

A Project Report

on

File Encryptor in C++

Submitted in partial fulfillment of the requirement of PROJECT

PROJECT-I (BCE3009)

of

Bachelor in Computer Engineering

Submitted to



Purbanchal University

Biratnagar, Nepal

Submitted By

Aayush Kumar Mallik (731744)

Saraswati Rokaya (731763)

Salim Shrestha (731759)

KANTIPUR CITY COLLEGE

Putalisadak, Kathmandu

A Project Report
on
File Encryptor in C++
Submitted in partial fulfillment of the requirement of PROJECT
PROJECT- I (BCE3009)
of
Bachelor in Computer Engineering

Submitted to
Purbanchal University
Biratnagar, Nepal

Submitted By
Aayush Kumar Mallik (731744)
Saraswati Rokaya (731763)
Salim Shrestha (731759)

Project Supervisor
Mr. Kiran Khanal
Senior Assistant Professor

KANTIPUR CITY COLLEGE
Putalisadak, Kathmandu

Abstract

This project “File Encryptor in C++” demonstrates the encryption and decryption of files using the Caesar Cipher algorithm. It incorporates core programming concepts such as file handling and user interaction. A graphical interface built with the WinBGIm library provides visual feedback, sound effects, and a history log for all operations.

The system allows users to select files, apply encryption or decryption, and save outputs while supporting text, numbers, and punctuation. Additional features include loading animations, error handling, and an intuitive menu-based design. Although the Caesar Cipher offers limited security, it serves as an educational model to understand cryptographic basics and practical implementation.

This work aims to help beginners grasp the fundamentals of cryptography while offering a foundation for future enhancements, such as stronger algorithms and cross-platform compatibility.

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to all those who supported and guided us in the successful completion of this project titled "File Encryptor in C++".

First and foremost, we extend our deepest appreciation to our supervisor Mr. Kiran Khanal for his invaluable guidance constructive feedback and continuous encouragement throughout the development process. His expertise and mentorship were instrumental in shaping the direction and quality of this work.

We also wish to express our heartfelt thanks to Mr. Nishan Lamichhane who taught us C Programming in the first semester and C++ Programming in the second semester. His dedication to teaching and the solid foundation he provided in programming concepts have been vital to the successful execution of this project.

Furthermore, we are grateful to the faculty members and staff of the Department of Computer Engineering for providing the necessary resources and a supportive learning environment. We sincerely appreciate the suggestions, cooperation and moral support from our classmates and friends.

Lastly, we owe our deepest thanks to our families for their patience understanding and unwavering encouragement throughout this journey.

DECLARATION

We hereby declare that the project report entitled “File Encryptor in C++”, submitted in partial fulfillment of the requirements for the degree of Bachelor of Engineering in Computer Engineering, is the result of our original work carried out under the supervision of Mr. Kiran Khanal.

We affirm that:

1. This work has not been submitted previously for the award of any degree, diploma, or similar title at any other institution or university. In accordance with academic and ethical standards, proper acknowledgements have been given wherever the work of others has been referenced.
2. The project complies with the rules and regulations of Purbanchal University and Kantipur City College.

We understand that any violation of academic integrity may result in disciplinary action.

Signatures:

| Name | Signature | Date |
|---------------------|-----------|----------------|
| Salim Shrestha | | 15 August 2025 |
| Saraswati Rokaya | | 15 August 2025 |
| Aayush Kumar Mallik | | 15 August 2025 |

SUPERVISOR'S APPROVAL

This is to certify that the major project entitled “File Encryptor in C++”, undertaken and successfully demonstrated by Salim Shrestha, Saraswati Rokaya, and Aayush Kumar Mallik, has been completed under my guidance.

This project is submitted as partial fulfillment of the requirements for the degree of Bachelor of Engineering in Computer Engineering under Purbanchal University. Throughout the duration of the project. The students have demonstrated dedication, strong technical skills, and a clear understanding of the subject matter.

Their performance during the development and presentation of the project reflects their readiness to take on professional responsibilities in the field. I hereby approve this project for certification by the concerned authority.

Mr. Kiran Khanal
Senior Assistant Professor
Date: 15 August 2025

CERTIFICATE FROM DEPARTMENT

This is to certify that, following the Supervisor's Approval and Examiners' Acceptance, the project entitled "File Encryptor in C++", submitted by Salim Shrestha, Saraswati Rokaya and Aayush Kumar Mallik, has been officially approved as a partial fulfillment of the requirements for the degree of Bachelor of Engineering in Computer Engineering under Purbanchal University. The department acknowledges the students' efforts and successful completion of the project.

We commend their work and wish them continued success in all their future endeavors.

Er. Subash Rajkarnikar
Head of Department,
Department Of Computer Engineering,
Kantipur City College
Date: 2025-08-15