



College of Engineering and Technology

Department of Computer Science

Course: Software Engineering (COMP 433)

Course Project

Modern School New System

Introduction

Since the establishment of Modern Schools in 2018, they have been looking for a complete school portal that can automate and manage their business processes. They currently they have more than 500 students, 20 teachers, school principal, accountant, secretary, registrar, and two cleaning employees. Your group has been assigned the task of developing complete analysis and design model towards building a state-of-the-art software system that can automate almost all of their business processes. This document provides a general description of Modern School internal business processes.

Your group will need to extend this information and add additional features.

General Background

Since the rise of problem of COVID-19, the need for new school portal has become very urgent. Such portal can enable teachers to keep in touch with their classes and students by providing mechanism to send messages, material, assignments, and so forth. The major school processes that need to be automated by the new portal are: students registration, building each class schedule, assignments, messages, payments and salary receipts, publish of grades, student warnings, publish of teaching material, and so forth. This school portal will be still beneficial during normal face-to-face school days, enabling students and teachers for example to see their schedule, send messages, assignments, etc.

Registration Department

The registrar is responsible for registering new students into the system. When new student arrives, they collect his basic information (name, DOB, gender, address, parents information, last school name, last school grades, etc) as well as medical information. The registrar is also responsible for transferring a student to other school.

Additionally, the registrar is responsible for adding new teachers to the system and assign them their classes and schedule. Finally, the registrar is responsible for transferring teachers out of the school.

Accounting Department

The accountant is responsible for collecting payments from the students, issuing payments requests/reminders to parents, and managing their discounts. Also, the accountant is responsible for the payroll for the teachers and other employees in terms of salary payments.

Management

School principal will be monitoring various reports about the students, their grades, warnings, complaints, and their attendance. Additionally she will monitor teacher's performance, attendance, and complaints.

Teachers

Teachers should be able to view their schedule, send messages, publish new material (PowerPint, PDF, WORD, etc), send assignments, , publish grades, and so forth.

Students' Parents

Students parents should be able to see schedule, manage assignments, manage messages, see grades, warnings, payments due, balance sheet.

Please note the following:

1. The above description is basic; your group needs to extend it by adding additional, smart features.
2. Do not, in any case share your work with any person outside your group. I expect each group to be different in their additional features.
3. Unless you provide a high-quality output, high grades will be hard to achieve.
4. Copying between groups will not be tolerated and will be directed to university punishment committees (سيتم تحويل المجموعات التي تشارك عملها مع مجموعات أخرى الى اللجان (التأديبية فى الجامعة
5. I wish you the best of luck.