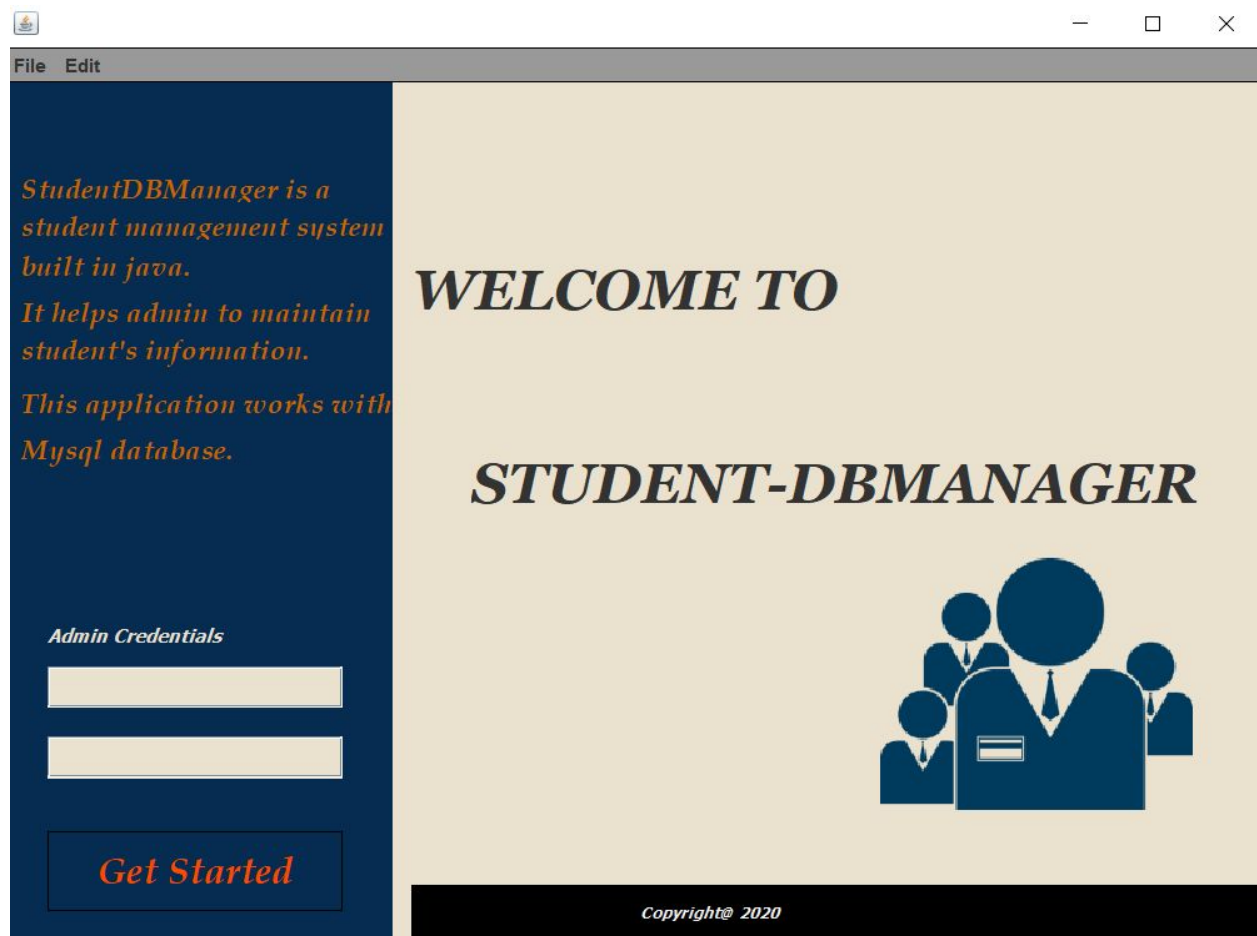


STUDENT DATABASE MANAGEMENT SYSTEM

Students data storing and handling system built in JAVA



Problem no: 11 >>Student Database Management System

Problem Statement: The system will have a GUI for user interaction and backend database (MySQL). The system will allow users to insert student information in a database and search student details (name, address, subjects, electives, total credits, grades etc.)

About StudentDBManager

>>It is a GUI based database interactive application built in java.

>>It uses the MYSQL database.

>>Users should login as admin to access and manage data. By default admin credentials are username: admin password:admin@123 .

>>User is allowed to perform following operations:

1)Inserting new Students into Database.

2)Searching and viewing student details.

3)Updating students' information.

4)Deleting student from database.

5)To see the complete students list.

***It is suggested to run application using netbeans IDE.

SCOPE OF WORK

>>We designed a layout for each user interactive interface and we started building it using JAVA SWING controls.

>>After completing the GUI part, we figured out the interfaces that need a mysql connection. We used mysql-connector to achieve the connection.

>>We created suitable tables and columns in database. On users request, the application performs rendering data from database or uploading into database.

image	name	mail	phoneno	address	dob	gender	batch	course	regno	rollno	subject1	subject2	subject3	subject4	subject5	subject6	subject7	subject8
[BLOB - 121.7 KiB]	sdhgds	sdds	dvsdsds	dvsds	06-04-2020	Male	1st Year	CSE	dvsds	dvsds	1)dvsds	2)dvsdsdd	3)dvsds	4jd	5jdvsds	6jdvs	7jdvsds	8jdvsdd
[BLOB - 121.7 KiB]	sdhgds	sdds	dvsdsds	dvsds	06-04-2020	Male	1st Year	CSE	dvsds	dvsds	1)dvsds	2)dvsdsdd	3)dvsds	4jd	5jdvsds	6jdvs	7jdvsds	8jdvsdd
[BLOB - 69.0 KiB]	ewqqwknjk	hjhhdasfsd	aadaskjkkj	sdfdsghghgj	18-04-2020	Male	2nd Year	CSE	sfs	dsf	1)fsfsfsf	2)fsfsfsf	3fsfsfs	4)fsfsfsf	5jsfs	fsfs6)	7)jsf	8)jsfs
[BLOB - 69.0 KiB]	ewqqwknjk	hjhhdasfsd	aadaskjkkj	sdfdsghghgj	18-04-2020	Male	2nd Year	CSE	sfs	dsf	1)fsfsfsf	2)fsfsfsf	3fsfsfs	4)fsfsfsf	5jsfs	fsfs6)	7)jsf	8)jsfs
[BLOB - 69.0 KiB]	ewqqwknjk	hjhhdasfsd	aadaskjkkj	sdfdsghghgj	18-04-2020	Male	2nd Year	CSE	sfs	dsf	1)fsfsfsf	2)fsfsfsf	3fsfsfs	4)fsfsfsf	5jsfs	fsfs6)	7)jsf	8)jsfs
[BLOB - 21.3 KiB]	Namballa Murthy	namballa@gmail.com	2132344554	Pradham Gardens	03-04-2020	Male	4th Year	CSE	359	18048	1)abcd	2)abcd	3)abcd	4)abcd	5)abcd	6)abcd	7)abcd	8)abcd
[BLOB - 21.3 KiB]	Namballa Murthy	namballa@gmail.com	2132344554	Pradham Gardens	03-04-2020	Male	4th Year	CSE	359	18048	1)abcd	2)abcd	3)abcd	4)abcd	5)abcd	6)abcd	7)abcd	8)abcd
[BLOB - 879.1 KiB]	Suresh	admin@123	123456789	Andhra Pradesh	09-04-2020	Male	2nd Year	CSE	359	18048	1)Sub1	2)Sub5	3)Sub2	4)Sub6	5)Sub3	6)Sub7	7)Sub4	8)Sub8
[BLOB - 879.1 KiB]	Mukesh	ramesh@123	123456789	Andhra Pradesh	15-04-2020	Male	2nd Year	CSE	359	18048	1)Numerical Analysis	2)Java Lab	3)Java	4)Scilab	5)OS	6)Data Communications	7)OS lab	8)Signal and Systems
[BLOB - 121.7 KiB]	Namballa Mukesh	namballa.mukesh12345@gmail.com	7780161190	Srikakulam Andhra Pradesh-532001	08-04-2020	Male	2nd Year	CSE	359	18048	1)Numerical Analysis	2)Java	3)OS	4)Data Communications	5)Signals and Systems	6)Scilab	7)Java Lab	8)OS lab

subject2	subject3	subject4	subject5	subject6	subject7	subject8	grade1	grade2	grade3	grade4	grade5	grade6	grade7	grade8	elective1	elective2	elecgrade1	elecgrade2	cgpa	credit
2)dvsdsdd	3)dvsds	4jd	5jdvsds	6jdvs	7jdvsds	8jdvsdd	d	d	d	dd	d	d	d	d	1)sdvs	sdds2)	d	dd	dsdds	22
2)dvsdsdd	3)dvsds	4jd	5jdvsds	6jdvs	7jdvsds	8jdvsdd	d	d	d	dd	d	d	d	d	1)sdvs	sdds2)	d	dd	dsdds	22
2)fsfsfsf	3fsfsfs	4)fsfsfsf	5jsfs	fsfs6)	7)jsf	8)jsfs	a	a	a	a	a	a	a	a	1)fsfsfs	2sfsfs	a	a	aa	a
2)fsfsfsf	3fsfsfs	4)fsfsfsf	5jsfs	fsfs6)	7)jsf	8)jsfs	a	a	a	a	a	a	a	a	1)fsfsfs	2sfsfs	a	a	aa	a
2)fsfsfsf	3fsfsfs	4)fsfsfsf	5jsfs	fsfs6)	7)jsf	8)jsfs	a	a	a	a	a	a	a	a	1)fsfsfs	2sfsfs	a	a	aa	a
2)abcd	3)abcd	4)abcd	5)abcd	6)abcd	7)abcd	8)abcd	A	A	A	A	A	A	A	A	1)abcd	2)abcd	A	A	8.8	24
2)abcd	3)abcd	4)abcd	5)abcd	6)abcd	7)abcd	8)abcd	A	A	A	A	A	A	A	A	1)abcd	2)abcd	A	A	8.8	24
2)Sub5	3)Sub2	4)Sub6	5)Sub3	6)Sub7	7)Sub4	8)Sub8	A	A	B	A	A	A	C	A	1)elective-1	2)elective-2	C	A	8.8	24
2)Java Lab	3)Java	4)Scilab	5)OS	6)Data Communications	7)OS lab	8)Signals and Systems	A	A	A	B	B	A	B	B	1)ML	2)DBMS	A	B	8.8	24
2)Java	3)OS	4)Data Communications	5)Signals and Systems	6)Scilab	7)Java Lab	8)OS lab	A	A	A	A	A	A	A	A	1)Machine Learning	2)Database Management	A	A	8.0	24

■ Above are screenshots of table and few columns in database.

Discussion on functionalities of application

1. In a welcome frame once the user enter's username and password, they are verified and redirected to the manager frame which contains search, register and view functionalities.It throws error if credentials are invalid.
2. If a user enters a name, then the application starts searching it from database and returns all information. This data is displayed in assigned labels and textfields.
3. User can update or delete student after search query execution. After performing these operations, user can confirm the operations performed directly from GUI by clicking the view students button(Which returns all students in table from).

4.

StudentDBManager

Indian Institute of Information Technology
Kalyani, West Bengal

*Search with fullname

Search

Register new student

View all students

Name	MailID	Phoneno	Date of Birth	Batch	Course	Registration no	Roll no	CGPA	Credits
sdhgds	sdds	dsdsds	06-04-2020	1st Year	CSE	dsds	dsds	dsdds	22
sdhgds	sdds	dsdsds	06-04-2020	1st Year	CSE	dsds	dsds	dsdds	22
Namballa Mukesh	namballa.mukes...	7780161190	08-04-2020	2nd Year	CSE	18048	359	8.0	24
ewqqwvknjk	hjjhlhjdafsd	aadaskjkjk	18-04-2020	2nd Year	CSE	dsf	sfs	aa	a
ewqqwvknjk	hjjhlhjdafsd	aadaskjkjk	18-04-2020	2nd Year	CSE	dsf	sfs	aa	a
ewqqwvknjk	hjjhlhjdafsd	aadaskjkjk	18-04-2020	2nd Year	CSE	dsf	sfs	aa	a
Namballa Murthy	namballa@gmai...	2132344554	03-04-2020	4rth Year	CSE	18048	359	8.8	24
Namballa Murthy	namballa@gmai...	2132344554	03-04-2020	4rth Year	CSE	18048	359	8.8	24
Suresh	admin@123	123456789	09-04-2020	2nd Year	CSE	18048	359	8.8	24
Mukesh	ramesh@123	123455678	15-04-2020	2nd Year	CSE	18048	359	8.8	24

Search Info Update Delete

 Name:
 Mail ID:
 Phone no:
 Address:
 Gender:
 DOB:

Course: Batch:
 Regno: Rollno:

Registered Subjects:	Grade:	Elective Subjects:	Grade:
1) Numerical Analysis	<input type="text" value="A"/>	1) ML	<input type="text" value="A"/>
2) Java Lab	<input type="text" value="A"/>	2) DBMS	<input type="text" value="B"/>
3) Java	<input type="text" value="A"/>		
4) Scilab	<input type="text" value="B"/>		
5) OS	<input type="text" value="B"/>		
6) Data Communications	<input type="text" value="A"/>		
7) OS lab	<input type="text" value="B"/>		
8) Signals and Systems	<input type="text" value="B"/>		

CGPA: Credits:

1. Above are some screenshots of the application.

CONCLUSION

Future Implementations:

- 1) We want to add search filters for better search results. We want to ensure security of application by implementing its credentials validating functions.
- 2) We want to develop new frames for updation and deletion operations for a better view.