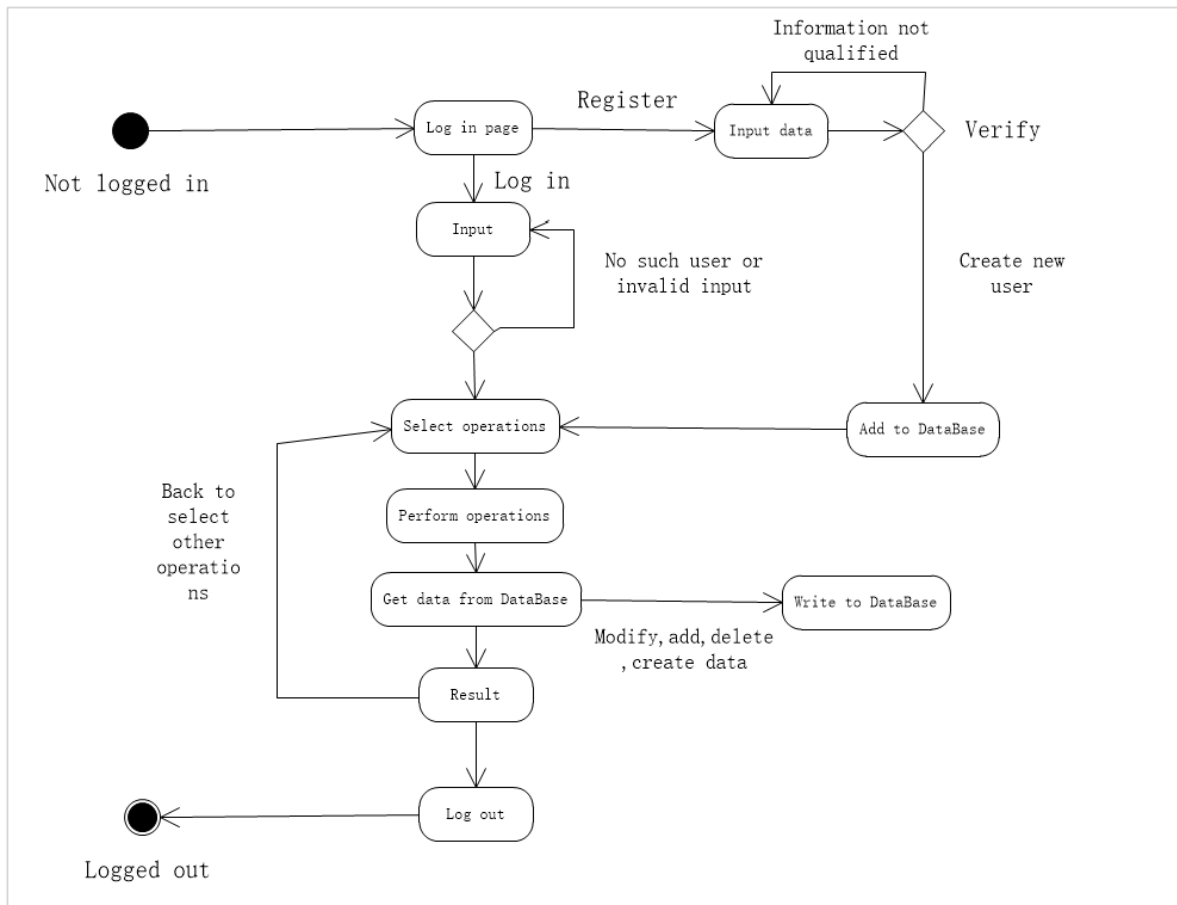


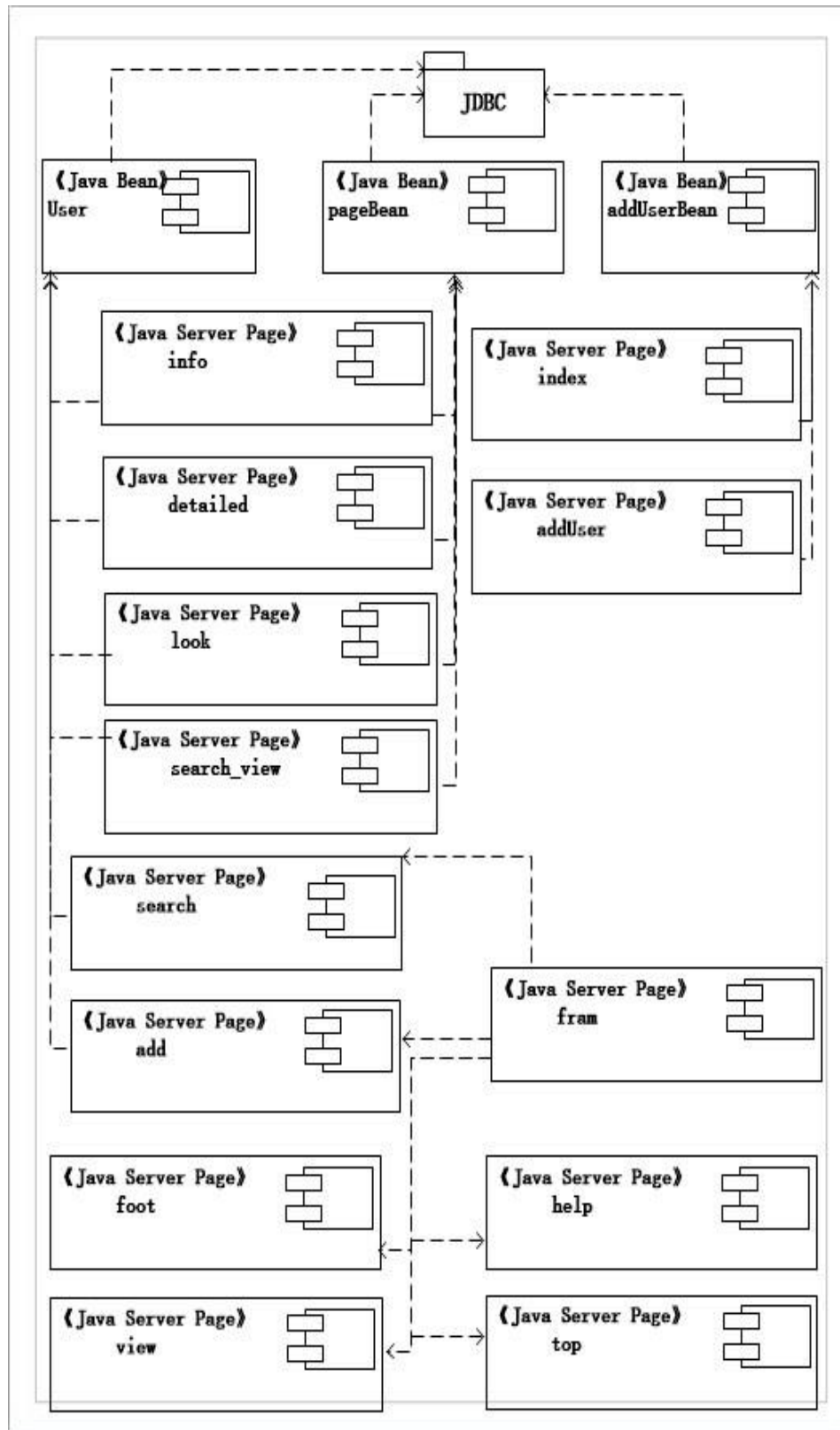
# CPE 640 Homework 3

Xuefan Wu, Shiyu Sun, Yue Liang

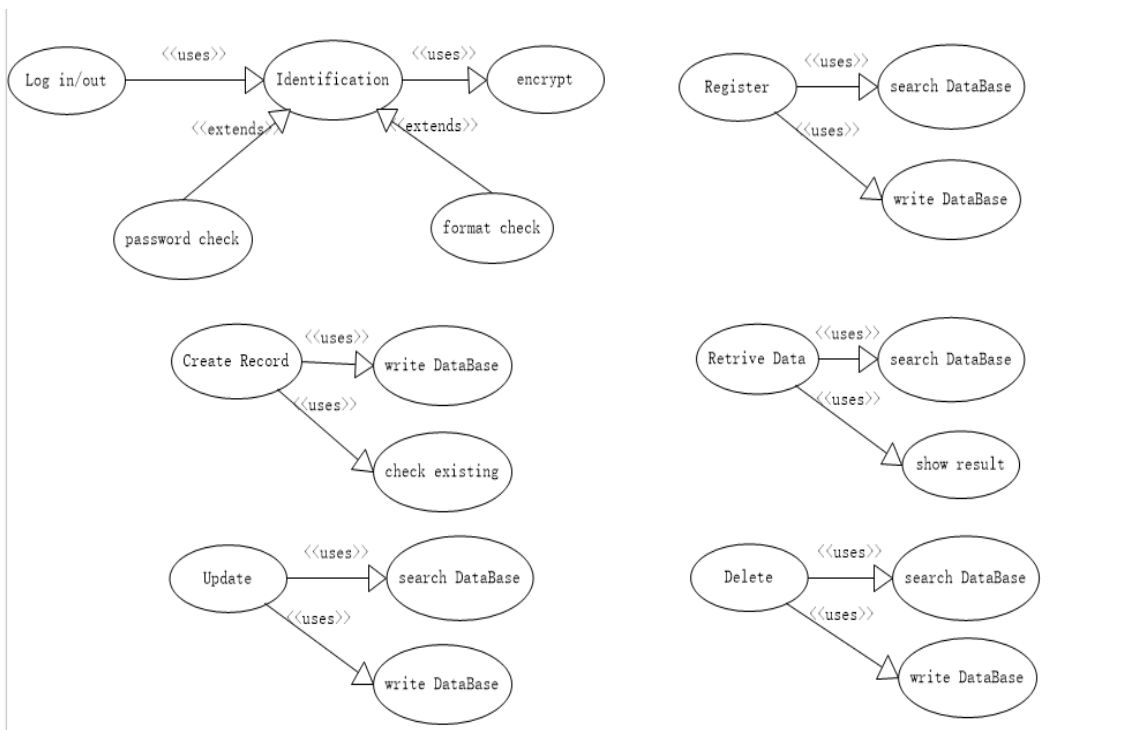
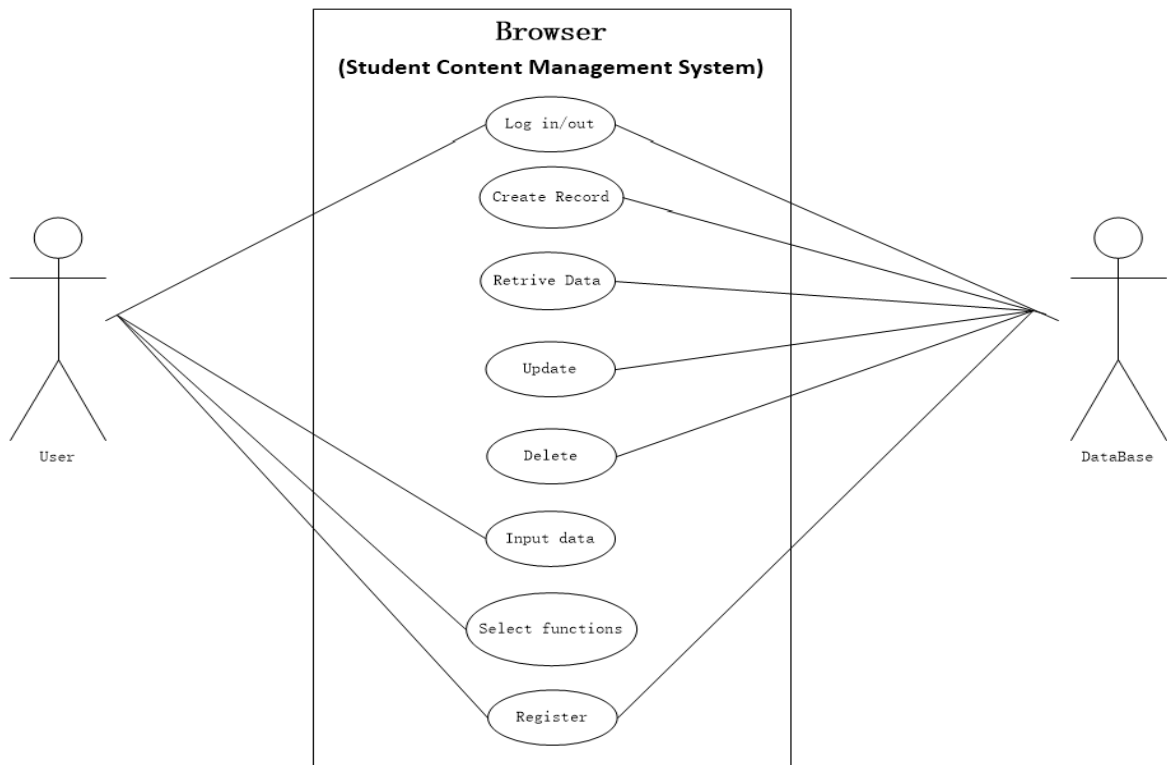
| Problem | Person who is responsible | Time   |
|---------|---------------------------|--------|
| 1       | Shiyu Sun                 | 2 days |
| 2       | Yue Liang                 | 2 days |
| 3       | Xuefan Wu                 | 3 days |



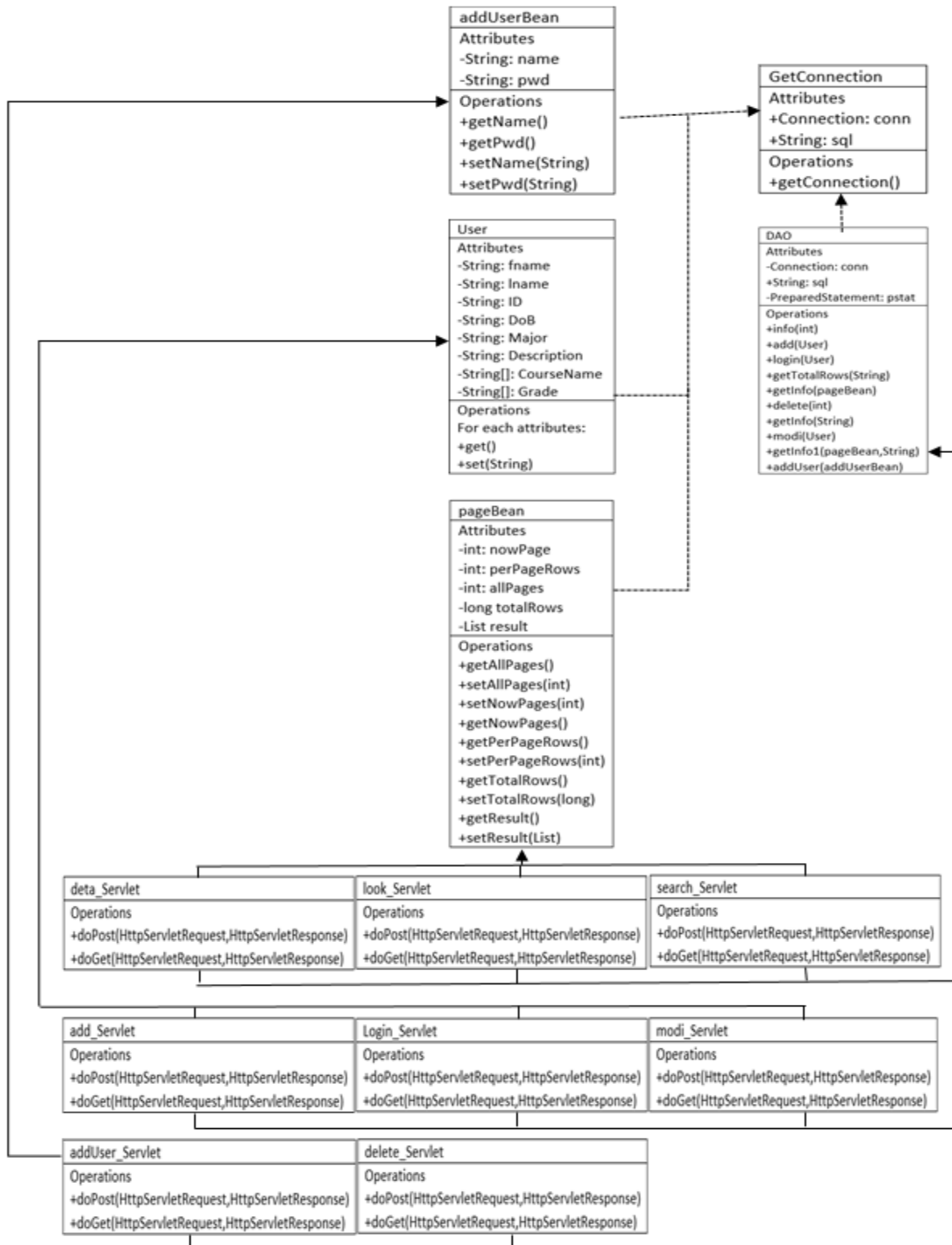
## Process View



**Component Diagram**



**Use Case Diagram**



**Class Diagram**

## Problem 1:

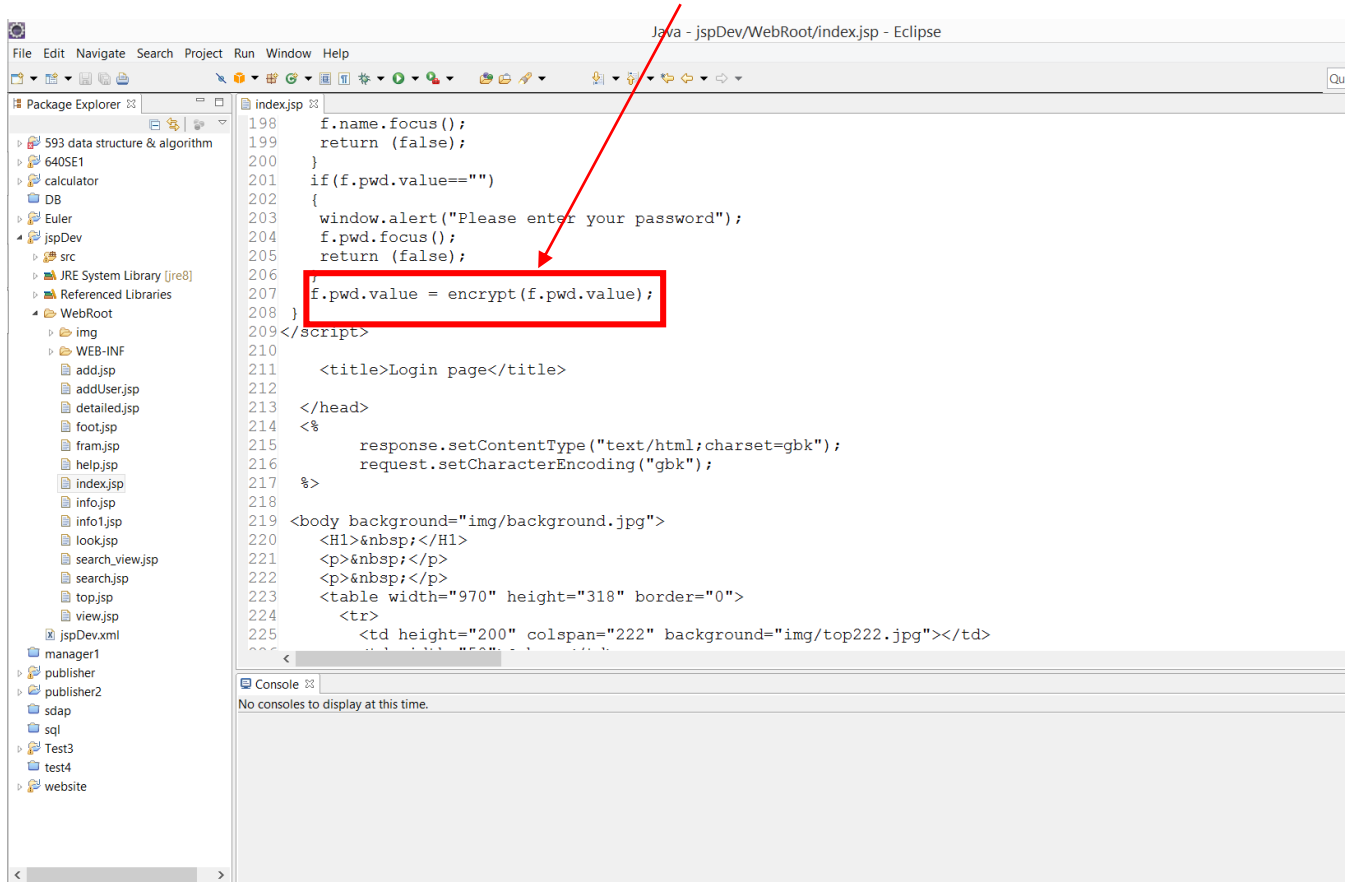
This is a part of the encryption Javascript code.

This function will return an encrypted version of password and insert it into database.

```
function encrypt(){
var pwd=document.getElementById("pwd").value;
pwd=ctoASC(pwd);
var mesglen=pwd.length;
mesglen=mesglen.toString(2);
var h=new Array(0x6a09e667, 0xbb67ae85, 0x3c6ef372, 0xa54ff53a, 0x510e527f, 0x9b05688c, 0x428a2f98, 0x71374491, 0xb5c0fbcf, 0xe9b5dba5, 0x3956c25b, 0x59f111f1);
var k=new Array(0x428a2f98, 0x71374491, 0xb5c0fbcf, 0xe9b5dba5, 0x3956c25b, 0x59f111f1);
pwd=pwd+"1";
while(pwd.length%512!=448)
pwd=pwd+"0";
while(mesglen.length<64)
mesglen="0"+mesglen;
pwd=pwd+mesglen;
var chunks=new Array(pwd.length/512);
for(var i=0;i<chunks.length;i++){
var w=new Array(64);
chunks[i]=pwd.substring(512*i,512*i+512);
for(var j=0;j<16;j++){
w[j]=parseInt(chunks[i].substring(32*j,32*j+32),2);
for(var j=16;j<64;j++){
var s0=dorightrotate(w[j-15],7)^dorightrotate(w[j-15],18)^(w[j-15]>>>3);
var s1=dorightrotate(w[j-2],17)^dorightrotate(w[j-2],19)^(w[j-2]>>>10);
w[j]=add(w[j-16],add(s0,add(w[j-7],s1)));
}
}
var a=h[0],b=h[1],c=h[2],d=h[3],e=h[4],f=h[5],g=h[6],hh=h[7];
for(var i=0;i<64;i++){
s0=dorightrotate(a,2)^dorightrotate(a,13)^dorightrotate(a,22);
var maj=(a&b)^(a&c)^(b&c);
var t2=add(s0,maj);
s1=dorightrotate(e,6)^dorightrotate(e,11)^dorightrotate(e,25);
var ch=(e&f)^(~e&g);
var t1=add(hh,add(s1,add(ch,add(k[i],w[i]))));
hh=g,g=f,f=e,e=add(d,t1),d=c,c=b,b=a,a=add(t1,t2);
}
h[0]=add(h[0],a),h[1]=add(h[1],b),h[2]=add(h[2],c),h[3]=add(h[3],d),h[4]=add(h[4],e);
h[5]=add(h[5],f),h[6]=add(h[6],g),h[7]=add(h[7],hh);
var result="";
for(var i=0;i<8;i++){
result+=tohex(h[i]);
}
}
```

## Problem 2:

This is part of the jsp file of login page: (This is the code which merge problem1&2)



```
198     f.name.focus();
199     return (false);
200 }
201 if(f.pwd.value=="")
202 {
203     window.alert("Please enter your password");
204     f.pwd.focus();
205     return (false);
206 }
207 f.pwd.value = encrypt(f.pwd.value);
208 }
209 </script>
210
211 <title>Login page</title>
212
213 </head>
214 <%
215     response.setContentType("text/html;charset=gbk");
216     request.setCharacterEncoding("gbk");
217 %>
218
219 <body background="img/background.jpg">
220     <H1>&nbsp;</H1>
221     <p>&nbsp;</p>
222     <p>&nbsp;</p>
223     <table width="970" height="318" border="0">
224     <tr>
225     <td height="200" colspan="222" background="img/top222.jpg"></td>
```

Login page:



We can see that we insert the encrypted password into database by register a user. (The original password is 1234567890)

```
mysql> select * from admin;
```

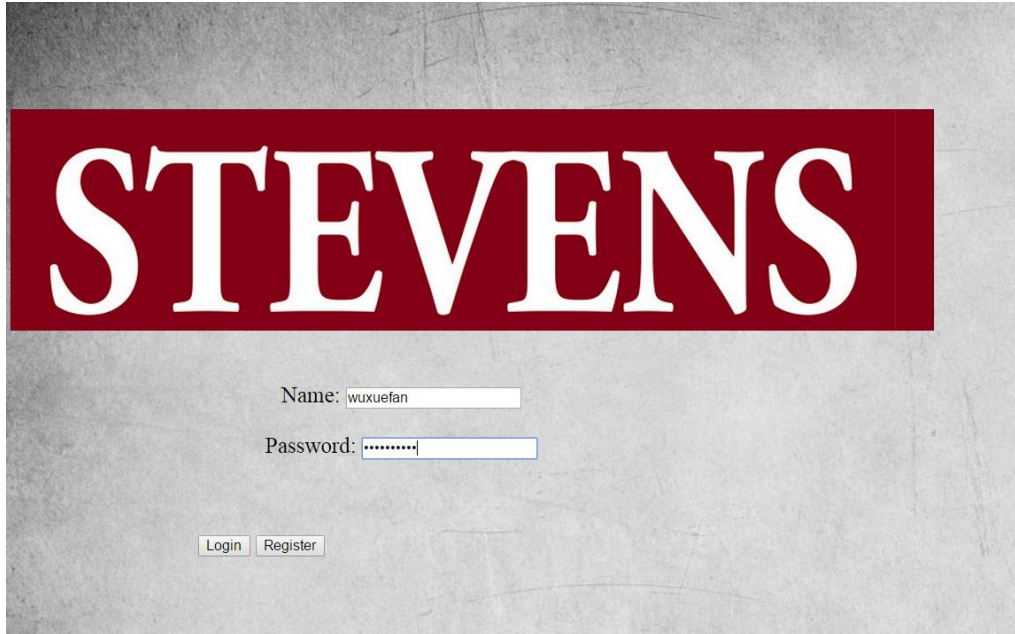
| nam       | age | sex    | pwd                                                              | address                  | id |
|-----------|-----|--------|------------------------------------------------------------------|--------------------------|----|
| wuxuefan  | 22  | female | C775E7B757EDE630CD0AA1113BD102661AB38829CA52A6422AB782862F268646 | 1100 Grand Street SG 602 | 1  |
| wuxuefan  | 22  | female | C775E7B757EDE630CD0AA1113BD102661AB38829CA52A6422AB782862F268646 | 1100 Grand Street SG 602 | 2  |
| wuxuefan  | 22  | female | C775E7B757EDE630CD0AA1113BD102661AB38829CA52A6422AB782862F268646 | 1100 Grand Street SG 602 | 3  |
| wuxuefan  | 12  | female | C775E7B757EDE630CD0AA1113BD102661AB38829CA52A6422AB782862F268646 | 1100 Grand Street SG 602 | 4  |
| wuxuefan2 | 22  | female | C775E7B757EDE630CD0AA1113BD102661AB38829CA52A6422AB782862F268646 | 1100 Grand Street SG 602 | 5  |

5 rows in set (0.00 sec)

### Problem 3:

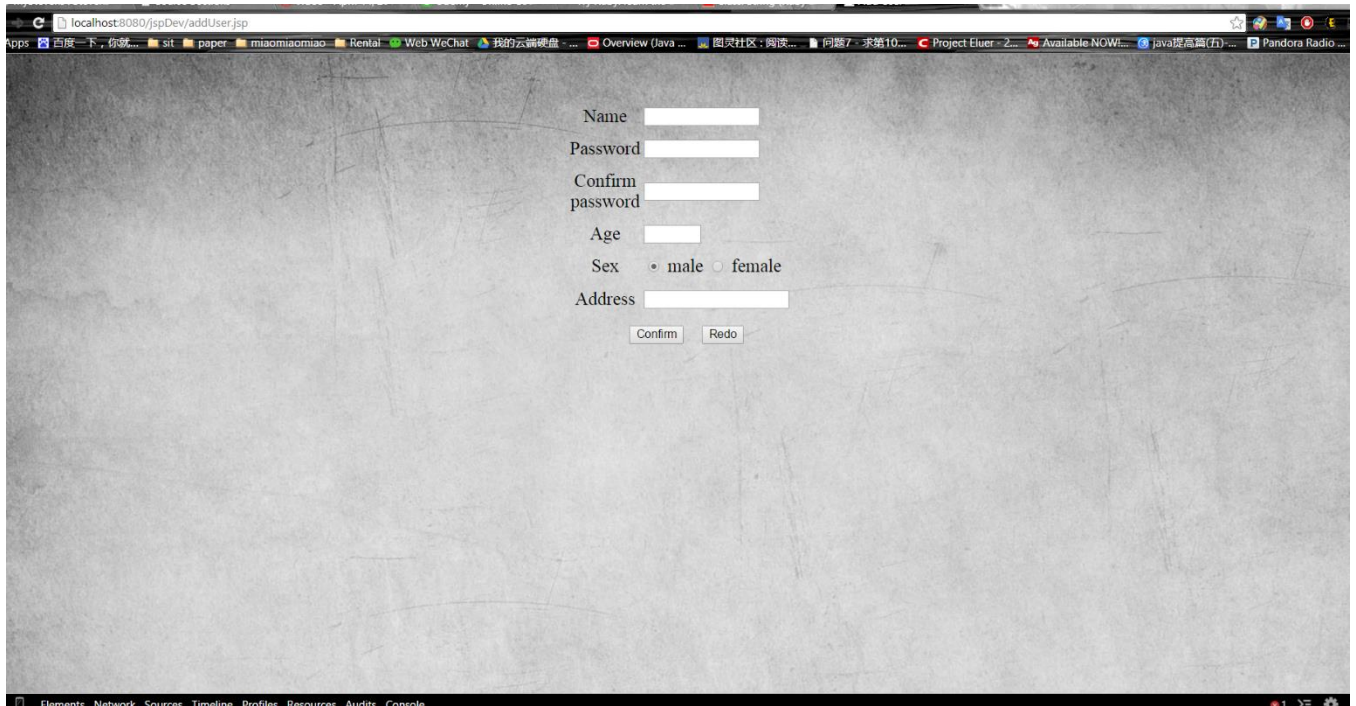
#### Student Content Management System

##### 1. Login Page



The screenshot shows a login page with a dark red header containing the word "STEVENS" in large, white, serif capital letters. Below the header, on a light gray background, are two input fields. The first is labeled "Name:" and contains the text "wuxuefan". The second is labeled "Password:" and contains a series of dots. Below these fields are two buttons: "Login" and "Register".

##### 2. If you a new user, you can simply register.

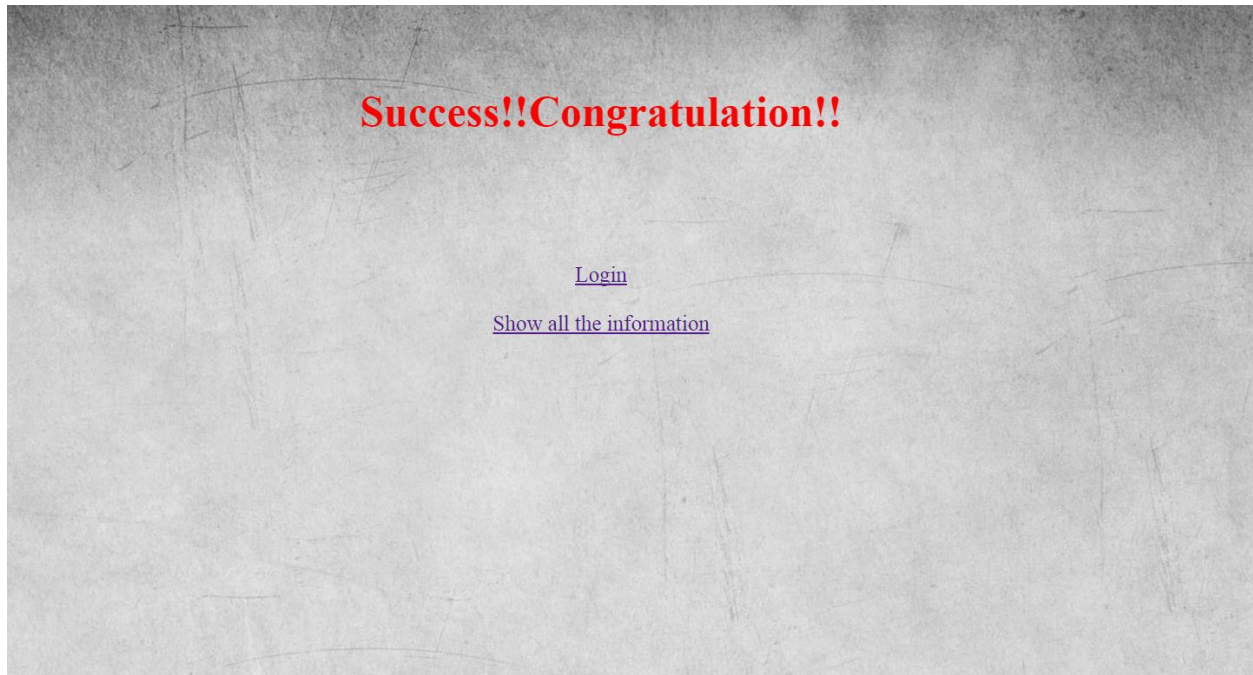


The screenshot shows a registration page in a web browser. The browser's address bar displays "localhost:8080/jspDev/addUser.jsp". The page has a light gray background. The registration form includes the following fields and controls:

- Name:
- Password:
- Confirm password:
- Age:
- Sex: ☒ male ☐ female
- Address:
- Buttons: "Confirm" and "Redo"

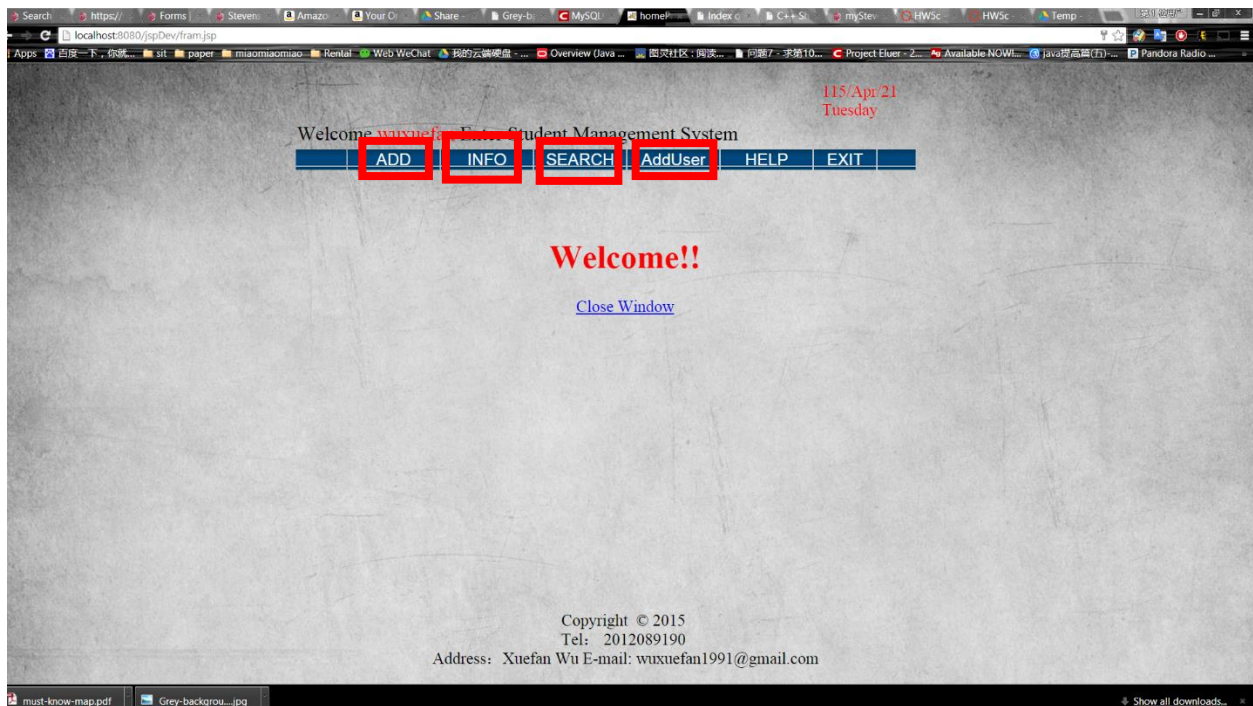


### 3. Register Success



### 4. And then we can login into the main page

There are several operations we can do from this page: add new user, get the user information, search user by id, add some new information into user.



5. We can add more specific information about a student by click "ADD" button

11/5/Apr/21  
Tuesday

Welcome **wuxuefan** Enter Student Management System

|     |      |        |         |      |      |
|-----|------|--------|---------|------|------|
| ADD | INFO | SEARCH | AddUser | HELP | EXIT |
|-----|------|--------|---------|------|------|

Name: \*  (Please use a real name!)

Sex: ☒ male ☐ female

Birthday: \*  (Format as Month/Day/Year)

Major: \*

Year:

Email: \*  (Must be a correct format)

Tel: \*  (Please enter a correct phone number)

Address: \*

Hobby:

Personal statement:

Copyright © 2015  
Tel: 2012089190  
Address: Xuefan Wu E-mail: wuxuefan1991@gmail.com

```
mysql> select * from stu_info;
```

| idx | nam      | sex    | bir        | cla | qq       | email                  | tel         | address           | join_time                | lik | info |
|-----|----------|--------|------------|-----|----------|------------------------|-------------|-------------------|--------------------------|-----|------|
| 1   | wuxuefan | female | 11/19/1991 | CPE | 2014Fall | wuxuefan1991@gmail.com | 20120891900 | 1100 Grand Street | Apr 21, 2015 12:30:45 AM |     |      |

1 row in set (0.00 sec)

6. And show all the information about this student by clicking “INFO” button

Welcome **wuxuefan** Enter Student Management System

Tuesday

|     |      |        |         |      |      |
|-----|------|--------|---------|------|------|
| ADD | INFO | SEARCH | AddUser | HELP | EXIT |
|-----|------|--------|---------|------|------|

**1 wuxuefan female 11/19/1991 CPE 2014Fall**  
**wuxuefan1991@gmail.com 20120891900**  
**1100 Grand Street**

[Continue add](#)

Show all the information

7. Search function:

We can search student information by ID and name and modify or delete student information

Welcome **wuxuefan** Enter Student Management System

Tuesday

|     |      |        |         |      |      |
|-----|------|--------|---------|------|------|
| ADD | INFO | SEARCH | AddUser | HELP | EXIT |
|-----|------|--------|---------|------|------|

|                                                                           |                                                                    |
|---------------------------------------------------------------------------|--------------------------------------------------------------------|
| ID                                                                        | <input type="text" value="1"/>                                     |
| Name                                                                      | <input type="text" value="wuxuefan"/>                              |
| Sex                                                                       | <input type="radio"/> male <input checked="" type="radio"/> female |
| Class                                                                     | <input type="text"/>                                               |
| Address                                                                   | <input type="text"/>                                               |
| <input type="button" value="Submit"/> <input type="button" value="Redo"/> |                                                                    |



Here's the search result:

Tuesday

Welcome **wuxuefan** Enter Student Management System

|  |     |      |        |         |      |      |
|--|-----|------|--------|---------|------|------|
|  | ADD | INFO | SEARCH | AddUser | HELP | EXIT |
|--|-----|------|--------|---------|------|------|

All the information based on search

hello!!!!!!

| ID | Name     | Sex    | Major | Address           | Operation |        |        |
|----|----------|--------|-------|-------------------|-----------|--------|--------|
| 1  | wuxuefan | female | CPE   | 1100 Grand Street | Detail    | Modify | Delete |

We get 1.0 student which accords the serch

REFRESH

We can modify or delete student information by clicking “Modify” and “Delete” button:

Student Information - Google Chrome

localhost:8080/jspDev/servlet/deta\_Servlet?id=1

|             |                                                                    |
|-------------|--------------------------------------------------------------------|
| ID          | 1                                                                  |
| Name        | wuxuefan                                                           |
| Sex         | <input type="radio"/> male <input checked="" type="radio"/> female |
| birthday    | 11/19/1991                                                         |
| class       | CPE                                                                |
| QQ          | 2014Fall                                                           |
| email       | wuxuefan1991@gmail.com                                             |
| phone       | 20120891900                                                        |
| address     | 1100                                                               |
| join time   | Apr 21, 2015 12:30:45 AM                                           |
| hobby       |                                                                    |
| description |                                                                    |
| operation   | <div>Save</div>                                                    |

Close window

Copyright © 2015  
Tel: 20120891900

After we done modify the student's information, we can click “save” button to change it.