# **Project Report**

Registration of student into college

## Introduction

The Tuition Report Generator is a C++ program designed to assist college administrators in managing student tuition data. It provides functionality for adding student details and generating reports summarizing the total tuition fees paid by students.

#### **Features**

- Add Student Details: This feature allows administrators to input and store information about
  individual students. Details such as the student's name, residency status (whether they are instate or out-of-state), tuition fees, and optional enrollment in a health plan can be recorded. The
  program calculates the total tuition fees paid by each student based on their residency status
  and health plan choice.
- Generate Report: The program can generate detailed reports summarizing the total tuition fees
  paid by students. These reports distinguish between in-state and out-of-state student tuition
  fees, providing a breakdown of the financial contributions from each group. Additionally, the
  generated report is saved to a file for future reference.

```
## (College Student Tuition) ##

1 Add Student Details
2 Generate Report
-1 Exit
Enter your choice:
```

### **Code Explanation**

The code of the Tuition Report Generator consists of several key functions:

- addStudent: This function is responsible for gathering and storing student details. It prompts the user to input information such as the student's name, residency status, tuition fees, and optional enrollment in a health plan. The function calculates the total tuition fees paid by each student based on their residency status and health plan choice.
- generateReport: This function generates a comprehensive report summarizing the total tuition
  fees paid by students. It retrieves data from the file containing student records and calculates the
  total tuition fees paid by in-state and out-of-state students. The report includes separate totals
  for in-state and out-of-state student tuition fees and is saved to a file named "tuition\_report.txt"
  for future reference.
- main: Serving as the entry point of the program, the main function displays a menu that allows
  users to interact with the program. Users can choose to add student details, generate a report, or
  exit the program.

#### Sample Usage

Adding Student Details: To add student details, the user enters information such as the student's name, residency status, tuition fees, and optional enrollment in a health plan. The program calculates and updates the total tuition fees paid by in-state and out-of-state students accordingly.

Generating Report: By selecting the option to generate a report from the menu, the program produces a detailed report summarizing the total tuition fees paid by students. This report includes separate totals for in-state and out-of-state student tuition fees and is saved to a file for future reference.

Exiting the Program: Users can choose the exit option from the menu to terminate the program.

## Conclusion

The Tuition Report Generator offers college administrators a convenient tool for efficiently managing student tuition data. By providing features for adding student details and generating comprehensive reports, the program supports informed decision-making and financial planning within the institution. Future enhancements could include implementing data validation, error handling, and user authentication to further enhance data integrity and security.