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## **Project Proposal**

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### **Presented To:**

Sir Talha Ahmed

### **Course:**

Object oriented programming

### **Section:**

SE2-2

## **Contact Book**

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### **Introduction**

We present a Contact Book application developed in C++, showcasing our proficiency in object-oriented programming (OOP) principles and data structures.

### **Objectives**



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- Design and implement a Contact class to store individual contact information.
- Develop a Contact Book class to manage a collection of Contact objects.
- Provide functionality for adding, displaying, and deleting contacts.
- Utilize inheritance, encapsulation, and polymorphism to ensure code reusability and scalability.

## Functionality

Our Contact Book application features:

**Add Contact:** Users can input and store new contact information, including name, phone number, and email.

**Search Contacts:** Display a list of all saved contacts for easy reference.

**Delete All Contacts:** Clear the entire contact list with a single command.

**Delete Specific Contact:** Remove a particular contact by specifying either the name or phone number.

## Implementation

We have implemented the following:

- Utilization of a vector to efficiently store Contact objects within the ContactBook class.
- Implementation of error handling mechanisms to manage invalid user inputs effectively.
- Adherence to best practices for code organization, commenting, and readability.

## Conclusion

In conclusion, our Contact Book project demonstrates our adeptness in applying OOP concepts to practical programming tasks. Through diligent design and implementation, we have developed a robust and user-friendly application that fulfills the specified requirements.

We are confident that our Contact Book solution not only meets but exceeds the expectations set forth. Its intuitive interface, comprehensive functionality, and efficient data management make it a valuable tool for organizing and managing contact information.



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Thank you for considering our Contact Book proposal. We are committed to delivering high-quality solutions and look forward to any feedback or suggestions for improvement.