Assignment 2: Email Service

➢ Program Code:

web.xml

```
<web-app>
  <servlet>
    <servlet-name>LoginServlet</servlet-name>
    <servlet-class>LoginServlet</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>RegisterServlet</servlet-name>
    <servlet-class>RegisterServlet</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>InboxServlet</servlet-name>
    <servlet-class>InboxServlet</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>ComposeServlet</servlet-name>
    <servlet-class>ComposeServlet</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>LogoutServlet</servlet-name>
    <servlet-class>LogoutServlet</servlet-class>
  </servlet>
 <servlet>
    <servlet-name>ContactServlet</servlet-name>
    <servlet-class>ContactServlet</servlet-class>
  </servlet>

  <servlet-mapping>
    <servlet-name>LoginServlet</servlet-name>
    <url-pattern>/LoginServlet</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>RegisterServlet</servlet-name>
    <url-pattern>/RegisterServlet</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>InboxServlet</servlet-name>
    <url-pattern>/InboxServlet</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>ComposeServlet</servlet-name>
    <url-pattern>/ComposeServlet</url-pattern>
  </servlet-mapping>
```

```
  <servlet-mapping>
    <servlet-name>LogoutServlet</servlet-name>
    <url-pattern>/LogoutServlet</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>ContactServlet</servlet-name>
    <url-pattern>/ContactServlet</url-pattern>
  </servlet-mapping>
  <welcome-file-list>
    <welcome-file>index.jsp</welcome-file>
  </welcome-file-list>
</web-app>
```

header.jsp

```
<!DOCTYPE html>
<html>
<head>
	<meta charset="utf-8">
	<link rel="shortcut icon" href="images/logo-2.png">
	<title>Mail Service</title>
	<meta name="viewport" content="width=device-width, intial-
scale=1">
	<link rel="stylesheet" type="text/css" href="css/style.css">
</head>
<body>
<header>
<div class="container">
	<div id="logo">
		<img src="images/logo-2.png" height="72px"
width='70px'><h1>MAIL SERVICE</h1>
	</div>
	<%
	if(session.getAttribute("username")!=null)
	{
		String username=(String)session.getAttribute("username");
	%>
	<nav>
		<ul>
			<li><a href="index.jsp">HOME</a></li>
			<li><a href="compose.jsp">COMPOSE</a></li>
			<li><a href="inbox.jsp">INBOX</a></li>
			<li><a href="feedback.jsp">FEED BACK</a></li>
			<li><a href="LogoutServlet">LOGOUT</a></li>
		</ul>
	<%
	out.print("<br><br><font style='color:white;float:right'>Welcome
"+username+"</font>");
	}
```

```
	else
	{%>
	</nav>
	<nav>
		<ul>
			<li><a href="index.jsp">HOME</a></li>
			<li><a href="login.jsp">LOGIN</a></li>
			<li><a href="register.jsp">SIGN IN</a></li>
			<li><a href="feedback.jsp">FEED BACK</a></li>
		</ul>
	</nav>
	<% } %>
</div>
</header>
```

index.jsp

```
<jsp:include page="header.jsp">
</jsp:include>
<section id="showcase">
	<div class="container">
		<h1>Welcome to Mail Service!</h1>
		<p>Hi! This is <strong>Mail Services</strong>, a free
service for Mailing system.You can perform all email operation,Currently
it stores the information in database it's free of cost.Let's try it..</p>
	</div>
</section>
<jsp:include page="footer.jsp"></jsp:include>
```

footer.jsp

```
<footer>
	<p>Mail Service, Copyright &copy; 2020</p>
</footer>
</body>
</html>
```

login.jsp

```
<jsp:include page="header.jsp"></jsp:include>
<section id="login">
	<div class="container">
	<% if(request.getAttribute("Error")!=null)
	{
		String Error=(String)request.getAttribute("Error");
		out.print("<font style='color:red'>"+Error+"</font>");
	}
	if(request.getAttribute("Error1")!=null)
	{
		System.out.print(request.getAttribute("Error1"));
		String Error1=(String)request.getAttribute("Error1");
		out.print("<font style='color:red'>"+Error1+"</font>");
	}
```

```
	if(request.getAttribute("register")!=null)
	{
		System.out.print(request.getAttribute("register"));
		String register=(String)request.getAttribute("register");
		out.print("<font style='color:navy'>"+register+"</font>");
	}
	if(request.getAttribute("logout")!=null)
	{
		System.out.print(request.getAttribute("logout"));
		String logout=(String)request.getAttribute("logout");
		out.print("<font style='color:navy'>"+logout+"</font>");
	}
	%>
	<h1><span class="highlight">LOG</span> IN</h1>
	<form action="LoginServlet" method="POST">
	<input type="email" name="email" placeholder="Enter Email"
required="Username is required"><br><br>
	<input type="password" name="password" placeholder="Enter
password" pattern="(?=.*\d)(?=.*[a-z])(?=.*[A-Z]).{8,}" title="Must
Contain Alpha numeric Characters"><br><br>
	<button type="submit" class="button1" name="Submit">Login
</button>
	<button type="reset" class="button1" name="reset">Clear
</button>
	</form>
	</div>
</section>
<jsp:include page="footer.jsp"></jsp:include>
```

LoginServlet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class LoginServlet extends HttpServlet
{
	public void doPost(HttpServletRequest request,
HttpServletResponse response)throws ServletException, IOException
	{
		response.setContentType("text/html");
		PrintWriter out=response.getWriter();
		String uname=request.getParameter("email");
		String password=request.getParameter("password");
		boolean status=false;
		try {
			Class.forName("com.mysql.jdbc.Driver");
```

```
                    Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/mailsyst
em","root","");
                    System.out.println("Success");
                    Statement stmt=con.createStatement();
                    ResultSet rs=stmt.executeQuery("select * from user
where email='"+uname+"' and password='"+password+"'");
                    status=rs.next();
                    System.out.println(status);
              }
              catch (ClassNotFoundException e)
              {
                    e.printStackTrace();
              }
              catch (SQLException e)
              {
                    System.out.println("Exception in GetConnection");
              }
              if(status==true)
              {
                    HttpSession session=request.getSession();
                    session.setAttribute("username",uname);
                    out.print("Welcome   " + uname);
                    RequestDispatcher
rd=request.getRequestDispatcher("index.jsp");
                    rd.include(request, response);
              }
              else
              {
                    String Error="Incorrect!, Please check your Email and
Password";
                    request.setAttribute("Error", Error);
                    RequestDispatcher rd=request.getRequestDispatcher
("login.jsp");
                    rd.include(request, response);
              }
              out.close();
        }
}
```

register.jsp

```
<jsp:include page="header.jsp"></jsp:include>
<section id="login">
        <div class="container">
        <%
        if(request.getAttribute("registererror")!=null)
        {
              String msg=(String)request.getAttribute("registererror");
```

```
            out.print("<font style='color:red'>"+msg);
            out.print("</font><br/>");
        }
        %>
        <h1><span class="highlight">SIGN</span> IN</h1>
        <form action="RegisterServlet" method="POST">
        <input type="text" name="name" placeholder="Enter Name">
        <br><br>
        <input type="text" name="email" placeholder="Enter Email">
        <br><br>
        <input type="password" name="password" placeholder="Enter
        Password"><br><br>
        <input type="text" name="mbno" placeholder="Enter Contact
        No."><br><br>
        <input type="text" name="country" placeholder="Enter Country">
        <br><br>
        Male<input type="radio" name="gender" value="male">
        Female<input type="radio" name="gender" value="female"/>
        <br><br>
        <button type="submit" class="button1" name="submit">SignIn
        </button>
        <button type="reset" class="button1"
        name="reset">Clear</button>
        </form>
</div>
</section>
<jsp:include page="footer.jsp"></jsp:include>
```

RegisterServlet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;
public class RegisterServlet extends HttpServlet
{
        public void doPost(HttpServletRequest request,
HttpServletResponse response)throws ServletException, IOException
        {
                response.setContentType("text/html");
                PrintWriter out=response.getWriter();
                String email=request.getParameter("email");
                String password=request.getParameter("password");
                String name=request.getParameter("name");
                String gender=request.getParameter("gender");
                String num=request.getParameter("mbno");
                long mname=Long.parseLong(num);
                String country=request.getParameter("country");
                int status=0;
```

```
		try {
			Class.forName("com.mysql.jdbc.Driver");
			Connection con=DriverManager.getConnection
("jdbc:mysql://localhost:3306/mailsystem","root","");

		String qry="Insert into user values('"+email+"','"+password
	+"','"+name+"','"+gender+"',"+mname+",'"+country+"')";
			System.out.println(qry);
			Statement stmt=con.createStatement();
			status=stmt.executeUpdate(qry);
			System.out.println("Status = "+status);
		}
		catch (ClassNotFoundException e)
		{
			e.printStackTrace();
		}
		catch (SQLException e)
		{
			System.out.println("Exception in GetCon");
		}
		if(status>0)
		{
			String register= "You are Successfully registered";
			request.setAttribute("register",register);
			RequestDispatcher rd=request.getRequestDispatcher
	("login.jsp");
			rd.include(request, response);
		}
		else
		{
			String registererror="Sorry, Registration failed. Please
	try later";
			request.setAttribute("registererror",registererror);
			RequestDispatcher rd=request.getRequestDispatcher
	("register.jsp");
			rd.include(request, response);
		}
		out.close();
	}
}
```

compose.jsp

```
<jsp:include page="header.jsp"></jsp:include>
<section id="login">
	<div class="container">
<%	if(request.getAttribute("compose")!=null)
	{
		String compose= (String)request.getAttribute("compose");
```

```
			out.print("<font style='color:navy'>"+compose+"</font>");
		}
		if(request.getAttribute("composeerr")!=null)
		{
			String composeerr= (String)request.getAttribute
("composeerr");
			out.print("<font style='color:navy'>"+composeerr+
"</font>");
		}
%>
<h1><span class="highlight">COMPOSE</span> MAIL</h1>
<form action="ComposeServlet" method="POST">
<label>To:</label><br>
<input type="email" name="reciever_id" placeholder="Enter Name"
required="" minlength="4"><br><br>
<label>Message:</label><br>
<textarea name="message" cols="43" rows="10" style="padding: 17px;"
placeholder="Message..." required=""></textarea><br><br>
<button type="submit" class="button1" name="submit">Submit
</button>
<button type="reset" class="button1" name="reset">Clear</button>
</form>
</div>
</section>
<jsp:include page="footer.jsp"></jsp:include>
```

ComposeServlet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.Calendar;
import java.sql.*;
public class ComposeServlet extends HttpServlet
{
	static int status=0;
	public void doPost(HttpServletRequest request,
HttpServletResponse response)throws ServletException, IOException
	{
		response.setContentType("text/html");
		PrintWriter out=response.getWriter();
		HttpSession session=request.getSession(false);
		String sender=(String)session.getAttribute("username");
		String reciever=request.getParameter("reciever_id");
		String msg=request.getParameter("message");
		try
		{
			Class.forName("com.mysql.jdbc.Driver");
```

```
                    Connection con=DriverManager.getConnection
("jdbc:mysql://localhost:3306/mailsystem","root","");
                    java.util.Date sqdate=Calendar.getInstance().
getTime();
                    java.sql.Date date =new java.sql.Date
(sqdate.getTime());

                    PreparedStatement ps=con.prepareStatement("Insert
into inbox values(null,?,?,?,?)");
                    ps.setString(2,reciever);
                    ps.setString(1,sender);
                    ps.setString(3,msg);
                    ps.setDate(4,date);
                    status=ps.executeUpdate();
                    System.out.println(status);
              }
              catch (SQLException e)
              {
                    e.printStackTrace();
              }
              catch (ClassNotFoundException e)
              {
                    e.printStackTrace();
              }
              if(status>0)
              {
                    out.print("Message Sucessfully Sent");
                    RequestDispatcher rd=request.getRequestDispatcher
("index.jsp");
                    rd.include(request, response);
              }
              else
              {
                    out.print("Sorry,Message was not sent");
                    RequestDispatcher rd=request.getRequestDispatcher
("compose.jsp");
                    rd.include(request, response);
              }
        }
}
```

inbox.jsp

```
<%@page import="java.sql.*" %>
<jsp:include page="header.jsp"></jsp:include>
<script>
var request;
function viewAll(name)
{
```

```
	var v=name;
	var url="delete.jsp?val="+v;
	if(window.XMLHttpRequest)
	{
		request=new XMLHttpRequest();
	}
	else if(window.ActiveXObject)
	{
		request=new ActiveXObject("Microsoft.XMLHTTP");
	}
	try
	{
		request.onreadystatechange=getAllInfo;
		request.open("GET",url,true);
		request.send();
	}
	catch(e)
	{
		alert("Unable to connect to server");
	}
}
function getAllInfo()
{
	if(request.readyState==4)
	{
		var val=request.responseText;
		document.getElementById('bottom').innerHTML=val;
	}
}
</script>
<%
	if(session.getAttribute("username")!=null)
	{
		String username=(String)session.getAttribute("username");
		if(request.getAttribute("delete")!=null)
		{
			String delete=(String)session.getAttribute("usernam
			out.print("<font style='color:navy'>"+delete+"</font>"
);
		}
		try
		{
			Class.forName("com.mysql.jdbc.Driver");
			Connection con=DriverManager.getConnection
("jdbc:mysql://localhost:3306/mailsystem","root","");
			PreparedStatement ps=con.prepareStatement("Select *
from inbox where reciever=?");
```

```
                    ps.setString(1,username);
                    ResultSet rs=ps.executeQuery();
                    out.print("<div id='bottom'></div>");
                    out.print("<div>  <table border=2 cellspacing='4'
cellpadding='5' >");

        out.print("<tr><td>SENDER</td><th>MESSAGE</td><td>DATE
OF RECIEVING</td><td>Delete</td></tr>");
                    while(rs.next())
                    {
                          int id=rs.getInt(1);
                          System.out.print(id);
                          out.print("<tr>");
                          out.print("<td>" + rs.getString(2) + "</td>");
                          out.print("<td>" + rs.getString(4) + "</td>");
                          out.print("<td>" + rs.getString(5) + "</td>");
                          out.print("<td><a href='delete.jsp?val="+
rs.getInt(1)+"'> Delete</a></td>");
                          out.print("</tr>");
                    }
                    out.print("</table>");
              }
              catch (SQLException e)
              {
                    e.printStackTrace();
              }
        }
        else
        {
              request.setAttribute("Error1","Please Do login First");
        %>
        <jsp:forward page="login.jsp"></jsp:forward>
        <%
        }
%>
<jsp:include page="footer.jsp"></jsp:include>
```

delete.jsp

```
<%@ page language="java" import="java.util.*"%>
<%@ page import="java.sql.*" %>
<%
        String n=request.getParameter("val");
        if(n.length()>0)
        {
              try
              {
                    Class.forName("com.mysql.jdbc.Driver");
```

```
                Connection con=DriverManager.getConnection
("jdbc:mysql://localhost:3306/mailsystem","root","");
                PreparedStatement ps=con.prepareStatement("delete
from inbox where id = '"+n+"' ");
                out.print("<br>");
                int s=ps.executeUpdate();
                out.print("Mail has been successfully deleted");
                con.close();
            }
            catch(Exception e)
            {
                e.printStackTrace();
            }
        }
%>
<jsp:forward page="inbox.jsp"></jsp:forward>
```

feedback.jsp

```
<jsp:include page="header.jsp"></jsp:include>
<section id="login">
    <div class="container">
    <%
        if(request.getAttribute("feedbackerror")!=null)
        {
            String
msg=(String)request.getAttribute("feedbackerror");
            out.print("<font style='color:red'>"+msg);
            out.print("</font><br/>");
        }
        if(request.getAttribute("feedback")!=null)
        {
            System.out.print(request.getAttribute("feedback"));
            String
register=(String)request.getAttribute("feedback");
            out.print("<font
style='color:navy'>"+register+"</font>");
        }
        %>
        <h1><span class="highlight">FEED</span>
BACK</h1><br>
            <form action="ContactServlet" method="POST">
            <input type="text" name="nm" placeholder="Enter
Name" required="" minlength="4"><br><br>
            <input type="email" name="email" placeholder="Enter
Email" required=""><br><br>
            <textarea name="msg"  cols="42" rows="5"
placeholder="Message..." style="padding:20px"
required=""></textarea><br><br>
```

```
                    <button type="submit" class="button1"
name="submit">Submit</button>
                    <button type="reset" class="button1"
name="reset">Clear</button>
            </form>
      </div>
</section>
<jsp:include page="footer.jsp"></jsp:include>
```

ContactServlet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class ContactServlet extends HttpServlet
{
      public void doPost(HttpServletRequest request,
HttpServletResponse response)throws ServletException, IOException
      {
            response.setContentType("text/html");
            PrintWriter out=response.getWriter();
            String email=request.getParameter("email");
            String name=request.getParameter("name");
            String msg=request.getParameter("msg");
            int status=0;

            try {
                  Class.forName("com.mysql.jdbc.Driver");
                  Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/mailsyst
em","root","");
                  String qry="Insert into feedback
values(null,'"+name+"','"+email+"','"+msg+"')";
                  System.out.println(qry);
                  Statement stmt=con.createStatement();
                  status=stmt.executeUpdate(qry);

                  System.out.println("Status = "+status);
            }
            catch (ClassNotFoundException e)
            {
                  e.printStackTrace();
            }
            catch (SQLException e)
            {
                  System.out.println("Exception in GetCon");
            }
```

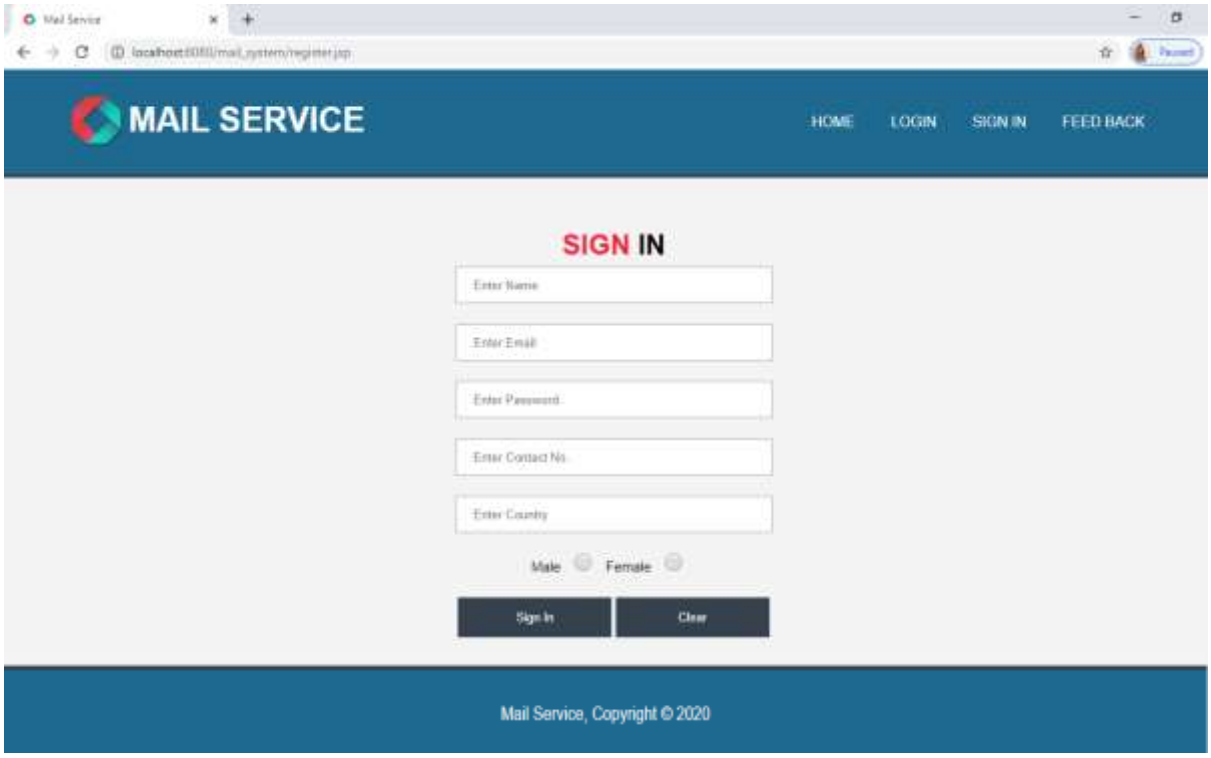
```
            if(status>0)
            {
                  String feedback= "Your feedback is Successfully saved";
                  request.setAttribute("feedback",feedback);
                  RequestDispatcher
rd=request.getRequestDispatcher("contact.jsp");
                  rd.include(request, response);
            }
            else
            {
                  String feedbackerror="Sorry, feedback is not Saved.
Please try later";
                  request.setAttribute("feedbackerror",feedbackerror);
                  RequestDispatcher
rd=request.getRequestDispatcher("contact.jsp");
                  rd.include(request, response);
            }
            out.close();
      }

}
```

LogoutServlet.java

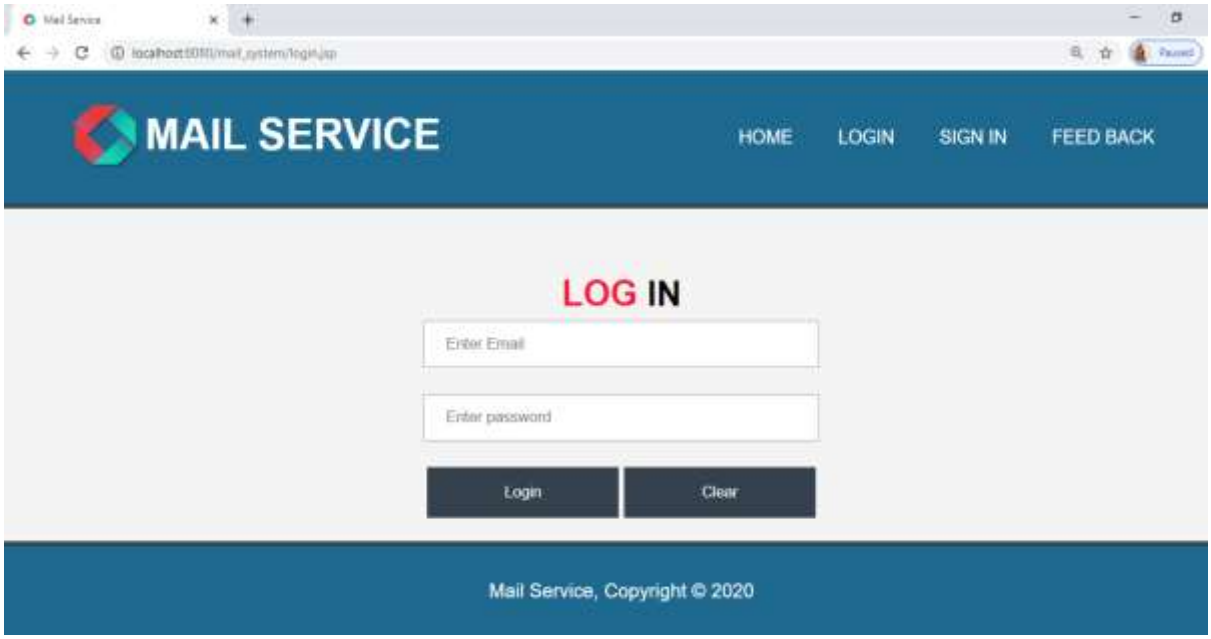
```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class LogoutServlet extends HttpServlet
{
      public void doGet(HttpServletRequest request, HttpServletResponse
response)throws ServletException, IOException
      {
            response.setContentType("text/html");
            PrintWriter out=response.getWriter();
            HttpSession session=request.getSession(false);
            session.invalidate();
            request.setAttribute("logout","You have been sucessfully
logged out");
            RequestDispatcher
rd=request.getRequestDispatcher("/login.jsp");
            rd.include(request,response);
      }

}
```

➢ Screenshots:

Sign in

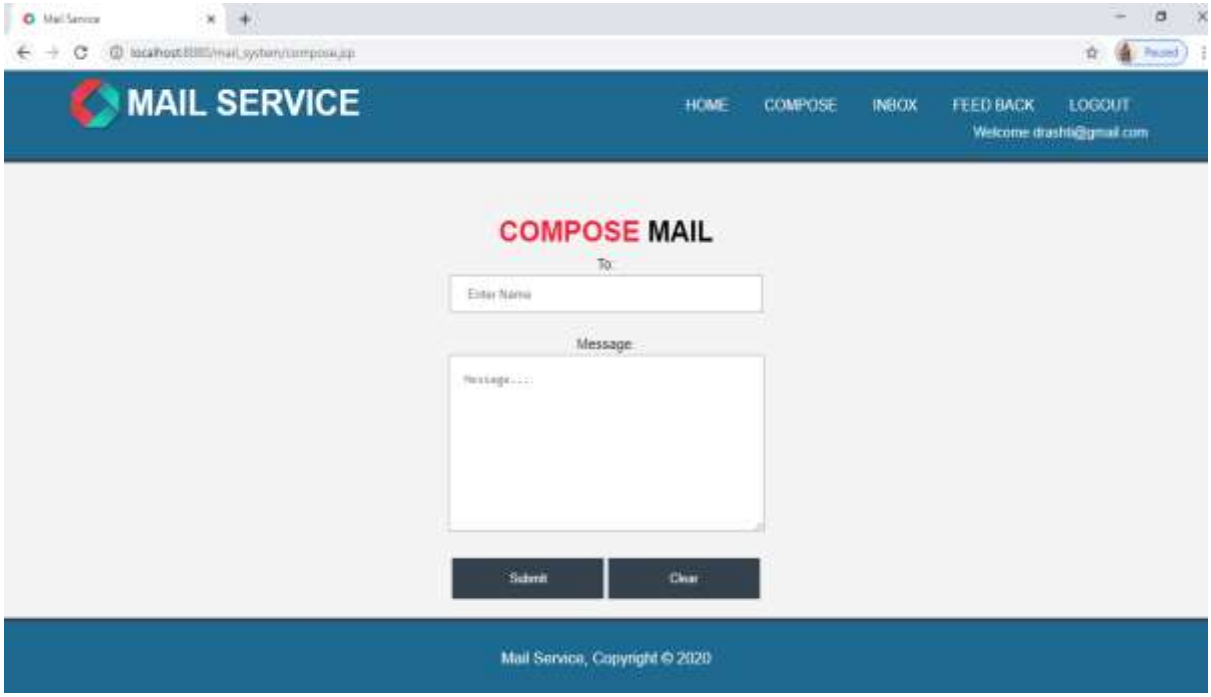


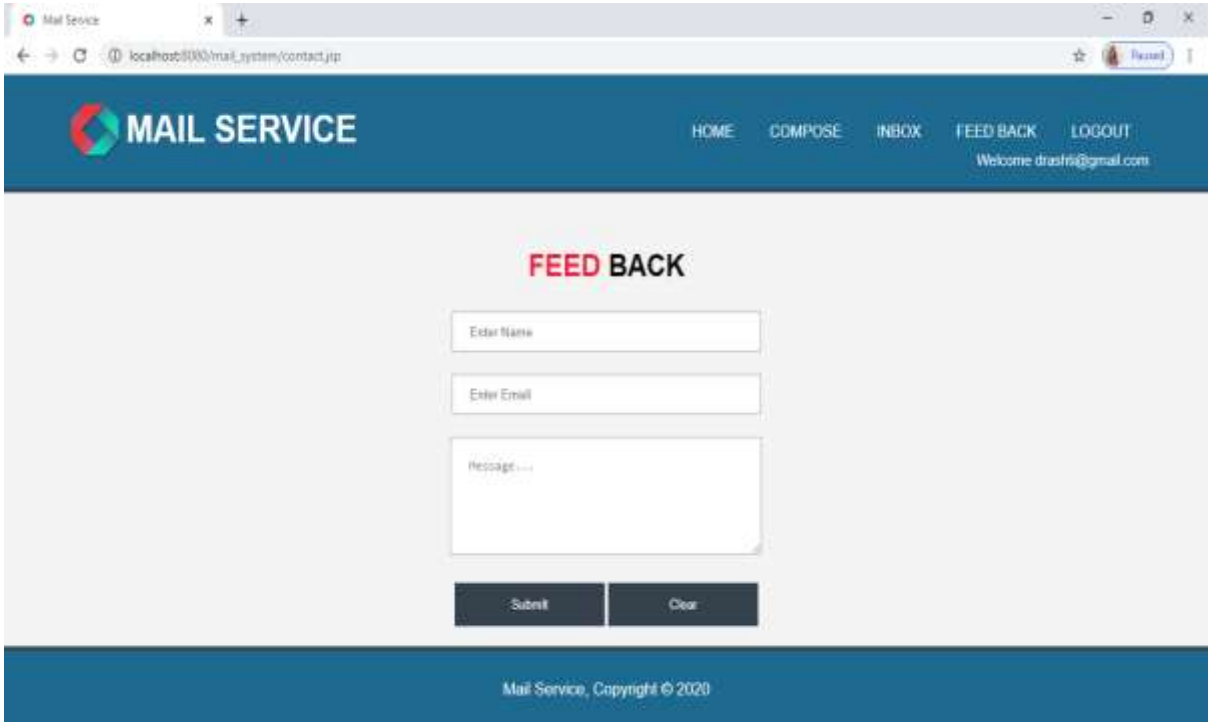
Login



Home

Compose



Inbox

FeedBack