

Project Overview:

A Java Swing application to register students and view their details, connected to a MySQL database.

Prerequisites:

- Java JDK installed
 - MySQL Server running with a database named `student_db`
 - MySQL Connector/J version 9.3.0 JAR file added to `lib/` folder
-

Database Setup:

```
CREATE DATABASE student_db;
USE student_db;

CREATE TABLE student (
  student_id INT AUTO_INCREMENT PRIMARY KEY,
  name VARCHAR(100),
  email VARCHAR(100),
  grade VARCHAR(10),
  phone VARCHAR(15)
);
```

Project Structure:

```
StudentManagementSystem/
├── src/
│   ├── model/
│   ├── dao/
│   ├── ui/
│   └── main/
├── lib/
│   └── mysql-connector-j-9.3.0.jar
└── out/
```

Compile the project:

```
javac -cp "lib/mysql-connector-j-9.3.0.jar" -d out src/model/*.java
src/dao/*.java src/ui/*.java
```

Run the Student Registration UI:

```
java -cp "out;lib/mysql-connector-j-9.3.0.jar" ui.StudentUI
```

Run the View Registered Students UI:

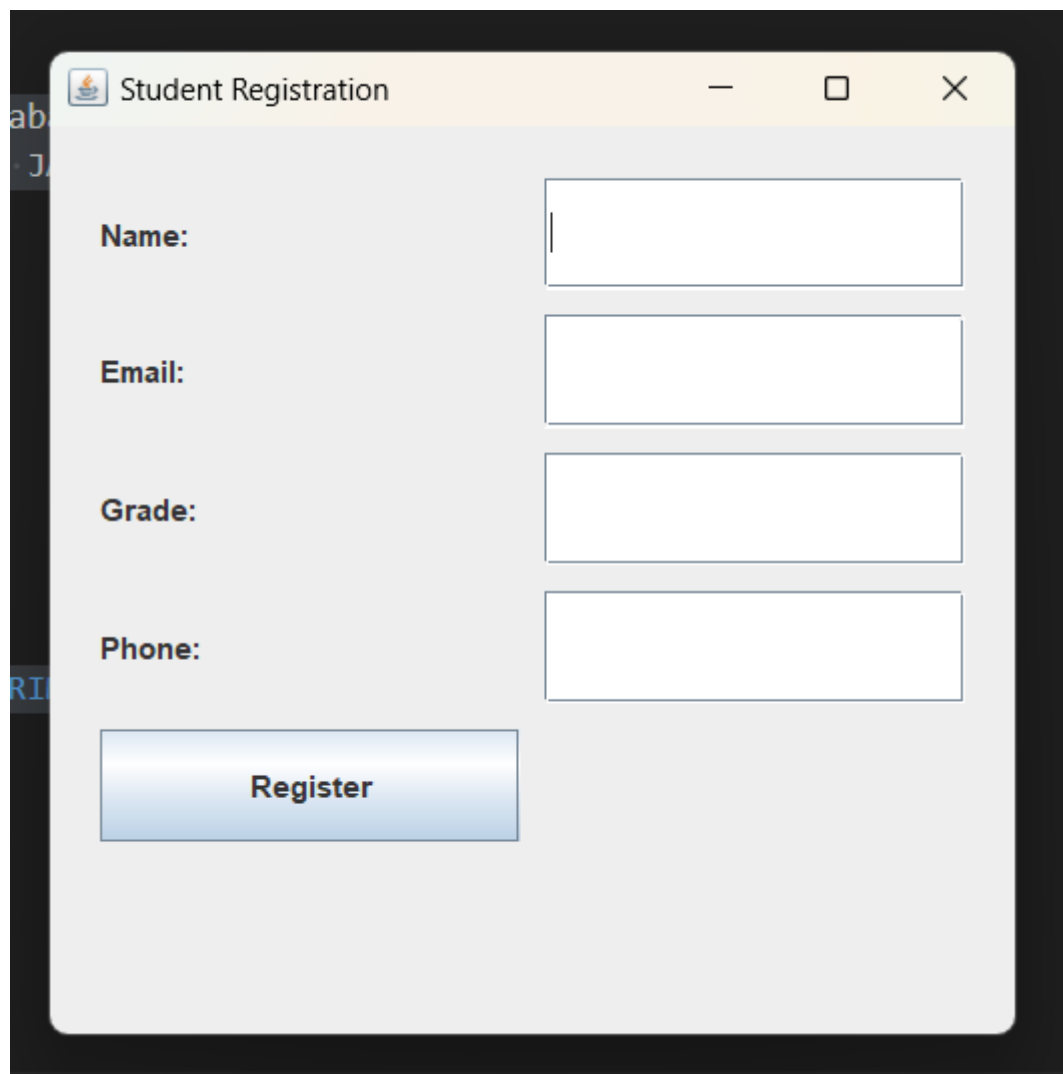
```
java -cp "out;lib/mysql-connector-j-9.3.0.jar" ui.ViewStudentsUI
```

Note: On Linux/macOS, replace the semicolon (;) with a colon (:) in the classpath.

Output Screenshots

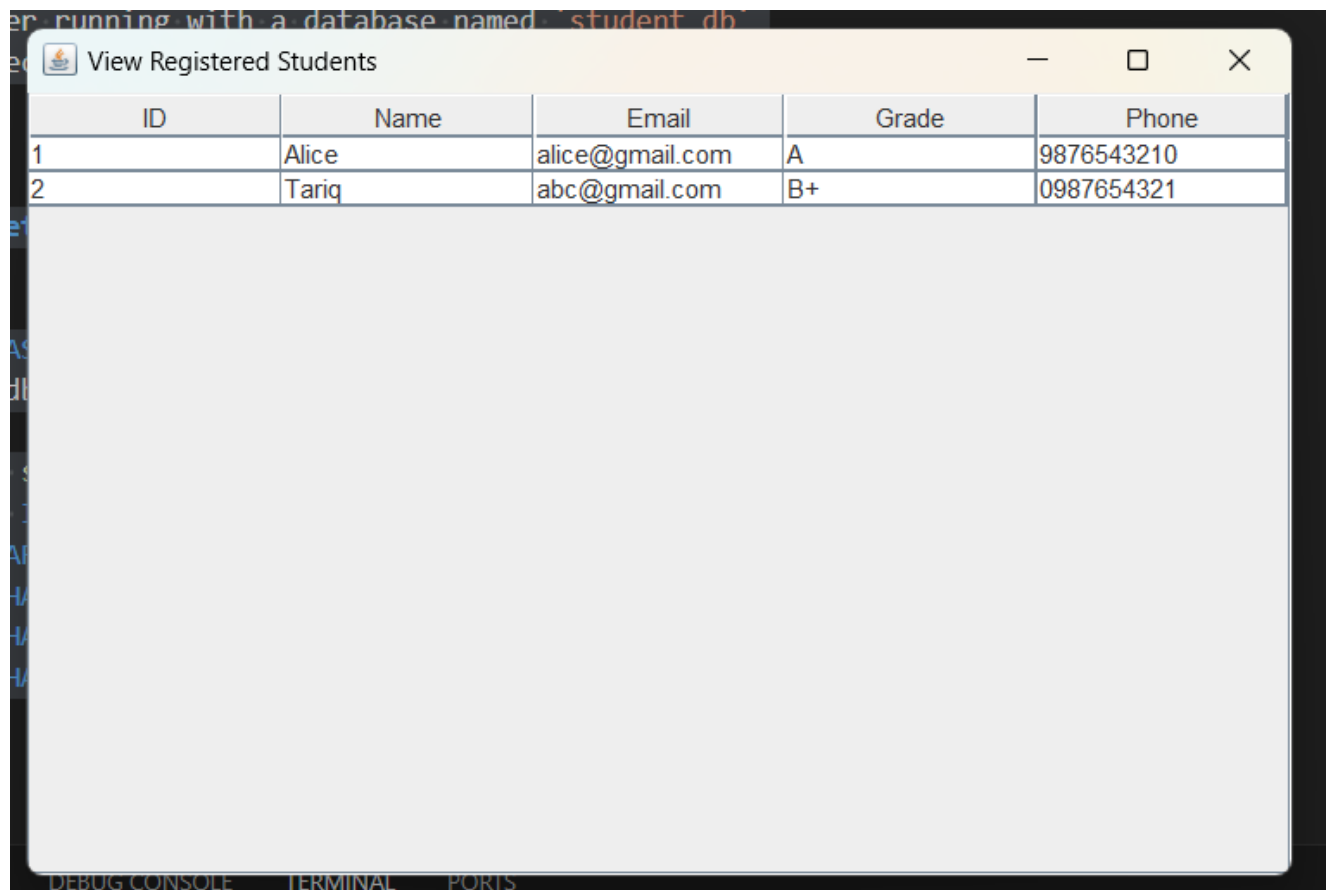
1. Student Registered Successfully

After filling out the registration form and submitting, the console shows:

A screenshot of a Java Swing window titled "Student Registration". The window has a standard title bar with minimize, maximize, and close buttons. The main content area is light gray and contains four labels on the left: "Name:", "Email:", "Grade:", and "Phone:". To the right of each label is a white text input field. Below these fields is a blue button with the text "Register". The window is set against a black background.

2. View Registered Students

All registered students are displayed in a table UI:



The screenshot shows a Java Swing window titled "View Registered Students". Inside the window is a table with five columns: ID, Name, Email, Grade, and Phone. The table contains two rows of data. Below the table is a large, empty light gray rectangular area. The window has standard OS controls (minimize, maximize, close) in the top right corner. In the background, a terminal window is visible with some text related to a database connection.

ID	Name	Email	Grade	Phone
1	Alice	alice@gmail.com	A	9876543210
2	Tariq	abc@gmail.com	B+	0987654321

Additional Notes:

- Make sure your database connection (username/password) is correct in your `DBConnection` class.
- MySQL server should be running and accessible at `localhost:3306`.

Support:

For any questions or issues, please contact [Tarique Ahsan] at [tariq.ahsan.1619@gmail.com].