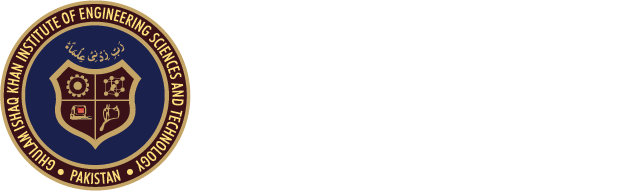
****

**“COLLEGE MANAGEMENT SYSTEM”**

**Project Proposal**

**Muhammad Abbas Sarah Siddiqui**

2021313 2021570

BSAI 31’ BSAI 31’

**Contents:**

1. **Synopsis**
2. **User story**
   1. **Benefits**
   2. **Usage**
   3. **Friendly**
3. **Technology**
   1. **Software used**
   2. **Queries/SQL**
   3. **Functionalities**
   4. **Maintenance**
4. **GIT References**

**Synopsis:**

A college management system is important since it manages the students’ relevant information online or in one single workspace. It allows users to perform multiple tasks with ease. This college management system store organizes and gives results based on the need of the user. It helps increase the institutes or the instructors’ efficiency and as well as makes it easy for students to keep their grades, courses, credit hours, attendance, etc in check.

The problems faced by our institution right now are data redundancy and a wide spread of excel sheets used by each instructor. It is separate for their marks, attendance, courses, and final grades. It is difficult to update and maintain, it also has higher inconsistency and lacks security. Each file needs to have specific constraints so that it is secure, which in turn increases the workload on TAs (Teacher assistants). Many students lose the files due to several reasons, such as any software update, change of devices, and multiple others. A good college management system provides clear and concrete information to students about their progress.

The college management system must keep track of all the information, and the database needs to be organized so that data is easier and faster to access. Therefore, we decided to create a new college management system that can be used by both the students as the users and instructors as the hosts/admins.

This database design will provide a clear, one-stop solution for every student. They can keep an eye on their progress and if it is all in one place it is easier for them to access it. It will give the students details regarding their academic information such as their courses, number of credit hours, attendance, marks, and grade sheet, which will be accurately given under each course and their instructor, and details regarding exams, assignments, and quizzes.

**User Story:**

Our management system will have three main users’ admin members, instructors, and students. Instead of having multiple excel sheets and data all over the place, one relational database can be made which handles all functionalities from the end of each user. As an admin member, one can, log in/out, create, edit and delete a student and instructor record, update the users’ information, and handle student course registrations. An admin member logs in using their respective username and password, if he is authenticated meaning if his username exists in the admin table along with the correct password, he is given access to the database. The admin member can access student and instructor records using student registration numbers and instructor IDs and they can manipulate the data there. As an instructor, one can, log in/out, enter student grades and attendance, post tasks, and any updates. An instructor can log in using their respective username and password and can access student records to manipulate the data. They can access a particular student record using their registration number. Lastly, as a student, one can log in/out, view subject grades, view attendance, and register for courses. A student can log in using their respective username and password and can access information regarding a particular course using the course ID. This information is updated by the respective instructor (only the instructor for that respective course can manipulate this information). The student cannot manipulate any data. This design will ensure the security of data, smart access, easy tracking and updating of records, and an easy user interface.

**Technology / Methodology**

This project will be divided into two parts, the front-end part, and the back-end. However, we would be focusing on the back end more than the front end. We would be using oracle 21c to create the database tables and to write SQL queries.

To decide on the relations between the components, we would use an ER/EER diagram. It will show the relations between the entities, and ER/EER model will be used to create the database tables.

We will create many tables in this project. We will have a table for students and keep the student information there such as their registration numbers, name, age, and contact information.

Another table would be created for courses, and the same for attendance, grades, marks, and exam-related information.

The information above is not final and is prone to change.

**Git Link:**

**https://github.com/spaceboi21/College\_Management\_System\_-DBMS**