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STUDENT RECORD SYSTEM

TEAM:

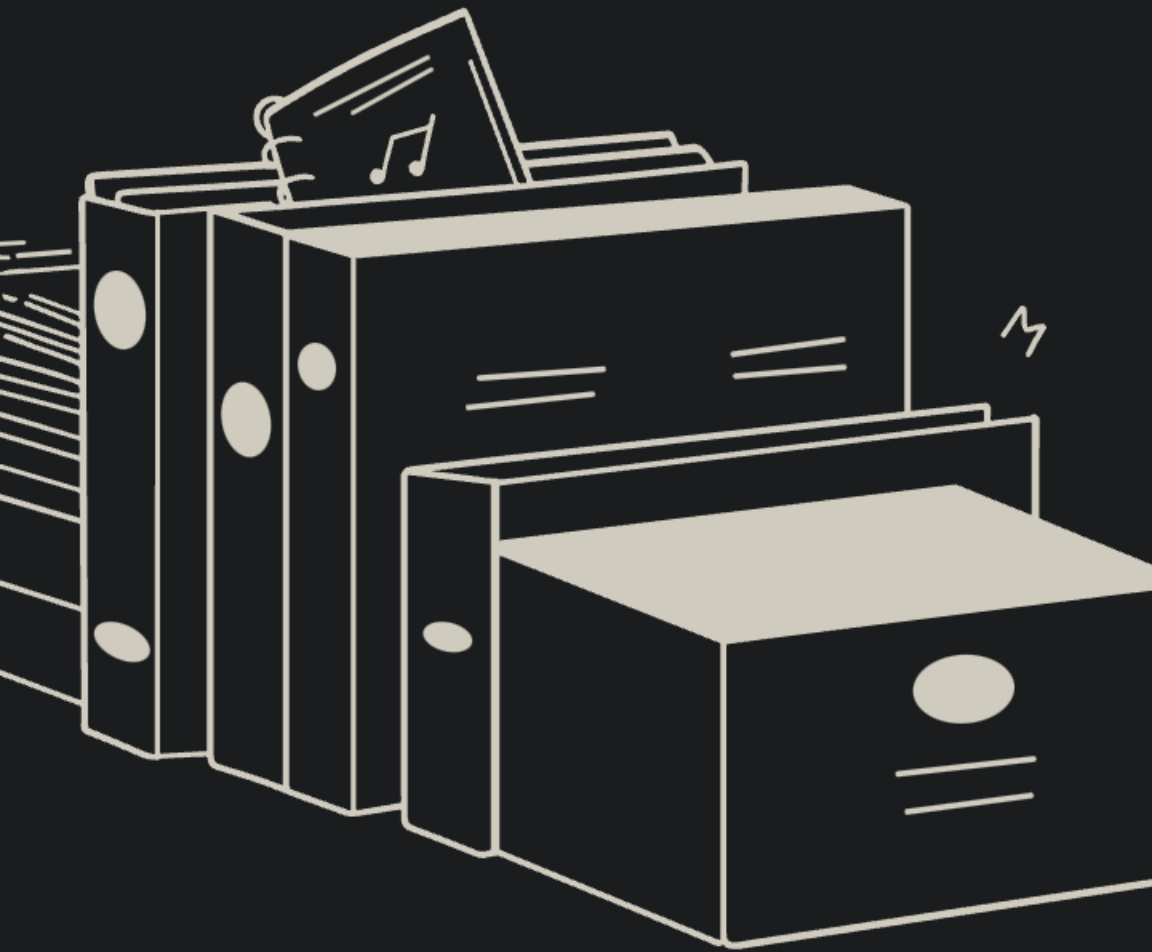
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Student Record System: Introduction

The Student Record System manages data efficiently.

It stores, updates, and analyzes student information seamlessly.

Uses arrays to store students and linked lists for marks updates.

System Workflow

1 Data Entry

Input student details and marks.

2 Storage

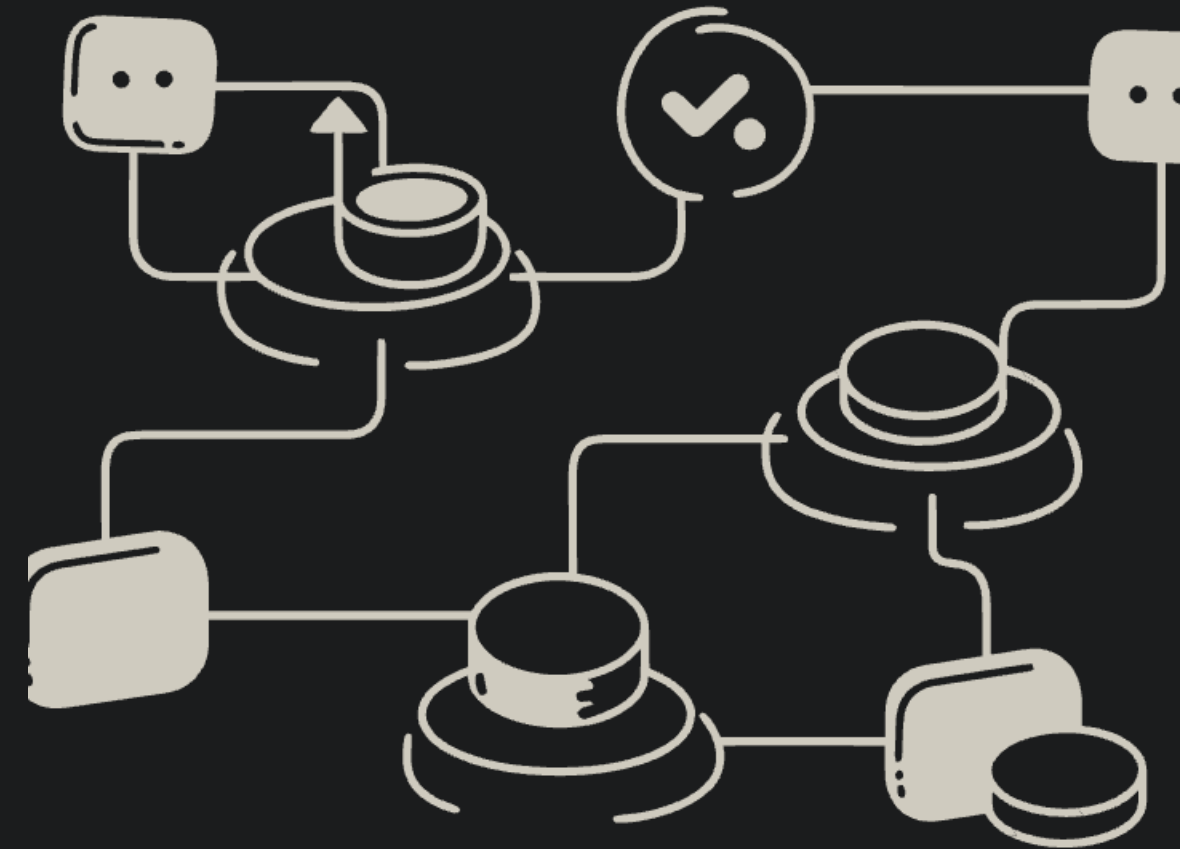
Store students in arrays; create linked lists for marks.

3 Processing

Modify and compute data as needed.

4 Output

Generate reports and retrieve records.



System Modules

Student Registration

Adds new students using arrays for storage.

Mark Update

Updates subject marks with linked lists.

Report Generation

Displays comprehensive student data.

Search & Retrieval

Finds and accesses student records quickly.

Objectives and Goals



Primary Objective

Efficient management of student records.

Real-Time Access

Quickly retrieve up-to-date student information.

Accurate Data

Minimize errors in record keeping.

Simplified Reporting

Generate clear and concise reports easily.

Data Analysis & Visualization

Performance Graph

Shows distribution of grades by subject.

Student Grades Table

Details scores using linked list data structure.

Key Metrics

- Average scores
- Pass/fail rates

Advantages & Disadvantages

Advantages

- Fast retrieval with arrays
- Efficient mark updates via linked lists
- Strong data structure concepts

Disadvantages

- Fixed array size limits flexibility
- Overhead managing linked lists
- C language complexity for beginners

Future Enhancements

Dynamic Arrays

Implement resizing to handle more students.

GUI Interface

User-friendly system for easy interaction.

Cloud Integration

Enable remote data access and backup.

Student Portal

Allow students to view and update info.

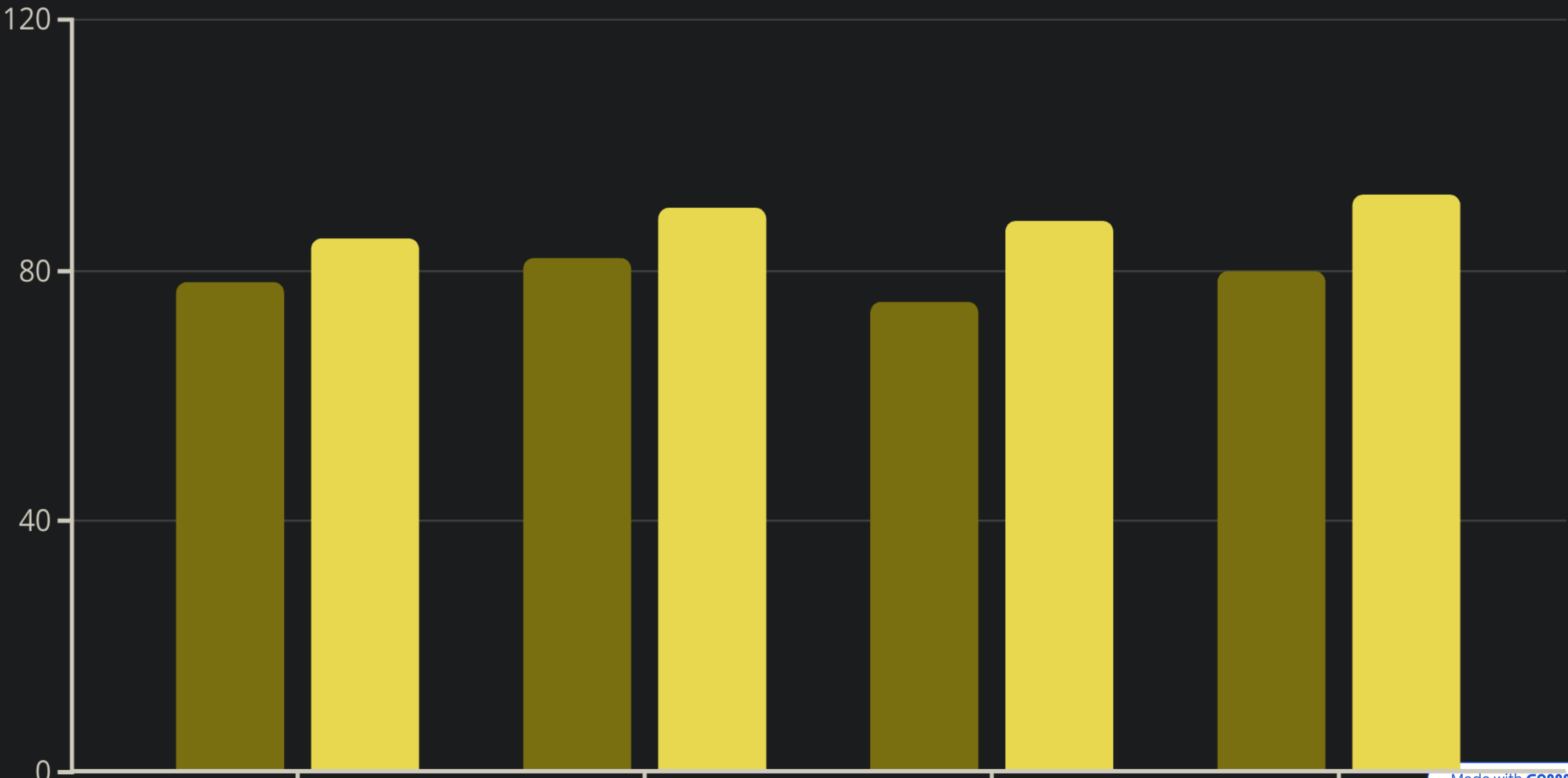
Enhanced Security

Protect data with advanced safeguards.

Data Analysis & Visualization

Subject	Average Score	Pass Rate (%)
Mathematics	78	85
Science	82	90
English	75	88
History	80	92

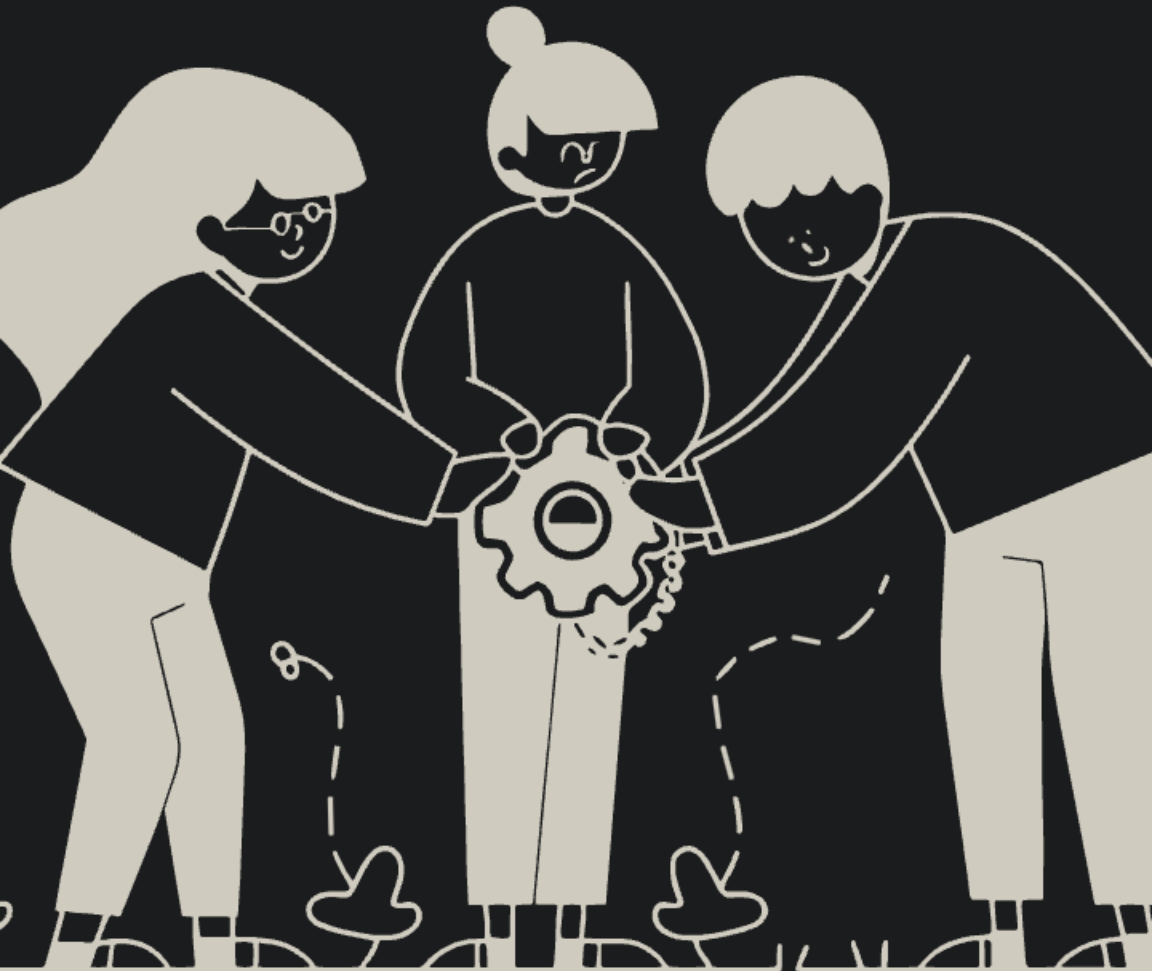
Student Grades Distribution



Code link: - <https://github.com/KannaSudheer/STUDENT-RECORD-SYSTEM/blob/main/main.c>

OUTPUT

```
enter your choice
1. Add Student
2. Update Subject Marks
3. Dispaly Students
4. Exit
1
enter the Student ID and Name
22
balaji
enter your choice
1. Add Student
2. Update Subject Marks
3. Dispaly Students
4. Exit
2
enter the student ID, subject and marks
22
DS
95
enter your choice
1. Add Student
2. Update Subject Marks
3. Dispaly Students
4. Exit
3
ID: 22, Name: balaji
    Subject: DS, Marks: 95
enter your choice
1. Add Student
2. Update Subject Marks
3. Dispaly Students
4. Exit
4
```



Conclusion

The Student Record System improves data handling efficiency.

It delivers accuracy, scalability, and easy access.

Thank you! Ready for your questions.

Thank You

