

a. Design a software for managing students results (b) Implement the design

Design:

1. Database Schema:Code First

Students Table:

- StudentID (Primary Key)
- Name
- Class
- Date of Birth
- Contact Information

Subjects Table:

- SubjectID (Primary Key)
- Name

Results Table:

- ResultID (Primary Key)
- StudentID (Foreign Key referencing Students Table)
- SubjectID (Foreign Key referencing Subjects Table)
- Marks
- Grade

2. User Interface:

Dashboard:

- Overview of student results
- Quick access to different functionalities

Manage Students:

- Add, edit, delete student details

Manage Subjects:

- Add, edit, delete subject details

Manage Results:

- Add, edit, delete student results
- Ability to filter results by student, subject, or class

Generate Reports:

- Generate overall class reports
- Generate individual student reports
- Export reports in various formats (PDF, Excel)

3. Functionalities:

- Add/Modify Student:
 - ✓ Input student details such as name, class, date of birth, and contact information.
- Add/Modify Subject:
 - ✓ Input subject details such as name.
- Add/Modify Result:
 - ✓ Select student, subject, enter marks, calculate grade.
- View Results:
 - ✓ View individual student results.
 - ✓ View results by subject or class.
- Generate Reports:
 - ✓ Generate reports based on selected criteria (e.g., class, subject, student).
 - ✓ Option to print or export reports.

Implementation:

For implementation, you can use a programming language like C# for backend development and a framework like Asp.net Core Mvc for web application development.