



# University of Dhaka

Department of Computer Science and Engineering

*Project Report:*

*Object Oriented Programming Lab(CSE-2112)*

*Project Name:*

*School Management Software*

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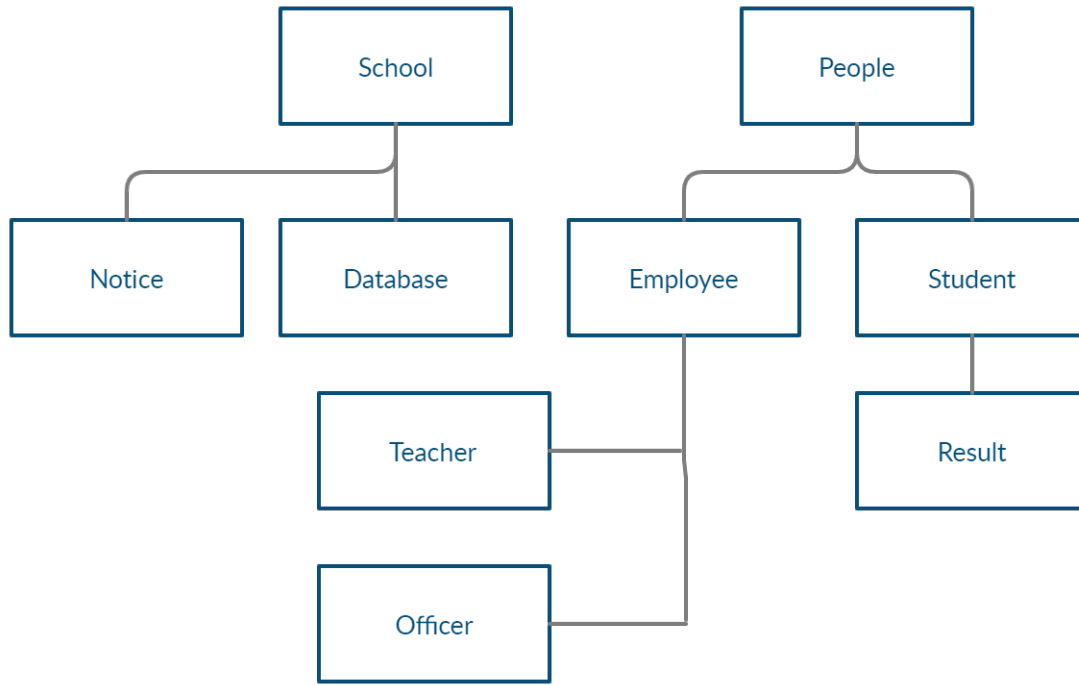
## **Requirement Analysis**

The School Management System software is an application which developed for school's administrations management. It is a software developed in Java which is used to store all the school-related records such as student information, teacher information, staff information etc. The informations are stored through a database . The objective of developing such a system was to reduce the errors that create many problems in the manual system where it was very difficult to store the records and access the data. It also provides the facility to calculate the attendance of the student. There is one type of login for this system and that is the administrator login. The employees can create their own administrator account with their unique employee id provided by the organisation. The whole system is handled by the administrator who has all the rights to edit or modify any school member information. It stores information related to students, staff, and teachers. School Management Software can help a admin of an educational institutions to organise their structure, curriculum, syllabus and communications etc along with some powerful reporting features to keep tabs on all procedures.

Main purpose of the School management software is to make the whole school activities on System. This system will maintain whole processes: Add teachers, add Students, add Departments, control registration processes and this system automatically generates reports. This system was developed to provide a secure, easy to use a reliable system. This will be created to handle all the school-related information and save it in records.

## **System Design**

Class Hierarchy of the School Management Software:



### Class Hierarchy

The above hierarchy represent the whole structure of the software. The description of the class hierarchy is given below:

#### ***School:***

This class contains the overall details of the school. This is an abstract class. We will handle the login and sign up section here. This class contains two child classes:

##### **1. *Notice:***

This class contains the details of the noticeboard and its information.

## **2. Database:**

This class contains all types of data of every member of the school. This class contains two child classes:

### **2.1 Statistics:**

Its a child of the database class .This class shows the number of students ,teachers,employees and many other data of the school.

### **2.2 People:**

It is also child of the database class .This is an abstract class.In this class we will implement three types of subclasses here:

#### **2.2.1 Student:**

This class contains the information of a student such as name,roll,contact details, picture and academic progress of the students.It has one child class which is:

##### **2.2.1.1 Result:**

This class contains all the result related data and method.

#### **2.2.2 Employee:**

The list of employees,date of birth,contact number, picture, address etc will be found in this class. This class contain two child classes:

#### **2.2.2.1 *Teachers:***

This class is the child class of Employee class and contains the methods and variables to access the data of all school's teachers.

#### **2.2.2.1 *Officer:***

This class is the child class of Employee and contains the details of the officers who are required for conducting a school.