Daffodil International University
project proposal

Course Name:- Database System

Course Code:- SE-224

SUBMITTED TO

Kazi Rifat Ahmed

Lecturer

Department Of Software Engineering

Daffodil International University

SUBMITTED BY

Istewak Hassan

I'd:0242220005341228

Department Of Software Engineering

Daffodil International University

Title:

Coaching Center System

Introduction:

In today's educational landscape, coaching centers play a pivotal role in supplementing traditional learning methods by providing specialized guidance and support to students. As the demand for such institutions continues to rise, efficient management becomes imperative to ensure smooth operations and optimal student outcomes. In this regard, the proposal for establishing a comprehensive database for our coaching center emerges as a strategic initiative to streamline administrative processes, enhance organizational efficiency, and elevate the overall learning experience for our students effectively.

Background:

The need for a comprehensive database solution for our coaching center arises from the growing complexity and scale of our operations. As a reputable institution committed to academic excellence and student success, we recognize the importance of efficient administrative processes in supporting our educational mission. Over the years, our coaching center has witnessed a steady increase in student enrollment, expansion of course offerings, and diversification of

instructional methods, leading to greater demands on our administrative resources and systems.

Table Information:

The database for the Coaching Center Management System will consist of several tables to store relevant information. The primary tables include:

1. Assignment
2. Attendance
3. Class
4. Class Batch
5. Class Enrollment
6. Coaching Tutor
7. Dues
8. Grade
9. Student
10. Transaction

Attribute Information:

Assignment:

1. Assignment ID: Unique identifier for each assignment.
   Title: Title or name of the assignment.
2. Description: Description or instructions for the assignment.
3. Deadline: Deadline for submission of the assignment.
   Subject: Subject or course to which the assignment belongs.
4. Class ID: Identifier for the class to which the assignment is assigned.

Attendance:

1. Attendance ID: Unique identifier for each attendance record.
2. Student ID: Identifier for the student whose attendance is being recorded.
3. Class ID: Identifier for the class for which attendance is being recorded.
4. Date: Date for which attendance is being recorded.
5. Status: Attendance status (e.g., present, absent, late).

Class:

1. Class ID: Unique identifier for each class.
2. Name: Name or title of the class.
3. Subject: Subject or course taught in the class.
4. Tutor ID: Identifier for the tutor responsible for teaching the class.
5. Schedule: Schedule or timetable for the class.

Class Batch:

1. Batch ID: Unique identifier for each class batch.
2. Class ID: Identifier for the class associated with the batch.
3. Start Date: Start date of the batch.
4. End Date: End date of the batch.
5. Capacity: Maximum capacity or number of students allowed in the batch.

Class Enrollment:

1. Enrollment ID: Unique identifier for each enrollment record.
2. Student ID: Identifier for the student enrolled in the class.
3. Class ID: Identifier for the class in which the student is enrolled.
4. Batch ID: Identifier for the batch to which the student is assigned (if applicable).

Coaching Tutor:

1. Tutor ID: Unique identifier for each tutor.
2. Name: Name of the tutor.
3. Subject: Subject or subjects taught by the tutor.
4. Contact Information: Contact details of the tutor (e.g., email, phone number).
5. Availability: Availability schedule or hours for tutoring sessions.

Dues:

1. Dues ID: Unique identifier for each due payment.
2. Student ID: Identifier for the student with dues.
3. Amount: Amount of dues to be paid.
4. Date: Date by which the dues are to be paid.
5. Status: Payment status of the dues (e.g., pending, paid).

Grade:

1. Grade ID: Unique identifier for each grade record.
2. Student ID: Identifier for the student whose grade is being recorded.
3. Class ID: Identifier for the class for which the grade is assigned.

4. Grade: Grade or score achieved by the student in the class.
5. Remarks: Additional remarks or feedback on the student's performance.

Student:

1. Student ID: Unique identifier for each student.
2. Name: Name of the student.
3. Date of Birth: Date of birth of the student.
4. Contact Information: Contact details of the student (e.g., email, phone number).
5. Guardian Name: Name of the student's guardian or parent.

Transaction:
1. Transaction ID: Unique identifier for each transaction.
2. Type: Type of transaction (e.g., payment, refund).
3. Amount: Amount of the transaction.
4. Date: Date of the transaction.
5. Description: Description or purpose of the transaction.
6. Related Entity ID: Identifier for the related entity involved in the transaction (e.g., student ID for fee payment).

Conclusion:

In conclusion, the development and implementation of a comprehensive database system for our coaching center represent a significant opportunity to enhance our operational efficiency, optimize resource allocation, and elevate the overall learning experience for our students. By consolidating critical data across various functional areas such as assignment management, attendance tracking, class scheduling, and financial transactions,

the proposed database solution will empower our administrators, faculty, and staff with timely, accurate, and actionable information to make informed decisions and drive continuous improvement.