

EXAM MANAGEMENT SYSTEM

PROJECT PROPOSAL



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INTRODUCTION

This project is developed in C language and the compiler we use is dev c++. The purpose of this project is to manage student's exam records easily. It stores student roll number, name, marks, percentage, and grade. The system allows adding students, entering marks, and displaying results. This project is based on Programming Fundamentals concepts.

OBJECTIVES

The purpose of this system is to help faculty efficiently manage student exam data by allowing them to add student information, enter marks, calculate results, generate grades, and display performance summaries. It aims to simplify data handling, reduce manual errors, and provide a user-friendly interface for quick and accurate exam management.

PROBLEM STATEMENT

This project is an Exam Management System developed in C language to help faculty manage student exam data easily. Manual recording and calculation of marks are time-consuming and can cause mistakes, especially for many students. This system allows teachers to add student information, enter marks, calculate results, and display grades quickly and accurately. It keeps all data organized and easy to access. The system is user-friendly and reduces human errors, making exam management faster and more reliable. Overall, it provides a simple and efficient solution for handling student exam records.

METHODOLOGY

This system is developed in **C language** and run using the **Dev C++ compiler**. No third-party libraries are used; only **standard C libraries** are utilized. The system uses **arrays** to store data for a maximum number of students. **If-else statements** are used for menu choices, and several **functions** are implemented to make operations easier and organized. These include **addStudent()** for adding student information, **addMarks()** for entering marks, **showAllStudents()** for displaying student data, **showTopper()** for showing top-performing students, and **getGrade()** for calculating grades. Each function performs its task efficiently within the system, ensuring **simple and effective exam management**.

PROJECT SCOPE

This project focuses on developing an **Exam Management System** to manage student exam records efficiently. The system allows faculty to add student details, enter marks, calculate results, generate grades, and display performance summaries. However, the system **does not include advanced features** such as online access, networking, or integration with other academic software. It assumes that all operations will be performed on a **single computer** using the Dev C++ compiler. The scope is limited to **basic data management, calculation, and display** functionalities to ensure simplicity and reliability.

FEASIBILITY STUDY

With the defined scope, the project is **feasible to complete within the schedule**.

- **Risks Involved:** Possible risks include **logical errors in data handling** or miscalculations in results. These risks will be managed by careful **program testing**, debugging, and using **functions to organize code**.
- **Resource Requirement:** The project requires a **personal computer**, **Dev C++ compiler**, and basic **C programming knowledge**. No additional hardware or third-party software is needed.

SOLUTION APPLICATION AREAS

This system is useful for schools, colleges, and universities. It helps teachers manage student exam data easily by adding students, entering marks, calculating results, and showing grades. The system saves time, reduces mistakes, and keeps records organized, making it easier for institutions to monitor student performance and manage exams efficiently.

TOOLS/TECHNOLOGY

- Hardware: Personal computer or laptop.
- Software: Dev C++ compiler.
- Programming Language: C language.
- Libraries: Standard C libraries (stdio.h, stdlib.h, etc.).

EXPERTISE OF THE TEAM MEMBERS

All team members have studied the relevant courses and have the required **C programming knowledge**. Each member is interested in the project and contributes according to their strengths. Some focus on coding, others on documentation, testing, and report preparation, ensuring the project can be completed efficiently and successfully.

MILESTONES

- **Requirement Analysis:** Understanding project objectives and scope.
- **Design:** Planning system structure, menus, and functions.
- **Implementation:** Writing code for student data, marks, results, and grades.
- **Testing & Debugging:** Ensuring all features work correctly.

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