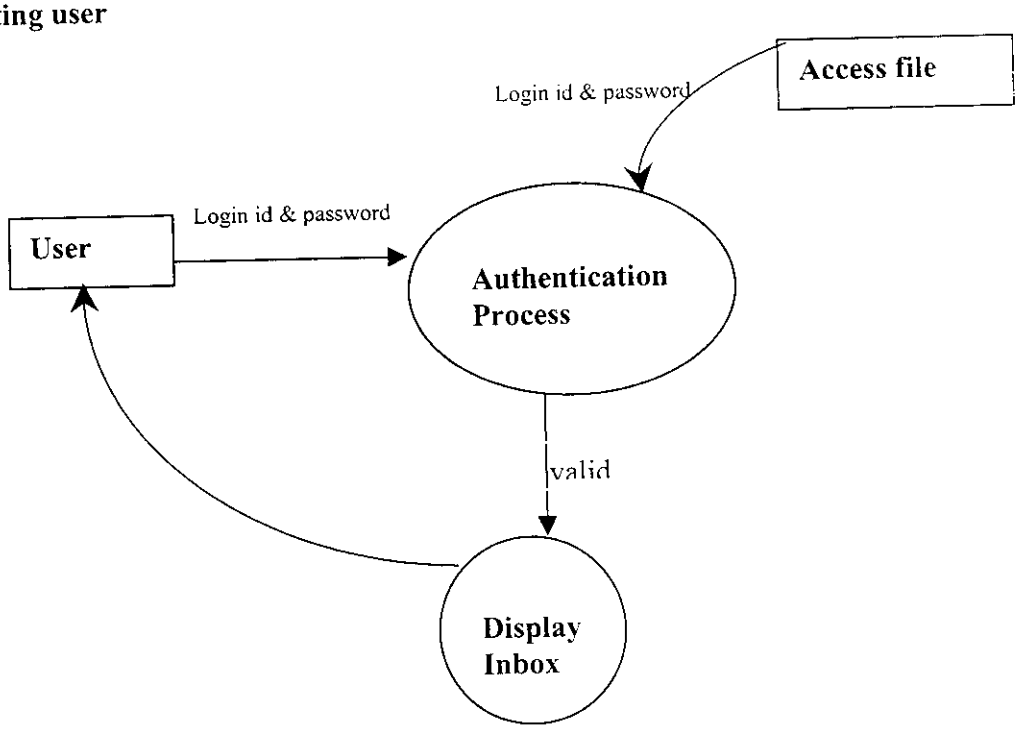


Fig. 4.1

New User

Fig. 4.2

Group Chat

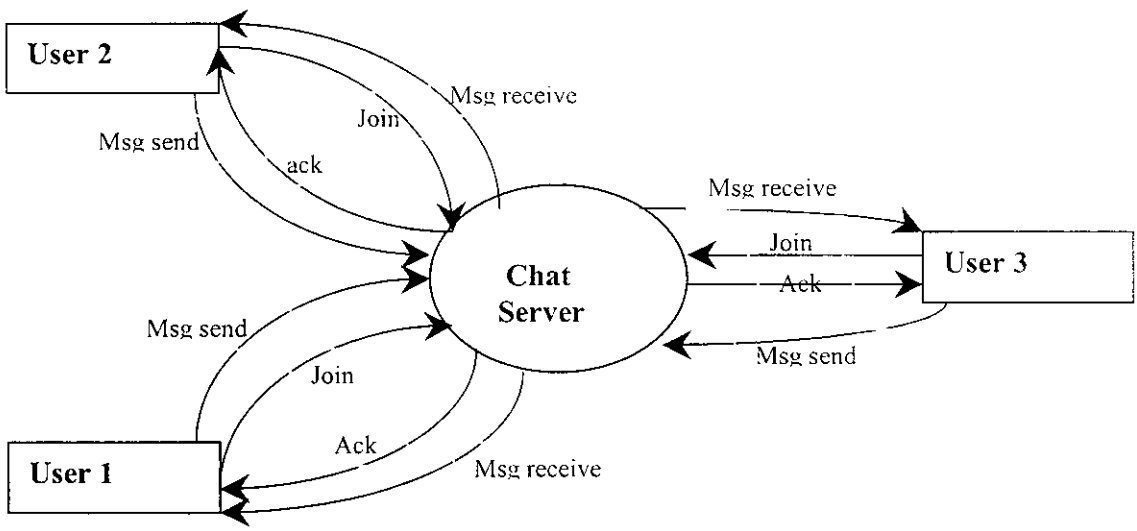


Fig. 4.3

5. SYSTEM IMPLEMENTATION AND TESTING

5.1 SYSTEM IMPLEMENTATION

As a policy every product in the company ready for release undergoes a versioning and release management process. The product is versioned and then implemented in the client location. A complete set of operational documentation, user's manual and guidelines are supplied. Professionals exclusively give user training to a few in the client place from the company.

IMPLEMENTATION PROCEDURES

The project undergoes a versioning and release management before it is delivered to the client. It is a process of identifying and keeping track of different versions and releases of the system. And the released product usually includes Configuration files defining how the release should be configured for particular installations. Data files needed for successful operations. An Installation Program, which is used to help install the system on the target hardware. Electronic and paper documentation describing the system. All these information are made available on a medium, which can be read and understood by the customer for the software.

The following factors are considered before implementation. Checking if all the components which make up the system been included, if the appropriate version of each required component been included, are the data objects included, etc... An installation program is created and the entire kit is delivered to the client.

USER TRAINING

The kit delivered consists of a complete guide on the new system developed. A through training on the new system is given to a representative from each of the user area and an overall demo given to the entire team. The queries from the audience were answered and hints given on various issues. Special training was given to the admin staff that is to play the role of super user. The configuration details and trouble shooting

methodologies were explained and his performance absorbed. The user manual was completely explained and doubts cleared for the same. Installing and uninstalling the package and taking a backup of the data were demonstrated to the super user. Various possible exceptions and the possible causes for it from the user's end were explained. The various user environments and the right of access specified to each user was clearly explained and demonstration given to the team on different user environments. Instructions on successful operation of the system and trouble shooting methodologies were thus discussed.

OPERATIONAL DOCUMENTATION

Properly produced and maintained system documentation is a tremendous aid to maintenance engineers. The system documentation includes all of the documents describing the implementation of the system from the requirements specification to the final acceptance test plan.

A complete set of Operational Documentation was prepared for the client, which included the features of the system, the access rights allocated for various users and trouble shooting details. The special features of the system were highlighted. A step-by-step procedure was included in the documentation for data entry, report generation and saving reports in text, html or rich text format. The documentation is prepared keeping in mind users who have little or no knowledge of computers.

The operational documentation includes a document describing the overall architecture, a maintenance guide, a user manual for operations like data entry, report generations, trouble shooting and a list of error codes and their causes and solutions. The purpose of input controls and the validations for the same are explained diagrammatically. A clear picture of the system and its functionalities are thus provided.

5.2 SYSTEM TESTING

TESTING PROCESS

Except for small software, systems should not be tested as a single, monolithic unit. Large systems are built out of sub-systems, which are built out of sub-systems, which are composed of procedures and functions. The testing process should therefore proceed in stages where testing is carried our incrementally in conjunction with the system implementation.

There are the five test stages and defects are discovered at any stage, they require program modifications to correct them and this may require other stages in the testing process to be repeated. The process therefore is an iterative one with information being fed back from later stages to earlier parts of the process.

The stages in the testing process are:

Unit Testing

Module Testing

System Testing

Acceptance testing

UNIT TESTING

Individual components are tested to ensure that they operate correctly. Each component is tested independently, without other system components. With respect to this project, the individual functions are treated as component and were tested.

The chat and mailing individual units in the intranet system operates successfully

MODULE TESTING

A module is a collection of dependent components such as an object class, an abstract data type or some looser collection of procedures and functions. A module encapsulates related components so it can be tested with other system components.

Each module in the Intranet System works successfully and dependent components such as object and class are checked.

SYSTEM TESTING

The sub-systems are integrated to make up the entire system. The testing process is concerned with finding errors, which result from unanticipated interactions between sub-system and system components. It is also concerned with validating that the system meets its functional and non-functional. After integration of the above sub-systems with the whole system, the entire system is tested for errors.

ACCEPTANCE TESTING

This is the final stage in the testing process before the system is accepted for operational use. The system is tested with data supplied by the system procurer rather than simulated data. Acceptance testing may reveal errors and omissions in the system requirements definition because the real data exercises the system in different ways from testing the data. Acceptance testing may also reveal requirement problems were the system facilities do not really meet the users need or the system performance is unacceptable. Test and reveal data were provided to the system and checked for errors

DEFECT TESTING

Defect testing is intended to exercise a system so that latent defects are exposed before the system is delivered. These contrasts with validation testing which is intended to demonstrate that the system meets its requirement. Validation testing requires the system to perform correctly using given acceptance test cases. A successful defect test is a test, which causes a system to perform incorrectly and hence exposes the defects. It demonstrates the presence, not absence of program faults.

Various values, within the limit and exceeding the limit were provided repeatedly to individual components of data acquisition. These brought out the defects in the system and were corrected. Two approaches to defect testing are:

BLACK-BOX TESTING

It relies on the specification of the system or component, which being tested to derive test cases. The system is 'black-box' whose behavior can only be determined by studying its inputs and the related outputs. This is also called as functional testing because mathematical functional can be specified using only inputs and outputs.

Following black-box methods were applied to both the modules to test arrays:

- Usage of only one value of entire array. This proved that the program works for an exceptional array.
- Usage of different arrays of different sizes. This decreased the chances that the program with defect would accidentally produce a correct output because of some characteristic of the inputs.
- First, middle and last elements were accessed and any problems due to the boundary effects were delivered.

STRUCTURAL TESTING

This is the complementary approach to black box testing and is sometimes called structural, white-box or glass-box testing. The tester can analyze the code and the use knowledge about the structure of the component to derive test data.

The advantage of structural testing is that an analysis of the code can be used to find how many test cases are needed to guarantee a given level of test courage. A dynamic analyzer can then used to measure the extent of this coverage and help with test case design.

PATH TESTING

Path testing is a white-box testing strategy whose objective is to exercise every independent execution path through the component. If every independent path is executed then all the statements in the program must have been executed at least one. Furthermore, all conditional statements are tested for both true and false cases. This helped to improve the program efficiency with respect to time complexity and memory usage.

During this testing process each independent path in the intranet system executes at least once. The conditional statements are tested for both true and false cases.

6.CONCLUSION

The Intranet server has been successfully designed, implemented and tested. The software developed is found to work effectively and efficiently. This system resulted in providing individual mail ids to all the employee within the organization, eliminating the need for the company to prove individual internet accounts to all its employee. As a result, each employee in the organization is able to send and receive mails from his individual account rather than using the single account provided by the company. After a system has been implemented all the individual mails are secured. Any restriction on the mail can imposed so that unwanted message can be left out which results in efficient utilization of the intranet account.

The Intranet chat server has been successfully designed, implemented and tested. The software developed is found to work effectively and efficiently. This system resulted in providing group chatting facility to all the employee within the organization, eliminating the need for the phones inside the organization.

The administrator could define user profile properly. If the organization thinks that a particular user must not be allowed to access his /her mail, by modifying user's settings he / she could be appropriately disallowed from accessing the resource.

6.SCOPE FOR FUTURE ENHANCEMENTS

The primary objective of Intranet Server is to provide individual mail ids to the employees of the organization. The System met the initial primary requirement but there is ample scope for the system to be improved. some of the features and facilities can be incorporated into the system are listed.

- Sending mails can be incorporated with the new version of ESMTP
- MIME implementation can be incorporated.
- Digital signature can be provided.

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erver Administration

JAVA WEB SERVER™ 2.0

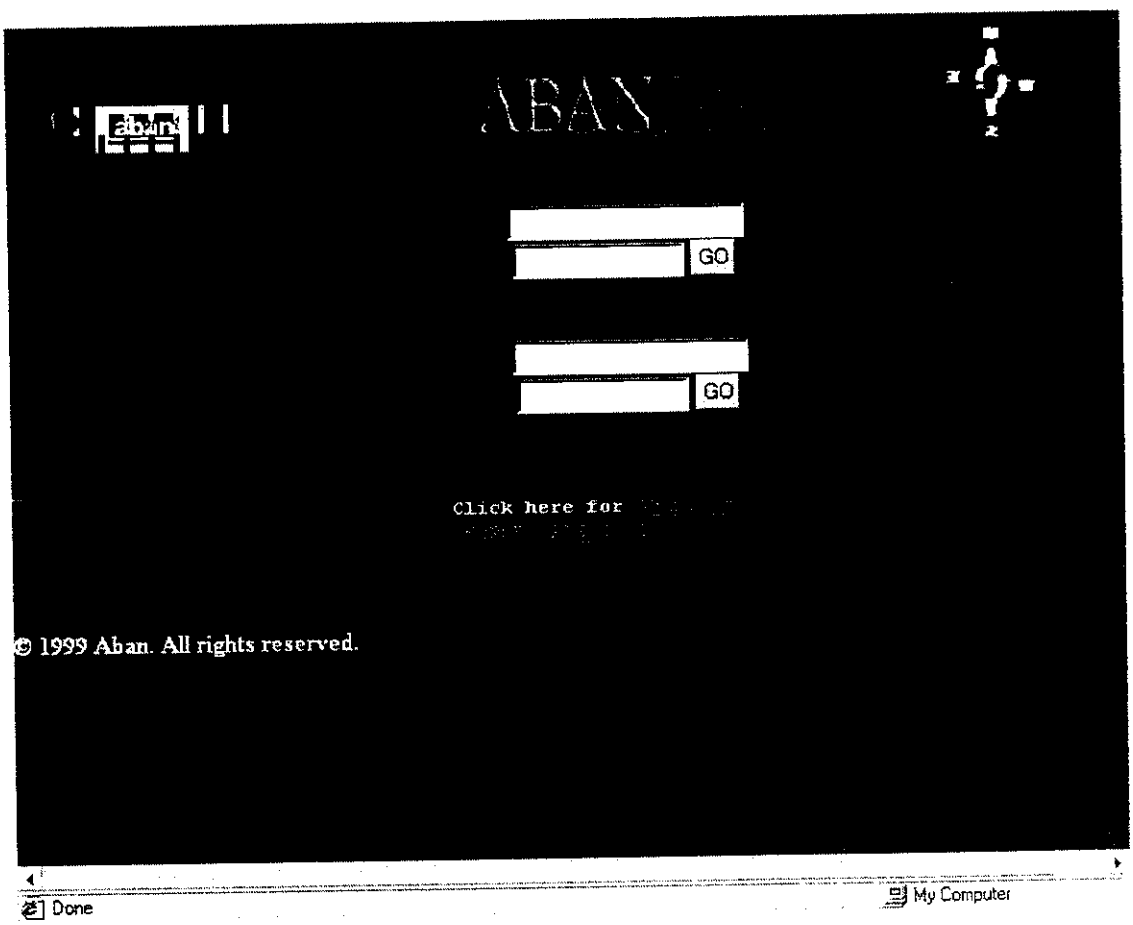
Properties Log Out

ces	Status	Port	Network Address	Version
va Web Server	Running			
Web Service	Running	8080		2.0
Secure Web Service	Not Running	7070		2.0

Manage | Restart | Stop | Shut Down

arted.

bin | E-MAI... | JRE | Finish... | Jav... | splitted1 | mailing | 15ppt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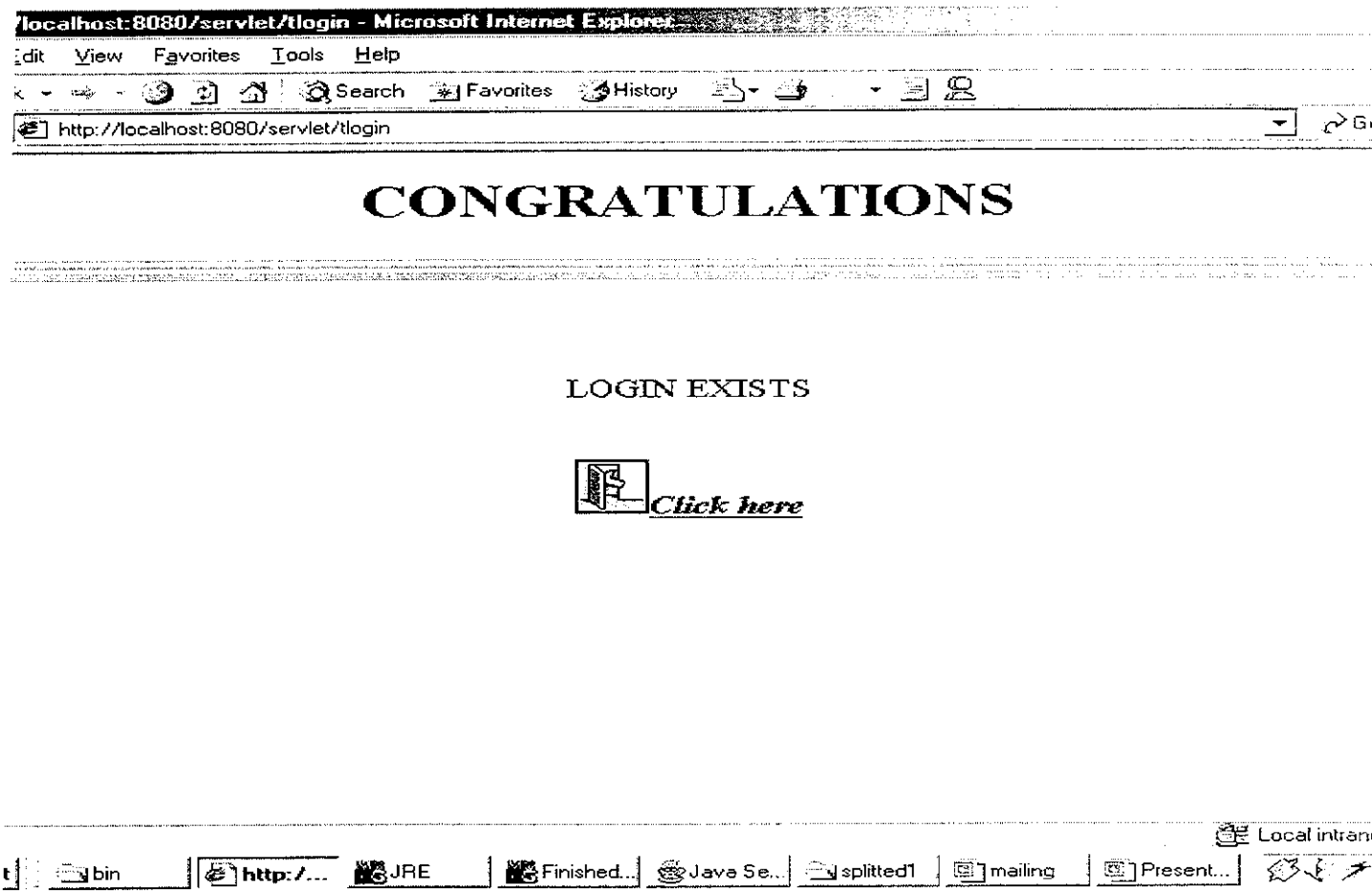
Click here for
© 1999 Aban. All rights reserved.
Done
My Computer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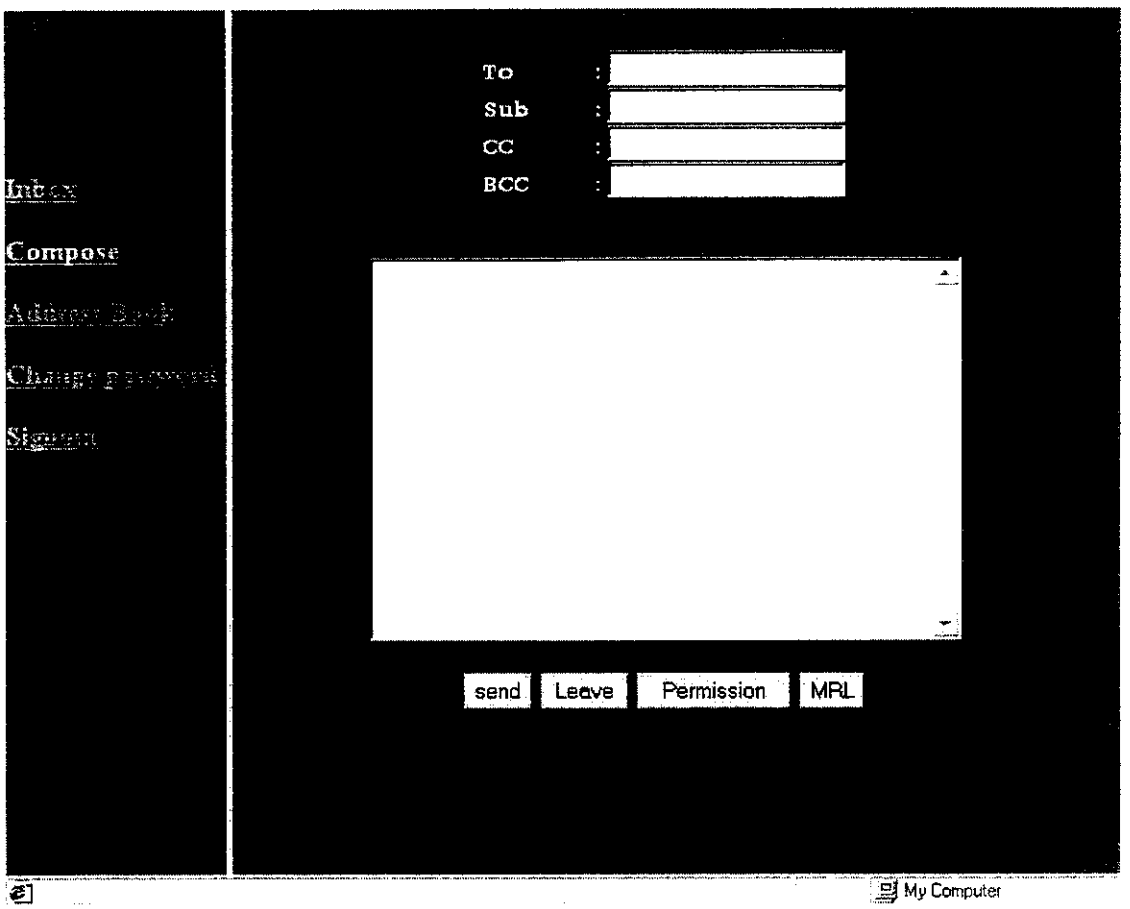
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CC :
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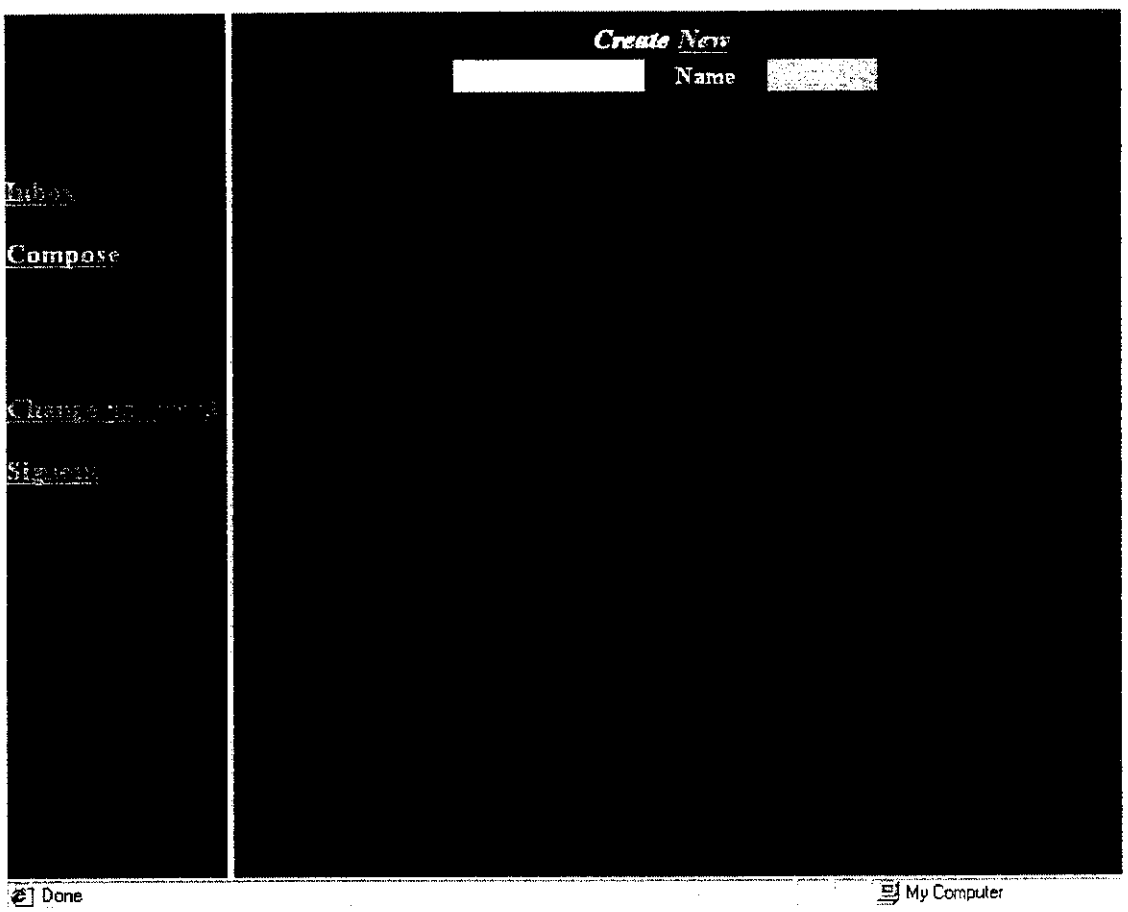
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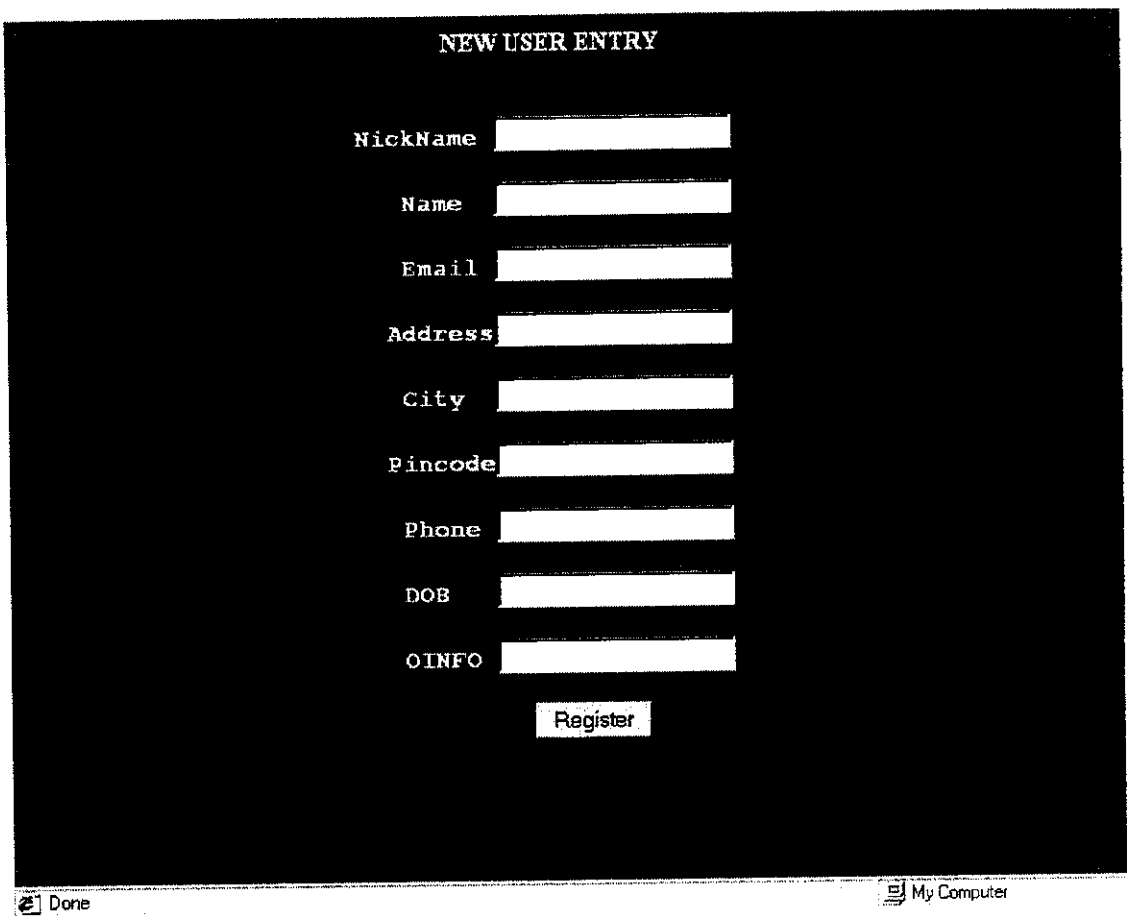
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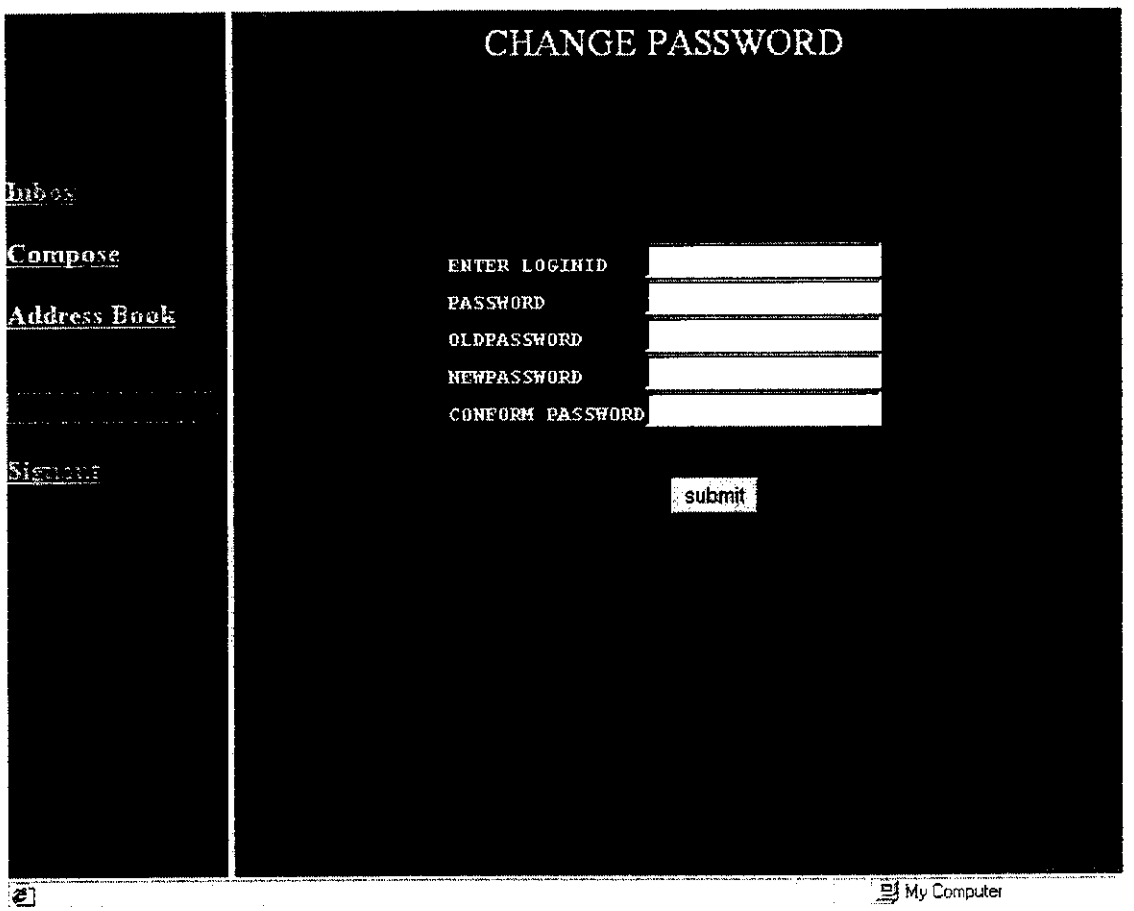
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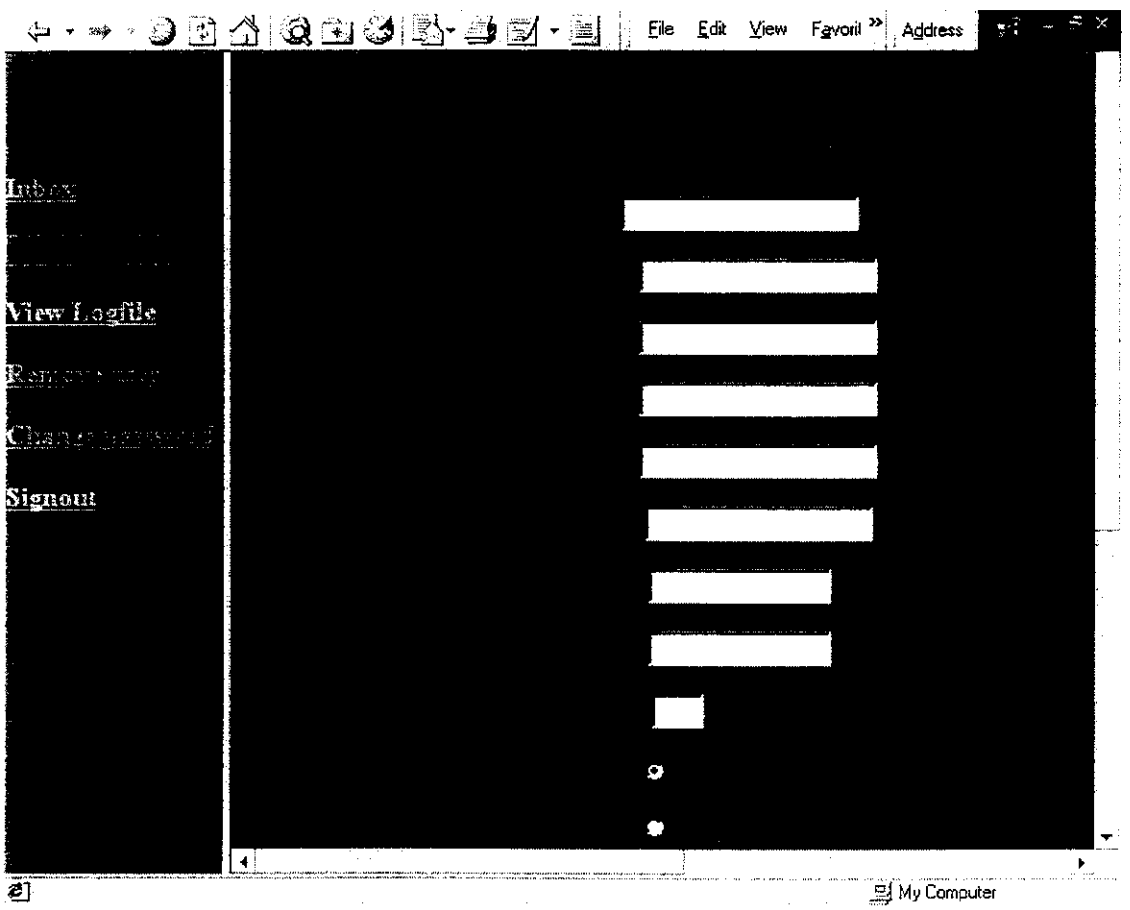
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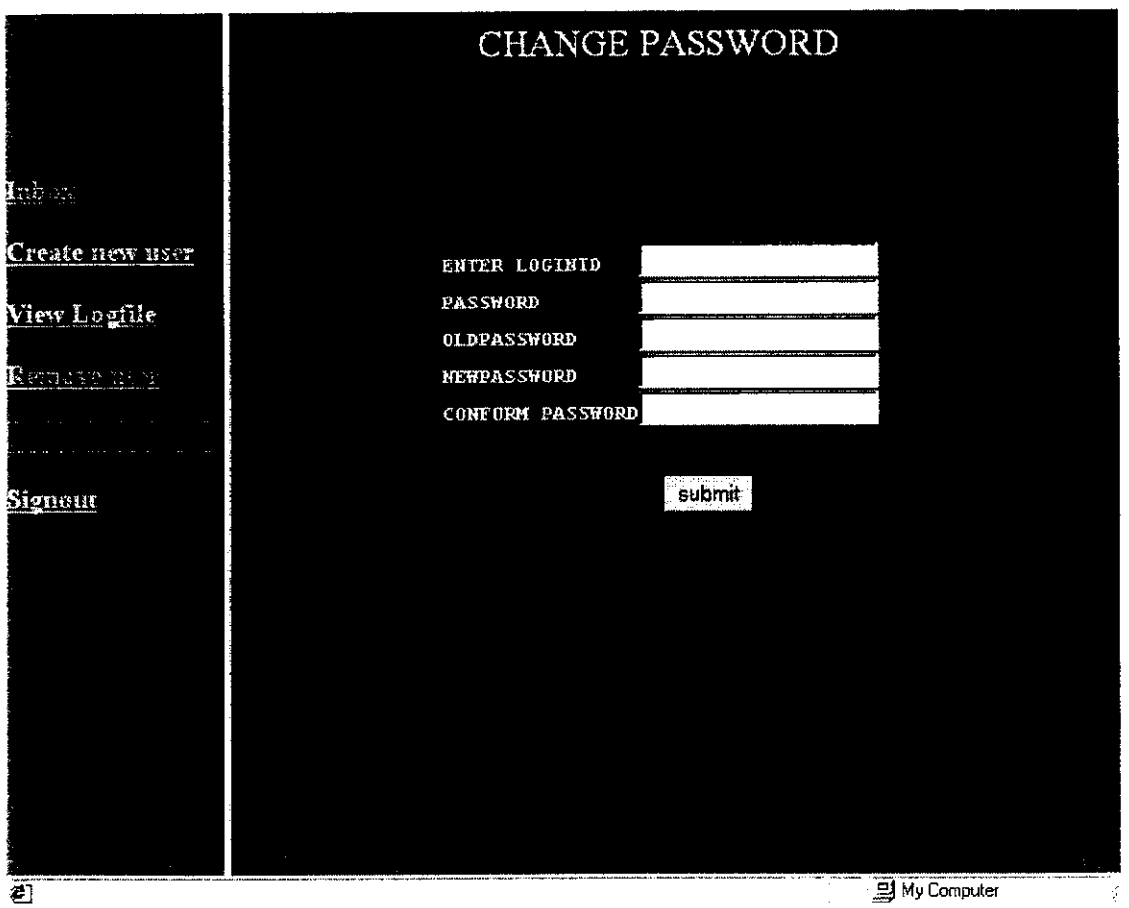
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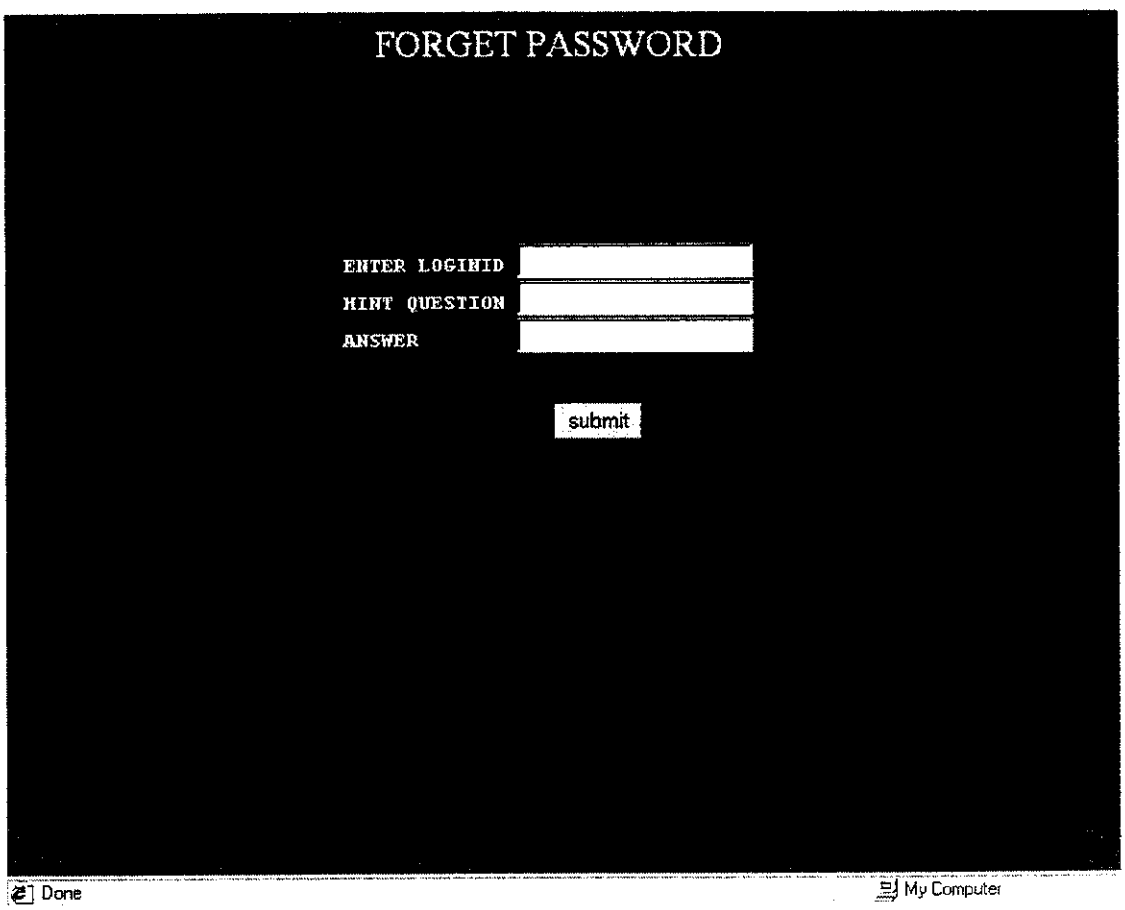
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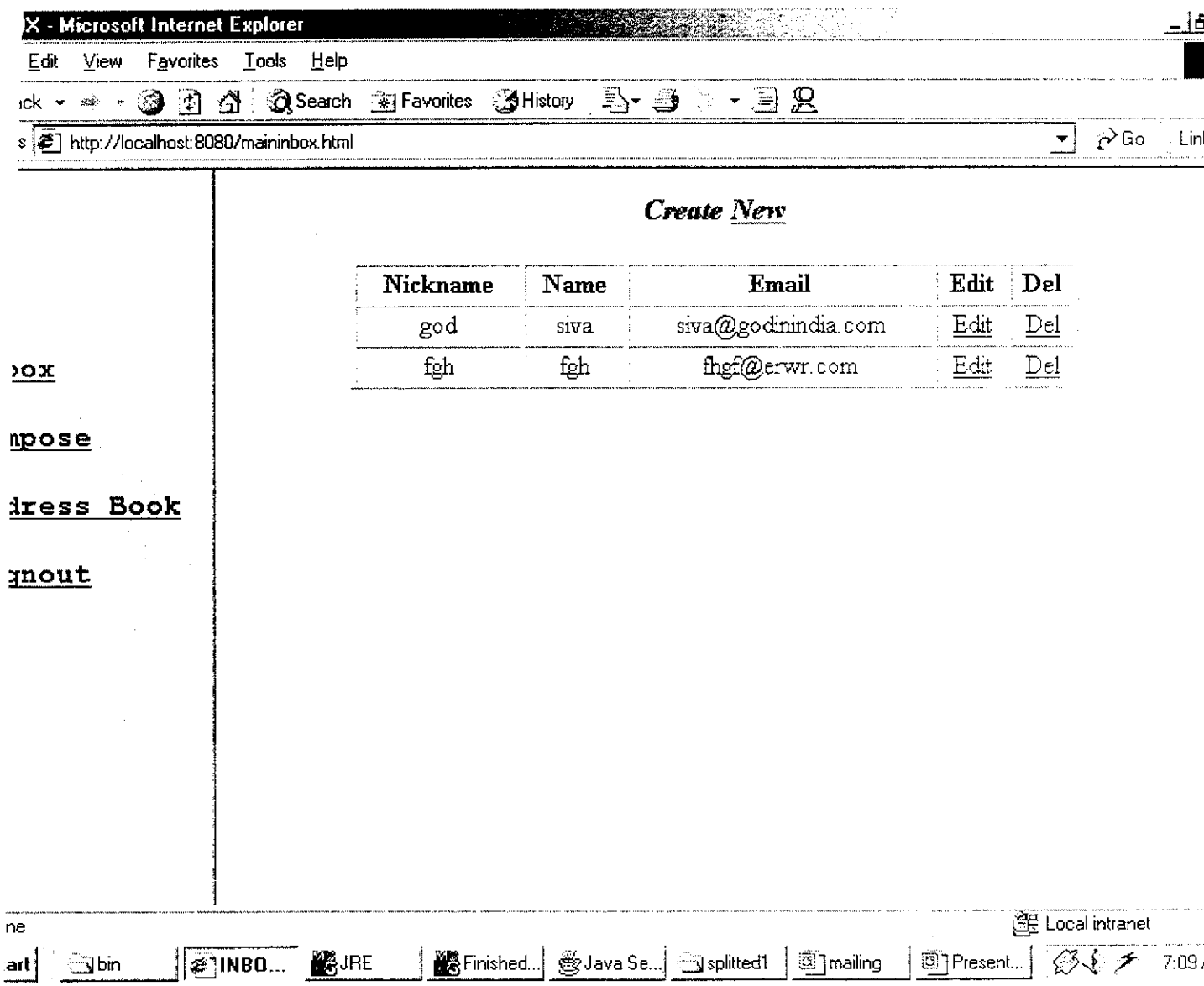
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Appendix

Acronyms and Abbreviations

HTTP

Hypertext transfers protocol. is a protocol used to transfer the data between web browser and web server.

TCP/IP

Transmission control protocol / Internet protocol. It is a protocol stack, backbone of the Internet.

SMTP

Simple mail transfer protocol which handles mail sending

Pop3

Point to point protocol, which is responsible for mail retrieving