

1. Tools and Technologies

- Frontend: Java Swing for GUI.
- Backend: JDBC for database connectivity.
- Database: MySQL Community Server.
- Testing: JUnit.

2. Prerequisites

1. Java Development Kit (JDK)
 - Download and install [JDK 8 or later](#).
2. MySQL Database
 - Download and install [MySQL Community Server](#).
 - During installation, configure the root password and note it for the database connection.
 - Install MySQL Workbench (Optional) for GUI-based database management.
3. JDBC Driver
 - Ensure the mysql-connector-java .jar file is included in the project

3. Installation Steps

Open the project in your chosen IDE.

4. Database Configuration

Edit DatabaseConnection.java:

Change code here:

```
private static final String URL = "jdbc:mysql://localhost:3306/university_db";  
private static final String USER = "root";  
private static final String PASSWORD = "your_password";
```

5. Running the Project

-> Start the MySQL Server. Open MySQL Workbench or use the command-line client to connect to the MySQL server.

-> Create a database:

```
CREATE DATABASE university_db;
```

-> Execute the provided schema SQL text file.

-> Run the Main class