



SCHOOL MANAGEMENT SYSTEM

By

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Introduction



School management systems become an integral a part of the upper education system.

We create it for to make the works easier to management system for the principal.

The executive aspects of such systems could include class rosters and therefore the ability to record students' grades.



With relevance the teaching aspects, however, it might include Servant details, Tenders information and treasury information as well.

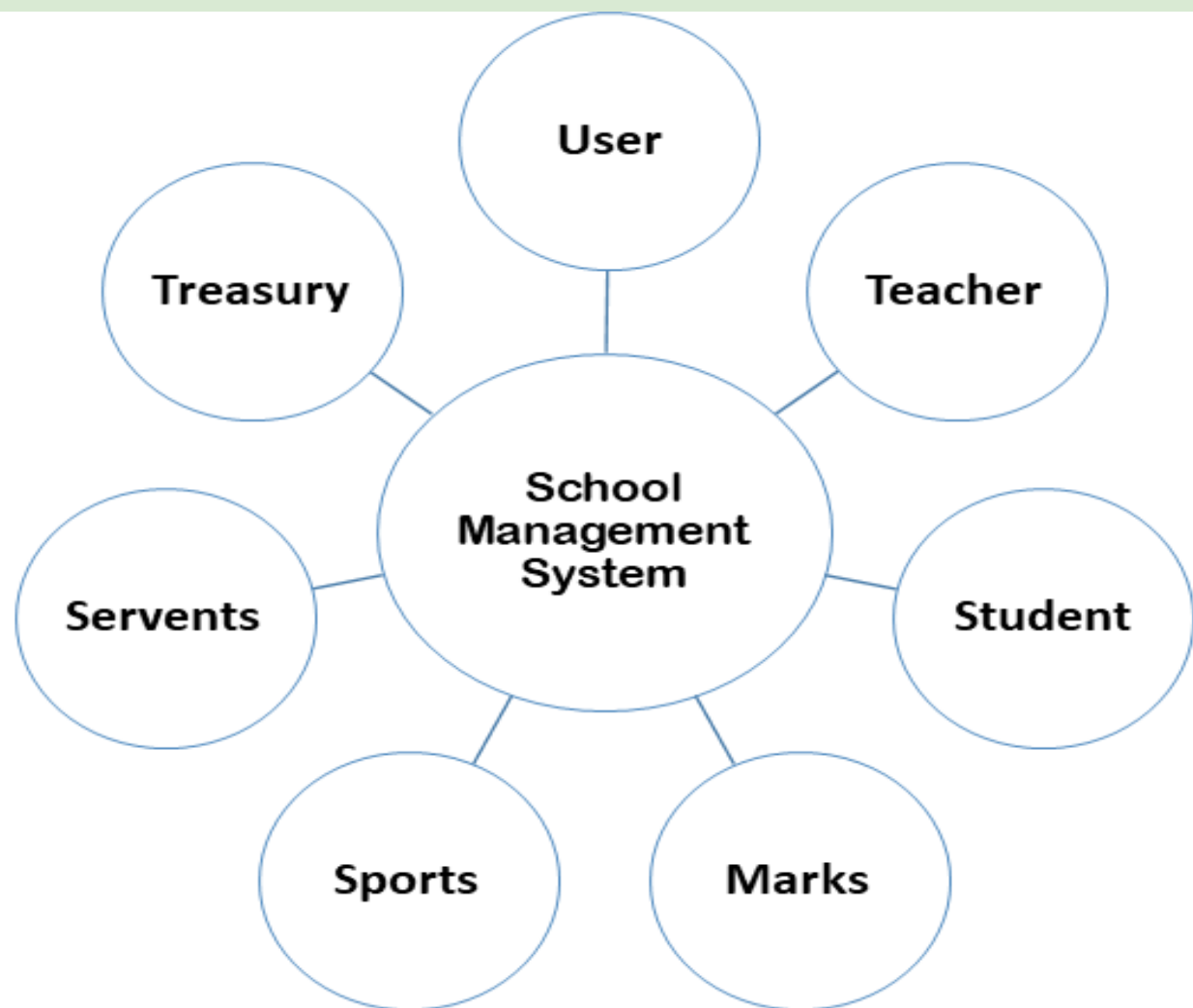
School management system can handle all the detail about a student or a teacher. The details include college details, students personal details academic details etc.

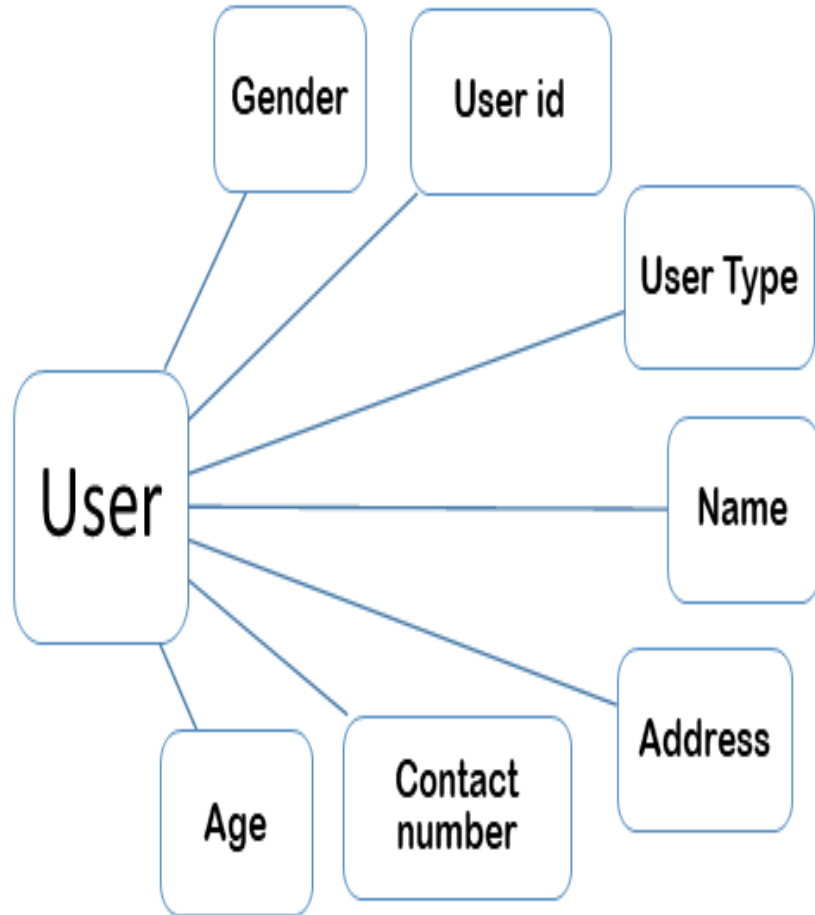




Classes and their attributes and methods



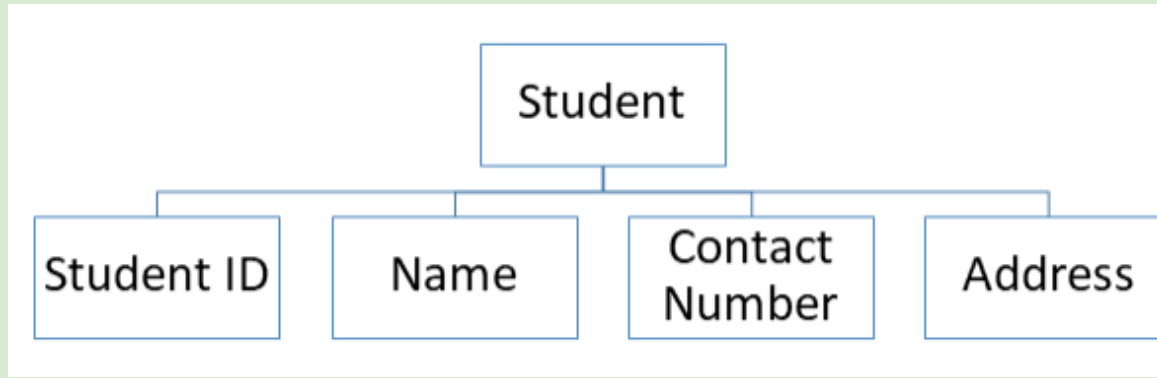




**User class
represents the
users of the system.**

**Teacher, Student,
Servant are some
users of the
proposed system.**

- **All these attributes and methods are inherited by child classes. Firstly, user must create a profile.**
- **In order to log in to the system user has to give correct username and password.**
- **If the username and password are incorrect, they cannot log in to the system. After login to the system, they can view their profile.**
- **Then if they want, they can update their details in the update profile section.**



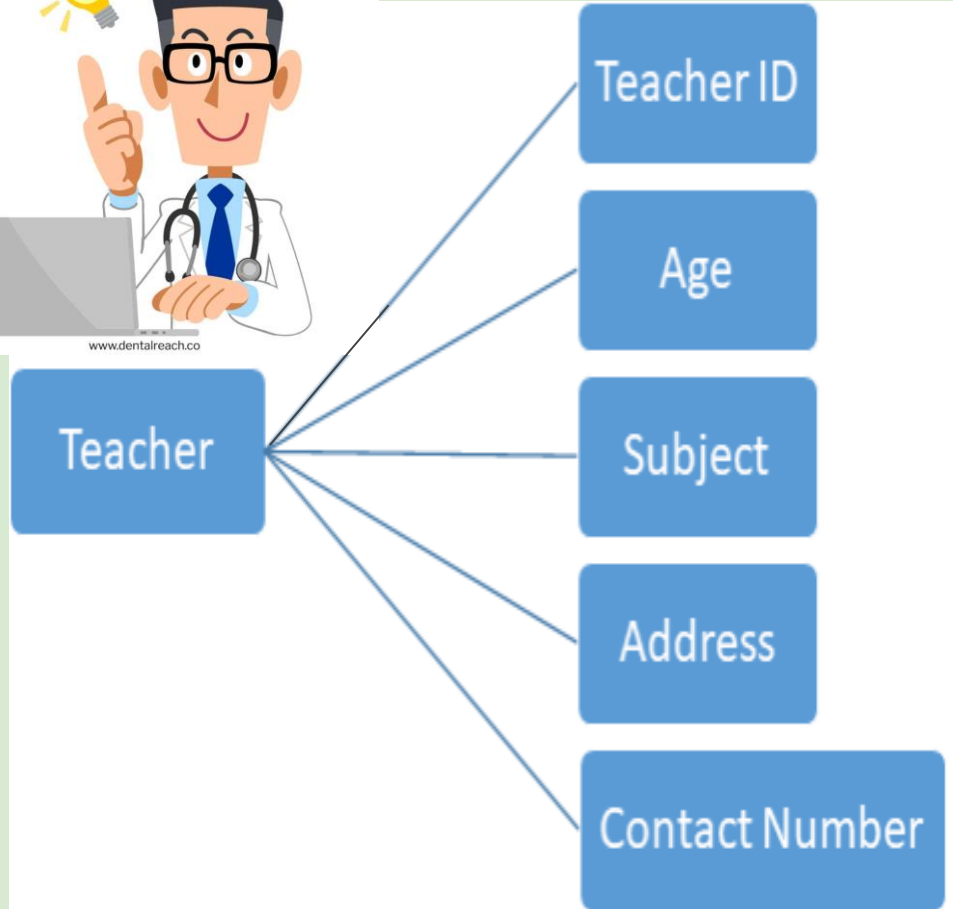
The student class has four properties namely Student ID, Name, Contact number, Address.

All these properties have respective methods to get and set object values.

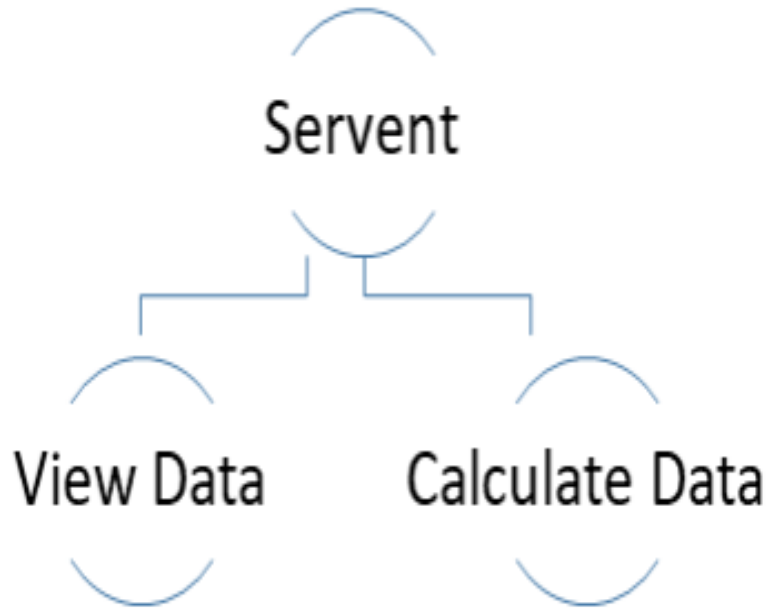
Used ArrayList for collection framework

- **Use exception handling to avoid from the exceptions occurs when run time.**
- **The purpose of this class is to maintain student details.**
- **All these attributes and methods are inherited by child**
- **classes.**





- **The teacher class has five properties namely Teacher ID, Age, Subject, Address, Contact number.**
- **All these properties have respective methods to get and set object values. Used ArrayList for collection framework.**
- **The purpose of this class is to maintain teachers details.**



This class is designed to retain details of school workers and calculate their monthly salary.



This required the names, age, daily salary, allowances, etc. of the employees employed as data.

There are two methods in servant class.

1) Salary

2) View Data



Marks

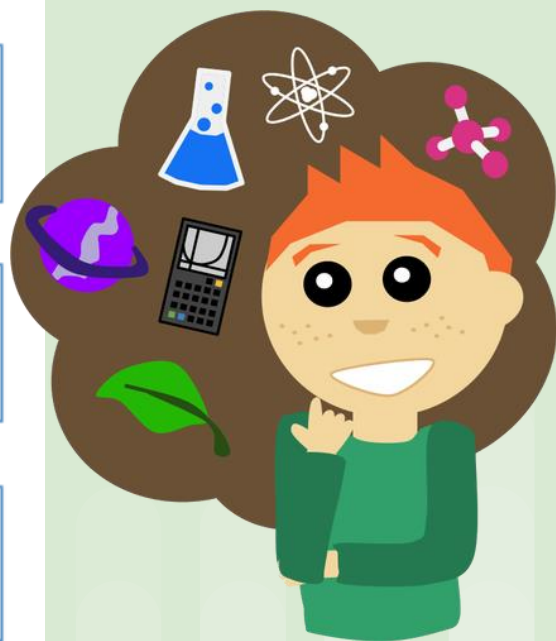
Asking Student name & ID

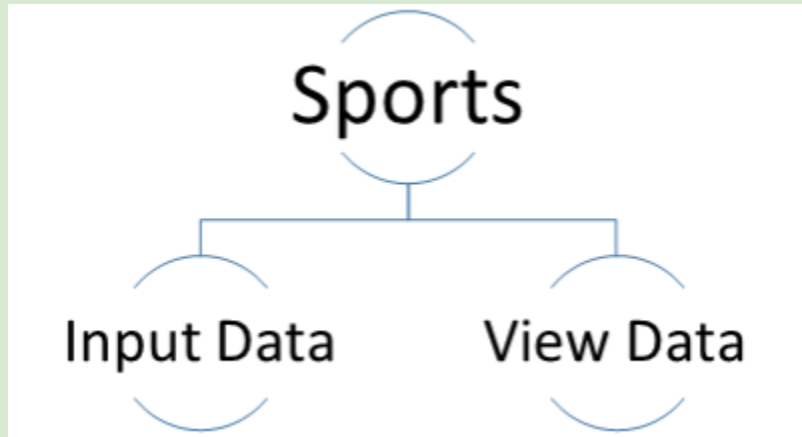
Asking to enter the grade
type

Asking to enter the no of
subjects & enter the marks

Can see total and
Percentage

Can get a grade after the
percentage





- This sports class is designed to collect data related to each sport.
- Accordingly, the coaches, teachers in charge and training dates and times related to each sport are collected as data.

class Treasury



Calculate Income

- void facilitiesServiceCharge()
- void donations()
- void incomeFromEvents()
- void Tenders()
- public String toString()

Calculate Expenditure

- void serventSalaries()
- void libraryBooksAndStationary()
- void repairs()
- void Others()
- public String toString()

Calculate balance



- The purpose of this class is to count the balance of the school treasury.
- Declare some data fields as private to increase the security of these data fields.
- Use inheritance by extending the parent class to two child classes.
- Used scanner in java package to get user inputs to calculations. The scanner variable is defined in the abstract class. Hence both the Income and Expenditure classes can use the scanner variable via inheritance.

This project “**School Management System**” provides a simple interface for maintenance of student information.

It can be used by educational institutes or colleges to maintain the records of students easily.

Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming.

All these problems are solved using this project.

Throughout the project the focus has been on presenting information in an easy and intelligible manner.

The project is very useful for those who want to know about School Management Systems and want to develop program based on the same concept.

The project provides facilities like registration and profile creation of students thus reducing paperwork and automating the record generation process in an educational institution.



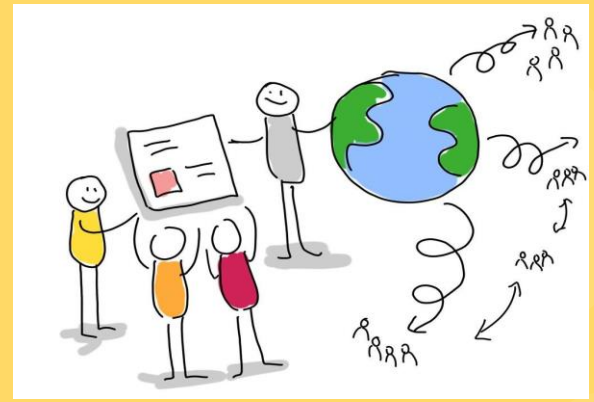
Challenges & Solutions

There were various errors came up while developing the program. To correct them, we refer some additional books as well as additional programs and lecture notes.



We were correct some errors by discussing with all the team members and changing some points in our system.

Teamwork



- ★ PS/2019/279 - Arshana Sagadevan - Developing Marks class
- ★ PS/2019/051 - Pitipanage Malaka Dilshan - Developing Treasury class
- ★ PS/2019/233 - Daluwakgodage Dulakshi Anuradha - Developing Servant class and Sports class
- ★ PS/2019/181 - Sashini Udyani Jayawardhana - Developing User class
- ★ PS/2019/195 - Wathsala Wimansani Ranasingha - Developing Student class and Teacher class



*Thank
You!*