

# School Management System Project Documentation

## School Management System Project Proposal

### Problem Statement:

There is a problem with traditional school management because it didn't have a systematic way to store information about students. When the staff or administrator wants to record the data of a student, they have to fill out a paper form. The data might be lost if there are a lot of problems at the same time. Another problem that can happen is that it can be hard to find and update information about students and class arrangements. Teachers have the same problems as administrators when they use a manual system, like not being able to keep track of students' behavior, results, attendance, and so on, which aren't kept in a systematic way so that all of the data can be used in the future and improved upon. Below is a specific problem statement that happens in a standard school when they use a manual system.

- There is a lot of paper used to keep track of student information, their results, and their performance.
- Manual systems are difficult to locate and update with information about students, their grades, and how well they performed in class.
- The manual system doesn't protect the academic information that could be lost if it were lost.
- There are some things that the school doesn't tell parents or teachers about, so they don't know about them.

### Solution:

Data security and management are very important parts of the school management system. This makes sure that every student in the school is kept up to date. Educators' and students' names, parents' names, transaction history, and other achievements are all stored. Monitoring and keeping track of notes, remarks, incidents, and other actions such as internal documents and workflows are included in the system. It is individuals who make and manage timetables. Keeping track of exams, assessments, grades, and progress in school is all managed by the software.

### Project Scope:

This system is designed to be easy for people to use and efficient for a wide range of different tasks. These tasks may include things like registering new students, managing fees, managing exams, and all the other things that make the administrative department of a school work well.



# School Management System Project Abstract

The School Management System is software meant for helping institutions. It is a piece of software that helps run the school's daily administrative and academic operations smoothly from afar. School management systems are good for the people who facilitate the school and good for parents, who can see how their kids are doing and pay their fees, and many more.

A school management system is developed to help staff do less work, help students and teachers save time, cut costs, and improve data security. All of these things will eventually make your institution more cost-effective and productive. It is also able to secure important data of students and educators that every educational institution needs.

## School Management System Project Modules:

- **School Information Management:** This module will show the information about a specific school whether it is primary, secondary, or tertiary. The school information includes the number of rooms and instructors they have as well as the count of slots for enrollees and students.
- **Student Management:** The information of the student must also be managed in school management because the student information was the most important data that the system should process.
- **Instructor/Teacher Management:** It is essential to put into consideration because the teachers must be rationed to the count of the students that the school will cater to. The information of the teachers also matters because the system should check the qualifications before they could teach.
- **Room Management:** The room management module serves as the division of the number of students to the capacity of each room per grade and section. This module will assign the count of students per room and section as well as the instructor.
- **Grade and Subject Management:** This module designates the instructors per subject to every student or enrollees.
- **Grading System:** The grading system module will sum up and calculate the given output by the students and the result would be the academic performance of every student. This will monitor the student's performance and behavior throughout the period.
- **Enrollment System:** The enrollment system module will manage the flow of activities during enrollment. This will also check the requirements for registration to complete their qualification to be a student of the school.
- **Fee and Payment Management:** Management of fees and payments is also covered in the school management system. The fee and payment information are processed from the enrollment and then the parents or students will be updated about their accounts to avoid conflicts.

These modules must be present in creating the School Management System to meet the needs in managing School transactions. Through this, the management and monitoring of students and school would be much easier for both school admin and teachers these modules for school management system were derived from the school activities and processes.

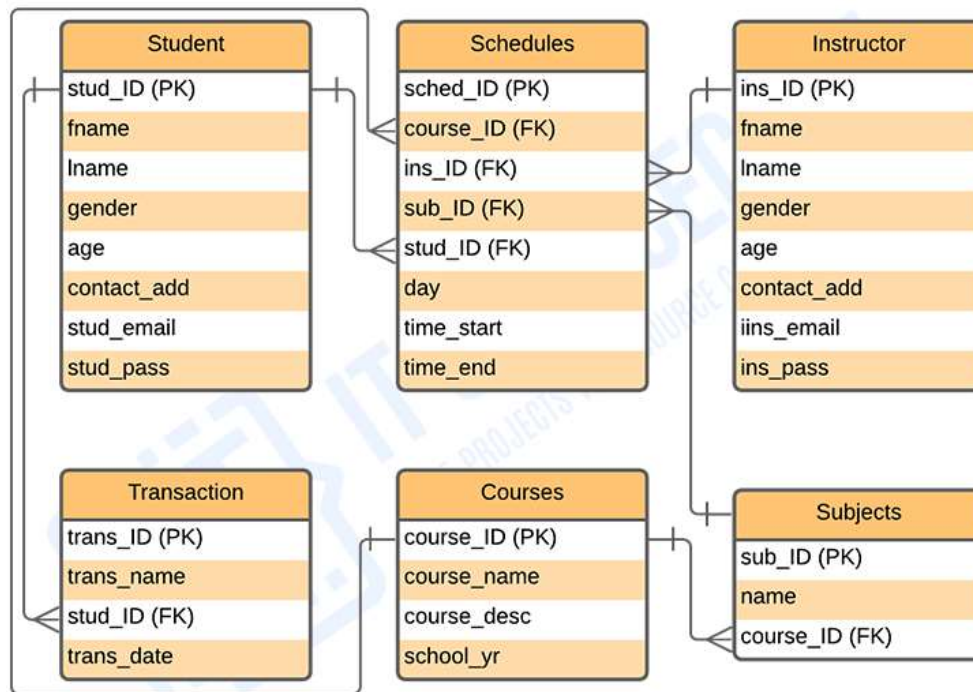
The modules declared here will be used in all areas of School Management System development. They will be present in School Management system diagrams as well as in the source codes in a particular language that you like. That is how the modules are used and essential for School management system (software) development.

## School Management System Project Report and UML Diagrams

Here are the UML Diagrams for School Management System Project Report. These UML Diagrams were all part of the project development and plays a big role in designing the structure and behavior of the School Management System. The ideas presented here were all based on the modules determined and declared for School Management System.

**School Management System ER Diagram - This School management system (ER diagram) database design** was made based on managing school requirements. These requirements are based on the data storage needed for storing inputs and the source of outputs requested by the users.

### SCHOOL MANAGEMENT SYSTEM



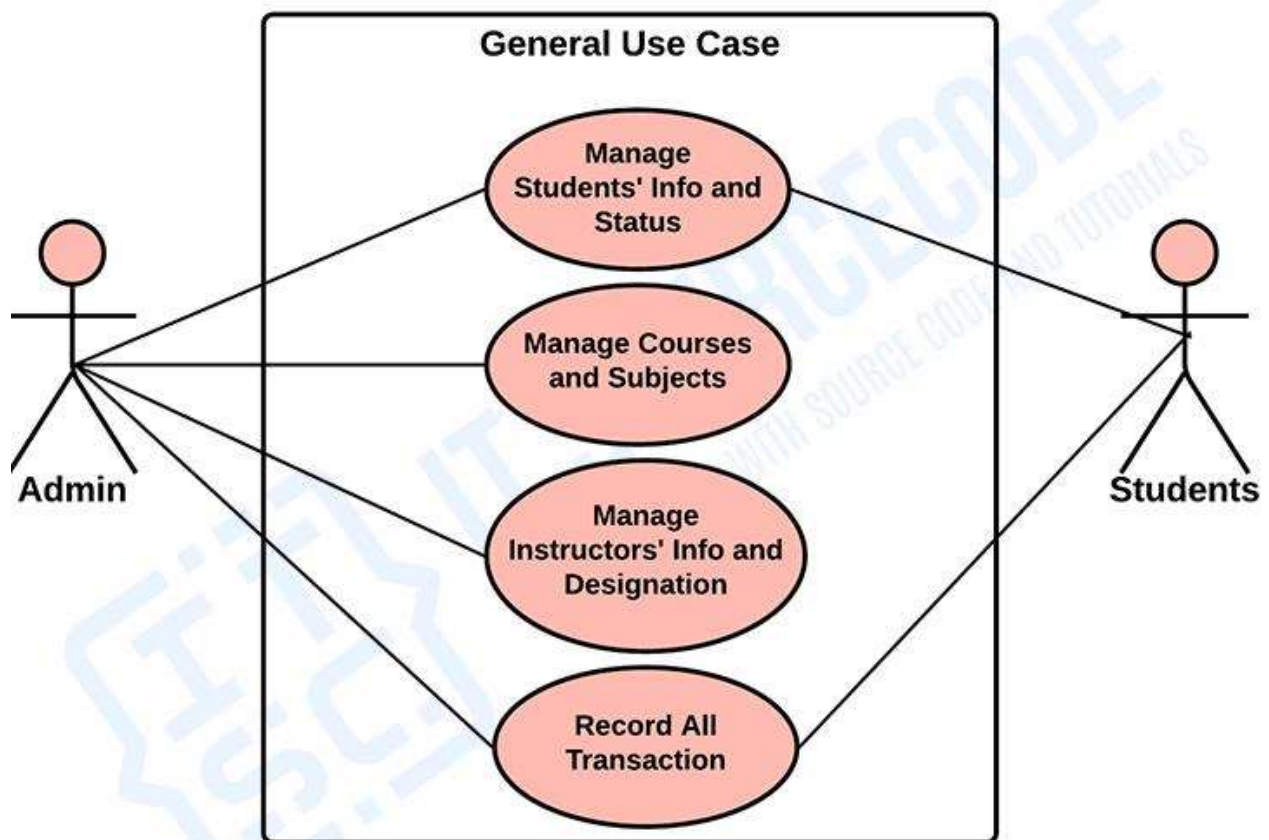
### ENTITY RELATIONSHIP DIAGRAM

*School Management System ER Diagram*

The features included in the system ER diagram were the security and monitoring of the students' records, transactions, and status. These features were also listed and recorded in reports that served as the history of transactions done in the system.

**School Management System Use Case Diagram** - This discusses the meaning of the School Management System project UML as well as its use case diagram using include and extend. A use case diagram is a visual representation of how a user might interact with a program. This diagram depicts the system's numerous use cases and different sorts of users. The circles or ellipses are used to depict the use cases.

## SCHOOL MANAGEMENT SYSTEM



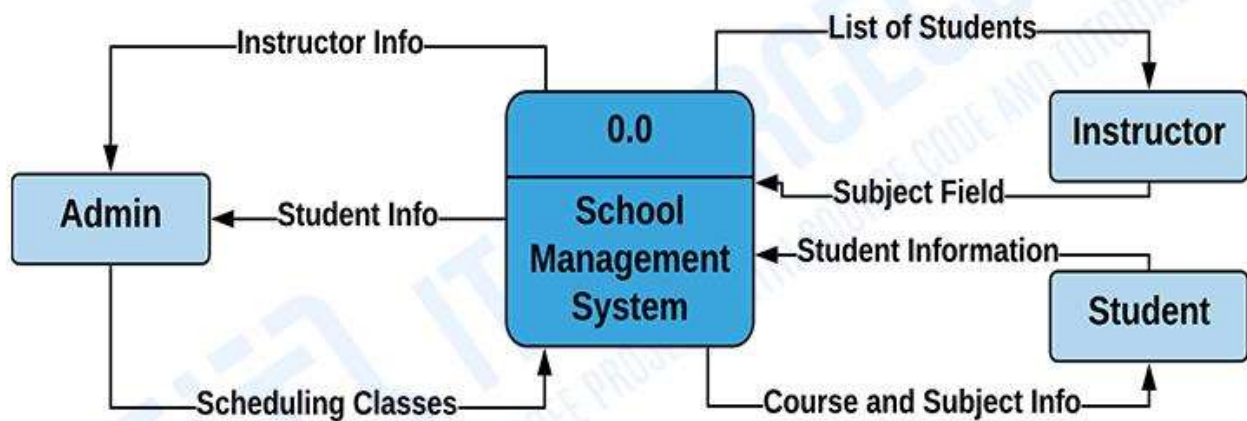
## USE CASE DIAGRAM

*School Management System Use Case Diagram*

By creating the use case of the School Management System, you will determine the possible features to identify the flow of the system. Then, you can create the blueprint or core of the system function.

**School Management System DFD Levels 0, 1, and 2** - This will give your ideas about the School Management System Project DFD Diagram levels 0, 1, and 2. The Data Flow Diagram (DFD) represents the flow of data and the transformations in the School Management System. In the DFD, input, processing, and output are used to represent and define the overall system.

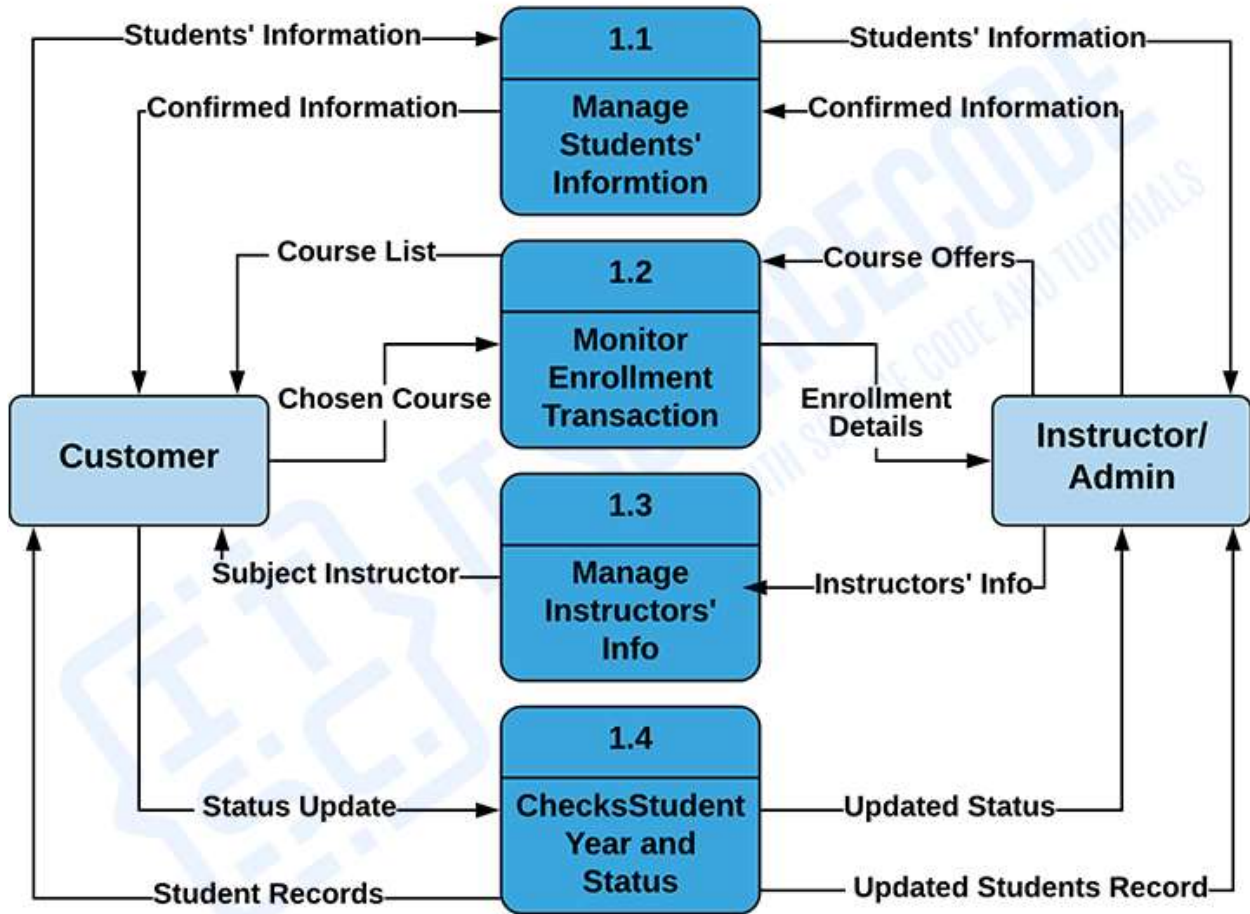
## SCHOOL MANAGEMENT SYSTEM



## DATA FLOW DIAGRAM LEVEL 0

*School Management System DFD Level 0*

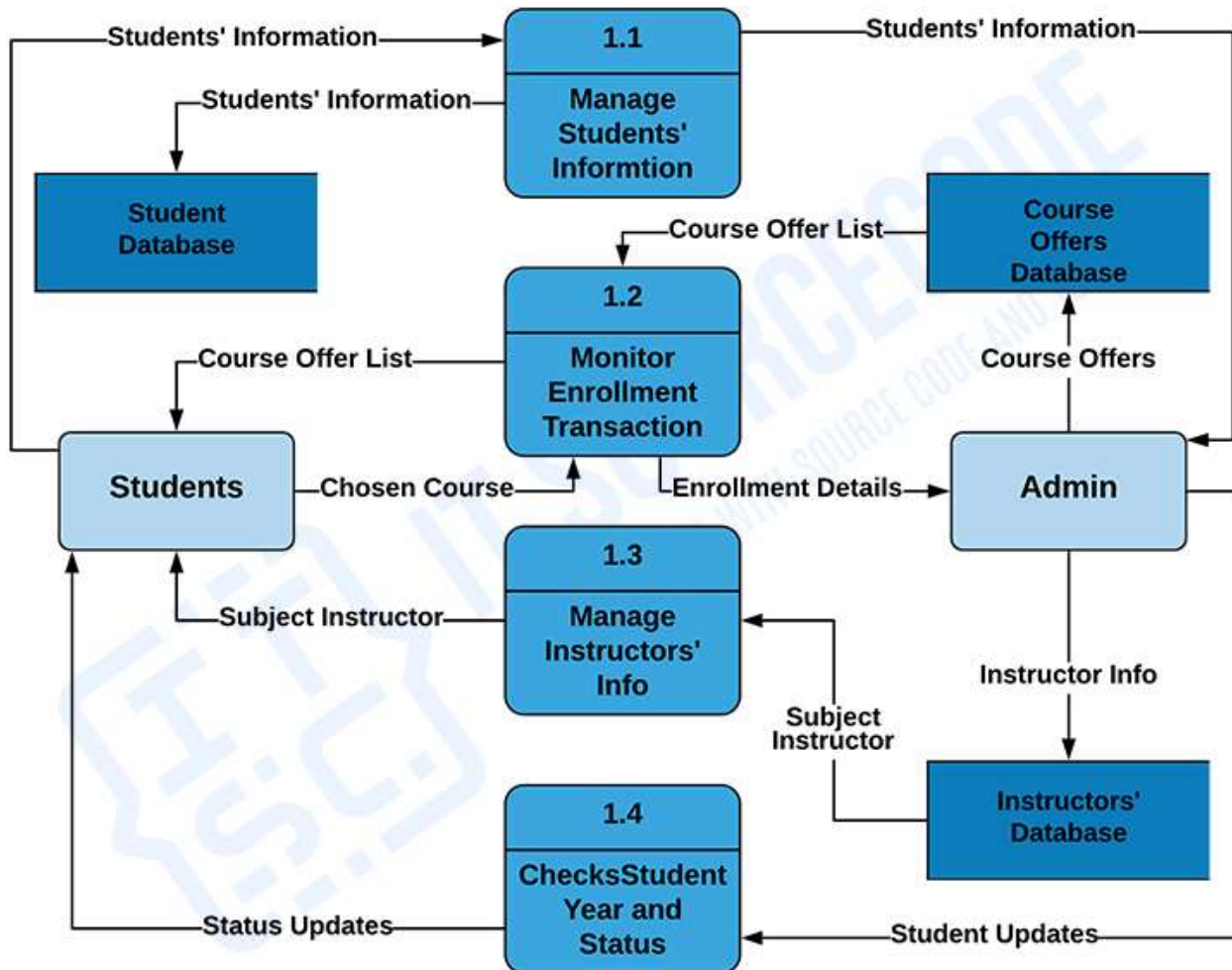
# SCHOOL MANAGEMENT SYSTEM



## DATA FLOW DIAGRAM LEVEL 1

*School Management System DFD Level 1*

# SCHOOL MANAGEMENT SYSTEM

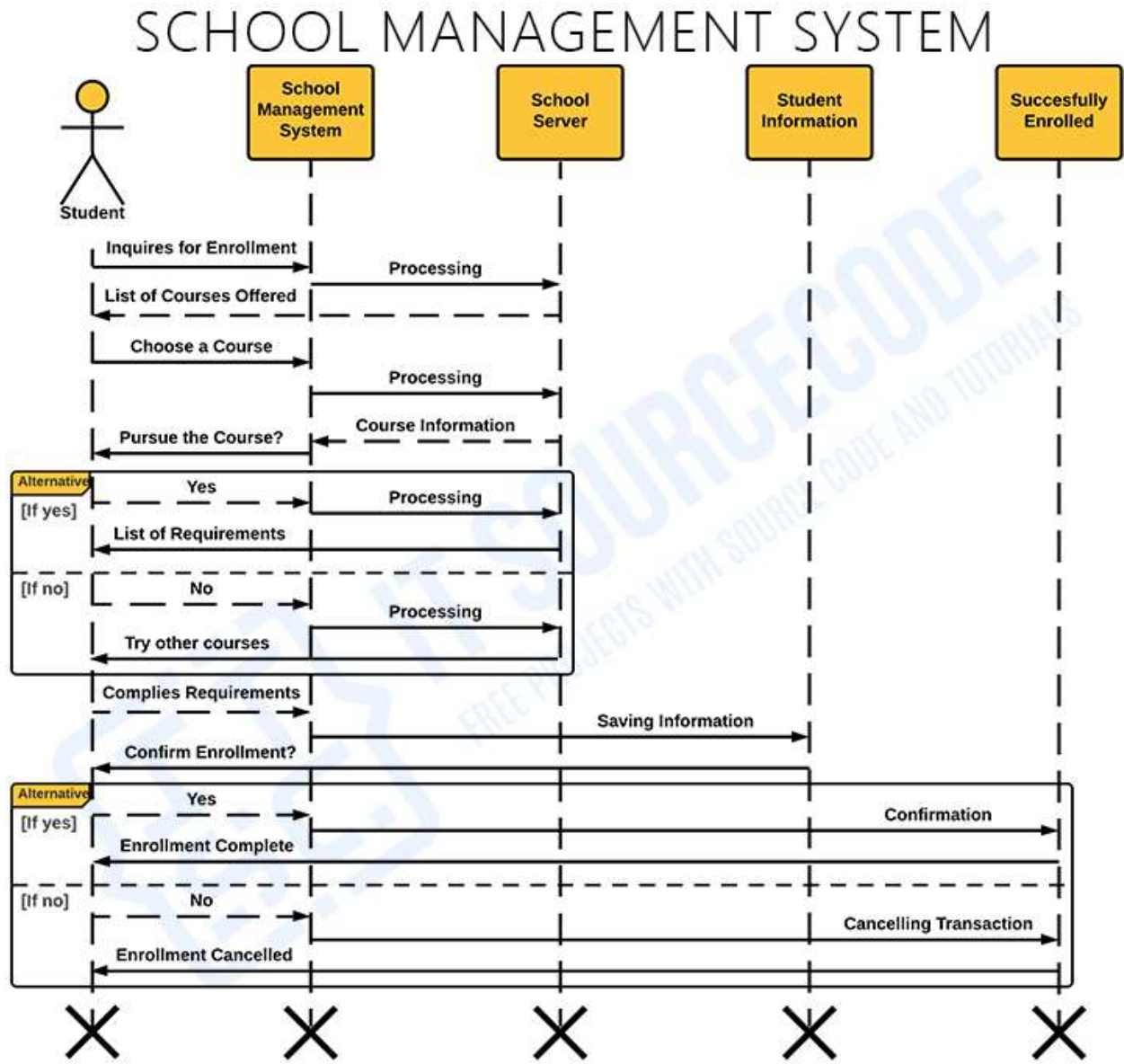


## DATA FLOW DIAGRAM LEVEL 2

*School Management System DFD Level 2*



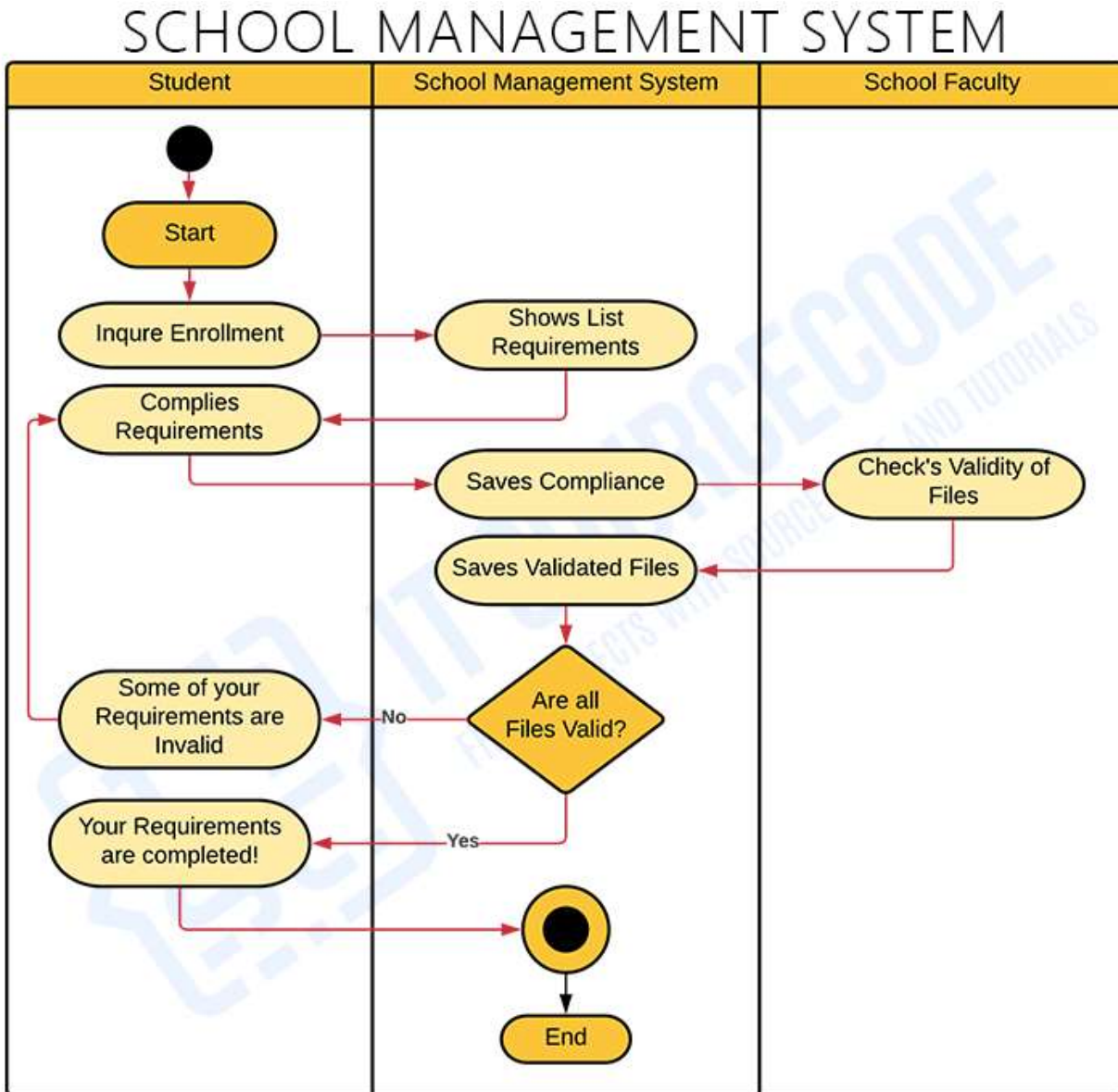
**School Management System Sequence Diagram** - is the diagram that gives a guide to the programmers and developers on what should be the behavior of the School Management System. It comes with the UML sequence Diagram symbols that help illustrate the structure of a School Management System. In order to achieve your desired system structure and behavior, you must design its sequence diagram before developing it.



## SEQUENCE DIAGRAM

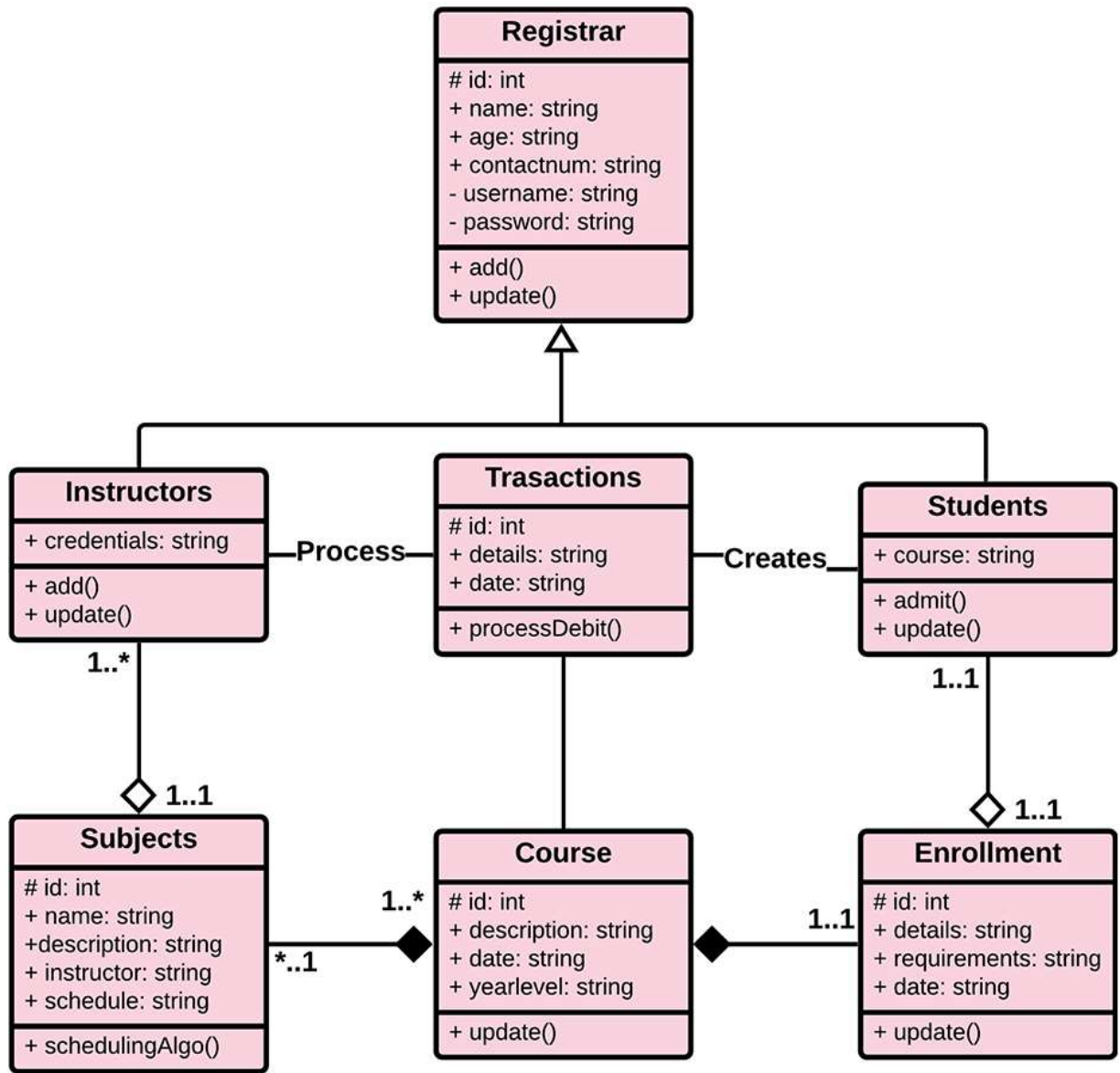
*School Management System Sequence Diagram*

**School Management System Activity Diagram** - is a designed illustration that provides the behavioral aspect of system development. It shows the system and user interaction as well as the flow of activities while they interact. School Management System UML Activity Diagram also gives the programmers bright ideas and guides them throughout the system making.



**ACTIVITY DIAGRAM**  
*School Management System Activity Diagram*

**School Management System Class Diagram** - is a designed structure that shows the classes and their relationships. This UML Class Diagram is made to guide programmers along with the School management system development. It contains the class attributes, methods as well as the relationships between classes. These mentioned contents make sure that your School management system development must in line with what should be its functions.



*School Management System Class Diagram*