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# PROJECT PROPOSAL

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School Management System



GROUP 11  
DEPARTMENT OF INDUSTRIAL MANAGEMENT  
University of Kelaniya



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## 1. Introduction

Education plays a great role in the development of any country. Many education organizations try to increase education quality. One of the aspects of this improvement is the managing of school resources. Most of the schools use a manual system to manage school resources thereby, causing overworking of the staff and latency in providing services. It will be easier to manage school resources using a computerized system which will improve the workflow of the system and make it easier and more efficient to use.

## 2. Process of the existing system

The existing system of a government school is managed manually using ledgers and files to store information of school resources.

Details of the academic, non-academic staff such as registration, salary, daily attendance, leave approvals, and other details regarding the staff are recorded in separate files. Details of students such as registration details and biodata, certificates and achievements, student performance reports, student fees, prefect details, and other details are recorded in separate files. Details of school buildings and other equipment as well as bills and payments for utilities are recorded manually. Apart from that, school timetables for each class and teacher and subject are also prepared manually.

## 3. Problem definition

With the enrolment of new students and staff each year, maintaining a manual-based system has become more complex and inconvenient as the number of files increases. Many problems arise due to the growing amount of information.

- Due to the limited space in school premises, maintaining a large file-based system is inconvenient.
- Maintaining a growing file-based system can cost a considerable amount of money due to the use of stationary.
- Another major problem is the security of data. Natural causes and damages caused by animals such as mice and termites as well as situations such as data thefts threaten the security of sensitive data.

- Maintaining data backups and updating data is difficult in a file-based system thereby causing data redundancy and inaccuracy of data.
- The latency in retrieving data, entering, and updating data affects school efficiency as well as exhausts the school staff. Additionally, it results in high data inconsistency.
- Due to many data, it is difficult to generate accurate reports of the performance of students, inventory reports, staff reports, attendance reports, and many others.

Therefore, a more efficient system is needed to manage school resources productively.

#### 4. Solutions provided by the proposed system

Considering the problems identified in the existing system, the following solutions are provided by the proposed system. Due to the hectic schedule of the organizations and the tough decision-making policies, it becomes troublesome to check in with the enrollment ratio of the students. It is thus required to implement proper school software to reduce the burden from various activities.

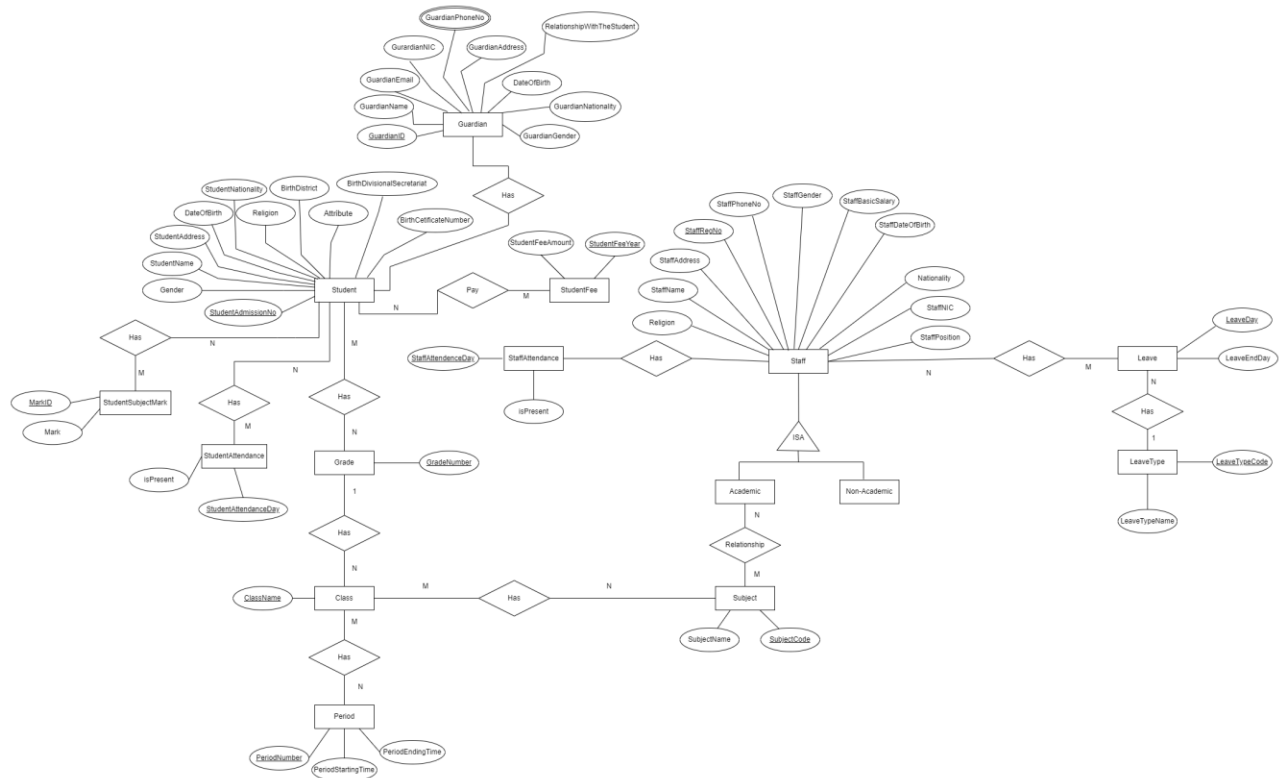
- The first objective of this system is to maintain the data of all students, staff in a database management system. The computerized management system boosts the productivity of the school. The reason for this is decreased time to maintain the records and increased accuracy in organizing the data. Less time leads to keeping the school focused on productivity.
- The stationary right from the paper files to records is saved when the school management system is used for performing routine administrative tasks. It leads to saving the school budget that is allocated to stationary and keeping a digital record of the data. Also, it does not create an untidiness of the records to be maintained.
- The software can be accessed from anywhere and at any time because all the necessary details can be found in one place. A record of everything can be kept due to its easy accessibility. Due to the easy accessibility, efficiency, and productivity increases. It also facilitates providing immediate information to students and staff.
- The workload upon the staff members is reduced as the teachers need to be technology-driven. This leads them to work upon the school management system and send out the required data to the requested parties. It reduces the workload from the teachers and saves time.

- Maintaining a computerized database makes it easier to enter data as well as modify it when needed without having to check many files.
- Generating reports for the school is much easier with the proposed system as all the details can be retrieved with just one click. Therefore, various reports according to the needs of the school can be generated more precisely and accurately.

## 5. Scope of the project

The school management system is developed for the students, academic and non-academic staff members. This system includes the students' registration details, the staff members' details, academic and non-academic leave details, timetable details, and the students' progress details such as results, achievement details.

The following ER diagram is planned to be created for the school management system.



## 6. Group Members

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