

Project Report  
On  
**MailSystem**



Internal Guide:  
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B. Tech Semester VI Information Technology  
April - May 2013

Submitted to,  
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# U.V.PATEL COLLEGE OF ENGINEERING



April – May 2013

## **CERTIFICATE**

**TO WHOM SO EVER IT MAY  
CONCERN**

This is to certify that Mr. Raxit Solanki student of B. Tech Semester VI (Information Technology) has completed Mini Project titled “MailSystem” in the year 2012-2013.

Project Guide  
Mr. Trupesh Patel  
Sign

Head  
CE / IT Department

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April – May 2013

## **CERTIFICATE**

**TO WHOM SO EVER IT MAY  
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This is to certify that Miss. Heli Shah student of B. Tech Semester VI (Information Technology) has completed Mini Project titled “MailSystem” in the year 2012-2013.

Project Guide  
Mr.Trupesh Patel  
Sign

Head  
CE / IT Department

## Acknowledgement

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This Project shall be incomplete if I fail to convey my heart-felt gratitude to those people whom I received considerable support and encouragement during this project creation. Lots of people have helped, provided technical, commercial and also behavioral acumen at all levels of the project and it's my luck for get the kind of support of them.

I have no words to thanks to our project faculty **Mr.Trupesh Patel** For help. They are becoming as way to take us from dark to bright future and specially they play their important role for motivation and to endeavor for succeed in project creation.

I want to say thank to all lecturers and professors staff of UVPCE for support us directly or indirectly to build this project. They are always helping and guide us in way that how to analyze, implement, develop and also testing such systems.

I want to say thank the other staff of UVPCE for providing us atmosphere and necessary tools which we required during creations of the system.

I want to especially thank to my classmates for suggestions and good support.

And last but not the least I want to thank my close friend Umang Shukla (M.Tech II sem, UVPCE) , And our god Google.!!!

Regards,







Mr. Raxit Solanki

Miss. Heli Shah

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**INTRODUCTION ABOUT PROJECT**

## INTRODUCTION ABOUT PROJECT

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### OVERVIEW OF THE PROJECT

Now days the growth of social networking is very fast. Plenty of new technology are coming day by day. It is very important to learn the concept behind that new technology being an I.T Engineer. This is my small but very efficient effort to take a step towards the social networking technology.

As we all know now days the most popular mailing service is Gmail. I have put a small effort to build that kind of mailing service on my local machine. I don't have used technologies like Clusters and Cloud. I have built my whole project following only database concept. I have used MySQL Database for my project which is very popular nowadays. In my MailSystem user can send and retrieve emails only on @secure.com domain. I have also implemented the concept of "forgot password" like Gmail. In short this is very small effort to build mailing service.

### SCOPE OF PROJECT

- The system is built on JAVA with MVC framework Struts(1.2) which is a very powerful framework nowadays.
- MailSystem is like a boon to all the business people. So the scope of this project is very huge.

### OBJECTIVE OF PROJECT

This project is not a business application. This is a simple effort to learn the fact behind all the social networking websites. And I have put an effort to create the local application for that.

In order to develop this project, it is required to do analysis of Gmail, Yahoo, Hotmail etc. So that I can build an effective social networking website. I have got lots of things by going through all this stuffs.

Eg.

- why this social networking websites are free?
- How we can obtain our own domain, And give services to our users to send and receive emails.
- How to earn money from this social networking.
- How SMTP , POP3 and IMAP servers/protocol works in network.
- What are the facts that affect my website.
- What are the difficulties that I have to face if I build my own mailing service.
  
- Which kind of validation I should have to put.
- How to obtain MVC pattern to make the handling easy.
- Google File System and MapReduce.



**HARDWARE AND SOFTWARE REQUIREMENTS**

## **HARDWARE AND SOFTWARE REQUIREMENTS**

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a) Development Environment:

Hardware specification:

1. Intel Core2Duo.
2. 320 GB.
3. 2 GB RAM.

Software specification:

1. Platform support: Windows 8.
2. Application Development tool used:  
MyEclipse 7.5, MySql Server, Sqlyog Database browser.

b). Supported Environment:

Hardware specification(minimum requirement):

1. Any system supporting dual processor supporting normal web applications.
2. 40 GB Minimum Requirement
3. 1 GB RAM For Good Performance.

Software specification:

1. Platform support: Windows 7 or above windows operationg system
2. Internet Explorer 7.0, MOZILLA, Safari, Opera, Netscape, Google chrome etc. Browser to view web application.

**TECHNOLOGY USED**

## Technology

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### **JAVA EE:**

Java Enterprise Edition is a programming platform— part of the Java Platform-for developing and running distributed multi-tier architecture Java applications, based largely on modular software components running on an application server.

JSP (Java Server Pages) will be used in this basically in frontend, with some servlets as a backend.

### **MVC Framework JavaStruts (1.2)**

The whole project is build following the pure mvc pattern. I have used JavaStruts version 1.2 framework. The most flexible tool to follow this approach is MyEclipse 7.5 Enterprise Edition.

### **HTML, XML:**

Hyper Text Markup Language and Extensible Markup Language are the predominant markup languages for web pages. It provides a means to describe the structure of text-based information in a document and to supplement that text with interactive forms, embedded images, and other objects.

### **JAVASCRIPT:**

JavaScript was designed to add interactivity to HTML pages

JavaScript is a scripting language - a scripting language is a lightweight programming language

A JavaScript is lines of executable computer code

A JavaScript is usually embedded directly in HTML pages

JavaScript is an interpreted language (means that scripts execute without preliminary compilation)

Everyone can use JavaScript without purchasing a license

JavaScript is supported by all major browsers, like Netscape and Internet Explorer, Chrome, Mozilla Firefox, etc.

### **Tools & Development Environment:**

#### **DB2 EXPRESS EDITION:**

DB2 Database is the database management system that delivers a flexible and cost effective database platform to build robust on demand business applications.

Apache Tomcat 6.0.18 Server (minimum requirement JSE 5.0, no JDK is required only JRE is sufficient) :

IBM WebSphere application server is an application server that runs business applications and supports the J2EE and web services standards OR Sun GlassFish Application server.

### **MYECLIPSE J2EE:**

Eclipse is a toolkit which is designed for the creation of more complex projects, providing fully dynamic web application utilizing EJB's. This consist of EJB tools , CMP ,data mapping tools & a universal test client that is designed to aid testing of EJB's. OR Oracle JDeveloper 11g IDE along with ADF (Application Development Framework).

### **□ BACK END – MySQL:**

MS SQL (Microsoft SQL Server) is the relational database management system produced by Microsoft.

Microsoft SQL Server is a comprehensive database server and information platform offering a complete set of enterprise-ready technologies and tools that help people derive the most value from information at the lowest total-cost-of-ownership. Enjoy high levels of performance, availability, and security; employ more productive management and development tools; and deliver pervasive insight with self-service business intelligence (BI).

A complete and integrated platform, Microsoft SQL Server brings it all together to get more value out of existing IT skills and assets, increase the productivity and agility of IT departments, and quickly build flexible, innovative applications.

### **Other technology**

#### **1.CSS**

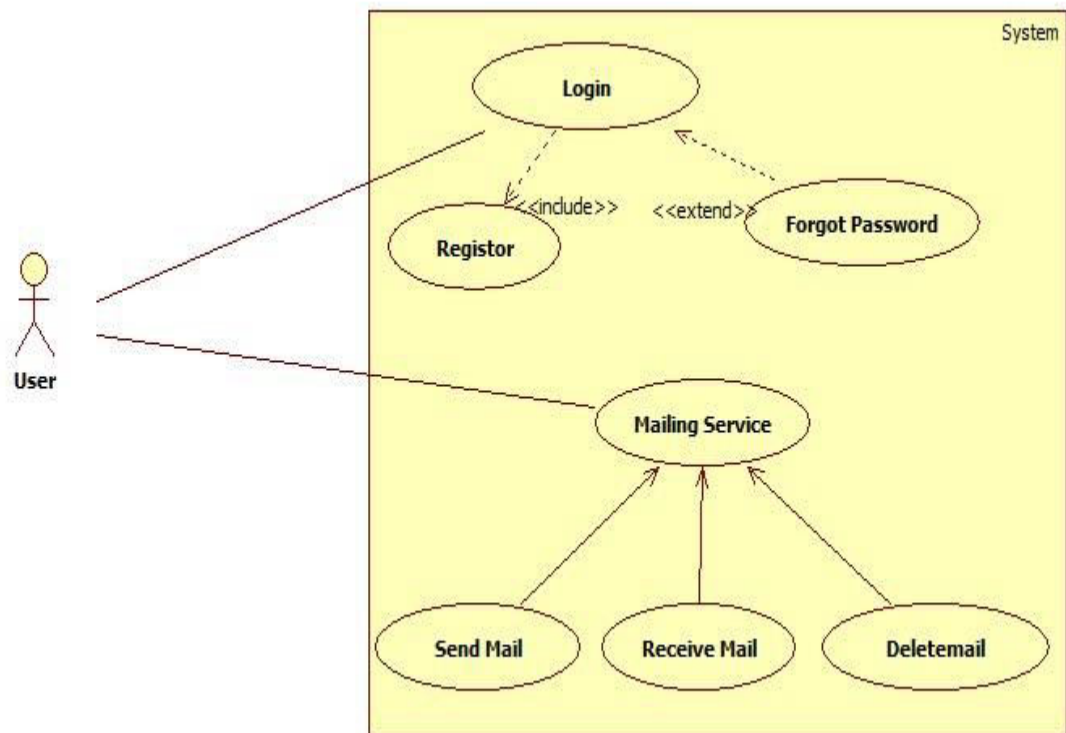
CSS (Cascading Style sheets) is a style sheet language used to describe the presentation semantic of a document written in a mark-up language. It's most common application is to style web pages written in HTML, but the language can also be applied to any kind of document, including plain XML, SVG and XUL.

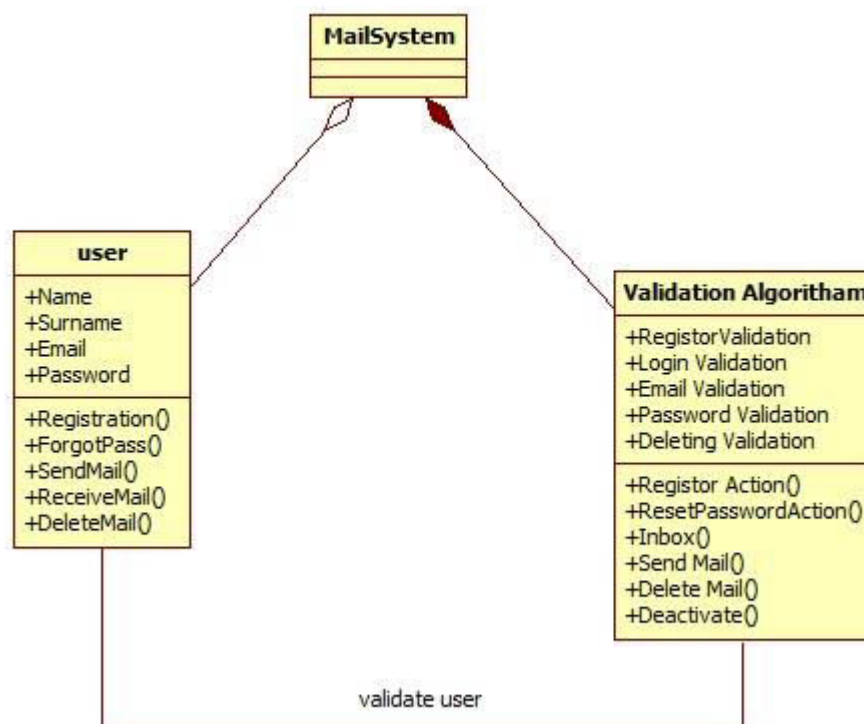


**UML DIAGRAMS**

## UML DIAGRAMS

### USE CASE DIAGRAM:

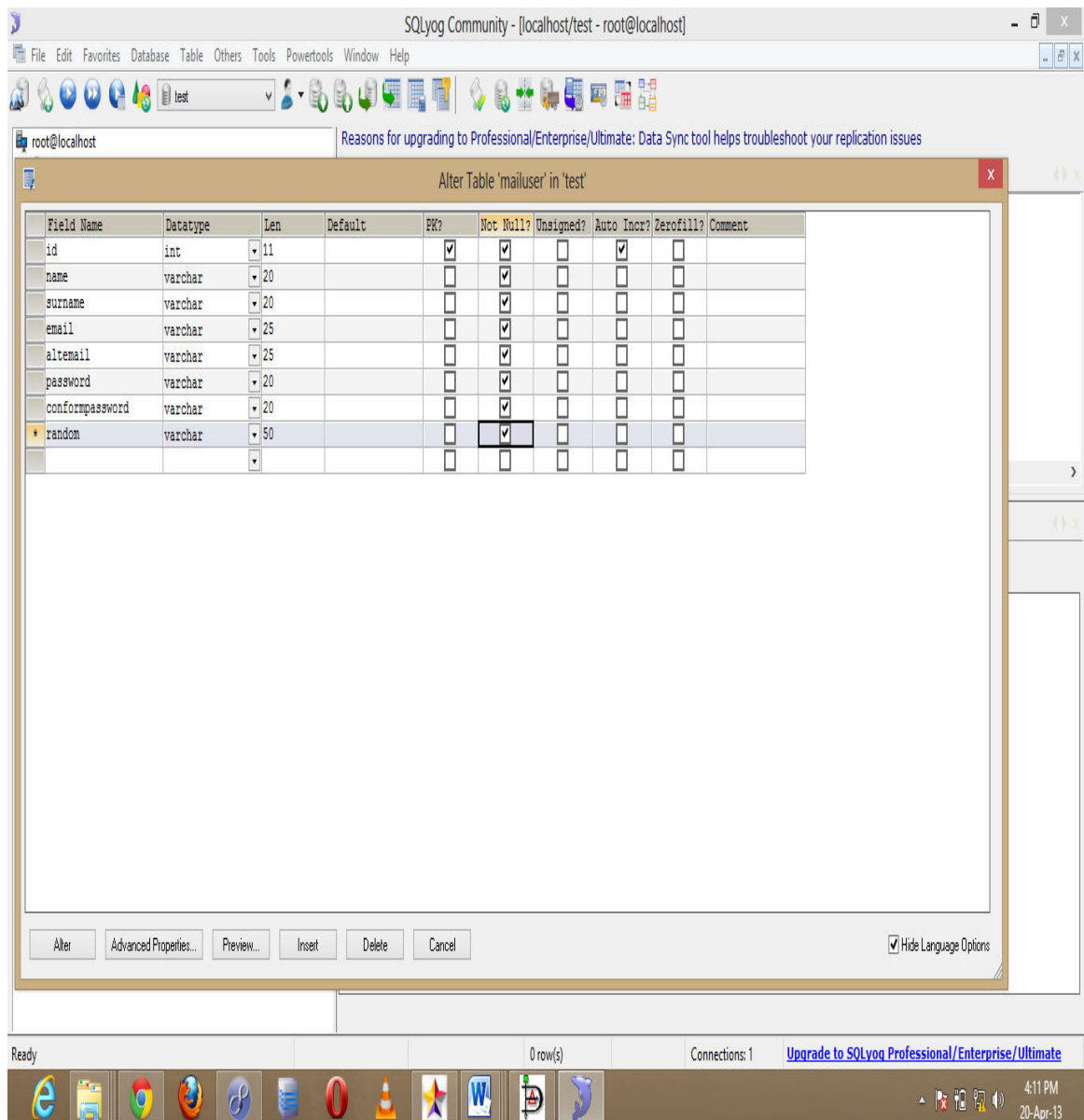


**CLASS DIAGRAM**



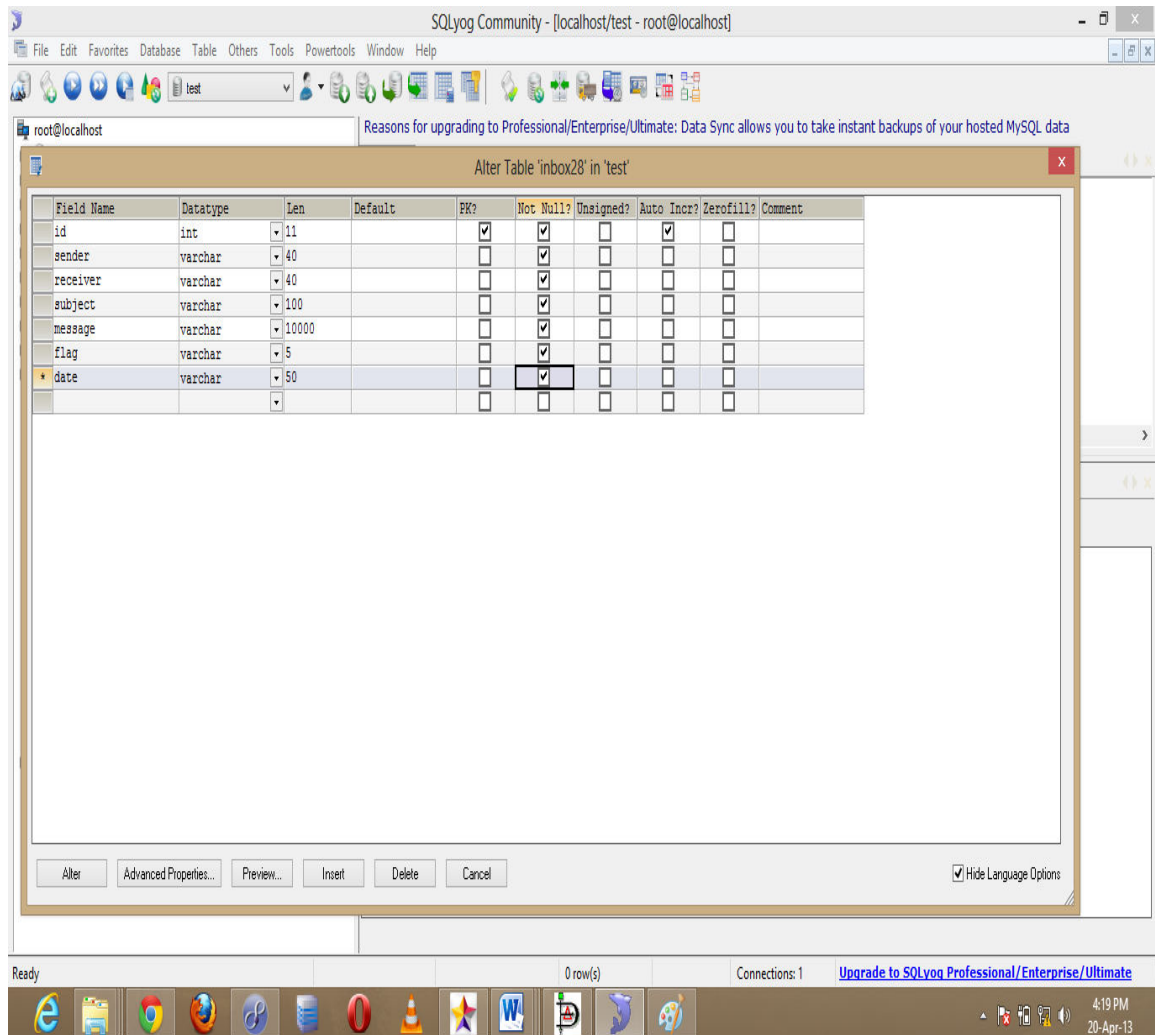
**DATA DICTIONARY****Table Name : mailuser**

The table contains all the information about the registered user. The information flow will be according to the RegistrationForm. There is one extra field which will be generated in backend. That is random number. This field is required for Forgot password module



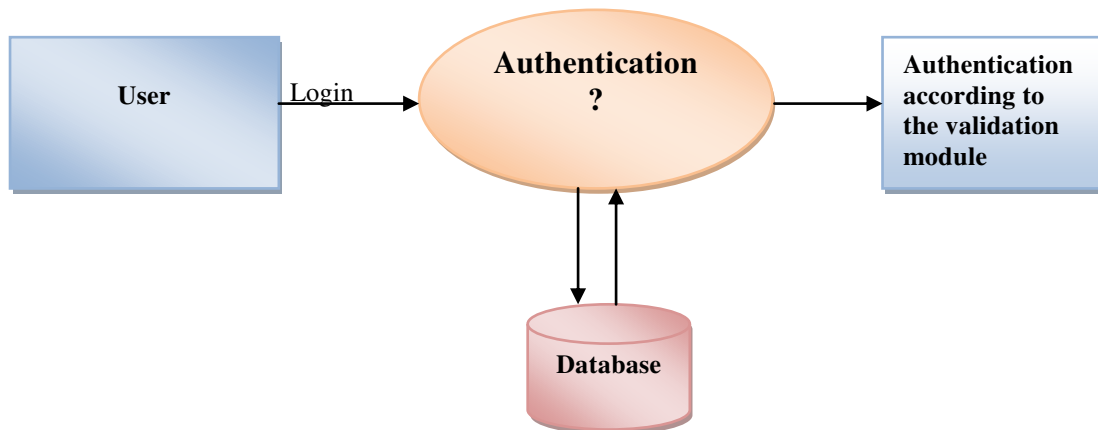
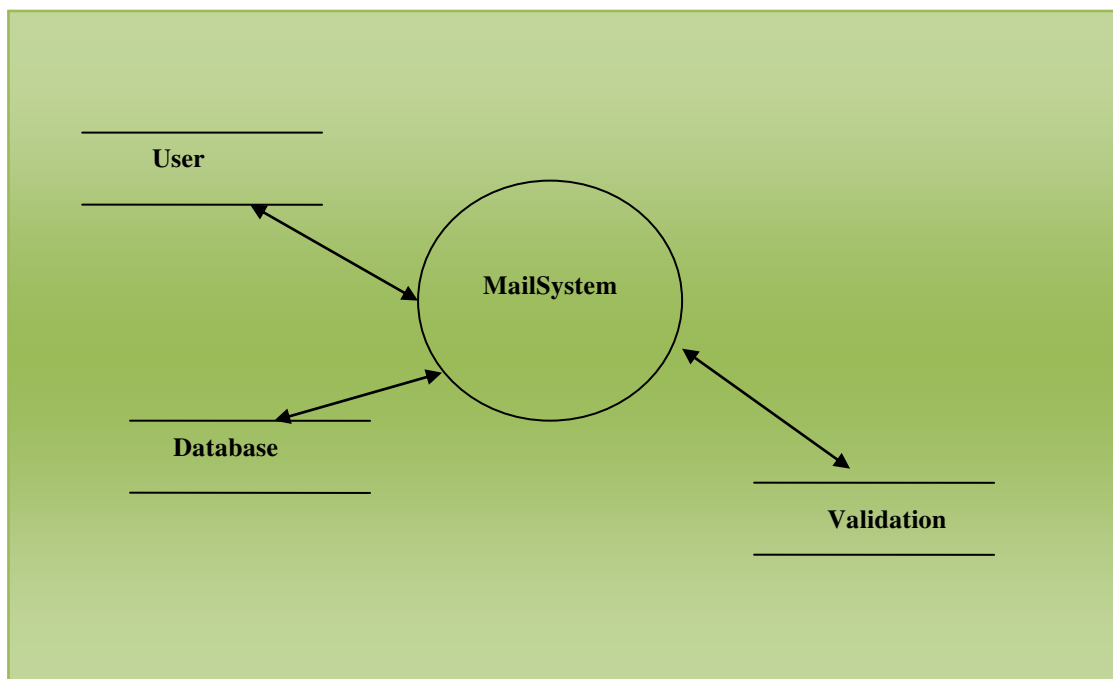
**Table Name : inbox28**

The table contain all DATA information of Mailing Module.



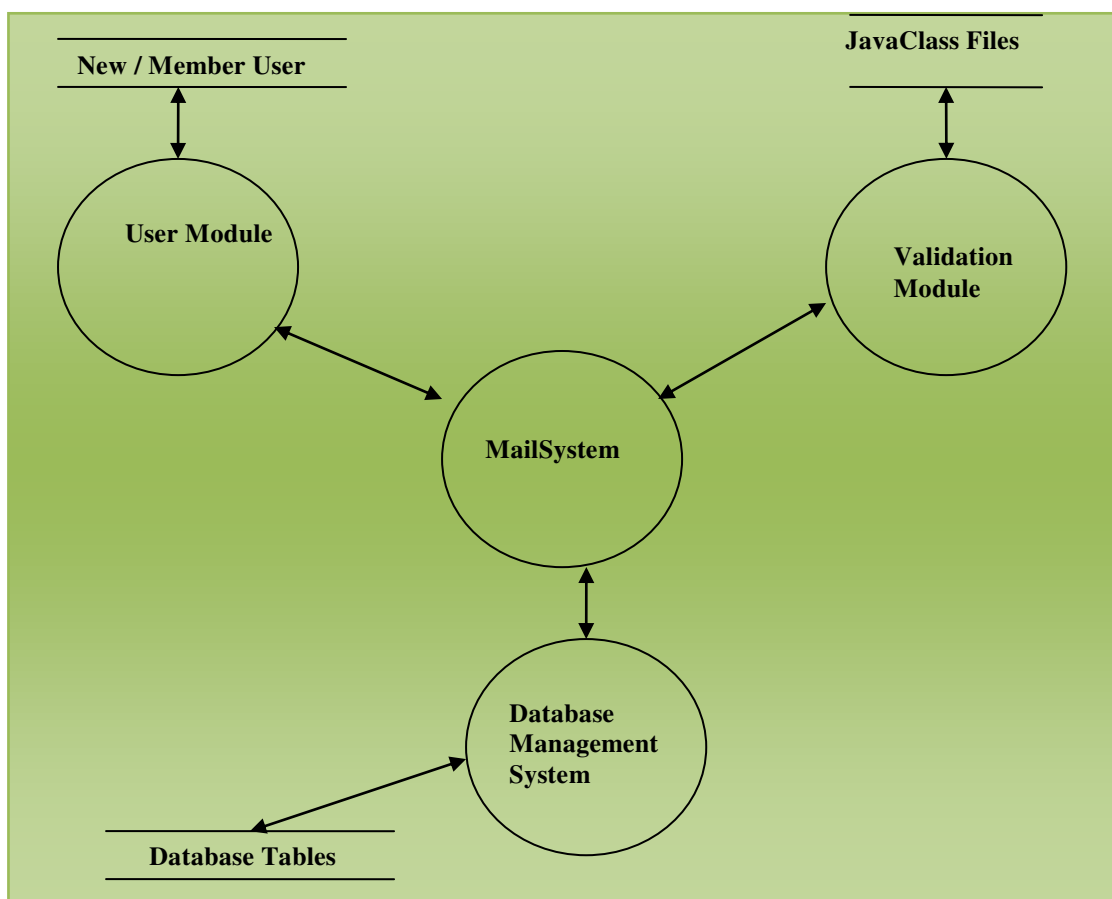
**DATA FLOW DIAGRAMS:**

**0 Level DFD:** This is the 0 level data flow diagram. It shows that user requests for the particular logging, the server will request to the MYSQL server for authentication request, if exist the user is allowed to enter his/her account.

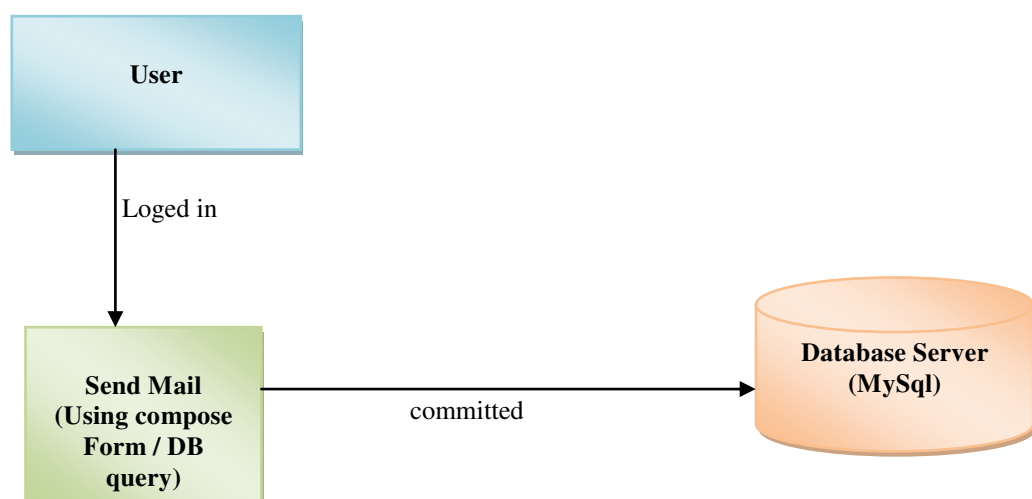
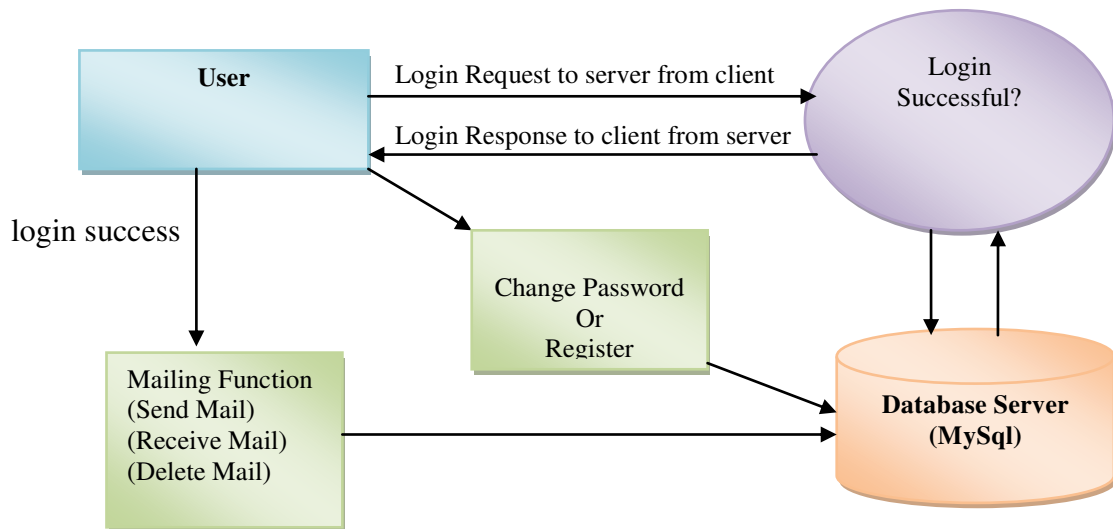
**Context Diagram :**

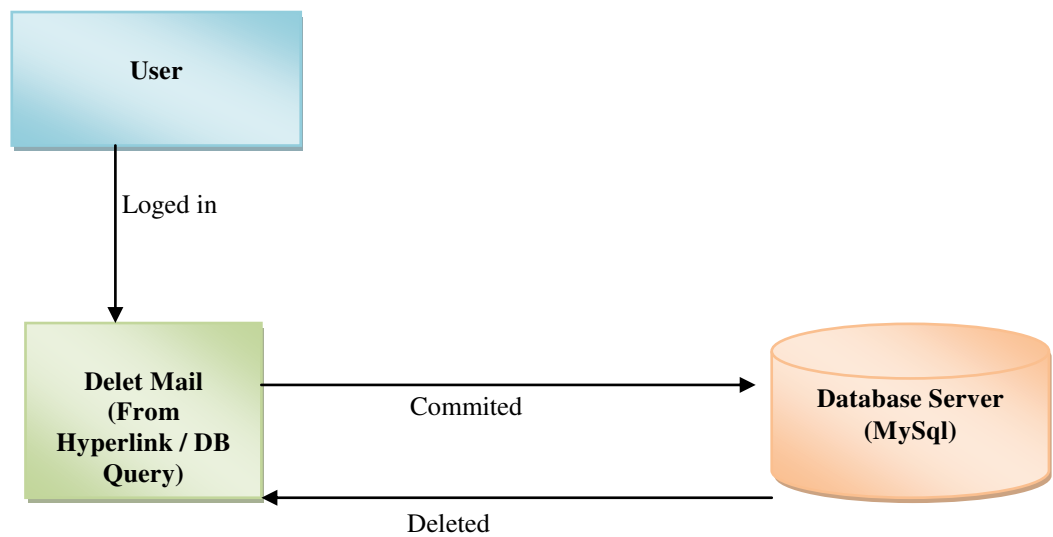
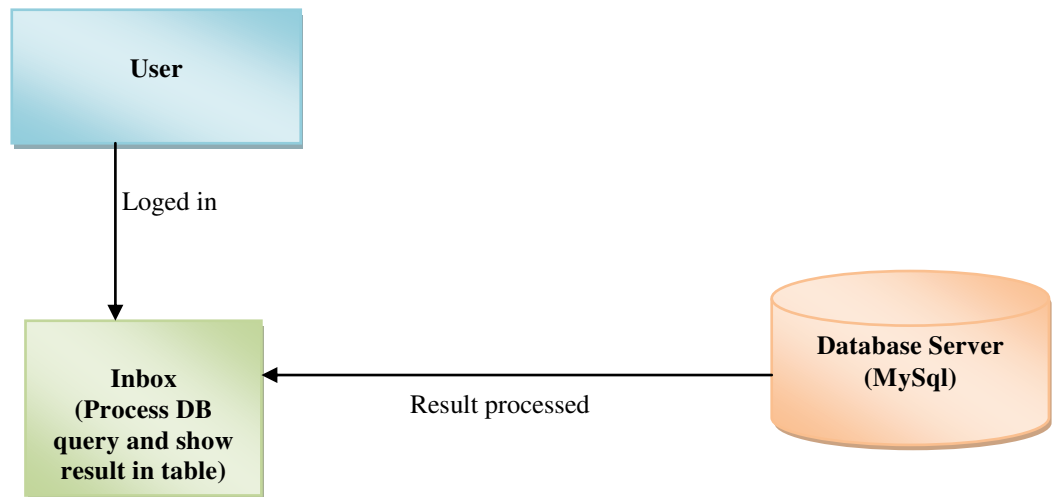
**1 Level DFD:**

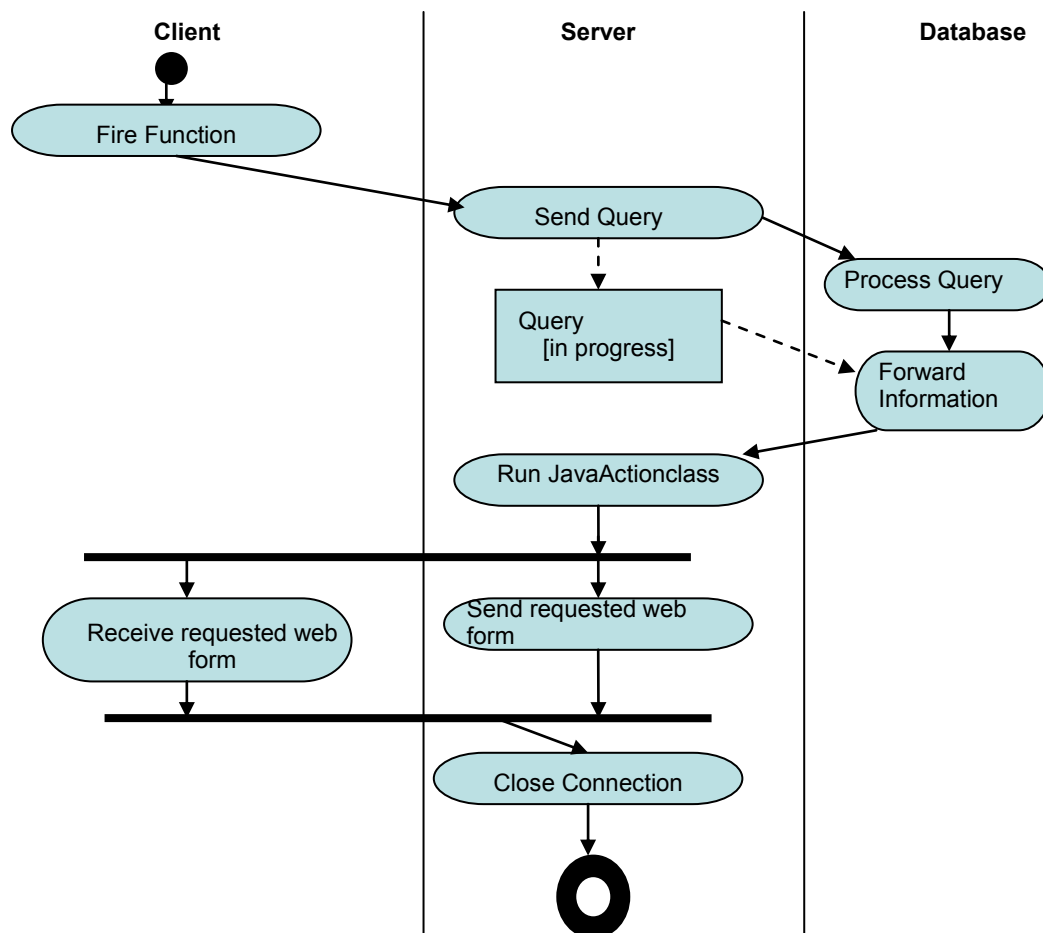
- This is the 1 level DFD, It will show the abstract view of the system once the user is logged in.
- Here in UserModule User can Register him/her self, Login into the system, or change the password.
- Validation module will be on the back end, and validate all the function that the user performs.
- All the Datafunction will invoke the Database module and give its reflection on it.



**2 Level DFD:** The 2 level DFD shows that what an admin and user can do with the system. This DFD shows the functionalities provided to user and how the data will flow according to the functionalities provided.

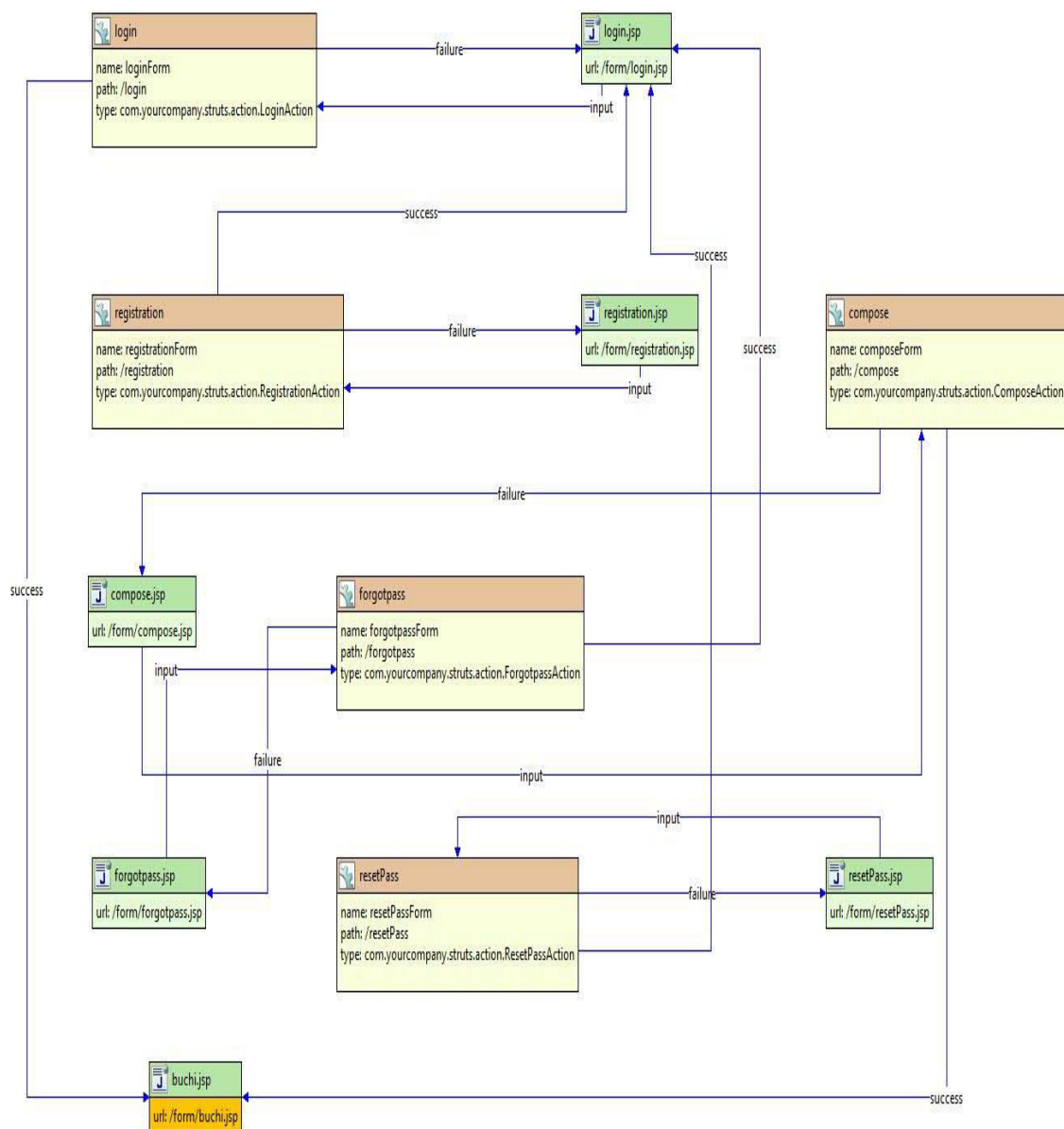




**ACTIVITY DIAGRAM:**

**E-R Diagram :**

- I have used MyEclipse 7.5 Enterprise edition to build my project and more over I have used struts as its backend technology. So in struts this Entity Relation flow will be automatically generated. This is the flow of my project which is prepared by MyEclipse .





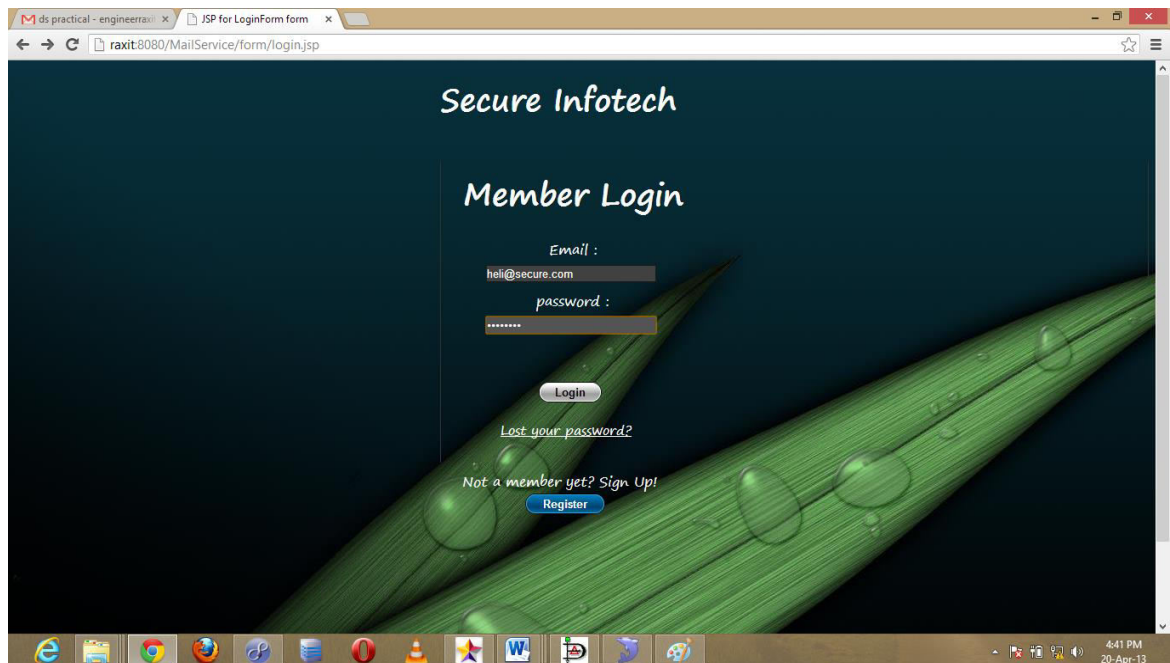


**SCREEN SHOTS**

## SCREEN SHOTS

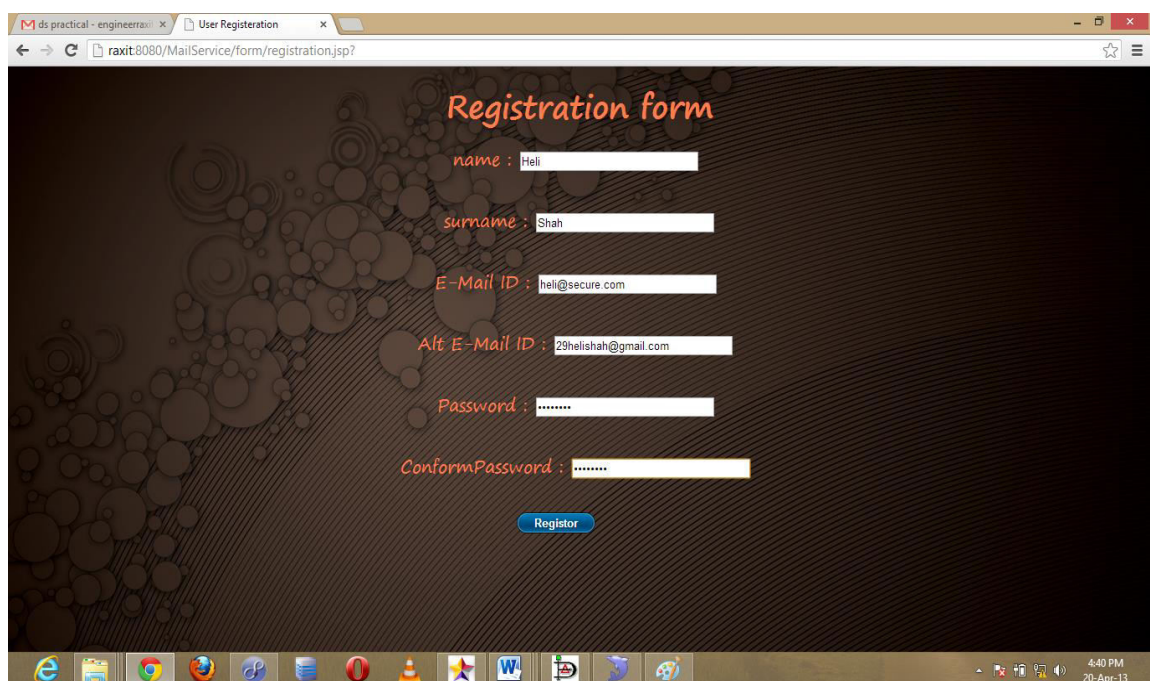
### LOGIN PAGE:

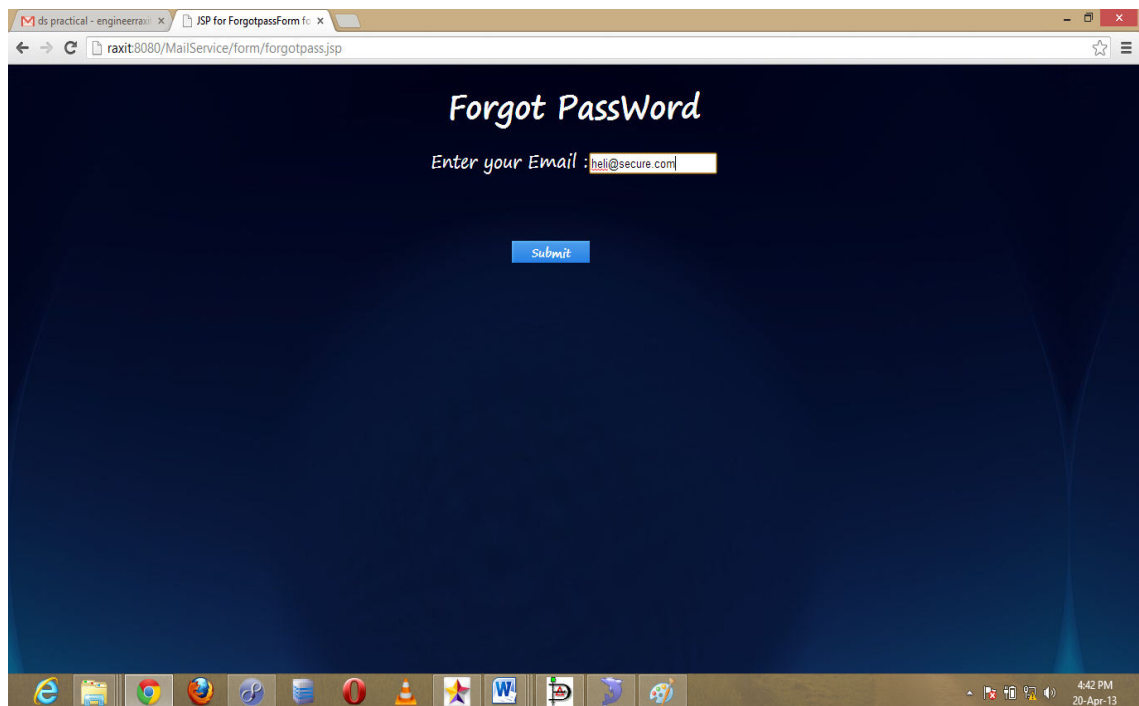
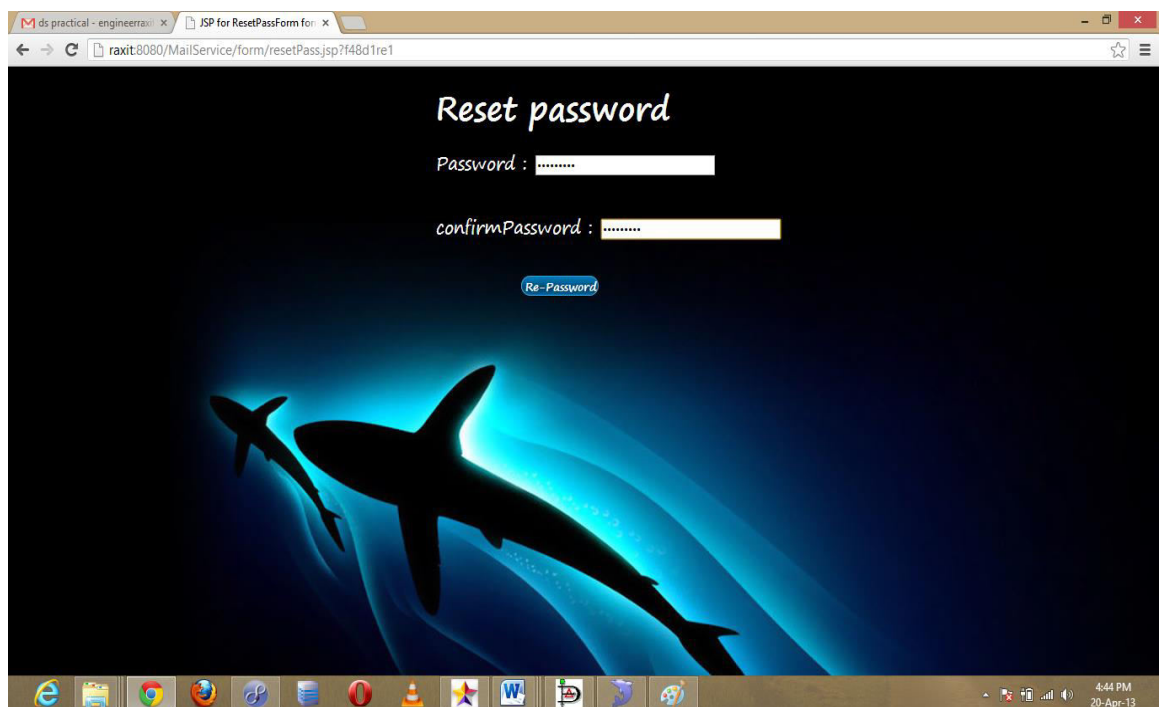
This is the login page of the project. It contains registration and forgotpassword link too.



### Registration Page:

User registration form.



**ForgotPassword PAGE:****Reset Password PAGE :**

**HOME PAGE:** This page is heart of the system.



**Inbox Page:**



**Sent Items:**

**BIBLIOGRAPHY**



## **BIBLIOGRAPHY**

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### **Web Sites**

[www.google.co.in](http://www.google.co.in)  
[www.wikipedia.org](http://www.wikipedia.org)  
[www.w3schools.com](http://www.w3schools.com)  
[www.yahoo.co.in](http://www.yahoo.co.in)  
[www.javatpoint.com](http://www.javatpoint.com)  
[www.hiddenbrains.com](http://www.hiddenbrains.com)  
[www.roseindia.net](http://www.roseindia.net)

### **Books**

#### **Java Struts**

Kaushik Das, BPB Publication

#### **Software Engineering - A Practitioner Approach**

Roger Pressman

#### **Analysis & Design Of Information System**

James Senn

#### **J2EE (just for basic concept)**

Herber shield