

Submitted By:

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OBJECT ORIENTED PROGRAMMING
PROJECT REPORT



SEMESTER PROJECT REPORT

OBJECT OREINTED PROGRAMMING

COURSE INSTRUCTOR:
Dr, **SHER DAUDPOTA**

DATED: **JULY/22/2020**
SUKKUR IBA UNIVERSITY

Introduction:

As we all are well-known about the issues of our daily life. Which are mandatory to resolve. As year's passes many of new problems are arisen, but as there are problems there must be solution of that problems. World has grown too fast to resolve the problems. Many fields are developed to resolve the world issues. Computer science is one of the best fields to resolve the problems which are being faced by the departments, managements and school, collages. As the name suggests, the school management system database can be used to help improve the proper management of the school. Many of the schools will not be having the facility of storing this information that is very essential through the database system. It will be stored in some files and papers. This may also result in misplace of the files and the folders. So by implementing this school management system database project it can help to manage the school related information to be stored in a more secure way.

Project idea:

The project is most probably based on the database so it stores all the data of the school and also consume the less time. As we are in the era of technology where all the works have been done computerized rather than manually. So we also want to create a software that make the work easy and also helpful for management mainly in the school managements. The main purpose of our project is:

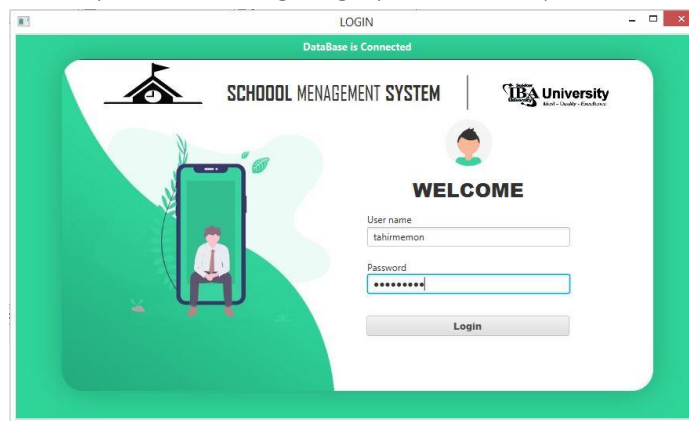
- Make the work computerize
- Reduce the time consumption
- Store the data
- Secure the data
- Reduce the errors
- Make the systems automatic
- No paper work

METHODOLOGY WITH EXECUTION SCREENSHOTS

ACTIVE AS AN STUDENT:

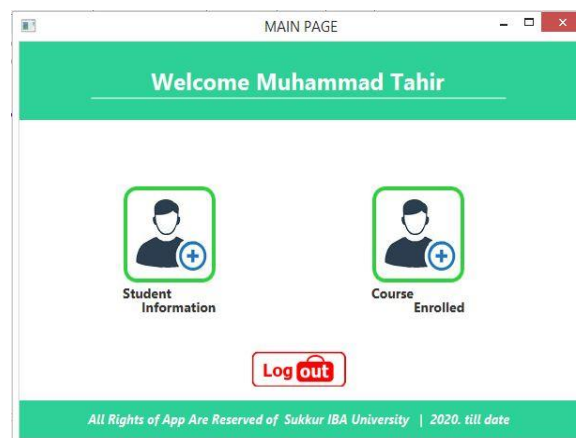
✓ Login page:

- Student must be enter **username** and **password** for login with your account (username and password are giving by school staff).



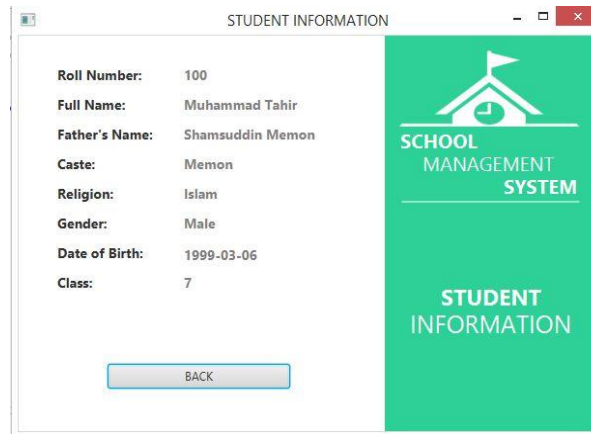
✓ Student Dashboard:

- When user login with your account then student dashboard page is seen where two options of available one is to see **your information** and other one is **enroll the course**.
- In the down position **logout** button is created for logout the student account.



✓ Student Information:

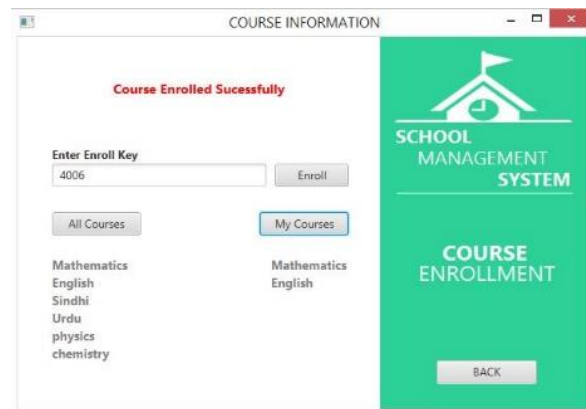
- When student click on **Student information** option then he/she see your personal information which are given with admission form.
- In the bottom portion **BACK** button is created.



The screenshot shows a window titled "STUDENT INFORMATION". On the left, there is a form with the following fields: Roll Number (100), Full Name (Muhammad Tahir), Father's Name (Shamsuddin Memon), Caste (Memon), Religion (Islam), Gender (Male), Date of Birth (1999-03-06), and Class (7). At the bottom of the form is a "BACK" button. On the right, there is a green sidebar with the "SCHOOL MANAGEMENT SYSTEM" logo and the text "STUDENT INFORMATION".

✓ Course enrolled:

- When user clicked on course enrolled then following page is open then, student must be enter the "**subject key**" with are given by subject teacher otherwise he/she can't enrolled any course.
- In the down portion student can see the **all courses** available as well those which he/she **enrolled**.
- In the right-down portion **BACK** button is created.

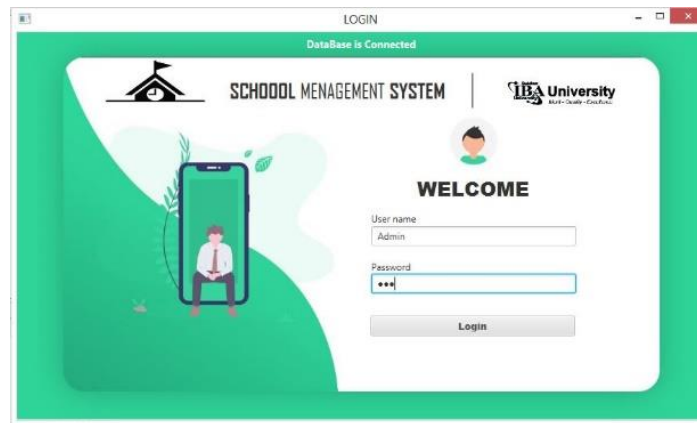


The screenshot shows a window titled "COURSE INFORMATION". At the top, there is a red message "Course Enrolled Successfully". Below this, there is a form with the label "Enter Enroll Key" and a text box containing "4006". To the right of the text box is an "Enroll" button. Below the form, there are two buttons: "All Courses" and "My Courses". Under "All Courses", there is a list of subjects: Mathematics, English, Sindhi, Urdu, physics, and chemistry. Under "My Courses", there is a list of subjects: Mathematics and English. At the bottom right, there is a "BACK" button. On the right, there is a green sidebar with the "SCHOOL MANAGEMENT SYSTEM" logo and the text "COURSE ENROLLMENT".

ACTIVE AS AN ADMINISTRATOR:

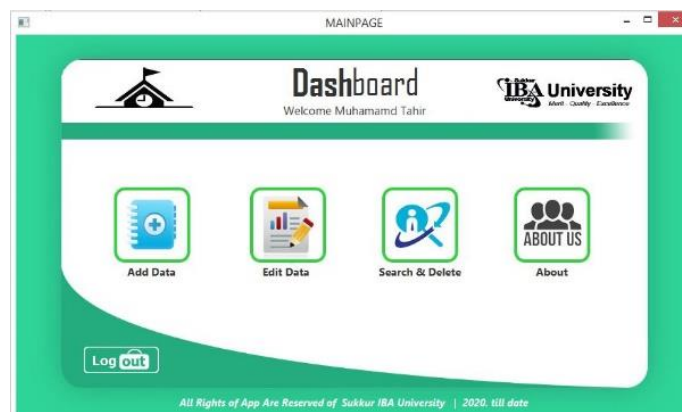
✓ Login page:

- Administrative must enter the username and password to access your account. (username and password is provided by school)



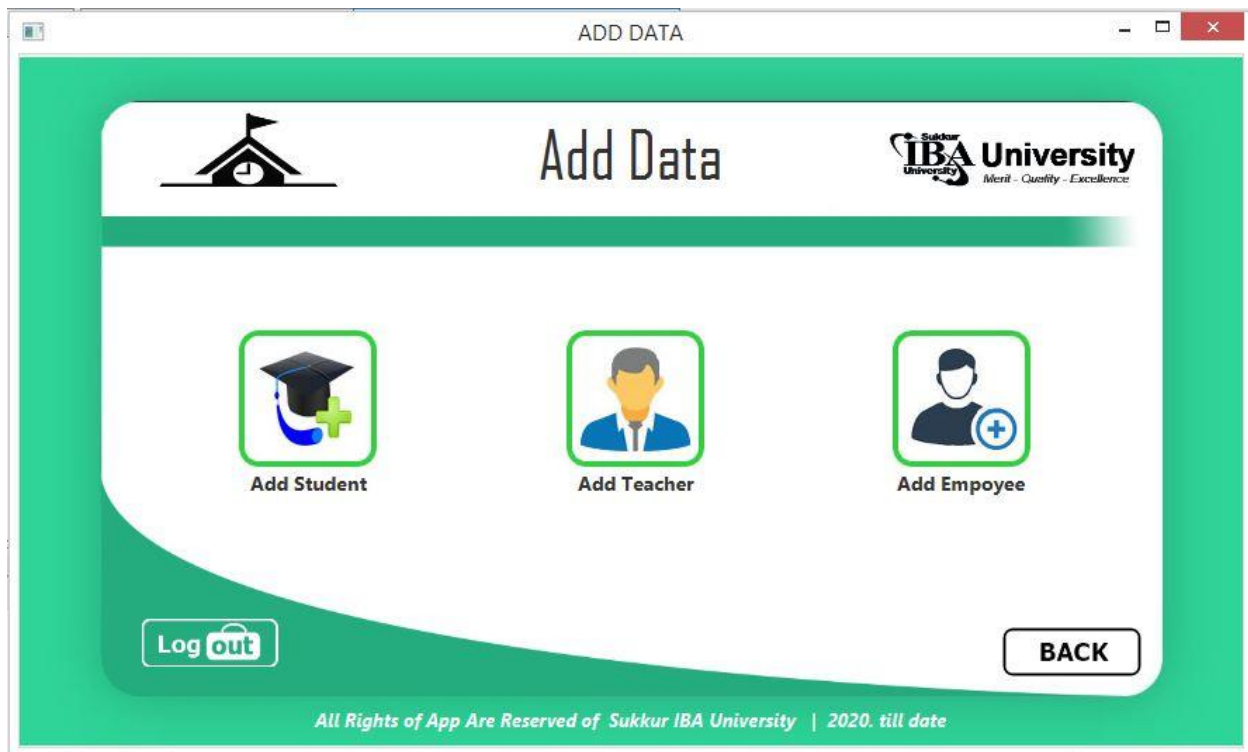
✓ Administrator Dashboard:

- When administrator successfully access your account than administrator can handle all the control of school managements system.
- Administrator can **add** the student, employee, and teacher record.
- Administrator can **edit** the student, employee, and teacher record.
- Administrator can **search & delete** the student, employee, and teacher record.



✓ Add Data Page:

- When admin is clicked on **add data** from **admin dashboard** then following page is open.
- In **add data** page 3 options are present one is add student record, second one is add teacher record, and third one is add employee record.
- In the left-bottom logout button is present and right-bottom back button is present.
- When admin click on back button then he/she go to admin dashboard page.
- When admin click on logout button then he/she directly go to login page.



✓ Add Student Record:

- When admin clicked on add Student from add data page then following page is display.
- In this page student form is present when admin fill the all data of student then this data is stored on the student database as a one record.
- Student form is full validate form when admin fill all the fields of form then record will add to database otherwise in right-bottom side message will print using label.
- In the right-bottom side 2 buttons are present one is submit button for add the record to student database, and other one is back button for going to add data page.
- In this form we use following components:
 - Labels
 - TextFields
 - Password field
 - Drop down
 - Date piker
 - Buttons
 - Imageview.

ADD STUDENT DATA

Roll Number:	<input type="text" value="107"/>	Username:	<input type="text" value="areejatta"/>
Full Name:	<input type="text" value="Areej Atta"/>	Password:	<input type="password" value="....."/>
Father,s Name:	<input type="text" value="Janiad Ali"/>		
Caste:	<input type="text" value="ghumro"/>	Religion:	<input type="text" value="islam"/>
Gender:	<input type="text" value="Female"/>	DOB:	<input type="text" value="6/14/2000"/>
Guardian's #:	<input type="text" value="03069865231"/>	Class:	<input type="text" value="7"/>
Place of Birth:	<input type="text" value="khairpur"/>		
Guardian CNIC:	<input type="text" value="4516254982315"/>		
Nationality:	<input type="text" value="pakistani"/>		
Address:	<input type="text" value="Khairpur, Sindh, Pakistan"/>		
Last Institution Attended:	<input type="text" value="Pak Turk School"/>		

SCHOOL MANAGEMENT SYSTEM

Registration was Successfull

Submit **Cancel**

✓ **Add Teacher Record:**

- When admin clicked on **add Teacher** from **add data** page then following page is display.
- In this page teacher form is present when admin fill the all data of teacher then this data is stored on the teacher database as a one record.
- Teacher form is full **validate** form when admin fill all the fields of form then record will add to **database** otherwise in right-bottom side message will print using label.
- In the right-bottom side 2 buttons are present one is **submit button** for add the record to teacher database, and other one is **back button** for going to add data page.
- In this form we use following components:
 - Labels
 - TextFields
 - Password field
 - Drop down
 - Date piker
 - Buttons
 - Imageview.

ADD TEACHER DATA

ID: 1006 Username: kashifali

Full Name: kashif ali Password:

Father's Name: Bilawal Ahmed

Caste: khoro Religion: islam

Subject: sindhi

Gender: Male DOB: 7/12/2006

Phone #: 0345986565 Salary: 45000

Grade: 17 Subject Key: 4008

Place of Birth: khairpur

Personal CNIC: 4523698562314

Nationality: Pakistani

Address: Khairpur, Sindh, Pakistan

SCHOOL MANAGEMENT SYSTEM

Submit Cancel

✓ **Add Employee Record:**

- When admin clicked on **add employee** from **add data** page then following page is display.
- In this page **employee form** is present when admin fill the all data of employee then this data is stored on the employee database as a one record.
- Employee form is full **validate** form when admin fill all the fields of form then record will add to **database** otherwise in right-bottom side message will print using label.
- In the right-bottom side 2 buttons are present one is **submit button** for add the record to employee database, and other one is **back button** for going to add data page.
- In this form we use following components:
 - Labels
 - TextFields
 - Password field
 - Drop down
 - Date piker
 - Buttons
 - Imageview.

ADD EMPLOYEE DATA

ID: 1004

Full Name: Rafiq ahmed

Father's Name: Mir muhammad

Caste: Memon Religion: islam

Gender: Male DOB: 7/23/2020

Work: Security Guard Grade: 6

Phone #: 03784565213 Salary: 11050

Place of Birth: Sukkur

Personal CNIC: 4598632124569

Nationality: Pakistani

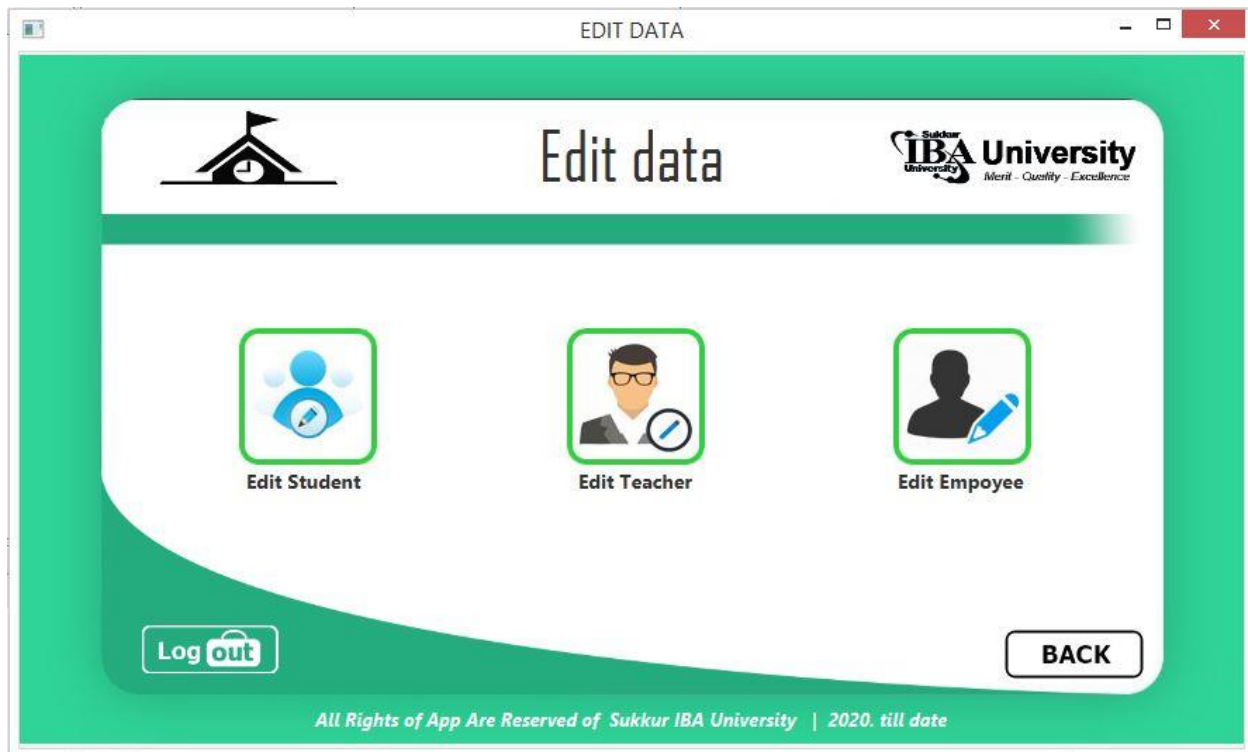
Address: Sukkur, Sindh, Khairpur

SCHOOL MANAGEMENT SYSTEM

Submit Cancel

✓ **Edit Data:**

- When admin is clicked on **edit data** from **admin dashboard** then following page is open.
- In **edit data** page 3 options are present one is edit student record, second one is edit teacher record, and third one is edit employee record.
- In the left-bottom logout button is present and right-bottom back button is present.
- When admin click on back button then he/she go to admin dashboard page.
- When admin click on logout button then he/she directly go to login page.



✓ **Edit Student Record:**

- When admin clicked on **edit Student** from **edit data** page then following page is display.
- In this page **student form** is present when admin **search** the student record by **roll number** through search textfield then all the data of that student is fill in that form, admin have authority to **edit that data** and click submit button for **updating** the record. And this record is directly updated to student database.
- Student form is full validate form when admin fill all the fields of form then record will add to database otherwise in right-bottom side message will print using label.
- In the right-bottom side 2 buttons are present one is **submit button** for add the editable record to student database, and other one is **back button** for going to edit data page.
- In this page we use following components:
 - Labels
 - TextFields
 - Password field
 - Buttons
 - Imageview.

EDIT STUDENT DATA

Enter Roll Number: 100

Roll Number:	<input type="text" value="100"/>	Username:	<input type="text" value="tahirmemon"/>
Full Name:	<input type="text" value="Muhammad Tahir"/>	Password:	<input type="password" value="....."/>
Father,s Name:	<input type="text" value="Shamsuddin Memon"/>		
Caste:	<input type="text" value="Memon"/>	Religion:	<input type="text" value="Islam"/>
Guardian's #:	<input type="text" value="03069430816"/>	Class:	<input type="text" value="7"/>
Place of Birth:	<input type="text" value="khairpur"/>		
Guardian CNIC:	<input type="text" value="452034621547"/>		
Nationality:	<input type="text" value="Pakistani"/>		
Address:	<input type="text" value="Civic center khairpur"/>		
Last Inistitution Attended:	<input type="text" value="FRESH"/>		

SCHOOL MANAGEMENT SYSTEM

✓ **Edit Teacher Record:**

- When admin clicked on **edit teacher** from **edit data** page then following page is display.
- In this page **teacher form** is present when admin **search** the teacher record by **id** through search textfield then all the data of that teacher is fill in that form, admin have authority to **edit that data** and click submit button for **updating** the record. And this record is directly updated to teacher database.
- Teacher form is full validate form when admin fill all the fields of form then record will add to database otherwise in right-bottom side message will print using label.
- In the right-bottom side 2 buttons are present one is **submit button** for add the editable record to teacher database, and other one is **back button** for going to edit data page.
- In this page we use following components:
 - Labels
 - TextFields
 - Password field
 - Buttons
 - Imageview.

EDIT TEACHER DATA

Enter ID: 1004

ID	<input type="text" value="1004"/>	Username:	<input type="text" value="memonatif"/>
Full Name:	<input type="text" value="Muhammad Atif"/>	Password:	<input type="password" value="....."/>
Father,s Name:	<input type="text" value="Rehman"/>		
Caste:	<input type="text" value="Memon"/>	Religion:	<input type="text" value="Islam"/>
Subject:	<input type="text" value="Programming"/>		
Phone #:	<input type="text" value="03156455645"/>	Salary:	<input type="text" value="70000"/>
Grade:	<input type="text" value="17"/>	Subject Key:	<input type="text" value="4005"/>
Place of Birth:	<input type="text" value="sukkur"/>		
Personal CNIC:	<input type="text" value="4521256488975"/>		
Nationality:	<input type="text" value="Pakistani"/>		
Address:	<input type="text" value="sukkur, sindh"/>		

SCHOOL MANAGEMENT SYSTEM

✓ **Edit Employee Record:**

- When admin clicked on **edit employee** from **edit data** page then following page is display.
- In this page **employee form** is present when admin **search** the employee record by **id** through search textfield then all the data of that employee is fill in that form, admin have authority to **edit that data** and click submit button for **updating** the record. And this record is directly updated to employee database.
- employee form is full validate form when admin fill all the fields of form then record will add to database otherwise in right-bottom side message will print using label.
- In the right-bottom side 2 buttons are present one is **submit button** for add the editable record to employee database, and other one is **back button** for going to **edit data** page.
- In this page we use following components:
 - Labels
 - TextFields
 - Password field
 - Buttons
 - Imageview.

EDIT EMPLOYEE DATA

Enter ID: 1003 **SEARCH**

ID: 1003

Full Name: Papan

Father,s Name: imran

Caste: lakho **Religion**: islam

Phone #: 03569865321 **Salary**: 8000

Work: Security Guard

Grade: 5

Place of Birth: Sukkur

Personal CNIC: 458756521325

Nationality: Pakistani

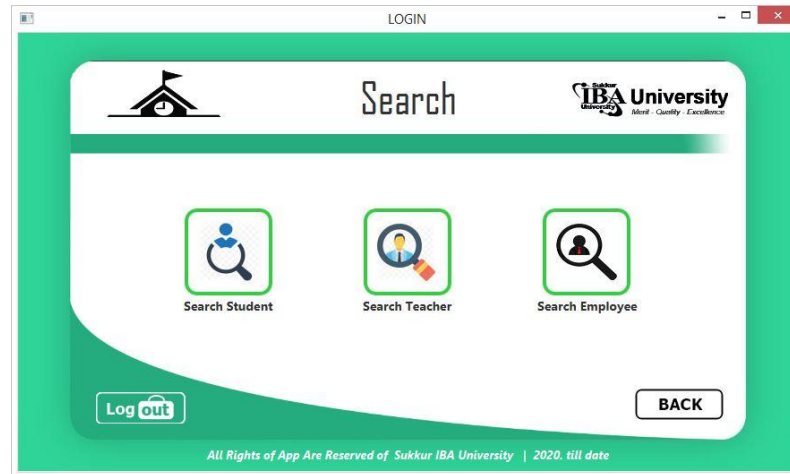
Address: Sukkur, Sindh, Khairpur

SCHOOL MANAGEMENT SYSTEM

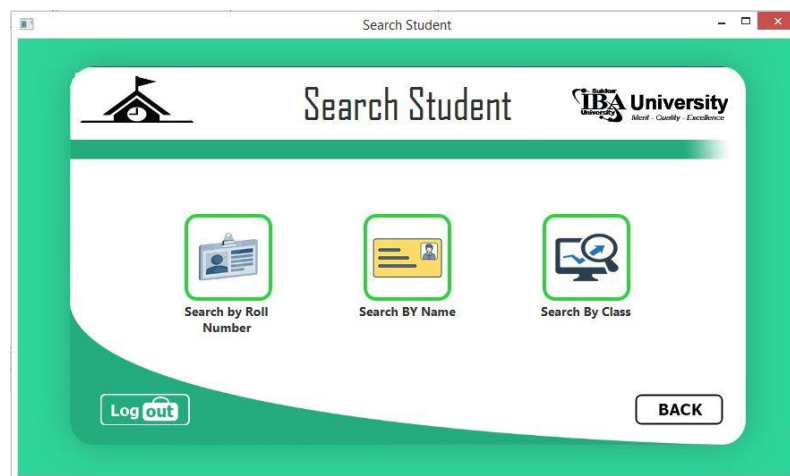
Submit **Cancel**

✓ **Search & Delete Data Page:**

- When admin clicked on **search & delete** from **admin dashboard** page then following page is display.
- In this page 3 options are available one is search or delete student record, second one is search or delete teacher record, and last one is search or delete employee record from school management database.

✓ **Search Student Page:**

- When admin clicked on **search & delete student** from **search & delete** page then following page is display.
- In this page 3 options are available one is search or delete student record by roll number, second one is search or delete student record by name, and last one is search or delete student record by class from student database.



✓ **Search Student by Roll Number:**

- When admin clicked on **search student by roll number** from **search & delete student** page then following page is display.
- In this page admin have authority to search the student record by roll number through search text field.
- When admin select the record from table and click the delete button then the message box is display for successfully deleted that record from student database.

Roll Number	Name	Father's Name	Caste	Gender	Religion	Class	Address
100	Muhammad Tahir	Shamsuddin Memon	Memon	Male	Islam	7	Civic center khairpur

✓ **Search Student by Name:**

- When admin clicked on **search student by name** from **search & delete student** page then following page is display.
- In this page admin have authority to search the student record by name, through search bar which is case sensitive.
- When admin select the record from table and click the delete button then the message box is display for successfully deleted that record from student database.

Roll Number	Name	Father's Name	Caste	Gender	Religion	Class	Address
102	Amjad Ali	Allah Dino	Pitafii	Male	Islam	5	Ghotki, Sindh

Message: Successfully Delete Record Details.

OK

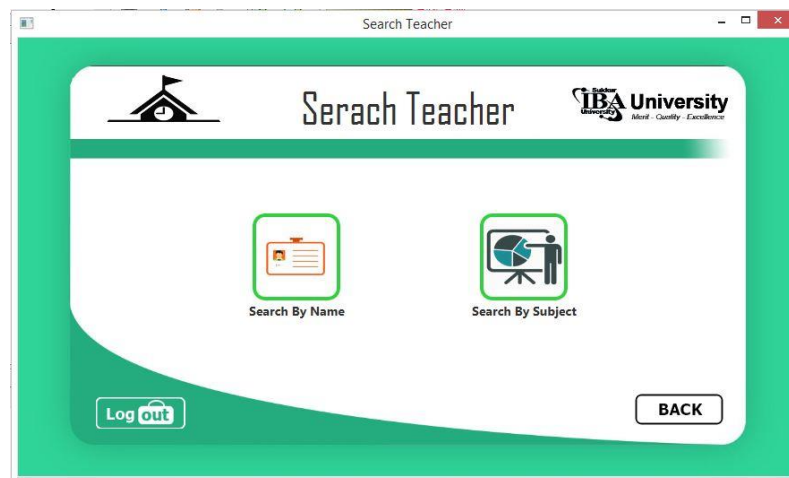
✓ **Search Student by Class:**

- When admin clicked on **search student by class** from **search & delete student** page then following page is display.
- In this page admin have authority to search the student record by class through search text field.
- When admin select the record from table and click the delete button then the message box is display for successfully deleted that record from student database.

Roll Number	Name	Father's Name	Caste	Gender	Religion	Class	Address
100	Muhammad Tahir	Shamsuddin Memon	Memon	Male	Islam	7	Civic center khairpur
104	Shafeeq Akhtar	Akhtar Ali	Narajo	Male	Islam	7	Gambat, Sindh
105	Komal	Saifullah	Shaikh	Female	Islam	7	khairpur, sindh
107	Areej Atta	Janiad Ali	ghumro	Female	Islam	7	Khairpur, Sindh, Pakistan

✓ **Search Teacher Page:**

- When admin clicked on **search & delete teacher** from **search & delete** page then following page is display.
- In this page 2 options are available one is search or delete teacher record by name, second one is search or delete teacher record by subject from teacher database.



✓ **Search Teacher by Name:**

- When admin clicked on **search teacher by name** from **search & delete teacher** page then following page is display.
- In this page admin have authority to search the teacher record by name, through search bar which is case sensitive.
- When admin select the record from table and click the delete button then the message box is display for successfully deleted that record from teacher database.

ID	Name	Father's Name	Caste	Religion	Subject	Gender	Date of Birth
1004	Muhammad Atif	Rehman	Memon	Islam	Programming	Male	2020-07-14

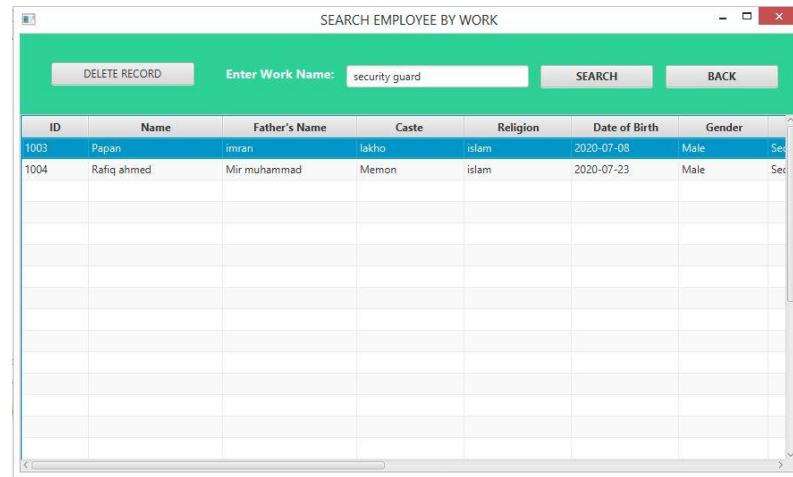
✓ **Search Teacher by Subject:**

- When admin clicked on **search teacher by subject** from **search & delete teacher** page then following page is display.
- In this page admin have authority to search the teacher record by subject, through search bar which is case sensitive.
- When admin select the record from table and click the delete button then the message box is display for successfully deleted that record from teacher database.

ID	Name	Father's Name	Caste	Religion	Subject	Gender	Date of Birth
1006	Marina Rajput	Irfan	Rajput	Islam	Programming	Female	1990-05-16
1004	Muhammad Atif	Rehman	Memon	Islam	Programming	Male	2020-07-14

✓ **Search Employee by Work:**

- When admin clicked on **search employee by work** from **search & delete employee** page then following page is display.
- In this page admin have authority to search the employee record by work, through search bar which is case sensitive.
- When admin select the record from table and click the delete button then the message box is display for successfully deleted that record from employee database.



✓ **About Us:**

- When admin clicked on **about** from **admin dashboard** page then following page is display.



Learning outcomes:

We actually learn how to make the software and how to connect the database to it how to create the jar file and also the dump file. We learn the run the programs on the tools like net beans or eclipse rather than notepad. Also know about GUI designing how to make frames on it. The main goals are learning about the database. Like how to create tables, search tables, insert tables and etc.

These methods and beauty of java make the school management system improved by qualities mainly in some rural departments where the technology is not much well-developed. The big benefit of this project is we can easily access the data of students, teachers and any of the faculty member in very short insist. Any detail or record of any participant of school can easily be found in the blink of an eye.

Conclusion:

In conclusion, by making this project we can help our managements and departments and also face the harsh conditions by which they are suffering from. We can easily resolve the problems on our finger-tips in our fields. In general, this project aims to enhance efficiency and at the same time maintain information accurateness. Later in this report, features and improvement that allow achievement to this goal will be demonstrated.