

SYSTEM REQUIREMENT SPECIFICATION (SRS) DOCUMENT

For Sir Syed High School & College Campus-X



Abstract

It is the project of POF. Developing a system for SIR SYED HIGH SCHOOL & COLLEGE campus -X. This document represents the documentation of project. It includes introduction, scope, objectives, benefits, existing system. Deeply system design, and their requirements for the project. The documentation and system development are under process.

Ammara Zia

Ammara.zia1142@gmail.com



SECTION-01

INTRODUCTION OF THE COLLEGE MANAGEMENT SYSTEM

The COLLEGE MANAGEMENT SYSTEM can be used to store student information like attendance, fees, and student result etc. admin can create report regarding any student any time using this system. Using this system, you can register new student and their course details. You can submit student fees and can check fees details anytime. You can create exam result and submit in this system. Student can check their result online by logging to the system. You can also add new employee in the system and can check details of the employee easily. Student can also check course detail online from this system.

The main objective of college management system is to automate all functionalities of a college or university. Using this system you can manage all college management work like admission, fees submission, time table management and result declaration. Using this college management system, you can view or update data and information about students and staff easily. This system helps in managing the activity like student admission, student registration, fees submission. Admin can also retrieve information of employee student.

Using this system you can manage all information of all aspects of a college, its students, faculties, Departments, marks and other curricular activities. College management system provides the easiest way to manage all functionalities of a college. This system facilitates colleges to maintain the functionality related to college employees and their students.

OBJECTIVE OF THE PROJECT

This project is invented for the College Management System of the student employee in college. The objective of the project solution for simplifying the entry process. It provides user friendly interface. The main objectives of the College Management System project are following:

- a) Easy searching of student, college & employee information.
- b) Increase high throughputs.
- c) Decrease overheads.
- d) Minimization redundancy.
- e) Make data more secure.
- f) Improve report generation process to improve decision making.
- g) To provide fast accurate and consist response.
- h) Proposed system is according to the current demand.

SCOPE OF THE PROJECT

Our project has a big scope to do. We can store information of all the student & college record. College Management System is categorized according to various streams. Various companies can access the information. Students & college can maintain their information and can update it. Notifications are sent to students about the companies. Students & college department can access previous information about college.

There are following modules and forms are used-

- a) Institute Record.
- b) Student Record.



- c) College Management System.
- d) Category's selection form.
- e) Reporting, Withdraw.
- f) Campus Placement.
- g) Staff Salary.
- h) New Admission.
- i) College Results.

Benefits of purposed college management system

The benefits of college management system for the employee are they can easily retrieve all information related to student and employee. Admin has all the Collective records of students of all the branches. Admin can check all the records of employees of all departments anytime. This system gives easy approach to find the detail information for any student/employee. Using this college management system, it is very easy to handle all functionality of college. This system is beneficial for both students and employees as they can get all previous or current information when they need. This system is also helpful to maintain the students record like admission record, fees record, exam result records. College management system can help to get all or a particular student attendance information. Also, it can help to maintain the fees and accounting reports of college in proper way.

Covering Details regarding Institute

- a) Student record – Covering Details regarding Students
- b) Counselling – Helps in Category wise Placements.
- c) Staff record – Converting Details regarding staff.



SECTION-02

Gathered Requirements:

POF IT Department given demonstration on said software as well. To fulfill the requirements, we provide all necessary information about students in soft copy. After trail some observation in the Fee module is as under: -

- i. Fee generation process is too difficult and lengthy. All categories fee must assign to the class in every month.
- ii. Advance Fee generation not possible.
- iii. Bank wise Scroll option not available.
- iv. Edit/ Delete/ Un post option for Fee Voucher is not available
- v. School Leaving Certificate option is not available
- vi. Re-admission process is not available.
- vii. Student Fee at least 6 months History on Fee Voucher is not available
- viii. Siblings or 3rd Child option is not present

Reports

- i. Class wise/ Section Wise Strength Wise Report
- ii. School Leaving Certificates and Struck Off report
- iii. Date/ Month wise & student wise new admission report
- iv. Fee Generation Report Date/Month/ Yearly (Student, Class & Section wise)
- v. Fee Collection Report Date/Month/ Yearly (Student, Class & Section wise)
- vi. Fee Defaulter Report Date/Month/ Yearly (Student, Class & Section wise)
- vii. Fee Posting Bank wise (Branches) Report date wise/ month wise / Yearly report
- viii. Individual Student Ledger (Student, Class & Section Wise)
- ix. Head / category Wise Report
- x. Welfare buses users report date wise/ month wise / Yearly report (Student, Class & Section Wise)
- xi. Fee receivable, Fee received and Pendency Report (Class/ Section Wise) Monthly / Yearly

Summary Reports

- i. Head Wise and Class / Section/ Student Wise Summary Report
- ii. Category wise student strength report (School Profile)
- iii. Bank wise & Date wise collection summary report
- iv. Head wise and class wise Summary of Defaulter Students

Modules to work on:

- i. Single Student Ledger
- ii. Process of edition in fee heads
- iii. Exam & lesson planner
- iv. Payroll



v. Homework

- vi. AddII
- vii. LMS
- viii. Complaint Portal
- ix. Export of reports in Excel and PDF
- x. Detailed View of all campuses for DIR WES & Admin SSEIs
- xi. Adjust Campus 10 in Software



SECTION-03

Detailing and Existing System

College Management System can store and manage all data of the various departments of a college like Administration, Attendance, Staff details etc. using this system user can retrieve any information related to student, teacher and fees. Using this system teacher can check student attendance anytime. This system also help teacher to announce the result. College administration can also manage college work easily. Admin can check leave, salary and other details of teacher any time. They can also create time table of classes from this system. The library module is used for the data process of library and book accessing for students and staffs.

Admin can also generate following reports from this system like

- Student Report
- Employee Report
- Course Detail Report
- Fee Detail Report
- Marks Detail Report
- Generate Pay Slip

Panels are available

- ✓ Collage panel
- ✓ Student panel
- ✓ Parent's panel
- ✓ Other panel

1. Collage panel

There are three types of users in this panel they are admin, mentor & faculty and these three users have their own rights and authorized to be done. when any student take admission in college then admin give a unique student id & password for student and admin give a unique parents id & password for parents. And if any mentor or faculty is been changed and new faculty is Join College then admin also provide them the login id and password. And then these three types of user (admin, mentor, and faculty) can login in college panel and perform their tasks.

- Admin
- Mentor
- Faculty

Admin For College & Self

Admin can add or delete the new course in college's courses. And admin can add or delete the new branch in particular course according to student study and requirement. Admin can add and delete (manage) the seats in particular branch means admin can fix seats in any branch of any courses. Admin can fix the criteria for the admission of student. Admin can enter the roll no of a particular student if he wants to show the full profile of student. Admin can change his bio data and profile if he needed it. For Student: When any student takes admission in college. Admin take requirement for the branch and course and check that there is a seat available in that particular branch & course and allotted as required and admin give a unique student id & password for student and admin give a unique parents id & password for parents.



- **Attendance:**

Admin can see the attendance of all branches student's year wise, branch wise, and roll no. wise. And admin is update and modification in attendance of all branch's students. If admin has any issue of attendance of particular student, then admin can be update notice in student account and parents' account.

- **Marks:**

admin can see the marks of all branches students, year wise, branch wise, and roll no. wise. And admin is update and modification in marks of all branches, students. If admin has any issue of marks of particular student, then admin can be update notice in student account and parents' account.

- **Notices:**

if admin has any issue for any student's marks and attendance and other field then admin can be update notice in student & parents account for parents and students. If admin wants to give any notice for a particular student, then admin can be giving a message or notice for student.

- **Calendar**

Admin can be updating a calendar for students. information about the midterms, practical and final exam dates in this calendar. Admin can be update calendar branch wise and year wise.

- **Time table**

admin can be updating a time table for students. information about the classes time with particular subject with day wise in this time table. Admin can be update time table branch wise and year wise.

- **News**

admin can be update news in particular student and year wise and branch wise. information of college events, functions. and information regarding technical & non technical. For Parents when any student take admission in college. Admin give a unique parents id & password for parents.

- **Notice:**

If admin has any issue of attendance & marks of particular student then admin can be update notice in student account and parents' account. So, parents can see the notice of college regarding to student. Mentor For College & Self mentor after login can be change in his profile and bio data. Mentor can be creating a list for his contact. In this list he up-dating the name, contact no, address, email id, etc. of his friends and faculty teacher.

For Student

- **Attendance:**

mentor can see the attendance of only their branch students, year wise and roll no. wise. And mentor is update and modification in attendance of only their branch students. If mentor has any issue of attendance of particular student, then mentor can be update notice in student account and parents' account.

- **Marks:**

mentor can see the marks of only their branch students, year wise and roll no. wise. And mentor is update and modification in marks of only their branch students. If mentor has any issue of marks of particular student, then mentor can be update notice in student account and parents' account.

- **Notices:**

if mentor has any issue for any student's marks and attendance then mentor can be update notice in student & parents account. If mentor wants to give any notice for a particular student, then mentor can be giving a message or notice for student.

- **Time table:**



mentor can be updating a time table for students of their branch. Information about the classes' time with particular subject and subject teacher name in this time table. Mentor can be update time table year wise.

• **Profile & contact list:**

mentor can be seeing the profile of their branch students.

For Parents:

If mentor has any issue of attendance & marks of particular student then mentor can be update notice in student account and parents' account.

For faculty:

mentor can be update time table of faculty teacher. and mentor can see the contact no, address, email id and other information of his branch teacher.

Faculty For College & Self faculty

can see their feedback and profile and bio data. and faculty can be change and update their profile and bio data but cannot be change their feedback.

For Student:

faculty will take the attendance of their lecture students. And update the attendance & marks of students. if faculty has any issue for any student's marks and attendance then teacher can be update notice in student & parents account. If faculty wants to give any notice for a particular student, then faculty can be giving a message or notice for student. For Parents: If mentor has any issue of attendance & marks of particular student then mentor can be update notice in student account and parents' account.

- Admin, mentor & faculty
- Login id & password
- Bio-data

• **Attendance For admin:**

update and show attendance all branch (semester wise and roll no wise) For faculty: update and show attendance only his department For mentor: update and show attendance only his department

• **Marks For admin:**

update and show marks all branch (semester wise and roll no wise) For faculty: update and show marks only his department For mentor: update and show marks only his department

• **Notices For admin:**

update and show marks all branch (semester wise and roll no wise) For faculty: update and show marks only his department

For mentor

update and show marks only his department

- All students
- Particular student
- Roll no. and comments
- Particular student and parents
- Time table & calendar Admin, mentor, faculty

For admin:

show and update time table of all semester and branches

For mentor:

show and update time table of all semester and branches for faculty: show and update time table of all semester and branches



2. Student panel 1

when student get admission in college, he will be provided the particular student id and password by college and then student can login from student panel from given or provided student id or password and can accessed the belonging services are provided for them such as attendance, marks, news, calendar, profile, etc. Student can change (update) their profile, bio data, personal information, and news but cannot change their attendance, marks, time table and calendar. When student can change in their profile and bio data then all changes are update in college panel and Parents panel.

- **Login id**

login id provided by college itself and they can be accessed by entering in login id block.

- **Password:** unique password is provided by college to each student's id. When correct password is entered required id is been login.

- **Bio data**

this field gives the information regarding family and student profile (name, father name, mother name, branch, current year, dob, roll no., address, blood group, contact no and profile picture).if student is going to update his personal information in student panel then the updation is also done or been performed in college panel and parents panel.

- **Attendance:**

this field informs about the attendance of student by semester wise till date it's been present. There is a criterion for attendance (75% present) and if it is less than 75% then its cerate the remark of short attendance or student can view the attendance by subject wise and show that how many lecture of a particular subject in a particular week & month been done and how many lecture attend by student in particular week and month.

- **Marks:**

This field informs about the marks of student by semester wise till semester it's been present. It can also display the marks of first midterm and second midterm and final exam of a particular semester. It shows that student is achieved marks of a particular subject from total marks and also calculate the rank in class.

- **Calendar:**

information about the midterms practical and final exam dates. and time table of classes.

- **Profile:**

if needed modification can be done for new password and profile picture and etc.

- **Personal information:**

it can add personal (contact name, contact no. And email id and address) for faculty and friends.

- **News:**

information of college events, functions. and information regarding technical & non technical.

- Login id & password • Bio-data • Attendance • Demarks • News Collage news other news
- Calendar • Profile • Library • Feedback

3. Parents panel

when student get admission in college, he will be provided the particular parents id and password by college and then parents can login from parent's panel from given or provided parents id or password and can accessed the belonging services are provided for them such as attendance, marks, news, calendar, profile, etc. Parents cannot change students, attendance, marks, time table and calendar. Mean parents only read the information of student and parents can communicate with teacher. if any parents want to give feedback for any teacher there is a service provided in parents panel with feedback field and this feedback can seen by admin.



- **Login id:**

login id provides by college itself and they can be accessed by entering in login id block.

- **Password:**

unique password is provided by college to each parent's id. When correct password is entered required id is been login.

- **Bio data:**

this field gives the information regarding family and student profile (name, father name, mother name, branch, current year, dob, roll no., address, blood group, contact no and profile picture). Parents cannot change in student bio data.

- **Attendance:**

this field informs about the attendance of student by semester wise till date it been present. There is a criteria for attendance (75% present) and if it is less than 75% then its create the remark of short attendance. Parents can view the attendance by subject wise and show that how many lecture of a particular subject in a particular week & month been done and how many lecture attend by student in particular week and month.

- **Marks:**

this field informs about the marks of student by semester wise till semester it's been present. it can also display the marks of first midterm and second midterm and final exam of a particular semester. It shows that student is achieved marks of a particular subject from total marks and also calculates the rank in class. But parents cannot change in students marks only view it.

- **Notice:**

information of fee (deposit date and amount) and Feedback of student given by teacher and Notification (information) for parents by college.

- **Feedback:**

feed of the teacher by the parents and it feedback store in adman's feedback block.

- Login id & password
- Information & bio-data of student
- Show attendance and marks
- Notice for regarding to fee and other account section
- feedback

4. Other panel

This panel can be use by guest user without login. Guest user can get information of college infrastructure, admission process, academics, department, and available courses and branches. And guest user can get information of requirement faculty teacher.

- Information of course and branch.
- Download the registration form.
- Information for requirement of faculty.

College Management System Modules Login & registration

- **Admin:** when any student take admission in college. admin give a unique student id & password for student and admin give a unique parents id & password for parents. For login in student & parents panel. And admin can be login in college panel. Admin give a unique id and password for faculty teacher.

- **Mentor:** mentor can be login in college panel.
- **Faculty:** teacher can be login in college panel.
- **Parents:** parents can be login in parents' panel.



- **Student:** student can be login in student panel. Bio data
 - **Admin:** admin can see the bio data of student and faculty. After searching by roll no. and name wise. } Admin can be change in their bio data.
 - **Mentor:** } mentor can be update and changes in their bio data. } mentor can see the bio data of their branch student. After searching by roll no.
 - **Faculty:** } faculty can be update and change in their bio data.
faculty teacher can see the bio data of their branch student. After searching by roll no.
 - **Parents:** } Parents can see the bio data of student.
 - **Student:** } student can be update in their bio data. Attendance
 - **Admin:** Admin can be update and see the attendance of student. After search by semester wise and roll no wise.
 - **Mentor:** mentor can be update and see the attendance of student. After search by semester wise and roll no wise.
 - **Faculty:** faculty can be update and see the attendance of student. After search by branch wise and roll no wise.
 - **Parents:** parents can see the attendance of student by semester wise and subject wise after search.
 - **Student:** student can see the attendance by semester wise and subject wise after search.
- Marks:
- **Admin:** admin can be update and see the marks of student. After search by semester wise and roll no wise.
 - **Mentor:** mentor can be update and see the marks of student. After search by branch wise and roll no wise.
 - **Faculty:** faculty can be update and see the marks of student. After search by branch wise and roll no wise.
 - **Parents:** parents can see the marks of student by semester wise and subject wise after search.
 - **Student:** student can see the marks by semester wise and subject wise after search.
- Notices
- **Admin:** } If admin has any issue for any student's marks and attendance then admin can be update notice in student & parents account. If admin wants to give any notice for a particular student, then admin can be giving a message or notice for student. After search the roll no and semester wise. } If admin has any issue of attendance & marks of particular student then admin can be update notice in student account and parents' account. after search the roll no. } Admin can be up-date a notice for parents regarding to fee and other information. after search the roll no and semester.
 - **Mentor:** } If mentor has any issue for any student's marks and attendance then mentor can be update notice in student & parents account. If mentor wants to give any notice for a particular student, then mentor can be giving a message or notice for student. after search the roll no. and branch wise. } If mentor has any issue of attendance & marks of particular student then mentor can be update notice in student account and parents' account. After search the roll no and branch wise.
 - **Faculty:** } If faculty has any issue for any student's marks and attendance then teacher can be update notice in student & parents account. If faculty wants to give any notice for a particular student, then faculty can be giving a message or notice for student. After search the roll no and semester.
 - **Parents:** } Information of fee (deposit date and amount) and Feedback of student given by teacher and Notification (information) for parents by college.



• **Student:** information of college events, functions. and information regarding technical & non technical Profile:

- **Admin:** } admin can see the profile of student and faculty. After searching by roll no. and name wise. } Admin can be update of their profile.
- **Mentor:** } mentor can see the profile of student. After searching by roll no. and name wise. } Mentor can be updating their profile.
- **Faculty:** } mentor can see the profile of student. After searching by roll no. and name wise. } Mentor can be updating their profile.
- **Parents:** parents can see the profile of student.
- **Student:** student can be change in their profile. if needed modification can be done for new password and profile picture and etc.

Calendar:

- **Admin:** admin can be up-date a calendar for students. information about the midterms practical and final exam dates in this calendar. Admin can be update calendar branch wise and year wise after search.
- **Mentor:** mentor can see the calendar of student's examination date sheet after search by branch and semester wise.
- **Faculty:** faculty can see the calendar of student's examination date sheet after search by branch and semester wise.
- **Parents:** parents can see the calendar of their student after click the calendar.
- **Student:** student can see the calendar after click the calendar.

News:

- **Admin:** admin can be update news in particular student. information of college events, functions. and information regarding technical & non technical after search the roll no and branch wise.
- **Students:** information of college events, functions. and information regarding technical & non technical.

Searching:

- **Admin:** admin can be searching the attendance, marks, and bio data of particular student and any semester or branch by roll no, semester name, branch name wise.
- **Mentor:** mentor can be searched the attendance, marks, and bio data of particular student and their branch by roll no, semester name, branch name wise.

• Faculty

faculty teacher can be searched the attendance, marks, and bio data of particular student and their branch by roll no, semester name, branch name wise.

• Parents:

If parents have any issue for particular teacher, then parents click the feedback term and search the teacher, name and write feedback for teacher. and parents can see the student's attendance and marks by search the semester name and subject name wise.

• Student:

student can see the marks and attendance by search the subject name and semester name wise.

Automation:

- **Admin:** the information receives to admin that the seats are full of particular branch in particular course. And if admin types login id and password wrong then message will appear that "your id and password is incorrect".
- **Mentor:**



the mentor receives the information of branch and their room no in which their lecture will held and show that the list of students of their lecture class. And if mentor types login id and password wrong then message will appear that “your id and password is incorrect”.

- **Faculty:**

the faculty receive the information of branch and their room no in which their lecture will held and show that the list of students of their lecture class. And if faculty types login id and password wrong then message will appear that “your id and password is incorrect”.

- **Parents:**

if parents type login id and password wrong then message will appear that “your id and password is incorrect”.

- **Student:**

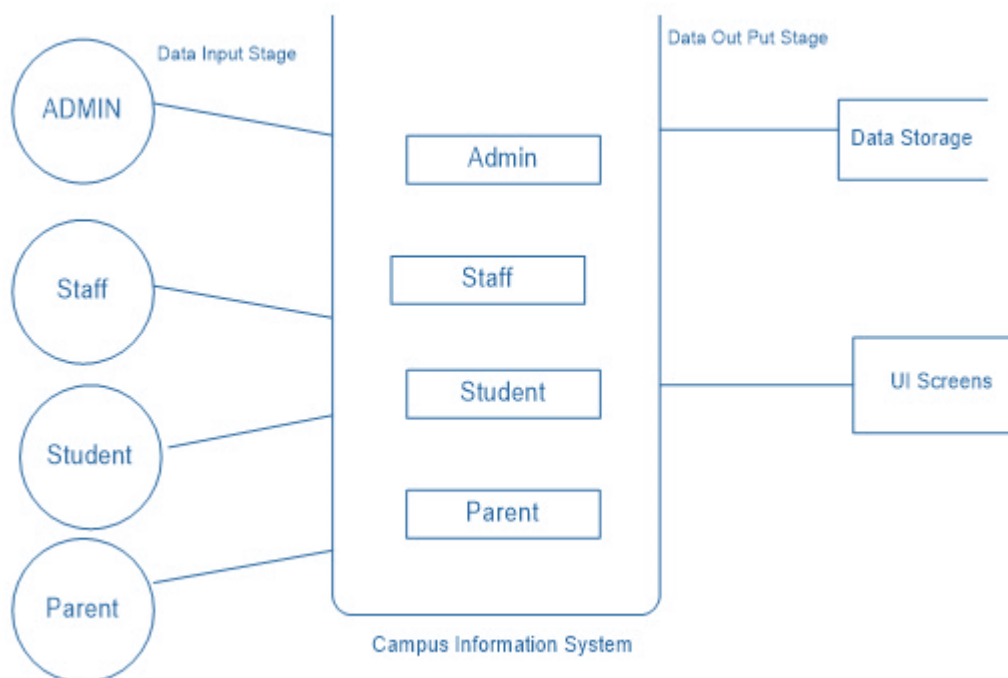
if student types login id and password wrong then message will appear that “your id and password is incorrect”.

SECTION -04 System Designing

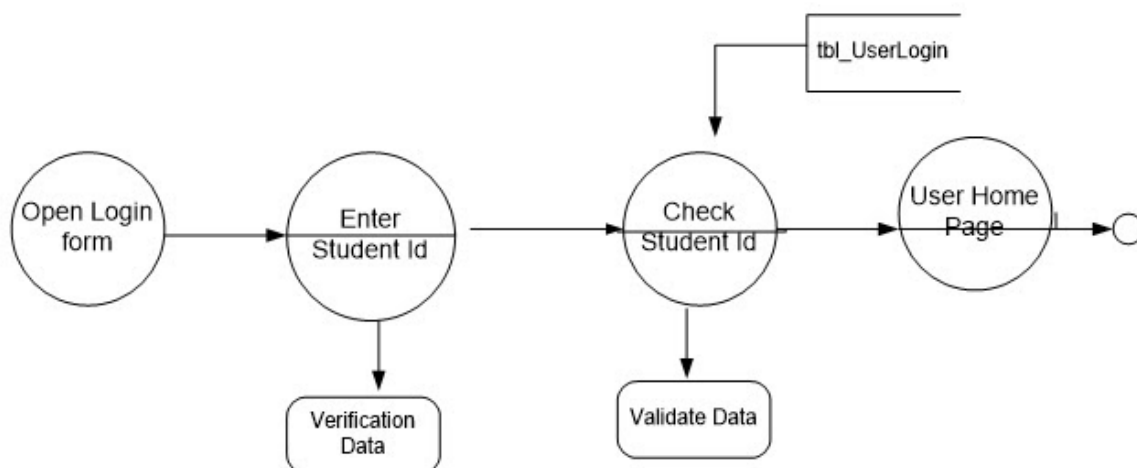
Data Flow Diagram of COLLEGE MANAGEMENT SYSTEM

A data-flow diagram is a way of representing a flow of data through a process or a system. DFD provides information about the outputs and inputs of each entity and the process itself. A data flow diagrams has no control flow—there is no decision rules and no loops.

Context 0 level Diagram



Login DFD Diagram



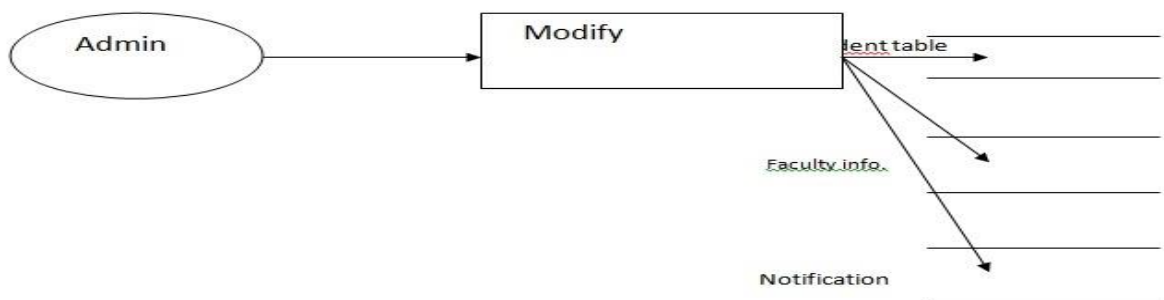


Admin Details Data Flow Diagrams

Level 1 Diagram



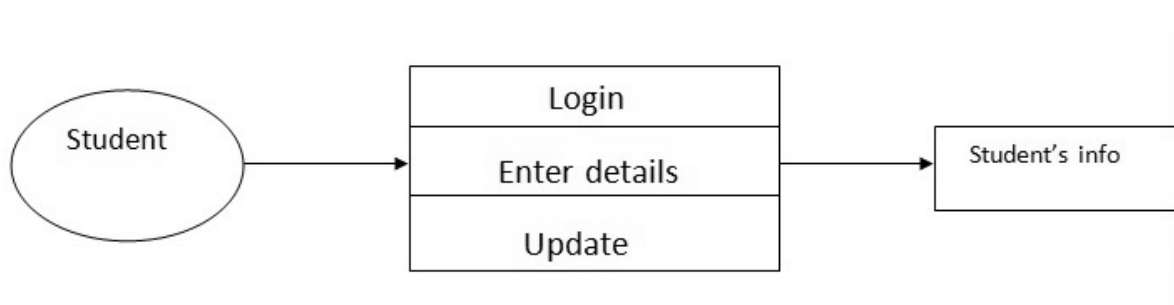
2nd Level DFD



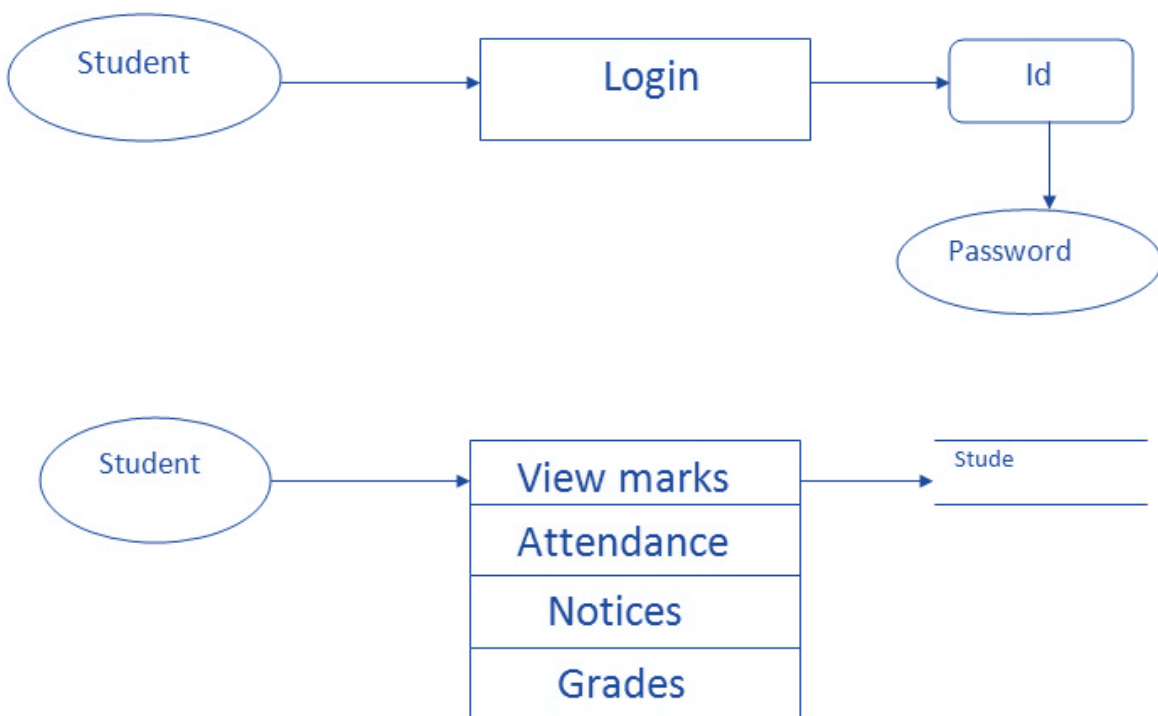


Student Details Data Flow Diagrams

Ist level DFD diagram

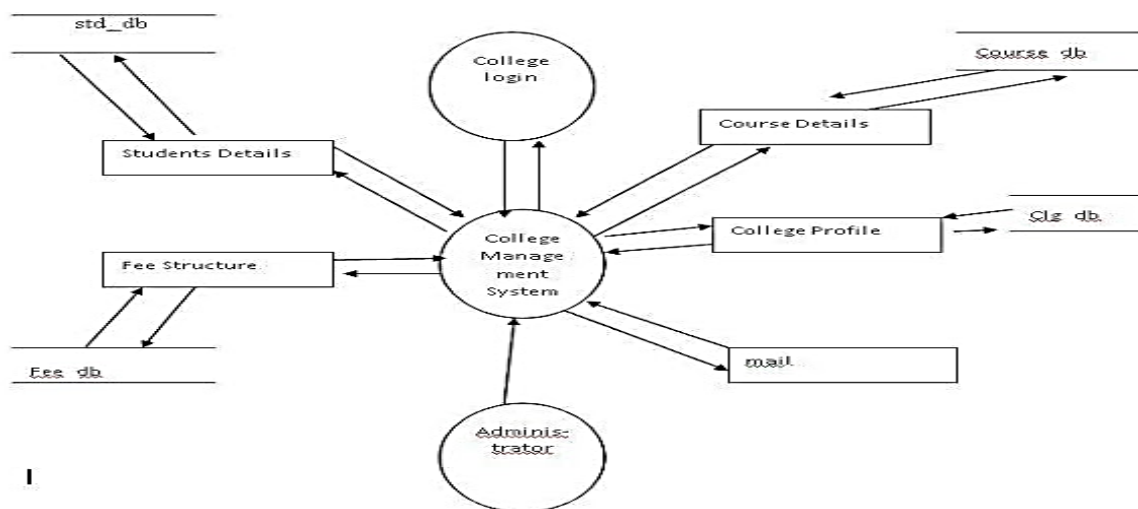
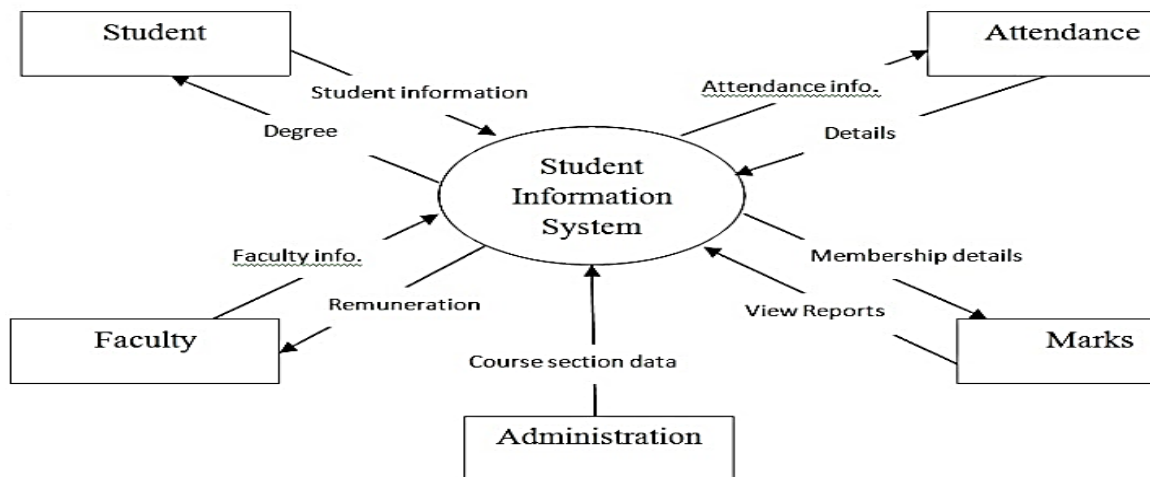


2nd level DFD

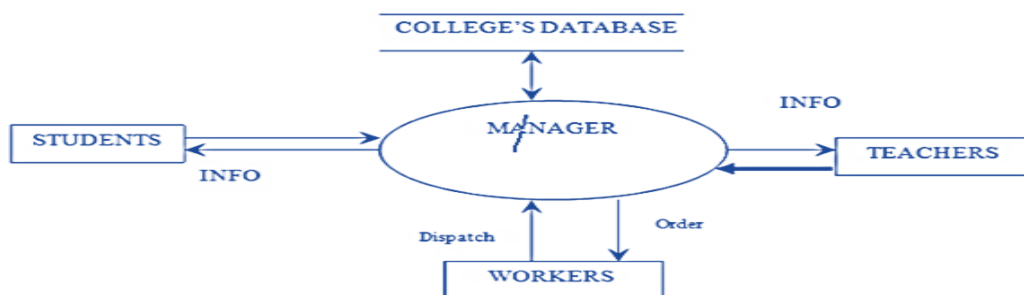


Over all Data Flow Diagram of COLLEGE MANAGEMENT SYSTEM

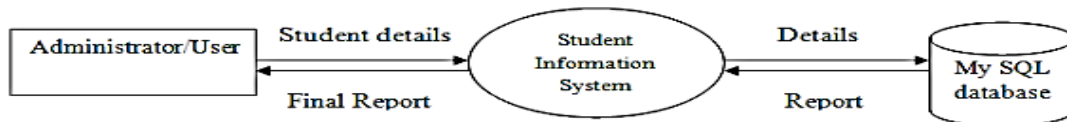
Overall data flow diagrams describes the overall flow of data in the system. Also inform us about entities of system.



DATA FLOW DIAGRAM

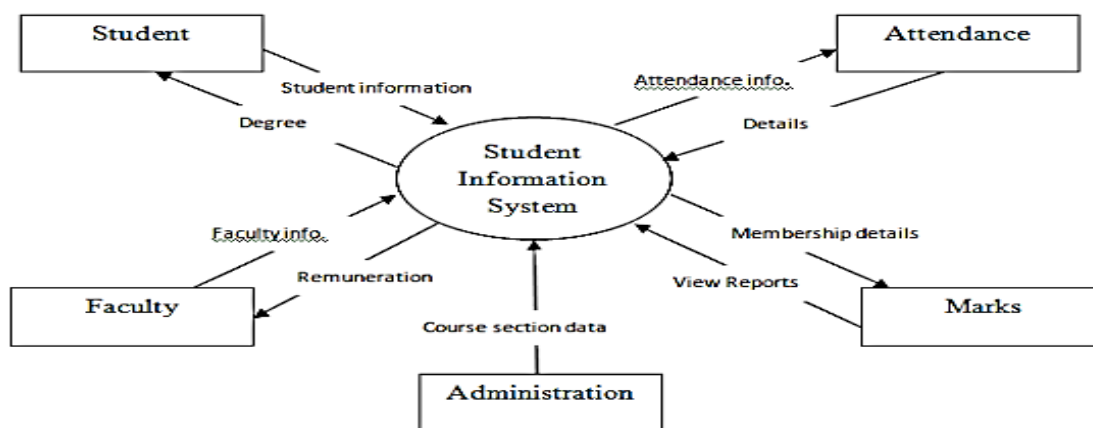


Level 0 DFD :



(Zero) 0 level diagram also known as context level diagram. It designed to be an abstraction view, showing the system as single process with its relationship to external entities. It represents the entire system as a single bubble with input and output data indicated by incoming and outgoing arrows.

Level 1 DFD:



level 1 data flow diagram (DFD) notates each of the main sub-processes that together form the complete system. We can think of the level 1 DFD as an “exploded view” of the context diagram.

UML Diagrams of modules that needs in the system

Why we draw class diagrams for system modules?

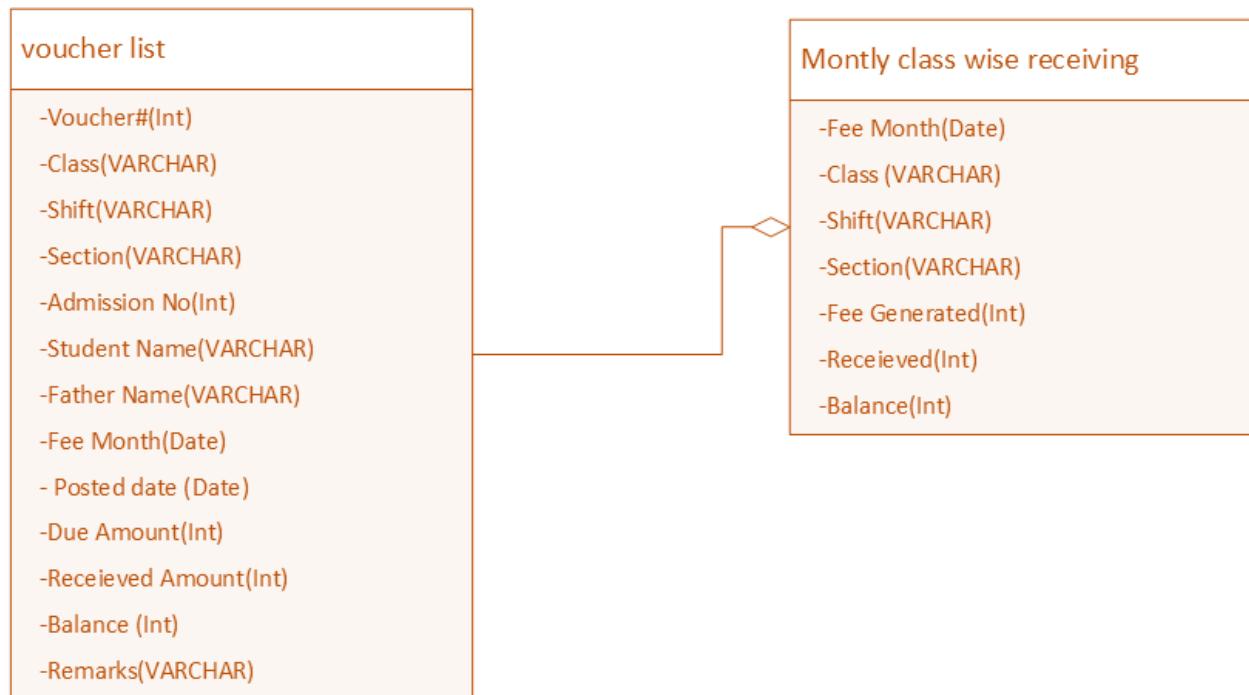
UML stands for ‘Unified Modelling language’. It is a type of static structure diagram that describes the structure of a system by showing the system’s classes, their attributes, operations, and their relationships among objects.

Student Ledger Module

This module consists of the all the financial details of the student. It keeps record of the fee paid by the student previously and details of the student. It also keeps record of the upcoming fee challan that students must pay through the bank. Student can print out any of the documents (Invoice, Official Receipt, etc.) from the Student Ledger.



Class diagram of Student Ledger Module:



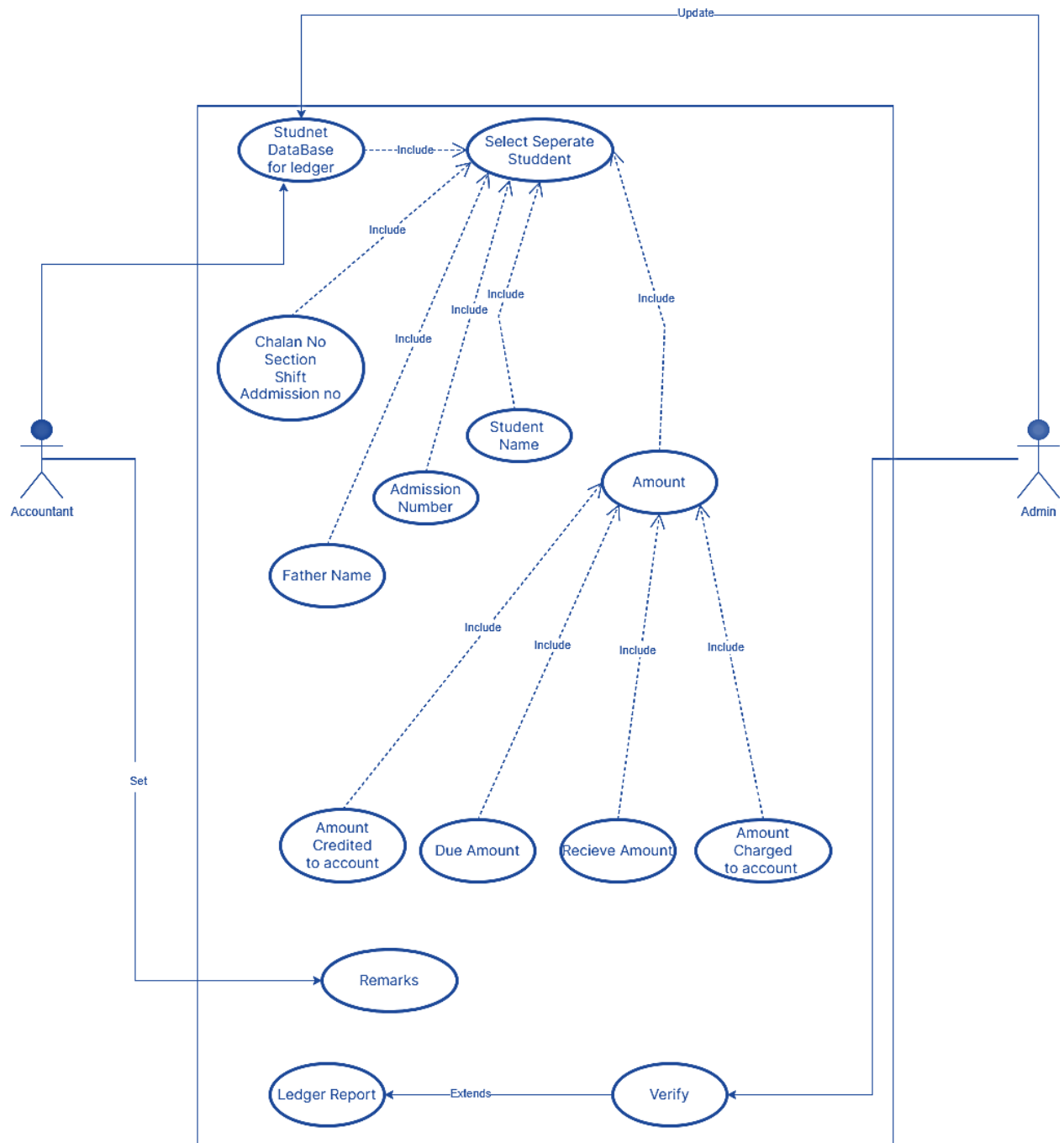
Why we make use case diagrams for system?

Use case add value. It explains how the system should behave and process, they also help to brainstorm what could go wrong. To identify and clarify and organize system requirements we make use case.

Use case of Student Ledger Module:



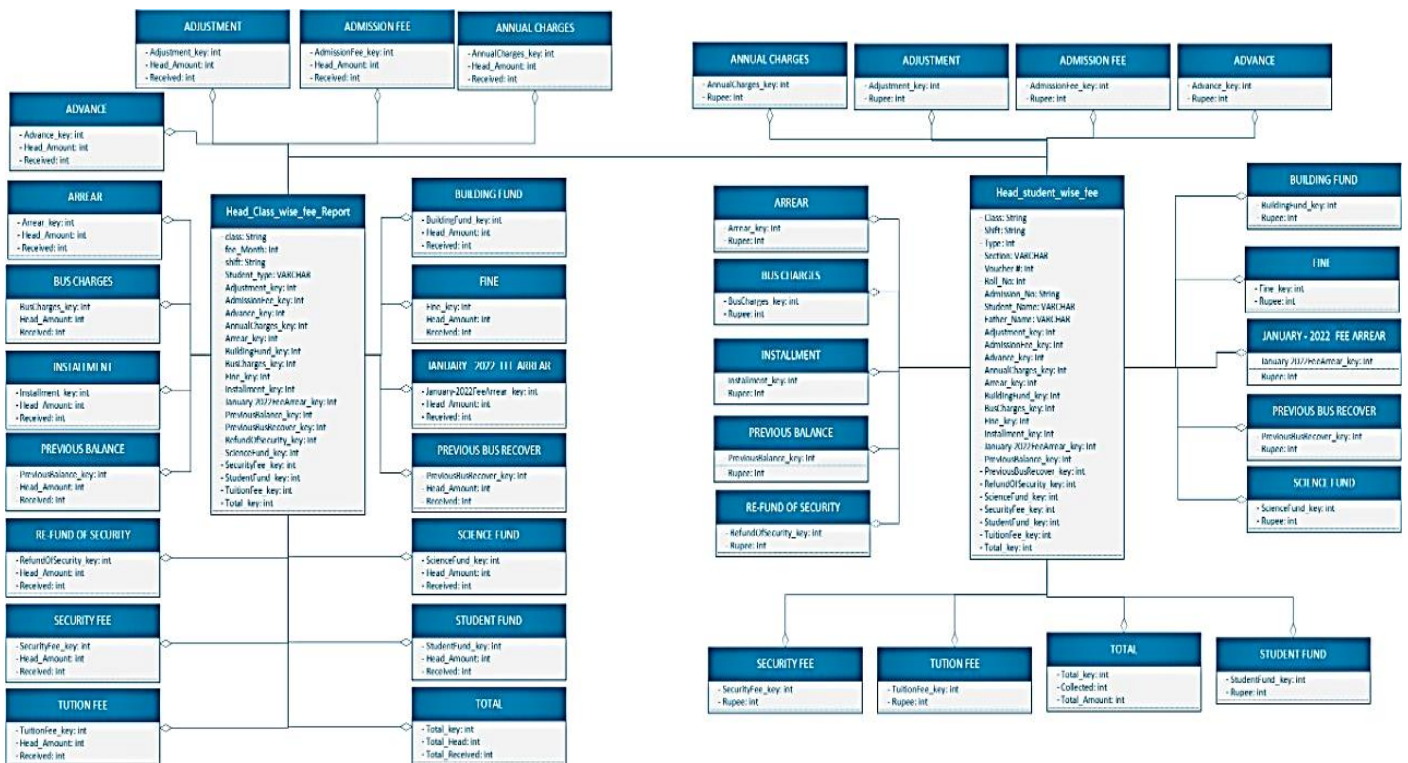
STUDENT LEDGER



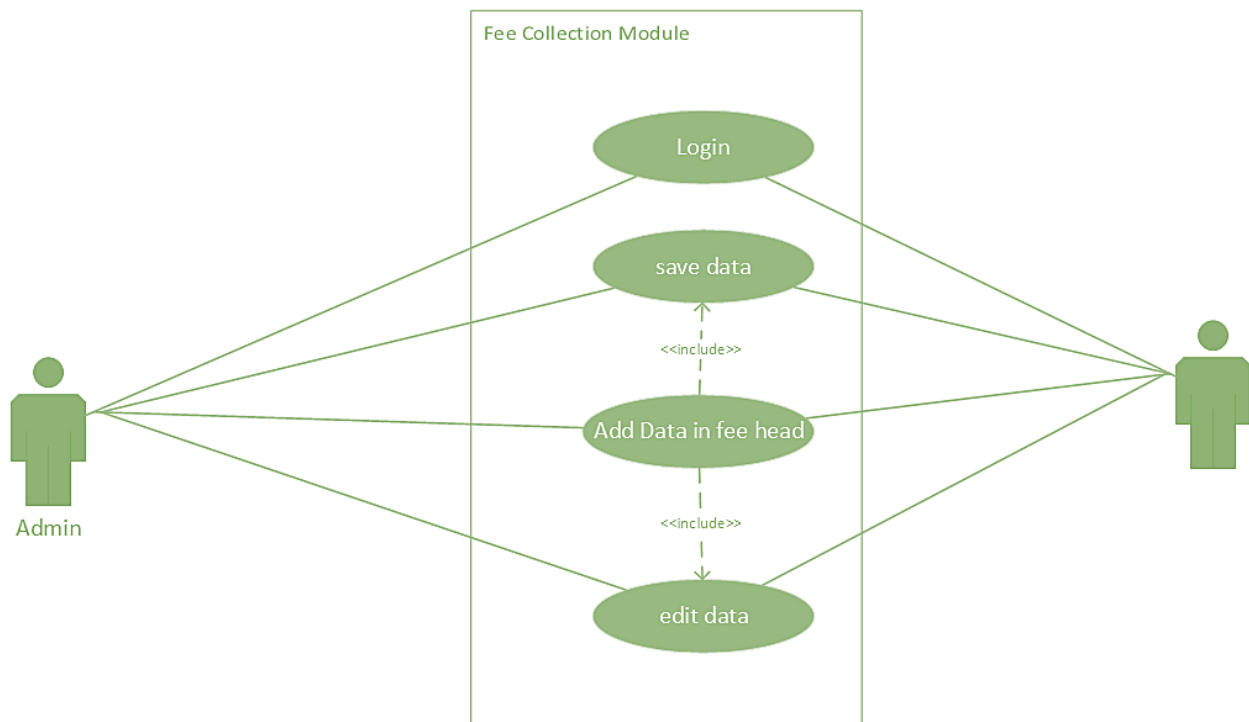
Fee head Module

This module allows the addition of data in fee head. The admin can login into the system and then can edit or add data in fee head and then save the changes to update the data in database.

Class diagram of Edition in fee head Module:



Use Case diagram of Edition in fee head Module:

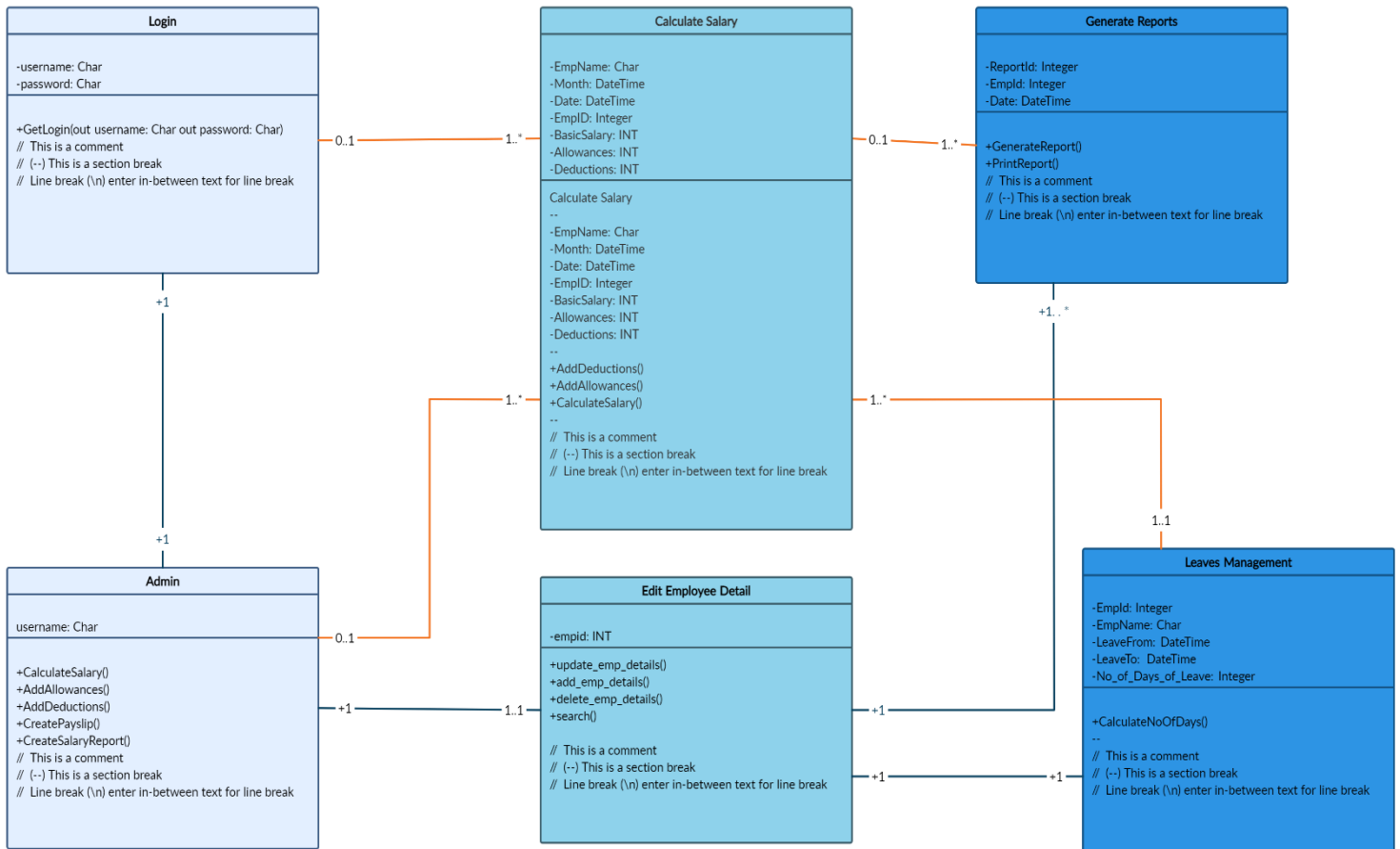


Payroll Module

The payroll module keeps track of employee pay also keep track of their previous pay history in case of unsanctioned leave or sanctioned half day leave the payroll module will deduct the amount from employee pay and will generate new pay of employee according to the deductions made. Report can also be generated for a single or multiple employees according to the need.



Class diagram of payroll Module:



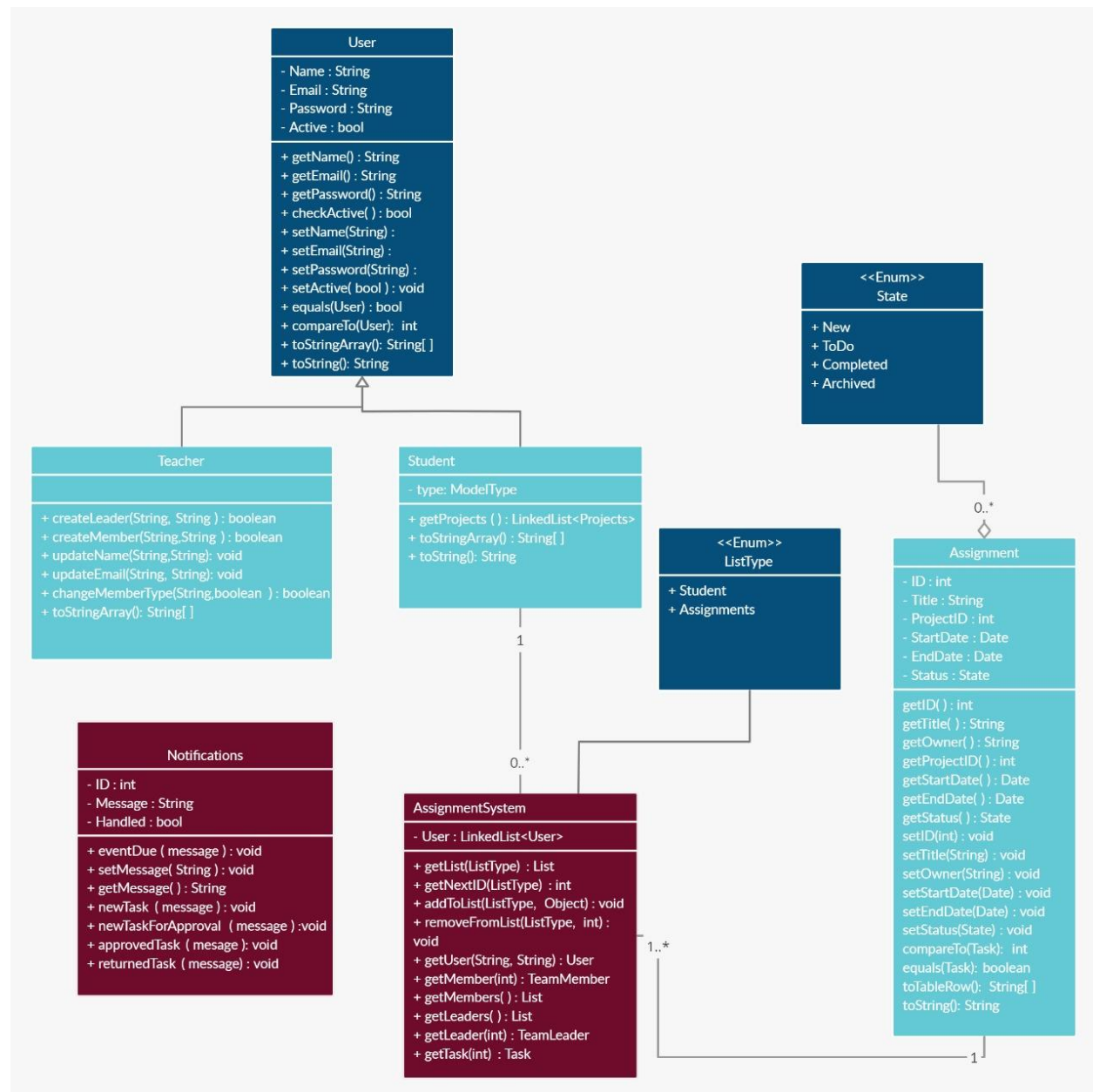
Use Case diagram of payroll Module:



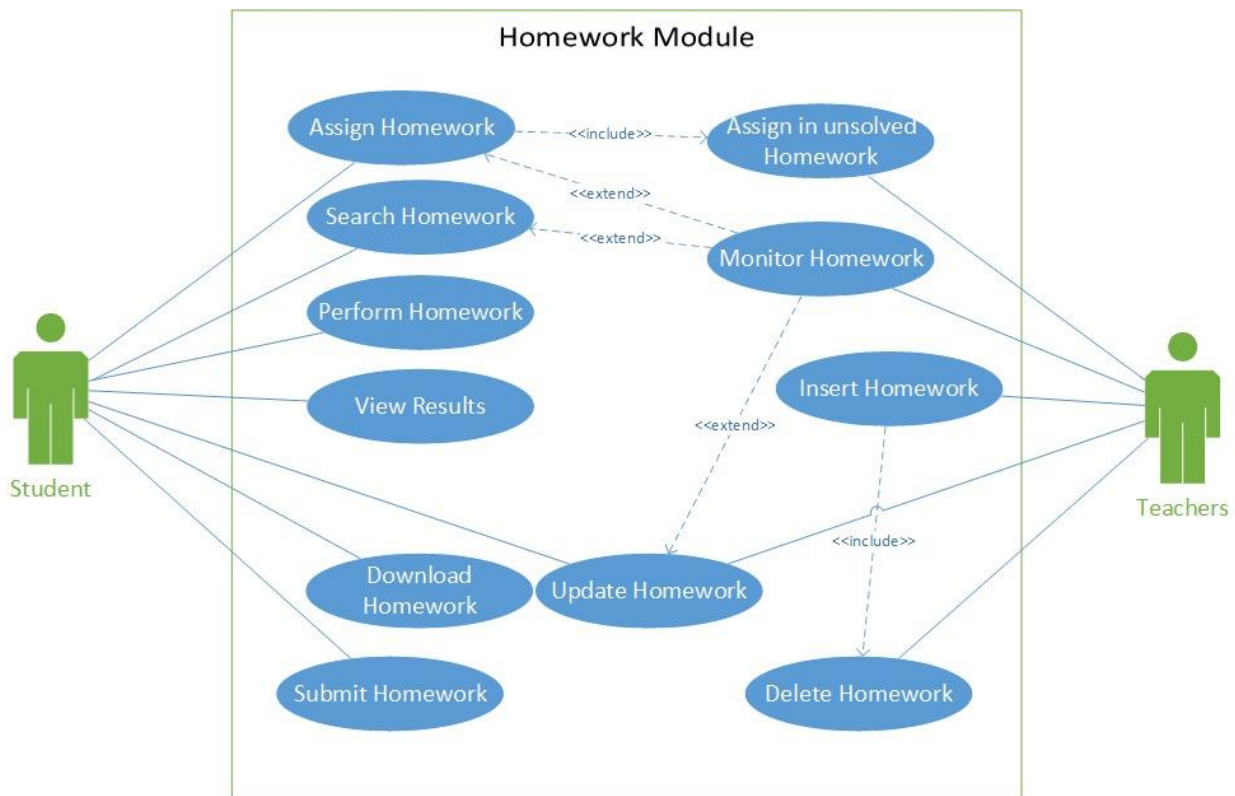
Homework Module

The homework Module allows the teacher to give homework or add assignments for students through online portal. After the completion of homework, the homework can be submitted online by students for evaluation purpose. Teachers can update the marks of students after they are being evaluated which student can also view through their portal.

Class diagram of Homework Module:



Use Case Diagram of Homework Module:



Complaint Module

Complaint module helps to register any complaint. it allows student, parents, and teachers to file a complaint related to any issue. Ticket will be issued to the person regarding complaint after that complaint is forwarded to admin dept where any action will be taken regarding the complaint.

Use Case diagram of Complaint Module:

