PHASE 1 SUBMISSION:

**COLLEGE MANAGEMENT SYSTEM**

TEAM MEMBERS WITH THEIR UTA IDS:

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**GENERAL PROBLEM DESCRIPTION: DOMAIN AND SCOPE**

One year into the Covid-19 pandemic, facilities offered by schools and universities are not limited to basic functioning instead, the authorities have been looking for advanced system.

Universities and college campuses are places where students live and study in close proximity to each other. They are also buzzing cultural hubs where students are brought together from nations around the world. Recently, the foundations of this unique ecosystem have been impacted significantly by the rapid spread of the coronavirus (Covid-19) outbreak, creating uncertainty regarding the implications for education. The pandemic also threatens to significantly alter nearly every aspect of college life, from admissions and enrollment to conducting classes online and managing their grades. These concerns extend to the financial future of higher education institutions in a time of considerable financial instability, both in the form of unexpected costs and potential reductions in revenue.

The most effective tool in keeping student retention and maintaining access to learning has been online courses. Universities across the US, and the world have adjusted their programs in response to the spread of the coronavirus.

We aim to build a College Management System to address this urgent need of the hour. This system is aimed at total user-friendly as well as efficient management of varied tasks. The education system has constantly been evolving. Hence to keep up with new channels of education we need to evolve our system to store information by automating the traditional ways and bringing more structure to the curriculum.

To manage enormous amount of student data, it becomes important to include a managing tool to every school and university. A College Management System is solution to all the requirements a schoolwork on. Various features like admission, attendance, examination, timetable, student performance report, grades, assignments, conferences would be available in our system.

Most of all, the mechanism of system is easy to understand that even if any school or university is utilizing it for the first time, the users will not have to toil hard to learn its function. **N**o doubt, revenue generation of any school or college might have been at risk, if the officials' time is wasted in manual adjustment of different sectors. However, with the advent of College Management System, the scenario of profit generation is treading on a productive path. Furthermore, it will not be wrong to say that this system comprises of pragmatic features that are beneficial for authorities as well as students of the college.

**BUSINESS GOALS OR FUNCTIONAL REQUIREMENTS**

College Management System centralize student data to make it more accessible for teachers, administrators, and students themselves.

The first objective of this system is to maintain the data of all the student and teacher in database. It maintains the personal record as well as the academic record of the student. It maintains student name, address, fee record and dues record, department, course.

It would also capture other details such as attendance, examination, timetable, student performance report, grades, assignments, conferences would be available in our system. Our system would provide information on the student’s academic progress.  Students would be able to see a time-lapse of their grade point average over a period.

Teacher personal record and salary record are also store in the software. It would also manage class record, subject record, examination record. Tracking grades information is helpful for everyone. This breakdown also saves time for faculty on fielding questions.

* College Management System will get information regarding which course has the highest and lowest enrollments.
* What are the pending balances of a student’s account?
* What are the courses taken by a teacher?
* What are the grades of the student?
* Which department has maximum number of students?
* Which professor is most preferred by most students and is popular?
* What course is preferred by most of the students?

**DATA TO BE CAPTURED**

**Teacher:**

* Personal information: Personal details of staff (name, address, contact, etc.) will be stored.
* Teacher ID: There will be a unique teacher id assigned to each teacher.
* It will contain information about course(s) which a teacher will teach.
* Department ID: A unique ID will be assigned to each teacher.
* A teacher can teach multiple courses to multiple students. Therefore, database will also contain students’ information who have enrolled for his or her courses. It will also allow teachers to keep a check on the performance of students of their class by assigning and viewing grades.

**Student**

* Personal information: This will provide all the details about a student like his/her name, address, Guardian, etc.
* College ID: There will be a unique college id for each student.
* It will contain information about a courses and section for which a student has enrolled.
* Database will capture account details of each student, or his dues by a given deadline. It will also contain information about the department and teacher under which a student has enrolled. Database will also keep a tab of the grades earned by each student in exam.

**Department**

* Department name: It will store name of the various departments in the college.
* Department ID: A unique ID will be assigned to each department.
* Multiple teachers are present in a certain department. It will also contain information about multiple courses offered by a specific department.

**Course**

* Course Name: This will provide the details about courses that are offered by the college.
* Course ID: Each course has a unique course ID.
* Section No: Same course can be taught by multiple teachers hence section no would help us track which teacher is teaching which section.
* It will contain information about which teacher is teaching a particular course.
* It will also contain information about course offered under which department as multiple courses will be offered by one department.

**Student course information**

* Course ID: It will specify the course ID assigned to each course.
* Section NO: It will help narrow down exactly which course student has taken.
* Student ID: Each student has a unique student ID.
* Grades: It will capture the grades.
* It will capture the details of a student along with the course or courses they have enrolled.
* It will also contain the grades obtained by a student in a specific course.

**Student Account**

* Student ID: Student account will have information a column for student ID.
* Balance Due: The amount that a student has to pay or any other fees regarding the course or other expenses for the facilities provided by the university.
* Last Date: This column will be used to identify students whose balance is still due by the last date of fees submission.