



**FACULTY OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
DEPARTMENT OF COMMUNICATION TECHNOLOGY AND NETWORK**

PROJECT REPORT DOCUMENTATION

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GROUP : 6

LECTURER : PROF. MADYA DR. MASNIDA BINTI HUSSIN .

NO.	NAME	MATRIC ID
1.	HU SIHAN	205090
2.	MUHAMMAD AZMAN BIN HABEEB MOHAMED	207726
3.	MUHAMMAD AFIQ BIN ZOLKARNAIN	207798
4.	MOHD AIMAN FARHAN BIN MOHD AMIN .	205343
5.	AZRIEL HAFNY BIN NOOR AZLI	205473
6.	YUAN LIANG	208863

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Project Report Documentation

1.1 User Requirements

- Registration page
 - Accepts login id, password and lecturer's information into database
- Login page
 - Validate login id and password in the database.
 - Give access to the lecturer page for lecturers.
 - Give access to the officer page for officers.
- Lecturer page
 - Able to access grant information and submit progress
 - Able to access lecturer information.
 - Submit progress for their grant
- Officer page
 - Able to access currently ongoing grant's information.
 - Can add a new grant for a lecturer.
 - Can update the due date of each grant.
 - Can delete grants that have errors.
 - Can search for specific grants.
 - Can access the information of the grant's owner.
 - Can sort the grant according to the grant owner, grant id, type, lecturer id and due date

1.2 ERD , Relation and Normalization

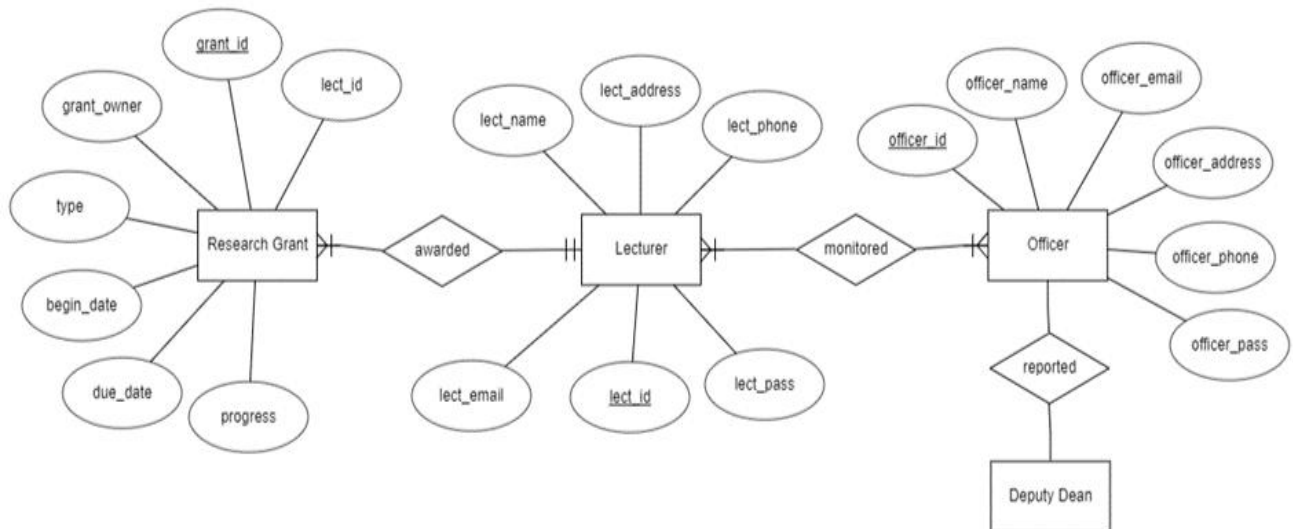


Figure 1.2.1 ERD of Grant Management System

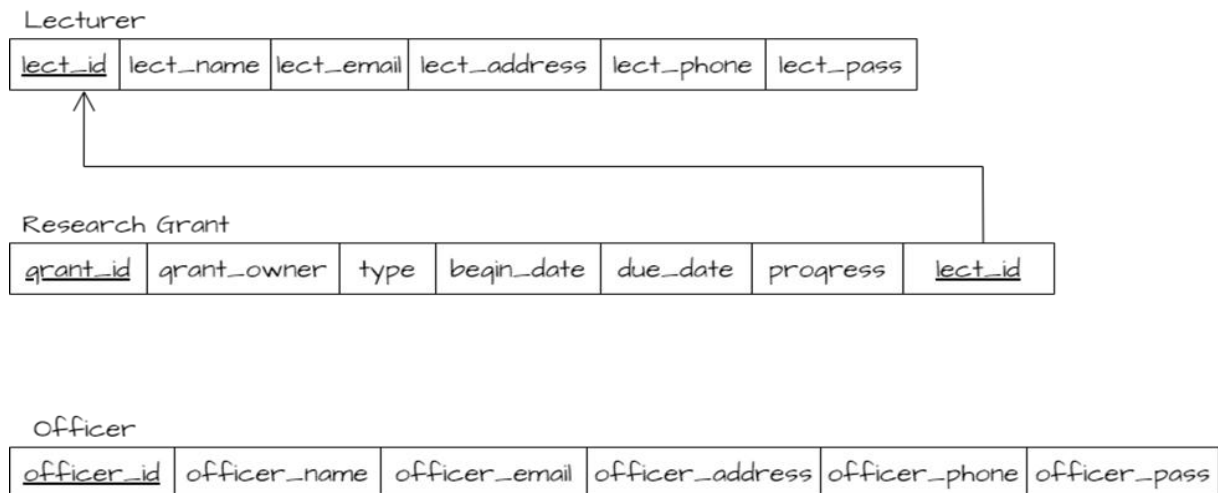


Figure 1.2.2 Relation of Grant Management System

Normalization

- First Normal Form

Grant (lect_id, grant_id, lect_name, lect_address, lect_phone, lect_email, lect_pass, grant_owner, type, begin_date, due_date, progress)

Officer (officer_id, officer_name, officer_address, officer_phone, officer_email, officer_pass)

- Second Normal Form

Lecturer (lect_id, lect_name, lect_email, lect_address, lect_phone, lect_pass)

Officer (officer_id, officer_name, officer_email, officer_address, officer_phone, officer_pass)

ResearchGrant (grant_id, lect_id, grant_owner, type, begin_date, due_date, progress)

- Third Normal Form

Lecturer (lect_id, lect_name, lect_email, lect_address, lect_phone, lect_pass)

Officer (officer_id, officer_name, officer_email, officer_address, officer_phone, officer_pass)

ResearchGrant (grant_id, lect_id, grant_owner, type, begin_date, due_date, progress)

GrantProgression (progress, begin_date, due_date)

1.3 A web-based database application

Sign Up

Regarding the Sign Up function, we mainly provide a registration function for lecturers, that is, to lecturer sign up. In addition, the officer of this system can register directly from the database. In the sign up interface, the content that the user needs to input includes: staff ID, full name, email address, address, mobile phone number, and password.

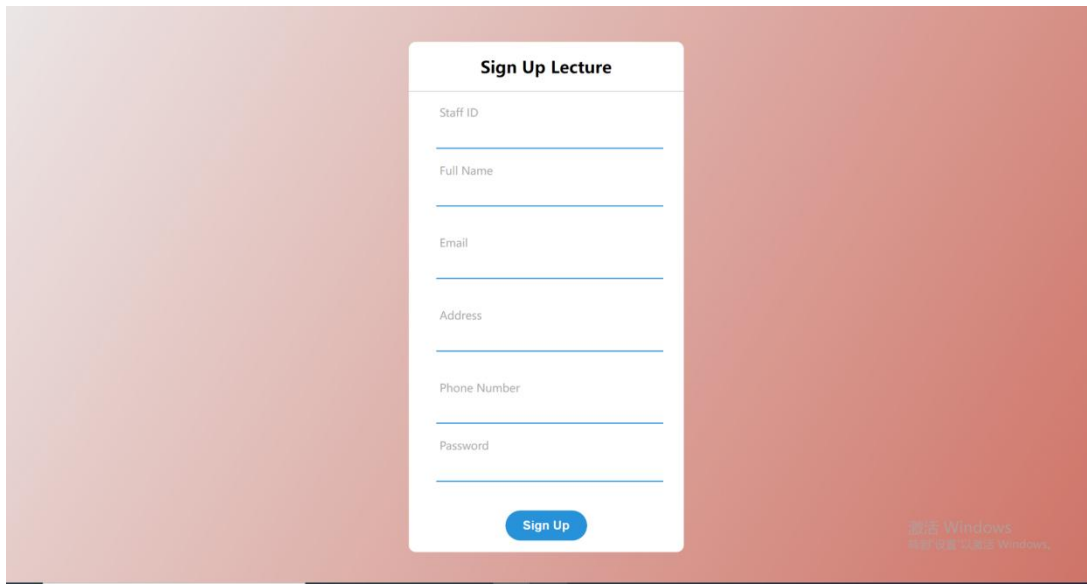
A screenshot of a web form titled "Sign Up Lecture". The form is centered on a red gradient background. It contains seven input fields: "Staff ID", "Full Name", "Email", "Address", "Phone Number", and "Password". Each field has a blue underline. At the bottom of the form is a blue "Sign Up" button. In the bottom right corner of the background, there is small text that reads "激活 Windows 转到设置以激活 Windows."

Figure 1.3.1 Lecture Sign up Page

The above information is required, and the user can register successfully only after filling in all the information and clicking the sign up button. Sign up page will be automatically redirected to the lecturer login page, which means the registration is successful. At this point, the registration is complete.

Lecturer Page

The Lecture page is accessible only to lecturers who have registered with the appropriate database. After the user enters their right login credentials on the login page, they are redirected to the lecturer page.

On the lecturer page, you'll find a complete collection of data about the lecturer, including their staff ID, full name, address, email address, and phone number.



Lecturer Grant Submission

Lecturer's Information

Lecturer ID:	106
Full Name:	MUHAMMAD AFIQ BIN ZOLKARNAIN
Email:	afiq.zol2013@gmail.com
Address:	Melaka
Phone No.:	0138006570

Figure 1.3.2 Lecutre Page Top Part

The data on this page is synchronized with the database that was created on the previous page.

As an illustration, the data for StaffID 106 and full name MUHAMMAD AFIQ BIN ZOLKARNAIN is identical to the SQL data below:

	LECT_ID	LECT_NAME	LECT_EMAIL	LECT_ADDRESS	LECT_PHONE	LECT_PASS
1	105	HU SIHAN	sihan@gmail.com	Shanghai, China	0126985487	sihan
2	103	AHMAD AZRIEL BIN HAFNY	hensemgei@gmail.com	Jalan Cicawi, Kota Damansara, Selangor	999	azriel
3	102	MUHAMMAD AZMAN BIN HABEEB MOHAMED	azman@gmail.com	Jalan Nuri, Kota Damansara, Selangor	01972491619	azman
4	104	AIMAN FARHAN BIN AMIN	aiman@gmail.com	Kunak, Sabah	0196587458	aiman
5	101	Yuan Liang	liang@gmail.com	Shan Xi, China	0196548957	liang
6	106	MUHAMMAD AFIQ BIN ZOLKARNAIN	afiq.zol2013@gmail.com	Melaka	0138006570	afiq

Lect_ID 106 -

6	106	MUHAMMAD AFIQ BIN ZOLKARNAIN	afiq.zol2013@gmail.com	Melaka	0138006570	afiq
---	-----	------------------------------	------------------------	--------	------------	------

There are three (3) sections at the bottom of the lecturer page titled Progress 1, Progress 2, and Close Project. Lecturers can add or update their grant submissions in the next progress. All files entered in this part will be accessible to officers for inspection.

The screenshot shows a section titled "Lecturer's Grant" with a light blue background. It contains three columns for submission:

- Progress 1**: "Please insert your Progress 1 file:", "Select files:", "Choose Files" (button), "No file chosen", "Submit" (button).
- Progress 2**: "Please insert your Progress 2 file:", "Select files:", "Choose Files" (button), "No file chosen", "Submit" (button).
- Close Project**: "Please insert your Close Project file:", "Select files:", "Choose Files" (button), "No file chosen", "Submit" (button).

Figure 1.3.3 Lecture Page Progress Part

As for the whole view of Lecturer page :

The screenshot shows the "Lecturer Grant Submission" page. At the top is the UPM logo and the title "Lecturer Grant Submission". Below is a section for "Lecturer's Information" with a table:

Lecturer ID:	106
Full Name:	MUHAMMAD AFIQ BIN ZOLKARNAIN
Email:	afiq_zo2013@gmail.com
Address:	Melaka
Phone No.:	0138006570

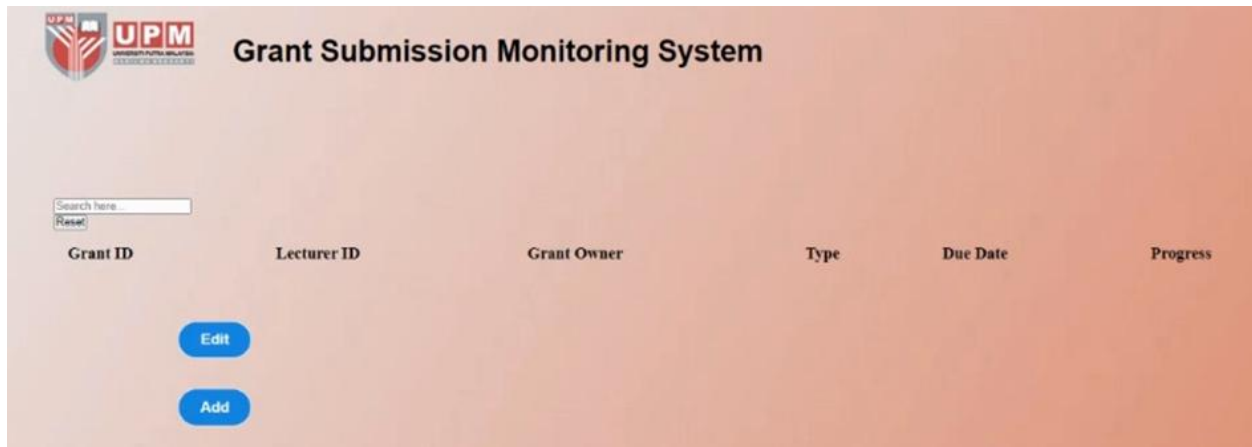
Below the information table is the "Lecturer's Grant" section, which is identical to the one shown in Figure 1.3.3, with three submission areas for Progress 1, Progress 2, and Close Project.

Figure 1.3.4 Lecture Page

Officer Page

The Officer page is accessible only to one officer registered with the appropriate database. After the user enters their proper login credentials on the login page, the system will send them to the Officer page.

On the officer page, our system will provide the complete information of the grant, which are grant ID, Lecturer ID, Grant Owner, Type, Due date and progress.



The screenshot shows the 'Grant Submission Monitoring System' interface. At the top left is the UPM logo. Below it is a search bar with the text 'Search here...' and a 'Reset' button. The main area contains a table with the following headers: 'Grant ID', 'Lecturer ID', 'Grant Owner', 'Type', 'Due Date', and 'Progress'. Below the table are two blue buttons: 'Edit' and 'Add'.

Figure 1.3.5 Officer Page

On this page, the system will provide the officer to insert a new grant for a particular lecturer by clicking the 'Add' button. The 'add' button will bring the officer to the insert grant information page.



The screenshot shows the 'Insert Grant Information' form. It contains the following fields: 'Grant Id :', 'Lecturer Id :', 'Type :', 'Begin Date :', 'Due date :', and 'Progress :'. The 'Begin Date' and 'Due date' fields have a date format 'dd/mm/yyyy' and a calendar icon. At the bottom right is a blue 'Submit' button.

Officers need to fill up the following form: grant ID, Lecturer ID, type, the beginning date of the grant, the due date for the grant, and lastly, the progress. Note that the progress is divided into 3 categories; 1, 2 and 3.

Grant Submission Monitoring System

Search here
Reset

Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress	
201	101	Yuan Liang	UPM	2022-06-19 00:00:00	1	delete

Edit

Add

Figure 1.3.6 Officer Page with Record

After clicking the 'submit' button, the system will show all the information about the grant on the front page of the officer. It is also added to our SQL database.

Oracle SQL Developer : Table F207798.RESGRANT@SSK3408

File Edit View Navigate Run Team Tools Window Help


Connections

SSK3408_Lab8.sql Welcome Page SSK3408 RESGRANT

Columns Data Model Constraints Grants Statistics Triggers Flashback Dependences Details Partitions Indexes SQL

Sort... Filter: Actions...

GRANT_ID	LECT_ID	GRANT_OWNER	TYPE	BEGIN_DATE	DUE_DATE	PROGRESS
1	201	101 Yuan Liang	UPM	19/01/2022	19/06/2022	1



Grant Submission Monitoring System

Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress	
203	102	MUHAMMAD AZMAN BIN HABEER MOHAMED	Others	2022-02-04 00:00:00	1	delete
201	101	Yuan Liang	UPM	2022-06-19 00:00:00	1	delete
202	101	Yuan Liang	KPT	2022-09-03 00:00:00	1	delete

Note that the officer can also add more grants with the same lecturer by clicking the 'add' button and filling in the information using the same Lecturer ID. The officer can add more grants with a different lecturer.

Update Grant Information

Grant Id :

Type :

Due date :

Officers can update the grant for a particular lecturer who has already finished their work for each progress; the officer can click the 'Edit' button and be sent to the update grant information page.

Update Grant Information

Grant Id :

Type :

Due_date :

The officer can insert a particular grant id that the officer wants to update and change the new due date for the lecturer if the current progress is done and moving into the following progress.

Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress	
203	102	MUHAMMAD AZMAN BIN HABEER MOHAMED	Others	2022-02-04 00:00:00	1	delete
201	101	Yuan Liang	UPM	2022-04-30 00:00:00	1	delete
202	101	Yuan Liang	KPT	2022-09-03 00:00:00	1	delete

Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress	
203	102	MUHAMMAD AZMAN BIN HABEER MOHAMED	Others	2022-02-04 00:00:00	1	delete
201	101	Yuan Liang	UPM	2022-04-30 00:00:00	1	delete

Figure 1.3.7 Officer Page After Delete

As you can see in the diagram above, the due date for grant id 201 is updated, and you can delete the grant that their progress is already complete using the 'delete' button.

Officers also can search anything related to the information of the grant to find any detailed data that they want.

<input type="text" value="Search here"/> <input type="button" value="Reset"/>						
Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress	
201	101	Yuan Liang	UPM	2022-04-30 00:00:00	1	delete
<input type="button" value="Edit"/>						
<input type="button" value="Add"/>						

For example, the officer can search lecturer id with the number '102', and the table will only show the information of the lecturer id 102. By clicking the 'reset' button, it will show all the data in the table back.

Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress	
203	102	MUHAMMAD AZMAN BIN HABEER MOHAMED	Others	2022-02-04 00:00:00	1	delete
201	101	Yuan Liang	UPM	2022-07-22 00:00:00	2	delete

Lecturer's Information

Lecturer ID:	102
Full Name:	MUHAMMAD AZMAN BIN HABEER MOHAMED
Email:	azman@gmail.com
Address:	Jalan Nuri, Kota Damansara, Selangor
Phone No.:	01972491619

The officer can also check the lecturer information to contact the particular lecturer regarding the grant by clicking the lecturer's name, and the system will go into the lecturer information.

Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress	
201	101	Yuan Liang	UPM	2022-01-21 00:00:00	1	Delete
1443	102	MUHAMMAD AZMAN BIN HABEEB MOHAMED	Others	2022-05-20 00:00:00	2	Delete
202	101	Yuan Liang	KPT	2023-09-20 00:00:00	1	Delete

And lastly, the system also provides a sort function where officers can sort the table in the ascending/descending order by clicking any data they want to be in the ascending order or descending order.

For example, by clicking the 'grant owner,' the system will sort the data into the alphabet order.

Search here...	Reset					
Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress	
202	101	Yuan Liang	KPT	2023-09-20 00:00:00	1	Delete
201	101	Yuan Liang	UPM	2022-01-21 00:00:00	1	Delete
1443	102	MUHAMMAD AZMAN BIN HABEEB MOHAMED	Others	2022-05-20 00:00:00	2	Delete

Appendix : A full Program Code

2.1 Welcome Page

welcome.jsp can be redirect to Lectlogin.jsp, Offlogin.jsp & signupLecturer.jsp.

```
welcome.jsp
1  <!DOCTYPE html>
2  <html>
3  <head>
4
5      <title>UPM Grand Monitoring Welcome Page</title>
6      <div style="background-color: #900c3f;margin:0px;padding: 0px">
7          
8
9      </div>
10 </head>
11
12 <body>
13
14     <div style="background-color: #cc2952;margin: 0px;padding: 0px">
15
16         <center><p style="color: #fff; font-size: 30px;margin: 0px;padding: 0px;margin-left: 100px;
17             font-style: italic;">Grant Submission Monitoring System</p>
18         <p style="color: #fff; font-size: 20px;margin: 0px;padding: 0px;margin-left: 100px; margin-top:
19             50px; font-style: italic;">This system is designed to provide UPM lecturers with the
20             function of grant application
21             <br><br>
22             As well as the functions of grant progress inquiry and report sending for relevant persons in
23             charge.</p>
24         <a href="Lectlogin.jsp" class="fas fa-chalkboard-teacher " style="font-size: 50px; text-decoration:
25             none;margin-left: 100px;margin-top:50px;color: #fff;"> Login As Lecturer</a>
26
27         <a href="Offlogin.jsp" class="fas fa-poll" style="font-size: 50px;text-decoration: none;margin-left
28             : 100px;color: #fff;line-height: 200px"> Login As Officer</a>
29
30         <p style="color: #fff;font-size: 20px;margin-left: 100px;margin-top: 50px;">Don't have account?
31             Click here to create a new account</p>
32         <script src="https://kit.fontawesome.com/0ed1e5d703.js" crossorigin="anonymous"></script>
33         <a href="singupLecturer.jsp" class="fas fa-user-plus" style="font-size: 50px;text-decoration: none;
34             margin-left: 100px;margin-top: 50px;color: #fff;line-height: 50px"> Lecturer Sign Up</a></
35             center>
36
37     <br>
38     <br>
39     <br>
40
41 </body>
42 </div>
```



```

44
45 <body>
46   <div style="background-color: #17202a; margin: 0px;padding: 0px">
47
48     <span style="color: #fff;font-size: 30px;font-weight: bold;margin-left: 50px;"></span>
49     <p style="color: #fff;margin-left: 50px; font-size: 20px">
50       <br><br>
51       <br><br>
52       <br><br>
53       <br><br>
54       <br><br>
55     </p>
56
57     <p style="color: #fff ;font-size:30px;font-weight: bold;margin-left: 50px"></p>
58
59     <p style="color: #fff;margin-left: 50px; font-size: 20px">
60       </p>
61
62   </div>
63 </body>
64 </html>

```

Figure 2.1.1 Code for Welcome Page

2.2 Sign Up Page

2.2.1 Lecturer Sign Up Page

signupLecturer.jsp will be redirect to singupLecturerConnect.jsp

```

1  <!DOCTYPE html>
2  <html lang="en" dir="ltr">
3    <head>
4      <link rel="stylesheet" type="text/css" href="css/loginstyle.css" />
5      <meta charset="utf-8" />
6      <title>Sign Up Page</title>
7      <link rel="stylesheet" type="text/css" href="css/loginstyle.css" />
8      <center></center>
12     <h1></h1>
13   </head>
14
15   <main>
16     <div class="header-img"></div>
17   </main>

```

```

19 <body>
20   <div class="center">
21     <h2>Sign Up Lecturer</h2>
22     <form action="signupConnectLecturer.jsp" method="post">
23       <div class="txt_field">
24         <label>Staff ID</label>
25         <span></span>
26         <input
27           type="number "
28           required
29           class="form-control"
30           id="lect_id"
31           name="lect_id"
32         />
33       </div>
34
35       <div class="txt_field">
36         <br />
37         <label>Full Name</label>
38         <input type="text" required id="lect_name" name="lect_name" />
39         <span></span>
40       </div>
41
42       <br />
43       <div class="txt_field">
44         <br />
45         <label>Email</label>
46         <input type="email" required id="lect_email" name="lect_email" />
47         <span></span>
48       </div>
49
50       <br />
51       <div class="txt_field">
52         <br />
53         <label>Address</label>
54         <input type="text" required id="lect_address" name="lect_address" />
55         <span></span>
56       </div>
57

```

```

57
58     <br />
59     <div class="txt_field">
60         <br />
61         <label>Phone Number</label>
62         <input type="text" required id="lect_phone" name="lect_phone" />
63         <span></span>
64     </div>
65
66     <div class="txt_field">
67         <br />
68         <label>Password</label>
69         <input type="password" required id="lect_pass" name="lect_pass" />
70         <span></span>
71     </div>
72
73     <br />
74
75     <input type="submit" value="Sign Up" />
76     <br />
77     <p></p>
78     <div class="signup_link"></div>
79 </form>
80 </div>
81 </body>
82 </html>
83

```

Figure 1.8 Code for Sign Up Lecture Page

2.2.2 signupConnectLecturer.jsp

```
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3  %
4  PreparedStatement stmt = null;
5  try
6  {
7      Class.forName("oracle.jdbc.driver.OracleDriver");
8      Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "F207798", "207798");
9      Statement st = conn.createStatement();
10
11     Integer lect_id=Integer.parseInt(request.getParameter("lect_id"));
12     String lect_name=request.getParameter("lect_name");
13     String lect_email=request.getParameter("lect_email");
14     String lect_address=request.getParameter("lect_address");
15     String lect_phone=request.getParameter("lect_phone");
16     String lect_pass=request.getParameter("lect_pass");
17
18     stmt=conn.prepareStatement("insert into lecturer values(?,?,?,?,?,?)");
19     stmt.clearParameters();
20     stmt.setInt(1,lect_id);
21     stmt.setString(2,lect_name);
22     stmt.setString(3,lect_email);
23     stmt.setString(4,lect_address);
24     stmt.setString(5,lect_phone);
25     stmt.setString(6,lect_pass);
26
27     stmt.executeUpdate();
28     stmt.close();
29     conn.close();
30
31     request.getRequestDispatcher("Lectlogin.jsp").forward(request,response);
32
33 }
34 catch(Exception e)
35 {
36     out.print(e);
37     e.printStackTrace();
38 }
39 %
40
```

Figure 1.9 Code for SignupConnectLecturer.jsp

2.3 Login Page

Regarding the login function, we provide a login interface including lecturers and officials. As long as users with account passwords can log in to the system through their respective account passwords, in the login interface, the content that the user needs to enter includes: user id and password, the user only has Login is not achieved until all information is filled in and the login button is clicked. The login page will run to the instructor information page, and the member has successfully logged in.

2.3.1 Lecturer Login Page

Lectlogin.jsp redirect to lectvalidate.jsp for id and pass validation

```
lectvalidate.jsp  x  Lectlogin.jsp  x
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3
4  <!DOCTYPE html>
5  <HTML>
6  <TITLE>Lecturer Log In Page</TITLE>
7  <center>
8  <body>
9      <head>
10         <meta name="viewport" content="width=device-width, initial-scale=1.0">
11         <meta charset="utf-8">
12         <meta name="keywords" content="Grant Submission Monitoring System">
13         <meta name="description" content="">
14         <meta name="page_type" content="np-template-header-footer-from-plugin">
15         <title>Lecturer</title>
16         <link rel="stylesheet" href="lectstyle.css" media="screen">
17         <link rel="stylesheet" href="Lecturer.css" media="screen">
18         <link rel="stylesheet" type="text/css" href="loginstyle.css">
19         <link id="u-theme-google-font" rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto:100,100i,300,300i,400,400i,500,500i,700,700i,900,900i|Open+Sans:300,300i,400,400i,600,600i,700,700i,800,800i">
20
21
22
23         <script type="application/ld+json">{
24             "@context": "http://schema.org",
25             "@type": "Organization",
26             "name": ""
27         }</script>
28         <meta name="theme-color" content="#478ac9">
29         <meta property="og:title" content="Lecturer">
30         <meta property="og:type" content="website">
31     </head>
32     <body class="u-body"><header class="u-clearfix u-header u-header" id="sec-c666"><div class="
33     u-clearfix u-sheet u-valign-middle u-sheet-1">
34         <div class="u-clearfix u-expanded-width u-layout-wrap u-layout-wrap-1">
35             <div class="u-layout">
36                 <div class="u-layout-row">
37                     <div class="u-align-left u-container-style u-image u-layout-cell u-size-18 u-image-1"
38                         data-image-width="722" data-image-height="341">
39                         <div class="u-container-layout u-container-layout-1"></div>
40                     </div>
41                     <div class="u-container-style u-layout-cell u-size-42 u-layout-cell-2">
42                         <div class="u-container-layout u-container-layout-2">
43                             <h1 class="u-text u-title u-text-1">Grant Submission Monitoring System</h1>
44                         </div>
45                     </div>
46                 </div>
47             </div>
48         </div></header>
49         <hr style = "color:grey" class="dashed">
50         <h3 style = "color:darkblue;" >Lecturer Log In Page</h3>
51         <hr style = "color:grey" class="dashed">
```



```

52
53 <h1 style="font-size: x-large;"><b>Sign In</b><br></br></h1>
54
55
56 <table>
57 <form method="get" id="logindetail" action="lectvalidate.jsp">
58 <form NAME="main" ACTION="Lecturer.jsp" method="post">
59 <tr>
60 <td><h2 style="font-size: large;"><b>Lecturer ID: </b></h2></td>
61 <td>
62 <input type="text" name="lect_id" id="name" required>
63 </td>
64 </tr>
65 <tr><td><br></td></tr>
66
67 <tr>
68 <td><h2 style="font-size: large;"><b>Password: </b></h2></td></td>
69 <td>
70 <input type="password" name="lect_pass" id="pass" required>
71 </td>
72 </tr>
73
74 <tr><td><br></td></tr>
75
76 <td>
77 <input type="submit" value="Login">
78 </td>
79 </tr>
80 </form>
81 </form>
82
83 <tr><td><br></td></tr>
84 </a>
85 </td>
86 </tr>
87 </table>
88
89
90 </body>
91
92 </center>
93
94 </HTML>

```

Figure 2.3.1 Code for Lecturer Sign in Page

2.3.2 Lecturer Validate Page

```
lectvalidate.jsp      x      Lectlogin.jsp      x
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3  <meta charset="UTF-8">
4
5  <%
6
7      PreparedStatement stmt = null;
8      try
9      {
10
11          Class.forName("oracle.jdbc.driver.OracleDriver");
12          Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "
13              F207798" , "207798");
14          Statement st = conn.createStatement();
15
16          String id = request.getParameter("lect_id");
17          String password = request.getParameter("lect_pass");
18
19          stmt=conn.prepareStatement("SELECT * from lecturer where lect_id = ?");
20          stmt.setString(1, id);
21
22          if ((stmt.executeUpdate())> 0) {
23
24              ResultSet rs=stmt.executeQuery();
25              while(rs.next()){
26                  %>
27                  <!DOCTYPE html>
28                  <body>
29
30                      <script type="text/javascript">
31                      let testname = '<%=rs.getInt("lect_id")%>';
32                      let testname2 = '<%=id%>';
33                      let testpass = '<%=rs.getString("lect_pass")%>';
34                      let testpass2 = '<%=password%>';
35
36                      //console.log(testname === testname2)
37
38                      if (testname === testname2 && testpass === testpass2) {
39
40                          window.location='Lecturer.jsp?lect_id='+ '<%=rs.getInt("lect_id")%>' +'&lect_pass='+ '
41                              <%=rs.getString("lect_pass")%>';
42                      }
43                      else {
44                          alert("Your password is wrong!");
45                          window.location='Lectlogin.jsp';
46                      }
47                      //else {
48                          //response.sendRedirect("GrantForm.jsp");
49                      //}
50                      </script>
51
52                  </body>
53                  <%
54              }
55          }else {
```

```

54      %>
55      <!DOCTYPE html>
56      <body>
57          <script type="text/javascript">
58              alert("Your Lecturer ID is wrong!");
59              window.location='Lectlogin.jsp';
60          </script>
61      </body>
62  <%
63  }
64  //Run the query
65  //statement.executeUpdate();
66  //response.sendRedirect("OfficerPage.jsp");
67  }
68  catch(Exception e)
69  {
70      out.print(e);
71      e.printStackTrace();
72  }
73
74  %>
75

```

Figure 2.3.2 Code for Lecturer Validate Page

2.3.3 Officer Login Page

Offlogin.jsp redirect to offvalidate.jsp for id and pass validation

```
Offlogin.jsp    offvalidate.jsp

1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3
4  <!DOCTYPE html>
5  <HTML>
6  <TITLE>Officer Log In Page</TITLE>
7  <center>
8  <body>
9    <head>
10     <title>Lecturer</title>
11     <link rel="stylesheet" href="lectstyle.css" media="screen">
12     <link rel="stylesheet" href="Lecturer.css" media="screen">
13     <link rel="stylesheet" type="text/css" href="loginstyle.css">
14
15     <link id="u-theme-google-font" rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto:100,100i,300,300i,400,400i,500,500i,700,700i,900,900i|Open+Sans:300,300i,400,400i,600,600i,700,700i,800,800i">
16
17
18   </head>
19   <body class="u-body"><header class="u-clearfix u-header u-header" id="sec-c666"><div class="
20     u-clearfix u-sheet u-valign-middle u-sheet-1">
21     <div class="u-clearfix u-expanded-width u-layout-wrap u-layout-wrap-1">
22       <div class="u-layout">
23         <div class="u-layout-row">
24           <div class="u-align-left u-container-style u-image u-layout-cell u-size-18 u-image-1"
25             data-image-width="722" data-image-height="341">
26             <div class="u-container-layout u-container-layout-1"></div>
27           </div>
28           <div class="u-container-style u-layout-cell u-size-42 u-layout-cell-2">
29             <div class="u-container-layout u-container-layout-2">
30               <h1 class="u-text u-title u-text-1">Grant Submission Monitoring System</h1>
31             </div>
32           </div>
33         </div>
34       </div>
35     </div></header>
36
37     <hr style = "color:grey" class="dashed">
38     <h3 style = "color:darkblue;" >Officer Log In Page</h3>
39     <hr style = "color:grey" class="dashed">
40
41     <h1 style="font-size: x-Large;"><b>Sign In</b><br><br></h1>
42
43     <table>
44       <form method="get" id="logindetail" action="offvalidate.jsp">
45       <form NAME="main" ACTION="Lecturer.jsp" method="post">
46       <tr>
47         <td><h2 style="font-size: large;"><b>Officer ID: </b></h2></td>
48         <td>
49           <Input type="text" name="officer_id" id="name" required>
50         </td>
51       </tr>
```

```

52 <tr><td><br></td></tr>
53
54 <tr>
55 <td><h2 style="font-size: large;"><b>Password: </b></h2></td></td>
56 <td>
57 <Input type="password" name="officer_pass" id="pass" required>
58 </td>
59 </tr>
60
61 <tr><td><br></td></tr>
62
63 <td>
64 <Input type="submit" value="Login">
65 </td>
66 </tr>
67 </table>
68 </form>
69 </form>
70
71 <tr><td><br></td></tr>
72 </a>
73 </td>
74 </tr>
75 </table>
76
77
78 </body>
79
80 </center>
81
82 </HTML>

```

Figure 2.3.3 Code for Officier login Page

2.3.4 Officer Validate Page

```
Offlogin.jsp  x  offvalidate.jsp  x
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3  <meta charset="UTF-8">
4
5  <%
6
7  PreparedStatement stmt = null;
8  try
9  {
10
11  Class.forName("oracle.jdbc.driver.OracleDriver");
12  Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "
13  F207798" , "207798");
14  Statement st = conn.createStatement();
15
16  String id = request.getParameter("officer_id");
17  String password = request.getParameter("officer_pass");
18
19  stmt=conn.prepareStatement("SELECT * from Officer where officer_id = ?");
20  stmt.setString(1, id);
21
22  if ((stmt.executeUpdate())> 0) {
23
24      ResultSet rs=stmt.executeQuery();
25      while(rs.next()){
26          %>
27          <!DOCTYPE html>
28          <body>
29
30              <script type="text/javascript">
31              let testname = '<%=rs.getString("officer_id")%>';
32              let testname2 = '<%=id%>';
33              let testpass = '<%=rs.getString("officer_pass")%>';
34              let testpass2 = '<%=password%>';
35
36              //console.log(testname === testname2)
37
38              if (testname === testname2 && testpass === testpass2) {
39
40                  window.location='OfficerPage.jsp?officer_id='+ '<%=rs.getString("officer_id")%>' +
41                  &officer_pass='+ '<%=rs.getString("officer_pass")%>';
42              }
43              else {
44                  alert("Your password is wrong!");
45                  window.location='Offlogin.jsp';
46              }
47              //else {
48              //response.sendRedirect("GrantForm.jsp");
49              //}
50              </script>
51
52          </body>
53          <%
54      }
55  }else {
```

```

54      %>
55      <!DOCTYPE html>
56      <body>
57          <script type="text/javascript">
58              alert("Your Officer ID is wrong!");
59              window.location='Offlogin.jsp';
60          </script>
61      </body>
62  <%
63  }
64  //Run the query
65  //statement.executeUpdate();
66  //response.sendRedirect("OfficerPage.jsp");
67  }
68  catch(Exception e)
69  {
70      out.print(e);
71      e.printStackTrace();
72  }
73
74  %>

```

Figure 2.3.4 Code for Officier Validate Page

2.4 Lecturer Page

Lecturer.jsp will be redirected to confirmsub.jsp (confirmation grant submission)

2.4.1 Lecturer.jsp

Regarding the lecturer page, when the ID and password match those in the database, the user can successfully log in to the lecturer page, and in the lecturer page we can see data about the lecturer, including employee ID, full name, address, email address and telephone number ,

There are three (3) sections at the bottom of the Instructor page titled "Progress 1", "Progress 2" and "Closed Project". Instructors can add or update their grant submissions in the next progression. All documents entered in this section will be available for inspection by officers.


```

Lecturer.jsp      x      confirmsub.jsp      x
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3
4  <!DOCTYPE html>
5  <html style="font-size: 16px;">
6      <head>
7          <title>Lecturer</title>
8          <link rel="stylesheet" type="text/css" href="loginstyle.css">
9          <link rel="stylesheet" href="lectstyle.css" media="screen">
10         <link rel="stylesheet" href="Lecturer.css" media="screen">
11         <script class="u-script" type="text/javascript" src="jquery.js" defer=""></script>
12         <script class="u-script" type="text/javascript" src="nicepage.js" defer=""></script>
13         <link id="u-theme-google-font" rel="stylesheet" href="https://fonts.googleapis.com/css?family=
Roboto:100,100i,300,300i,400,400i,500,500i,700,700i,900,900i|Open+Sans:300,300i,400,400i,600,6
00i,700,700i,800,800i">
14
15     </head>
16     <body class="u-body"><header class="u-clearfix u-header u-header" id="sec-c666"><div class="
u-clearfix u-sheet u-valign-middle u-sheet-1">
17         <div class="u-clearfix u-expanded-width u-layout-wrap u-layout-wrap-1">
18             <div class="u-layout">
19                 <div class="u-layout-row">
20                     <div class="u-align-left u-container-style u-image u-layout-cell u-size-18 u-image-1
" data-image-width="722" data-image-height="341">
21                         <div class="u-container-layout u-container-layout-1"></div>
22                     </div>
23                     <div class="u-container-style u-layout-cell u-size-42 u-layout-cell-2">
24                         <div class="u-container-layout u-container-layout-2">
25                             <h1 class="u-text u-title u-text-1">Lecturer Grant Submission</h1>
26                             </div>
27                         </div>
28                     </div>
29                 </div>
30             </div>
31         </div></header>
32         <section class="u-clearfix u-section-1" id="sec-db2b">
33             <div class="u-clearfix u-sheet u-sheet-1">
34                 <div class="u-container-layout u-container-layout-2">
35                     <h2 class="u-text u-title u-text-1"><b>Lecturer's Information</b></h2>
36                 </div>
37             </div>
38         <%
PreparedStatement stmt = null;
39         try
40         {
41             Class.forName("oracle.jdbc.driver.OracleDriver");
42             Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "
F207798", "207798");
43             //Statement st =conn.createStatement();
44
45             Integer lect_id=Integer.parseInt(request.getParameter("lect_id"));
46             String lect_pass=request.getParameter("lect_pass");
47
48             stmt=conn.prepareStatement("SELECT * from lecturer where lect_id = ? AND lect_pass = ?");
49             stmt.setInt(1, lect_id);
50             stmt.setString(2, lect_pass);

```

```

51
52     ResultSet rs=stmt.executeQuery();
53     while(rs.next()){
54 %>
55     <style>table {
56     font-family: arial, sans-serif;
57     border-collapse: separate;
58     width: 100%;
59     max-height: 100%;
60     }
61
62     td, th {
63     border: 1px solid #dddddd;
64     text-align: left;
65     padding: 8px;
66     }
67
68     tr:nth-child(even) {
69     background-color: #dddddd;
70     }</style>
71     <center><table>
72         <tr>
73             <td><p style = "font-size: x-Large;"><b>Lecturer ID: </b></p></td>
74             <td><p style = "font-size: x-Large;"><%=rs.getInt("lect_id")%></p></td>
75         </tr>
76         <tr>
77             <td><p style = "font-size: x-Large;"><b>Full Name: </b></p></td>
78             <td><p style = "font-size: x-Large;"><%=rs.getString("lect_name")%></p></td>
79         </tr>
80         <tr>
81             <td><p style = "font-size: x-Large;"><b>Email: </b></p></td>
82             <td><p style = "font-size: x-Large;"><%=rs.getString("lect_email")%></p></td>
83         </tr>
84         <tr>
85             <td><p style = "font-size: x-Large;"><b>Address: </b></p></td>
86             <td><p style = "font-size: x-Large;"><%=rs.getString("lect_address")%></p></td>
87         </tr>
88             <td><p style = "font-size: x-Large;"><b>Phone No.: </b></p></td>
89             <td><p style = "font-size: x-Large;"><%=rs.getString("lect_phone")%></p></td>
90         </tr>
91     </table>
92 </center>
93 <%
94     }
95     rs.close();
96     stmt.close();
97     conn.close();
98     }
99     catch(Exception e){
100         out.print(e);
101         e.printStackTrace();
102     }
103 %>
104 <div class="u-container-layout u-container-layout-2">

```

```

105     <h2 class="u-text u-title u-text-1"><b>Lecturer's Grant</b></h2>
106 </div>
107 <%
108 PreparedStatement stmt2 = null;
109 try
110 {
111     Class.forName("oracle.jdbc.driver.OracleDriver");
112     Connection conn2 = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm",
113         F207798", "207798");
114     //Statement st =conn.createStatement();
115
116     Integer lect_id=Integer.parseInt(request.getParameter("lect_id"));
117
118     stmt2=conn2.prepareStatement("SELECT * from resgrant where lect_id = ?");
119     stmt2.setInt(1, lect_id);
120
121     ResultSet rs2=stmt2.executeQuery();
122     while(rs2.next()){
123 %>
124 <style>table {
125 font-family: arial, sans-serif;
126 border-collapse: separate;
127 width: 100%;
128 max-height: 100%;
129 }
130
131 td, th {
132 border: 1px solid #dddddd;
133 text-align: left;
134 padding: 8px;
135 }
136
137 tr:nth-child(even) {
138 background-color: #dddddd;
139 }</style>
140 <center>
141 <table>
142 <tr>
143 <td><p style = "font-size: x-large;"><b>Grant ID: </b></p></td>
144 <td><p style = "font-size: x-large;"><%=rs2.getInt("grant_id")%></p></td>
145 </tr>
146 <tr>
147 <td><p style = "font-size: x-large;"><b>Type: </b></p></td>
148 <td><p style = "font-size: x-large;"><%=rs2.getString("type")%></p></td>
149 </tr>
150 <tr>
151 <td><p style = "font-size: x-large;"><b>Due Date: </b></p></td>
152 <td><p style = "font-size: x-large;"><%=rs2.getString("due_date")%></p></td>
153 </tr>
154 <tr>
155 <td><p style = "font-size: x-large;"><b>Progress: </b></p></td>
156 <td><p style = "font-size: x-large;"><%=rs2.getInt("progress")%></p></td>
157 </tr>
158 </table>

```



```

158     </center>
159
160     <%
161     }
162     rs2.close();
163     stmt2.close();
164     conn2.close();
165     }
166     catch(Exception e){
167         out.print(e);
168         e.printStackTrace();
169     }
170     %>
171 </div>
172 </section>
173 <section class="u-clearfix u-section-2" id="sec-155b">
174 <style> div1 {
175     border: 5px outset red;
176     background-color: lightblue;
177     text-align: center;
178 }</style>
179 <div class="u-clearfix u-sheet u-valign-top u-sheet-1">
180     <div1 class="u-clearfix u-expanded-width u-layout-wrap u-layout-wrap-1">
181         <div class="u-layout">
182             <div class="u-layout-row">
183                 <div class="u-container-style u-layout-cell u-size-20 u-layout-cell-1">
184                     <div class="u-container-layout u-valign-top u-container-layout-1">
185                         <h3 class="u-text u-text-default u-text-1"><b>Progress 1</b><br></h3>
186                         <h2 style="font-size: Large;">Please insert your Progress 1 file: </h2>
187                         <form action="confirmsub.jsp">
188                             <label for="myfile">Select files:</label>
189                             <input type="file" id="myfile" name="myfile" multiple><br></br>
190                             <input type="submit" onclick="return confirm('Are you sure?')">
191                         </form>
192                     </div>
193                 </div>
194             </div>
195             <div class="u-container-style u-layout-cell u-size-20 u-layout-cell-2">
196                 <div class="u-container-layout u-valign-top u-container-layout-2">
197                     <h3 class="u-text u-text-default u-text-2"><b>Progress 2</b><br></h3>
198                     <h2 style="font-size: Large;">Please insert your Progress 2 file: </h2>
199                     <form action="confirmsub.jsp">
200                         <label for="myfile">Select files:</label>
201                         <input type="file" id="myfile" name="myfile" multiple><br></br>
202                         <input type="submit" onclick="return confirm('Are you sure?')">
203                     </form>
204                     </div>
205                 </div>
206             </div>
207             <div class="u-container-style u-layout-cell u-size-20 u-layout-cell-3">
208                 <div class="u-container-layout u-valign-top u-container-layout-3">
209                     <h3 class="u-text u-text-default u-text-3"><b>Close Project</b></h3><br></br>
210                     <h2 style="font-size: Large;">Please insert your Close Project file: </h2>

```



```

212         <form action="confirmsub.jsp">
213             <label for="myfile">Select files:</label>
214             <input type="file" id="myfile" name="myfile" multiple><br></br>
215             <input type="submit" onclick="return confirm('Are you sure?')">
216         </form>
217     </div>
218 </div>
219 </div>
220 </div>
221 </div>
222 </div>
223 </section>
224 </body>
225 </html>

```

Figuree 2.4.1 Lecutrer Page

2.4.2 Lecturer Confirm Submission Page

confirmsub.jsp will be redirected to progvalidate.jsp for pass validation

```

1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3
4  <html>
5      <link rel="stylesheet" type="text/css" href="bgstyle.css">
6      <center><head>
7          <h1 style="font-size": xx-large;>Insert your password to submit</h1>
8      </head>
9      <body>
10         <form method="get" id="logindetail" action="progvalidate.jsp">
11             <form action="progressdone.jsp">
12                 <center><table>
13                     <tr>
14                         <td><h2>Password: </h3></td>
15                         <td><input type="password" name="lect_pass" id="password" value="" required /></td>
16                     </tr>
17                     <tr><br></tr>
18                     <tr>
19                         <td><input type="submit" onclick="return confirm('Are you sure?')"></td>
20                     </tr>
21                 </table></center>
22             </form>
23         </form>
24     </body></h1></center>
25 </html>

```

Figure 2.4.2 Lecturer Confirm Submission Page

2.4.3 Progress Validate Page

progvalidate.jsp (will be redirected to progressdone.jsp for Progress Updated notifications)

```
confirmsub.jsp x progvalidate.jsp x
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3  <meta charset="UTF-8">
4
5  <%
6
7  PreparedStatement stmt = null;
8  try
9  {
10
11  Class.forName("oracle.jdbc.driver.OracleDriver");
12  Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "
13  F207798" , "207798");
14  Statement st = conn.createStatement();
15
16  String password = request.getParameter("lect_pass");
17
18  stmt=conn.prepareStatement("SELECT * from lecturer where lect_pass = ?");
19  stmt.setString(1, password);
20
21  if ((stmt.executeUpdate())> 0) {
22
23      ResultSet rs=stmt.executeQuery();
24      while(rs.next()){
25          %>
26          <!DOCTYPE html>
27          <body>
28
29              <script type="text/javascript">
30                  let testpass = '<%=rs.getString("lect_pass")%>';
31                  let testpass2 = '<%=password%>';
32
33                  //console.log(testname === testname2)
34
35                  if (testpass === testpass2) {
36                      window.location='progressdone.jsp?lect_pass='+ '<%=rs.getString("lect_pass")%>';
37                  }
38                  else {
39                      alert("Your password is wrong!");
40                      window.location='Lectlogin.jsp';
41                  }
42
43              </script>
44
45          </body>
46          <%
47          }
48      }else {
49          %>
50          <!DOCTYPE html>
51          <body>
52              <script type="text/javascript">
53                  alert("Your Password is wrong!");
54                  window.location='Lectlogin.jsp';
55              </script>
56          </body>
```

```

55     <%
56     }
57     //Run the query
58     //statement.executeUpdate();
59     //response.sendRedirect("OfficerPage.jsp");
60     }
61     catch(Exception e)
62     {
63     out.print(e);
64     e.printStackTrace();
65     }
66
67     %>
68

```

Figure 2.4.3 Progress Validate Page

2.4.4 Progress Done Page

Progressdone.jsp (SQL Table ResGrant Column Progress UPDATED)

```

<<  confirmsub.jsp  x  progvalidate.jsp  x  progressdone.jsp  x
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
2  <%@page import="java.sql.*,java.util.*"%>
3
4  <html>
5      <link rel="stylesheet" type="text/css" href="bgstyle.css">
6      <center>
7      <head>
8          <h1 style="font-size": xx-large;>Progress Updated!</h1>
9      </head>
10     <body>
11         <%
12         PreparedStatement stmt = null;
13         try
14         {
15             Class.forName("oracle.jdbc.driver.OracleDriver");
16             Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "
17                 F207798", "207798");
18
19             String lect_pass=request.getParameter("lect_pass");
20
21             stmt=conn.prepareStatement("update resgrant set progress = progress + 1 where lect_id = (select
22                 lect_id from lecturer where lect_pass = ?)");
23             stmt.setString(1, lect_pass);
24
25             stmt.executeUpdate();
26         }
27         catch(Exception e){
28             out.print(e);
29             e.printStackTrace();
30         }
31         %>
32
33         <form action="welcome.jsp">
34             <input type="Submit" value="Return">
35         </form>
36     </body>
37 </center>
38 </html>

```

2.5 Officer Page

Only officers who exist in the database can access the officers page. After the user enters the correct login password on the login page, the system will transfer him to the official page.

In the Officials page, our system will provide full funding information, including funding ID, instructor ID, funding owner, type, deadline, and progress.

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<%@page import="java.sql.*,java.util.*"%>
<!DOCTYPE html>
<link rel="stylesheet" type="text/css" href="loginstyle.css">
<html style="font-size: 16px;">
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>OFFICER'S PAGE</title>
    <link rel="stylesheet" href="Projects.css" >
    <link rel="stylesheet" href="OfficerPagee.css" >
</head>

<body>
    <section class="header" >
        <nav>
            <a href="https://upm.edu.my/" class="square" ></a>
            <div class="nav-links">
                <h1 class="text">
                    <span style="font-size: 2.25rem;">Grant Submission Monitoring System</span>
                </h1>
            </div>
        </nav>
    </section>
    <section class="content-table">
        <div class="search">
            <form action="" method="get">
                <input type="text" class="form-control" name="q" placeholder="Search here..." />
            </form>
            <form action="OfficerPage.jsp">
                <button type="submit">Reset</button>
            </form>
        </div>
```



```

<table>
  <thead>
    <tr>
      <th onclick="sortColumnT('grantid')">Grant ID</th>
      <th onclick="sortColumnT('lectid')">Lecturer ID</th>
      <th onclick="sortColumnN('name')">Grant Owner</th>
      <th onclick="sortColumnT('type')">Type</th>
      <th onclick="sortColumnT('due')">Due Date</th>
      <th onclick="sortColumnT('progress')">Progress</th>
    </tr>
  </thead>
  <tbody id="tableData"></tbody>
</table>
<br><br>
<input type="submit" value="Edit"
  onclick="window.location='EditGrantForm.jsp';" />
<br><br>
<input type="submit" value="Add"
  onclick="window.location='GrantForm.jsp';" />
</section>
<script type="text/javascript">
let i = 0;
const dataA = [];
const dataB = [];
const dataG = [];
const dataT = [];
const dataU = [];
const dataK = [];
const dataL = [];

```

```

<%
PreparedStatement stmt = null;
try
{
    Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "F207798" , "207798");
    Statement st = conn.createStatement();
    String query = request.getParameter("q");
    String data;
    if(query != null){
        data = "select * from resgrant where LOWER(grant_owner) like '%" + query + "%' or lect_id like '%" + query + "%' or LOWER(type) like '%" + query + "%' or grant_id like '%" + query + "%'";
    }
    else {
        data = "select * from resgrant";
    }
    ResultSet rs =st.executeQuery(data);

    while(rs.next())
    {
        %>
        dataG[i] = '<%=rs.getString("grant_owner")%>' ;
        dataT[i] = '<%=rs.getString("type")%>' ;
        dataU[i] = '<%=rs.getString("grant_id")%>' ;
        dataA[i] = '<%=rs.getString("due_date")%>'
        dataB[i] = '<%=rs.getString("progress")%>'
        dataL[i] = '<%=rs.getString("lect_id")%>'
        dataK[i] = 'Delete'
        console.log(dataG)
        console.log(i)
        i++;
        <%
    }
} catch (Exception e)
{
    e.printStackTrace();
}
%>

```

```

%>
</script>
<script>

    let sortDirection = false;
    let grantData = [];
    let z = 0;
    //let grantData = [];
    //grantData[0] = {name: 'azman', type: 'E'};
    //grantData[1] = {name: 'azman1', type: 'F'};
    for(let j=0; j < dataG.length; j++) {
        grantData[j] = {grantid: dataU[j], name: dataG[j], type: dataT[j], due: dataA[j], progress: dataB[j], Delete: dataU[j], lectid: dataL[j]};
    }
    console.log(grantData)

    window.onload = () => {
        loadTableData(grantData);
    };

    function loadTableData(grantData) {
        const tableBody = document.getElementById('tableData');
        let dataHtml = '';

        for(let grant of grantData) {
            dataHtml += `<tr><td>` + grant.grantid + `</td><td>` + grant.lectid + `</td><td><a href="lectinfo.jsp?id=` + grant.lectid + `">` + grant.name
                + `</td><td>` + grant.type + `</td><td>` + grant.due + `</td><td>` + grant.progress + `</td><td><a href="delete.jsp?id=` + grant.Delete +
                `"` + `Delete` + `</td></tr>`;
            z++;
        }
        console.log(dataHtml)

        tableBody.innerHTML = dataHtml;
    }

```

```

function sortColumnN(columnName) {
    const dataType = typeof grantData[0][columnName];
    sortDirection = !sortDirection;

    switch(dataType) {
        case 'string' :
            sortNameColumn(sortDirection, columnName);
            break;
    }
    loadTableData(grantData);
}

function sortColumnT(columnName) {
    const dataType = typeof grantData[0][columnName];
    sortDirection = !sortDirection;

    switch(dataType) {
        case 'string' :
            sortNameColumn(sortDirection, columnName);
            break;
    }
    loadTableData(grantData);
}

function sortNameColumn(sort, columnName) {
    grantData = grantData.sort((p1,p2) => {
        return sort ? p1[columnName] < p2[columnName] ? -1:1 : p2[columnName] > p1[columnName] ? 1:-1
    });
}
</script>
</body>
</html>

```

Figure 2.5.1 Code for Officer Page

Clicking the add button in officerpage.jsp would redirect to GrantForm.jsp (For grant adding process)

2.5.2 Grant Form Page

```
<table>
  <thead>
    <tr>
      <th onclick="sortColumnT('grantid')">Grant ID</th>
      <th onclick="sortColumnT('lectid')">Lecturer ID</th>
      <th onclick="sortColumnN('name')">Grant Owner</th>
      <th onclick="sortColumnT('type')">Type</th>
      <th onclick="sortColumnT('due')">Due Date</th>
      <th onclick="sortColumnT('progress')">Progress</th>
    </tr>
  </thead>
  <tbody id="tableData"></tbody>
</table>
<br><br>
<input type="submit" value="Edit"
  onclick="window.location='EditGrantForm.jsp';" />
<br><br>
<input type="submit" value="Add"
  onclick="window.location='GrantForm.jsp';" />
</section>
<script type="text/javascript">
let i = 0;
const dataA = [];
const dataB = [];
const dataG = [];
const dataT = [];
const dataU = [];
const dataK = [];
const dataL = [];
```



```

        <div class="u-text u-title" style="border: 1px solid black; padding: 5px; margin: 5px auto; width: 80%; text-align: center;">
            </div>
        </div>
    </div>
</div>
</div>
</div></header></center>
<html><
<center>
<body>
    <form method="post" action="insert.jsp">
        Grant Id : <br>
        <input type="text" name="grant_id">
        <br><br>
        Lecturer Id : <br>
        <input type="text" name="lect_id">
        <br><br>
        Type : <br>
        <input type="text" name="type">
        <br><br>
        Begin Date : <br>
        <input type="date" name="begin_date">
        <br><br>
        Due date : <br>
        <input type="date" name="due_date">
        <br><br>
        Progress : <br>
        <input type="text" name="progress">
        <br><br>
        <input type="submit">
    </form>
</body>
</body>
</center>
</html>

```

Figure 2.5.2 Code for Grant Form Page

Clicking the edit button in officerpage.jsp will redirect to EditGrantForm.jsp (For grant editing purpose)

2.5.3 Edit Grant Form Pagee

```
<!DOCTYPE html>
<html style="font-size: 16px;">
  <head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta charset="utf-8">
    <meta name="keywords" content="Grant Submission Monitoring System">
    <meta name="description" content="">
    <meta name="page_type" content="np-template-header-footer-from-plugin">
    <title>Lecturer</title>
    <link rel="stylesheet" type="text/css" href="loginstyle.css">
    <link rel="stylesheet" href="nicepage.css" media="screen">
    <link rel="stylesheet" href="Lecturer.css" media="screen">
    <script class="u-script" type="text/javascript" src="jquery.js" defer=""></script>
    <script class="u-script" type="text/javascript" src="nicepage.js" defer=""></script>
    <meta name="generator" content="Nicepage 4.2.6, nicepage.com">
    <link id="u-theme-google-font" rel="stylesheet" href="https://fonts.googleapis.com/
css?family=Roboto:100,100i,300,300i,400,400i,500,500i,700,700i,900,900i|Open+Sans:300,300i,400,400i,600,600i,700,700i,800,800i">

    <script type="application/ld+json">{
      "@context": "http://schema.org",
      "@type": "Organization",
      "name": ""
    }</script>
    <meta name="theme-color" content="#478ac9">
    <meta property="og:title" content="Lecturer">
    <meta property="og:type" content="website">
  </head>
  <center>
  <body class="u-body"><header class="u-clearfix u-header u-header" id="sec-c666"><div class="u-clearfix u-sheet u-valign-middle u-sheet-1">
    <div class="u-clearfix u-expanded-width u-layout-wrap u-layout-wrap-1">
      <div class="u-layout">
        <div class="u-layout-row">
          <div class="u-align-left u-container-style u-image u-layout-cell u-size-18 u-image-1" data-image-width="722" data-image-height="341">
            <div class="u-container-layout u-container-layout-1"></div>
          </div>
          <div class="u-container-style u-layout-cell u-size-42 u-layout-cell-2">
```

```

        <div class="u-container-layout u-container-layout-2">
            <h1 class="u-text u-title u-text-1">Update Grant Information</h1>
        </div>
    </div>
</div>
</div>
</div>
</div>
</div></header></center>
<html>
<center>
<body>
    <form method="post" action="update.jsp">
        <b>Grant Id : </b><br>
        <input type="text" name="grant_id">
        <br><br>
        <b>Type : </b><br>
        <input type="text" name="type">
        <br><br>
        <b>Due_date : </b><br>
        <input type="date" name="due_date">
        <br><br>
        <input type="submit" value="Update">
    </form>
</body>
</center>
</body>
</html>

```

Figure 2.5.3 Edit Grant Form Page

Clicking the lecturer's name will redirect to lectinfo.jsp (To receive lecturer's information)

2.5.4 Lecturer Information Page

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<%@page import="java.sql.*,java.util.*"%>

<!DOCTYPE html>
<html style="font-size: 16px;">
<head>
<title>Lecturer</title>
<link rel="stylesheet" type="text/css" href="loginstyle.css">
<link rel="stylesheet" href="lectstyle.css" media="screen">
<link rel="stylesheet" href="Lecturer.css" media="screen">
<script class="u-script" type="text/javascript" src="jquery.js" defer=""></script>
<script class="u-script" type="text/javascript" src="nicepage.js" defer=""></script>
<link id="u-theme-google-font" rel="stylesheet" href="https://fonts.googleapis.com/
css?family=Roboto:100,100i,300,300i,400,400i,500,500i,700,700i,900,900i|Open+Sans:300,300i,400,400i,600,600i,700,700i,800,800i">

</head>
<body class="u-body"><header class="u-clearfix u-header u-header" id="sec-c666"><div class="u-clearfix u-sheet u-valign-middle u-sheet-1">
<div class="u-clearfix u-expanded-width u-layout-wrap u-layout-wrap-1">
<div class="u-layout">
<div class="u-layout-row">
<div class="u-align-left u-container-style u-image u-layout-cell u-size-18 u-image-1" data-image-width="722" data-image-height="341">
<div class="u-container-layout u-container-layout-1"></div>
</div>
<div class="u-container-style u-layout-cell u-size-42 u-layout-cell-2">
<div class="u-container-layout u-container-layout-2">
<h1 class="u-text u-title u-text-1">Lecturer Grant Submission</h1>
</div>
</div>
</div>
</div>
</div></header>
<section class="u-clearfix u-section-1" id="sec-db2b">
<div class="u-clearfix u-sheet u-sheet-1">
<div class="u-container-layout u-container-layout-2">
<h2 class="u-text u-title u-text-1">Lecturer's Information</h2>
</div>
</div>
```

```
<%
PreparedStatement stmt = null;
try
{
Class.forName("oracle.jdbc.driver.OracleDriver");
Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "F207798", "207798");
//Statement st =conn.createStatement();

Integer lect_id=Integer.parseInt(request.getParameter("id"));

stmt=conn.prepareStatement("SELECT * from lecturer where lect_id = ?");
stmt.setInt(1, lect_id);

ResultSet rs=stmt.executeQuery();
while(rs.next()){
%>
<style>table {
font-family: arial, sans-serif;
border-collapse: separate;
width: 100%;
max-height: 100%;
}

td, th {
border: 1px solid #dddddd;
text-align: left;
padding: 8px;
}

tr:nth-child(even) {
background-color: #dddddd;
}</style>
<center><table>
```



```

<center><table>
  <tr>
    <td><p style = "font-size: x-large;"><b>Lecturer ID: </b></p></td>
    <td><p style = "font-size: x-large;"><%=rs.getInt("lect_id")%></p></td>
  </tr>
  <tr>
    <td><p style = "font-size: x-large;"><b>Full Name: </b></p></td>
    <td><p style = "font-size: x-large;"><%=rs.getString("lect_name")%></p></td>
  </tr>
  <tr>
    <td><p style = "font-size: x-large;"><b>Email: </b></p></td>
    <td><p style = "font-size: x-large;"><%=rs.getString("lect_email")%></p></td>
  </tr>
  <tr>
    <td><p style = "font-size: x-large;"><b>Address: </b></p></td>
    <td><p style = "font-size: x-large;"><%=rs.getString("lect_address")%></p></td>
  </tr>
  <tr>
    <td><p style = "font-size: x-large;"><b>Phone No.: </b></p></td>
    <td><p style = "font-size: x-large;"><%=rs.getString("lect_phone")%></p></td>
  </tr>
</table>
</center>
<%
  }
  rs.close();
  stmt.close();
  conn.close();
}
catch(Exception e){
  out.print(e);
  e.printStackTrace();
}
%>
</div>
<br><br><br>
</section>
</body>
</html>

```

Figure 2.5.5 Lecturer Information Page

Clicking the delete button would redirect to delete.jsp (For deleting the grant data in the database.

2.5.6 Delete Record Page

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<%@page import="java.sql.*,java.util.*"%>

<%

PreparedStatement statement = null;
try
{

Class.forName("oracle.jdbc.driver.OracleDriver");
Connection conn = DriverManager.getConnection("jdbc:oracle:thin:@119.40.117.30:1521:fsktm", "F207798" , "207798");
Statement st = conn.createStatement();

    String id=request.getParameter("id");

    statement=conn.prepareStatement("delete from resgrant where grant_id = ?");
    statement.clearParameters();
    statement.setString(1,id);

//Run the query
statement.executeUpdate();
response.sendRedirect("OfficerPage.jsp");
}
catch(Exception e)
{
out.print(e);
e.printStackTrace();
}

%>
```

Figure 2.5.6 Delete Record Page

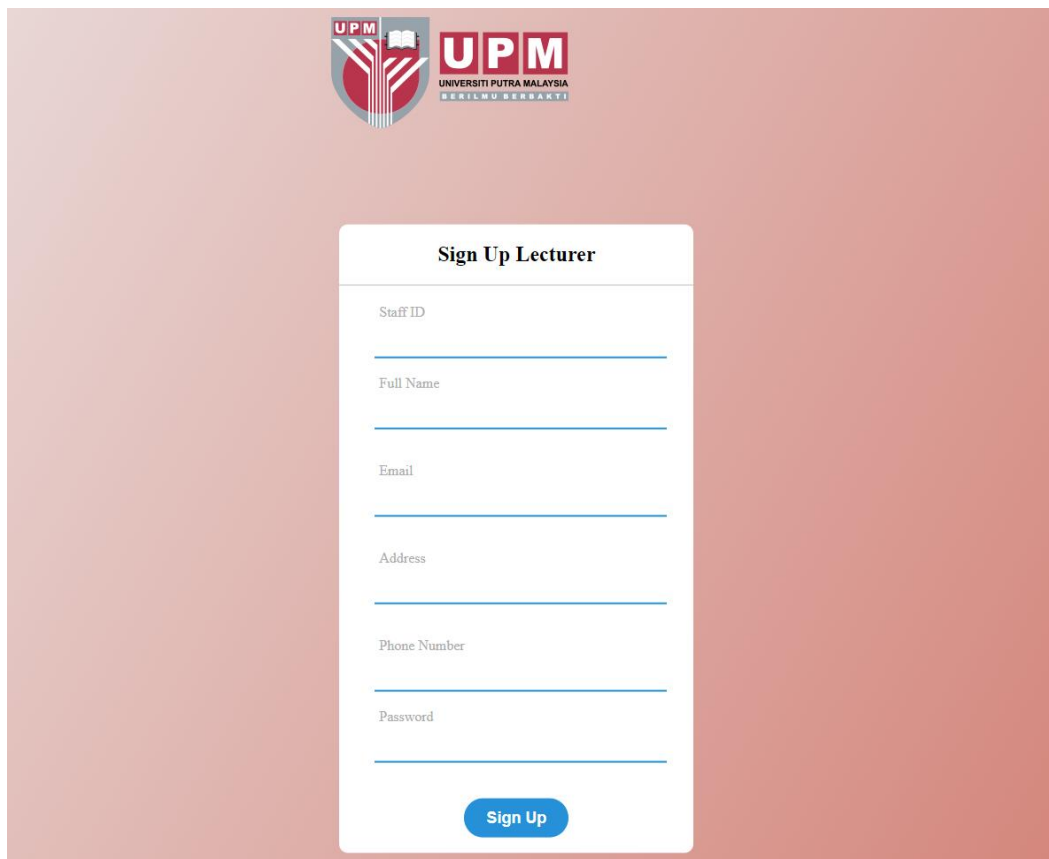
User Manual

product description

Grant submission monitoring system is designed for lectures and grant-related staff. Lecturers can use the system to view grant progress and submit documents required for the application stage. Officers can use this system to view and update the progress of grant applications, as well as view lectures personal information and escalate information to the dean after lectures have passed the submission deadline.

Product Features


Sign up



The screenshot displays the 'Sign Up Lecturer' form on a red background. At the top left is the UPM logo, which includes a shield with a book and the text 'UPM UNIVERSITI PUTRA MALAYSIA BERILMU BERBAKTI'. The form itself is a white card with the title 'Sign Up Lecturer' at the top. It contains seven input fields: 'Staff ID', 'Full Name', 'Email', 'Address', 'Phone Number', and 'Password'. Each field is preceded by its label and followed by a blue horizontal line. At the bottom of the form is a blue button with the text 'Sign Up' in white.

Log in

- Login as officer



UPM
UNIVERSITI PUTRA MALAYSIA
BERSILU BERSAKTI

Grant Submission Monitoring System

Officer Log In Page


Sign In

Officer ID:

Password:

[Login](#)

- Login as lecture



Grant Submission Monitoring System

Lecturer Log In Page


Sign In

Lecturer ID:

Password:

[Login](#)

Features for lecture



Lecturer Grant Submission

Lecturer's Information

Lecturer ID:	106
Full Name:	MUHAMMAD AFIQ BIN ZOLKARNAIN
Email:	afiq.zol2013@gmail.com
Address:	Melaka
Phone No.:	0138006570


Lecturer's Grant

Progress 1	Progress 2	Close Project
Please insert your Progress 1 file: Select files: <input type="button" value="Choose Files"/> No file chosen	Please insert your Progress 2 file: Select files: <input type="button" value="Choose Files"/> No file chosen	Please insert your Close Project file: Select files: <input type="button" value="Choose Files"/> No file chosen
<input type="button" value="Submit"/>	<input type="button" value="Submit"/>	<input type="button" value="Submit"/>

- Sign up
- Display personal information
- Check the progress of the grant
- Check the deadline of submission
- Submit the document for each progress

Features for officer

- Check the lectures' application
- Check the document of each progress



Grant Submission Monitoring System

Grant ID	Lecturer ID	Grant Owner	Type	Due Date	Progress
<input type="button" value="Edit"/>					
<input type="button" value="Add"/>					

- Update the progress of each grant

Insert Grant Information

Grant Id :

Lecturer Id :

Type :

Begin Date :

Due date :

Progress :

Update Grant Information

Grant Id :

Type :

Due date :

- Set the deadline for each progress
- Sort the grant
- Research the grant
- Delete / Add the grant

Lecturer's Information	
Lecturer ID:	102
Full Name:	MUHAMMAD AZMAN BIN HABEEB MOHAMED
Email:	azman@gmail.com
Address:	Jalan Nuri, Kota Damansara, Selangor
Phone No.:	01972491619

- Check the lectures' information

Instructions for use

1. Sign Up

Lecturers who first use this system need to sign up first.

2. Log in

Users can choose login as lecturer or login as officer, after inputting the ID and password that will jump to the corresponding interface.

3. Features for Lecture

These features only lectures can use.

4. Features for officer

These features only officers can use