

SETUP INSTRUCTIONS FILE

- **Project overview**

- The **Student Management System** is designed to help administrators, coordinators, and other school staff efficiently manage student enrollments, courses, and related academic data. It includes functionalities for user authentication, student information management, enrollment processing, and report generation.

- **System Requirements**

- **Operating System:** Windows 10 or higher, macOS, or Linux
- **Java Development Kit (JDK):** Version 22
- **NetBeans IDE:** Version 23
- **Database Management:** XAMPP v3.3.0 with MySQL
- **Reporting Tool:** Jaspersoft Studio v7.0.0

- **Installation Steps**

- **Step 1: Install Java JDK**
 - Download JDK 22 from the official [Oracle website](#).
 - Install it and set up the environment variable JAVA_HOME.
- **Step 2: Install NetBeans**
 - Download NetBeans 23 from the [Apache NetBeans website](#).
 - Install and configure NetBeans to recognize the JDK 22 installation.
- **Step 3: Install XAMPP**
 - Download XAMPP v3.3.0 from the Apache Friends website.
 - Install and start the MySQL service through the XAMPP control panel.
- **Step 4: Set Up the Database**
 - Open phpMyAdmin through XAMPP (<http://localhost/phpmyadmin>).
 - Create a new database named school.
 - Execute the SQL to create the tables:

```
CREATE TABLE `students` (  
    `StudentID` int NOT NULL AUTO_INCREMENT,  
    `Name` varchar(100) NOT NULL,  
    `Address` varchar(255) DEFAULT NULL,  
    `Email` varchar(100) DEFAULT NULL,
```

```
PRIMARY KEY (`StudentID`)  
);
```

```
CREATE TABLE `courses` (  
  `CourseID` int NOT NULL AUTO_INCREMENT,  
  `CourseName` varchar(100) NOT NULL,  
  `CreditHours` int DEFAULT NULL,  
  PRIMARY KEY (`CourseID`)  
);
```

```
CREATE TABLE `enrollment` (  
  `EnrollmentID` int NOT NULL AUTO_INCREMENT,  
  `StudentID` int NOT NULL,  
  `CourseID` int NOT NULL,  
  `EnrollmentDate` date NOT NULL,  
  PRIMARY KEY (`EnrollmentID`),  
  FOREIGN KEY (`StudentID`) REFERENCES  
  `students`(`StudentID`),  
  FOREIGN KEY (`CourseID`) REFERENCES  
  `courses`(`CourseID`)  
);
```

- **Step 5: Configure Jaspersoft Studio**
 - Download Jaspersoft Studio 7.0.0 from the TIBCO website.
 - Install and configure report templates as needed.
- **Step 6: Clone/Download Project Files**
 - Clone or download the project files to your machine.
 - Open the project in NetBeans and configure the database connection strings to match your local MySQL setup.

- **Running Application**

- Launch XAMPP and start the MySQL service.
- Open NetBeans and run the project.
- Log in using a valid username and password, or create a new account if necessary.

- **Troubleshooting Tips**

- **Database Connection Errors:**
 - Ensure XAMPP is running and the database configuration in the code matches localhost, 3306, and database credentials.
- **Report Generation Issues:**
 - Confirm that Jaspersoft Studio is correctly installed and the .jasper files are accessible.

- **Jar Library lib:-**

[https://drive.google.com/drive/folders/1ELr_YYm8LvYExVgOoGYya3Gbjda5eIGE?usp=drive link](https://drive.google.com/drive/folders/1ELr_YYm8LvYExVgOoGYya3Gbjda5eIGE?usp=drive_link)