Marking Scheme

Informatics College Pokhara

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Application Development

CS6004NI

Course Work 1

Submitted By: **Bhagya Shree Thapa**
London Met ID: Enter ID Here

Submitted To: Ishwor Sapkota
Module Leader

Component Grade and Comments	
A. Implementation of Application	
User Interface and proper controls used for designing	Design is properly done and in mess
Manual data entry or import from csv	not properly saved or imported data
Data Validation	No validation at all
Enrollment Report & weekly report in tabular format	very poorly executed reports and data not shown accurately
Course wise enrollment report & Chart display	Very poorly designed and only contains one report format with in appropriate data
Algorithm used for sorting & proper sorting of data	Default sorting provided by .net is used
B. Documentation	
User Manual for running the application	User Manual is average. Includes description for all interfaces

Application architecture & description of the classes ad methods sued	very poorly explained.
Flow chart, algoriathms and data sctructures used	very poorly explained and no diagramatic representation
Reflective essay	Very poorly written

C. Programming Style

Clarity of code,Popper Naming convention & comments	very poorly written code and no comments at all
System Usability	unusable system

Overall Grade:	**F**	**F**

Overall Comment:

Code should be self explainable with less comments. Need some proper naming of the component and require to add comments on required area.

In overall the code is working and all the functionality seems working and system can be used

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LONDON METROPOLITAN UNIVERSITY

School of Computing & Digital Media

Application Development

CS6004NP

Coursework 1

Submitted By:

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Date: 10th-Jan-2020

Submitted To:

Ishwor Sapkota

Application Development

Abstract

This is an individual course work for the module “Application Development” for Student Information System which is developed using Visual Studio Platform using C# language .With the great contribution of Mr. Ishwor Sapkota the course work was completed within the time frame.

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1. Introduction

In this coursework of the module “Application Development” we are asked to model a desktop application for Student Information System. The features and functions required to complete the system are fulfilled. The application must allow the user to input the student personal detail including registration date so that a system can generate a weekly enrolment report of the student. System must include detail like Name, address, contact no, email, program enrol, registration date. For security purpose there’s login system application through which only the authorized user can get access to the system and data.

The following are the key functional features of the application:

- Login
- Enroll Students
- Import CSV file
- Report sorted by student first name and registration date
- Weekly Report
- Chart

2. User Manual

The steps and instructions mentioned below are to be followed to make the system run successfully.

2.1 Login

This is the first page of the application login will prompt for username and password. By providing correct username and password user will get access. If the password and username is incorrect system will give two more chances to login.

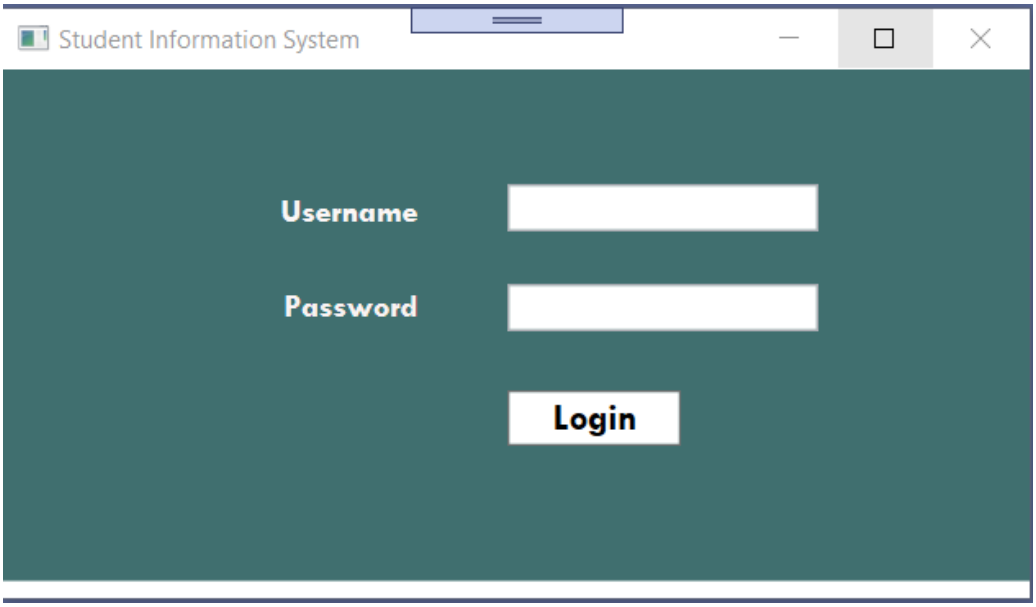


Figure 1: Login Form

If user inputs wrong username and password, error message is displayed. So, user has to enter correct username and password.

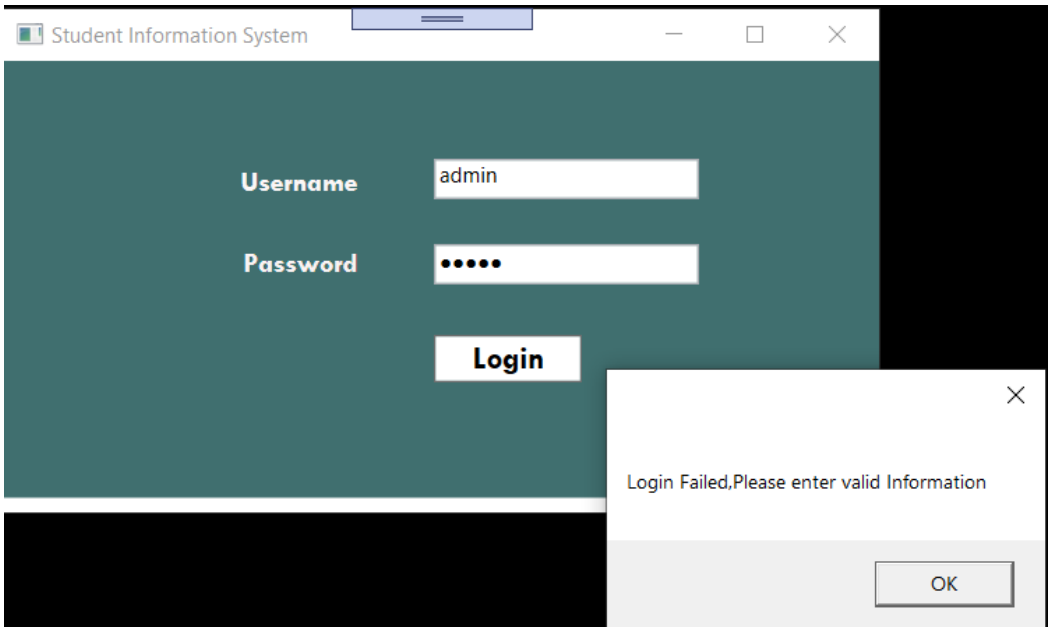


Figure 2: Error Message for attempting wrong username or password.

2.2 Home

After successfully login, this is the home page of the application. This page is the main page of the system as all the tasks are performed from this task. Through this page we can get access to other pages. The main screen provides five service which are Enroll Student, Import, Report, chart and weekly report section.

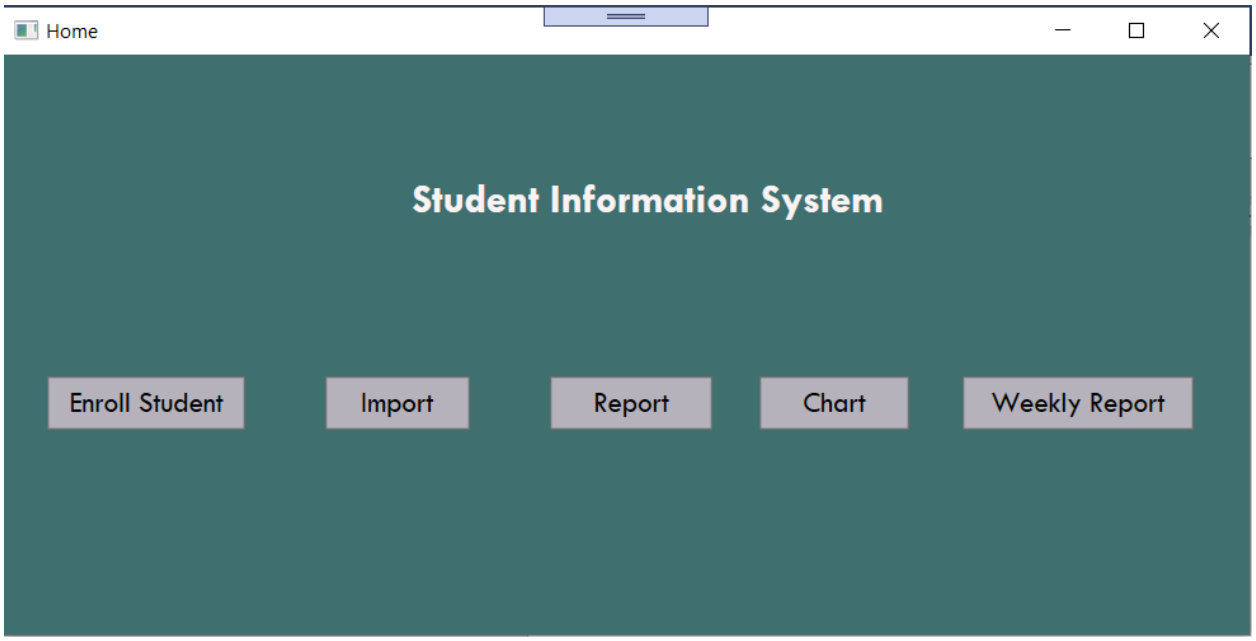


Figure 3: Home Page

2.3 Enroll Student

Enroll student add the data of the students which will be shown in the below grid view and save the data it in a xml format.

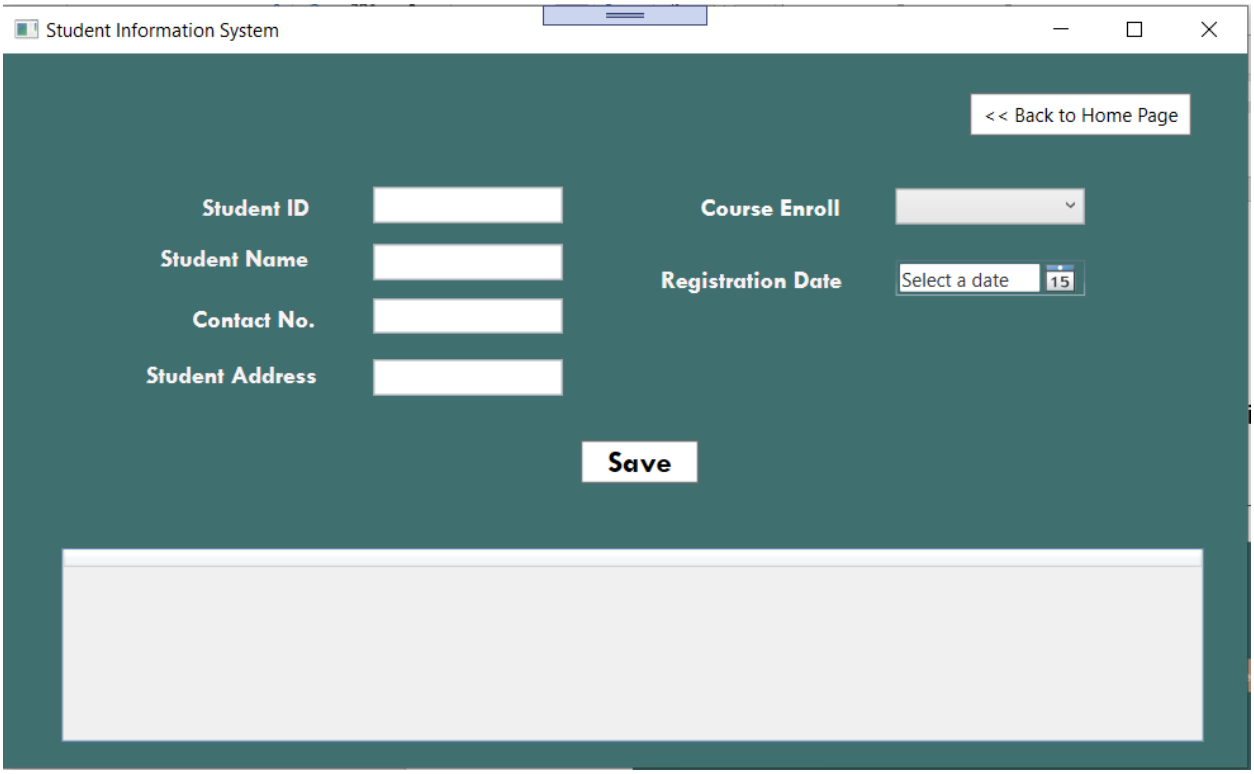


Figure 4: Form of Enroll Student

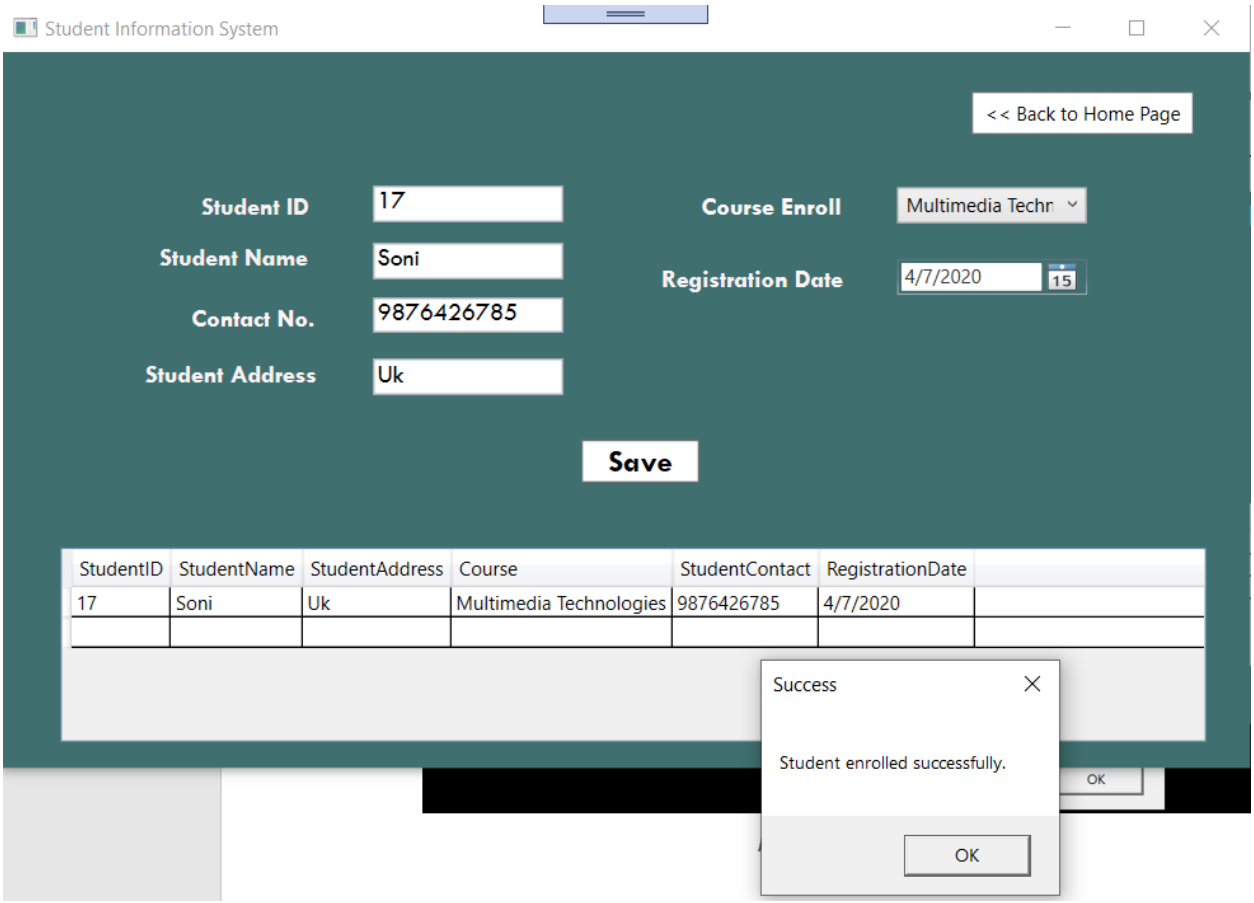


Figure 5: Student Enroll

2.4 Import

This is the design of an import page where the data of an students saved in a CSV format is imported.

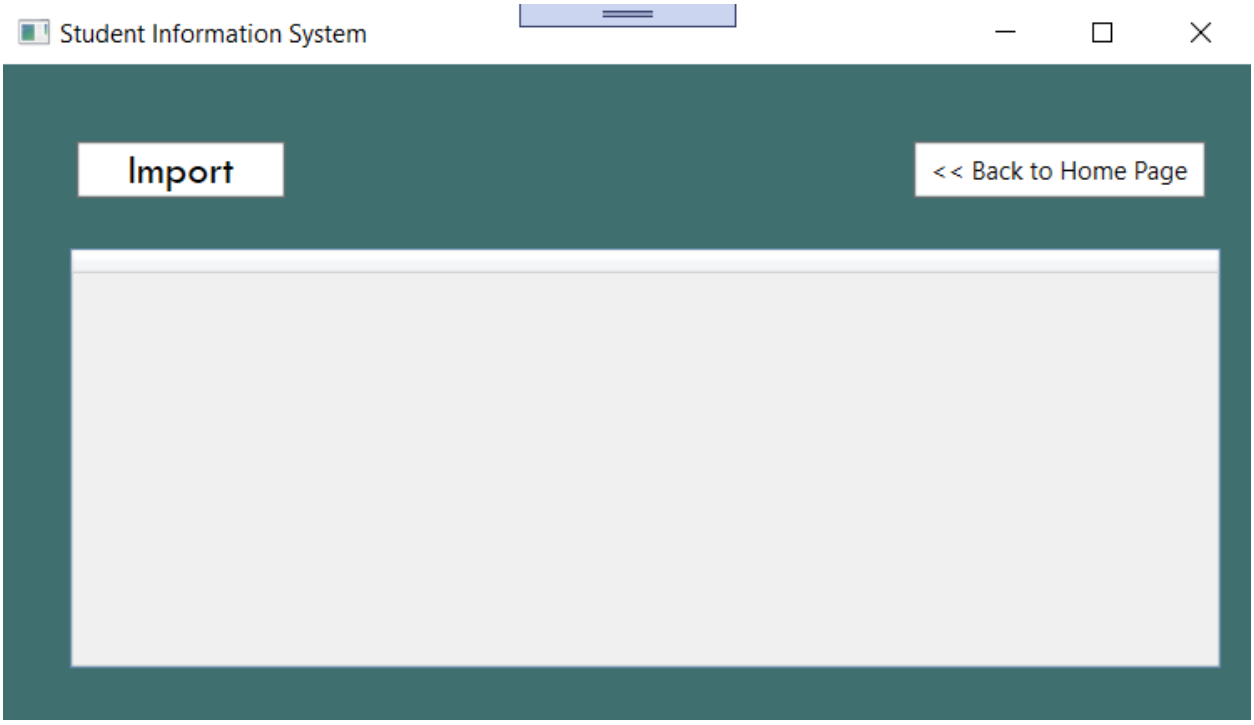


Figure 6: Import

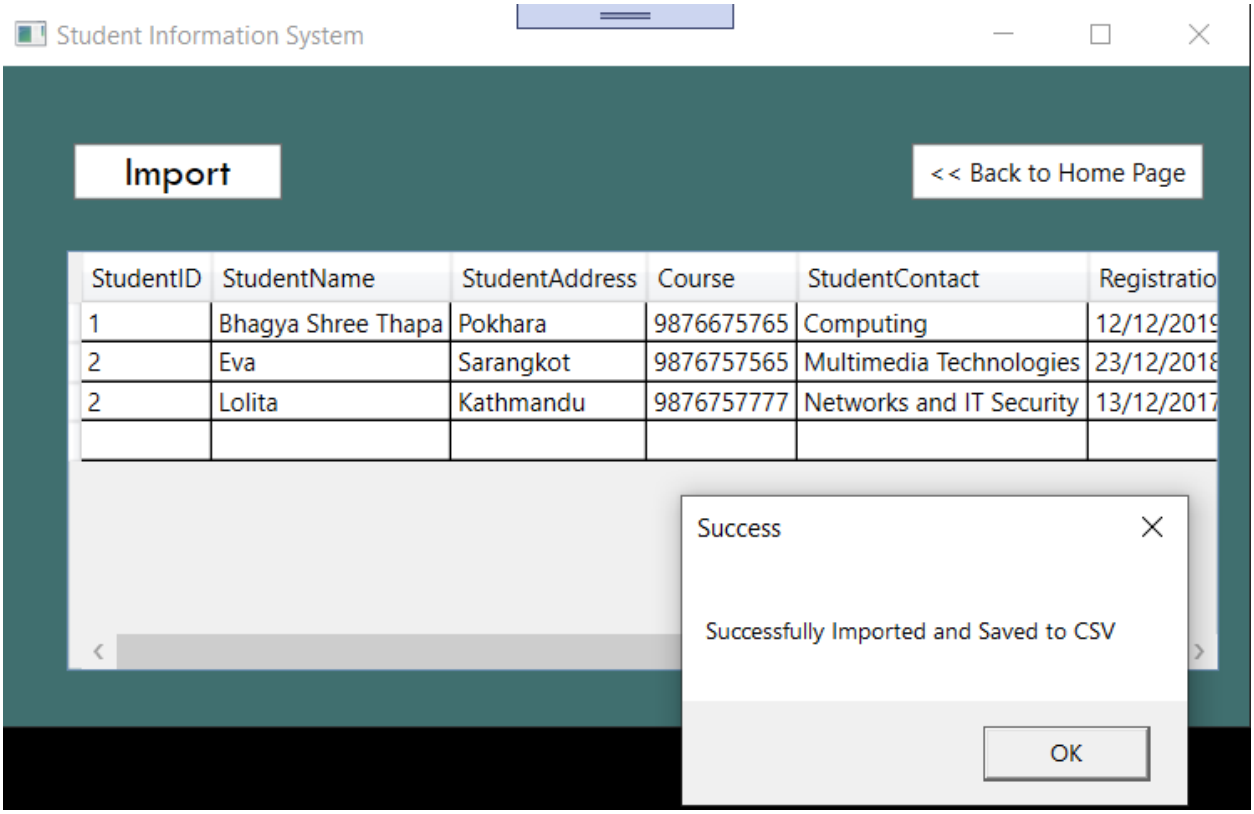


Figure 7: Importing data from CSV file

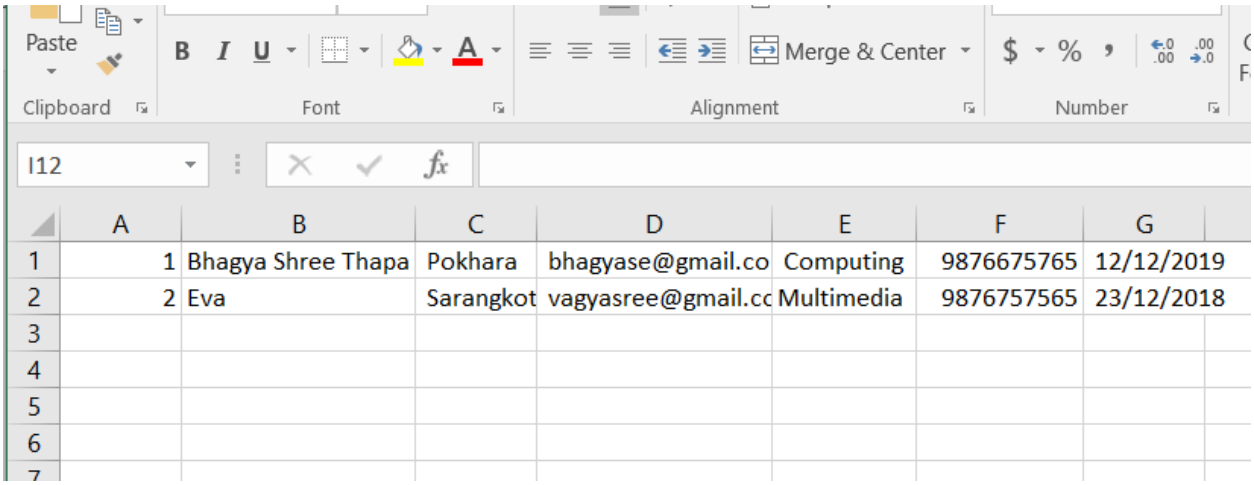


Figure 8: Details saved in CSV file

2.5 Report

Student's details will be shown sorted by first name and registration date

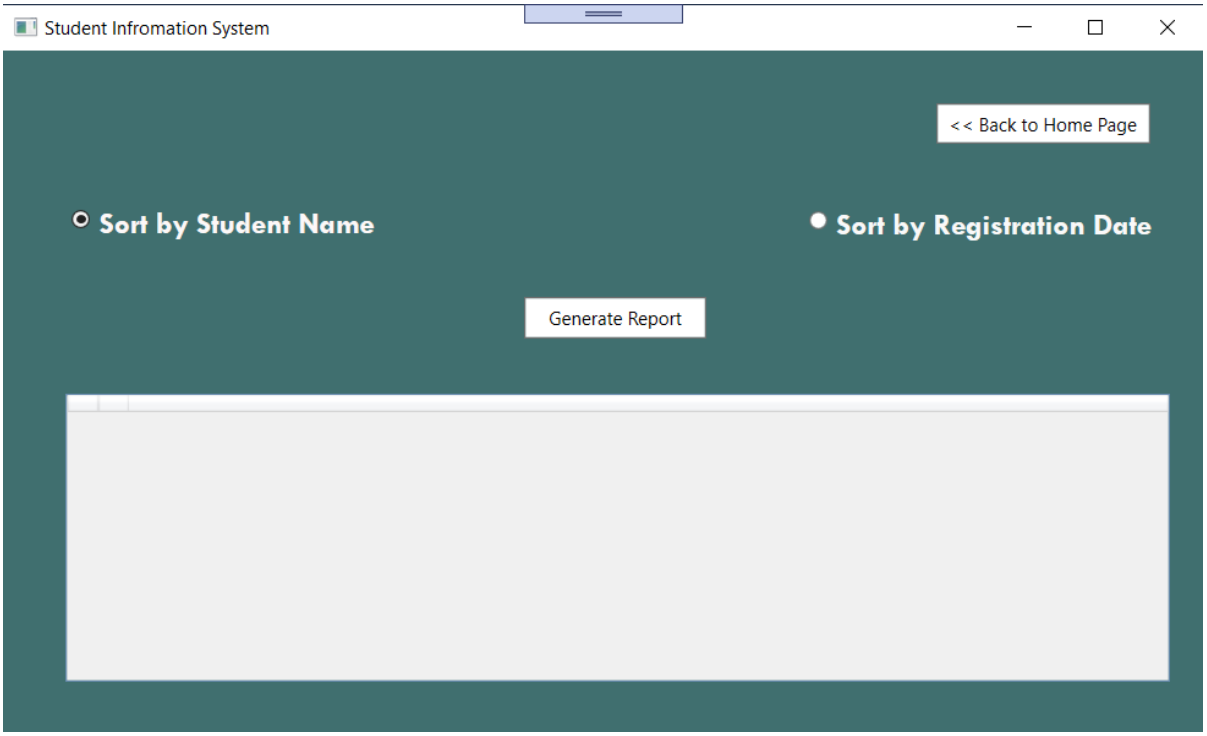


Figure 9: Report

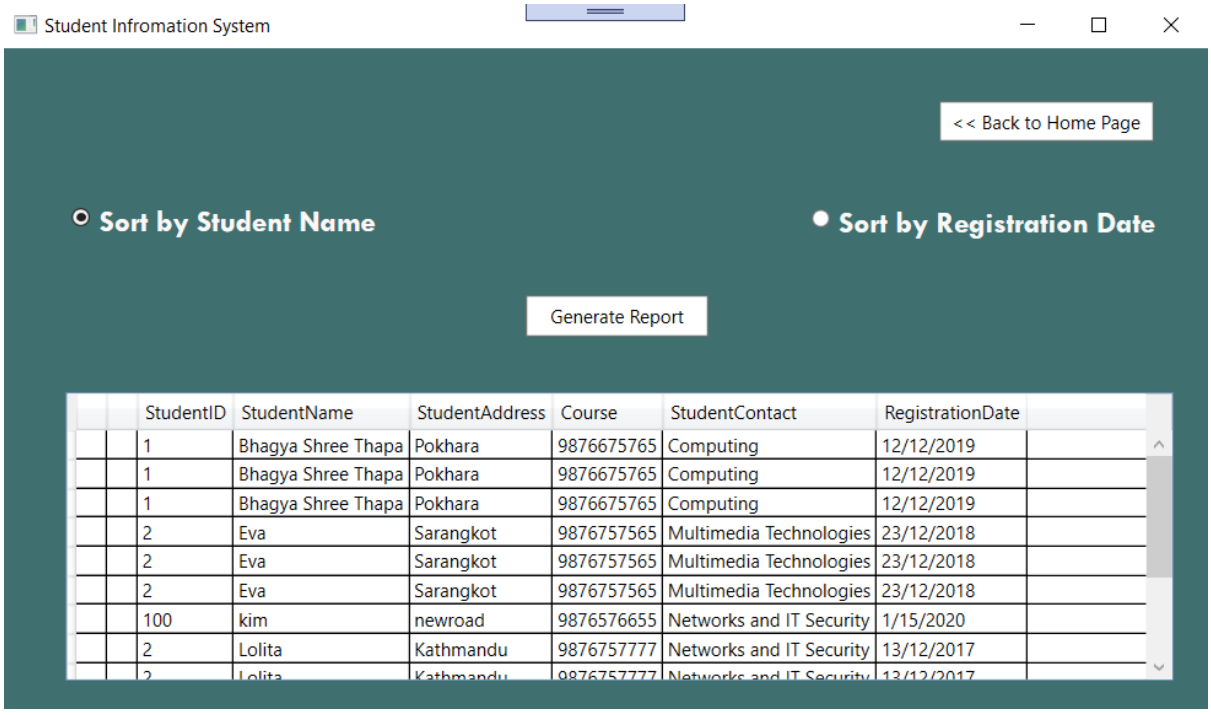
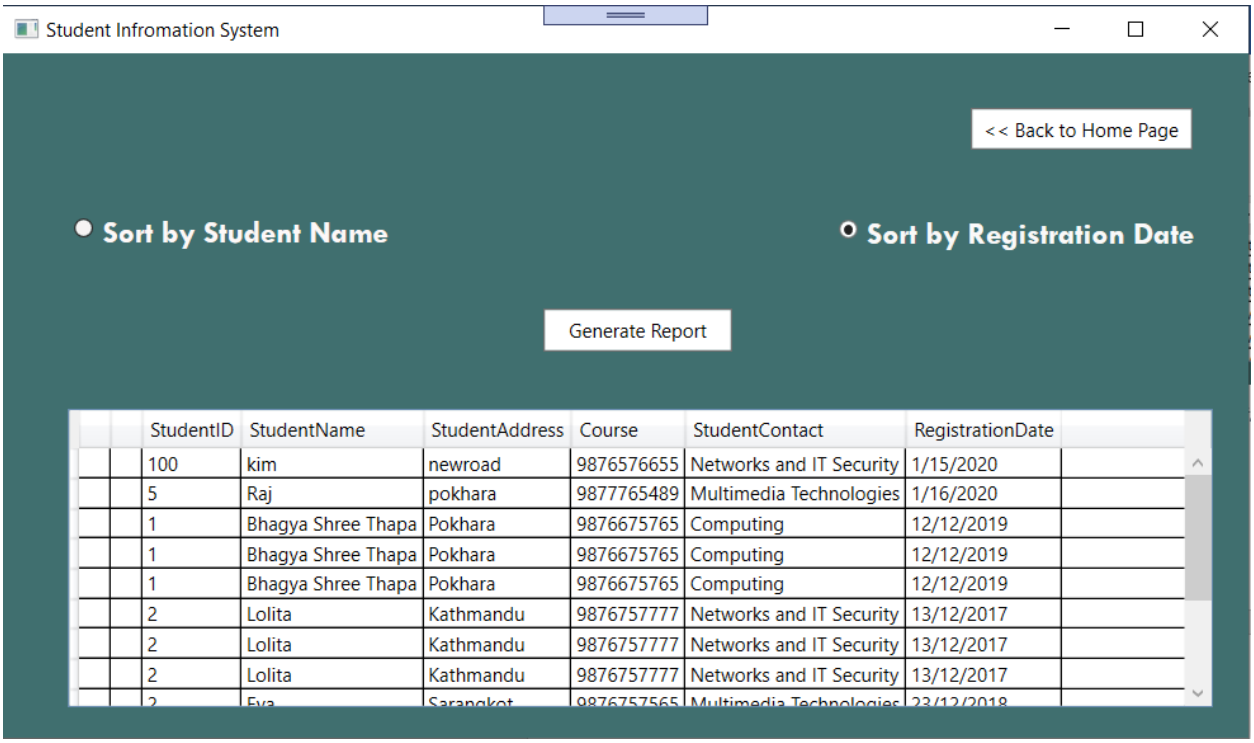


Figure 10: Generated report by students first name



StudentID	StudentName	StudentAddress	Course	StudentContact	RegistrationDate
100	kim	newroad	9876576655	Networks and IT Security	1/15/2020
5	Raj	pokhara	9877765489	Multimedia Technologies	1/16/2020
1	Bhagya Shree Thapa	Pokhara	9876675765	Computing	12/12/2019
1	Bhagya Shree Thapa	Pokhara	9876675765	Computing	12/12/2019
1	Bhagya Shree Thapa	Pokhara	9876675765	Computing	12/12/2019
2	Lolita	Kathmandu	9876757777	Networks and IT Security	13/12/2017
2	Lolita	Kathmandu	9876757777	Networks and IT Security	13/12/2017
2	Lolita	Kathmandu	9876757777	Networks and IT Security	13/12/2017
2	Eva	Sarangkot	9876757565	Multimedia Technologies	23/12/2018

Figure 11: Generated report by registration date

2.6 Weekly Report

This page will show the total number of the students who select same given course.

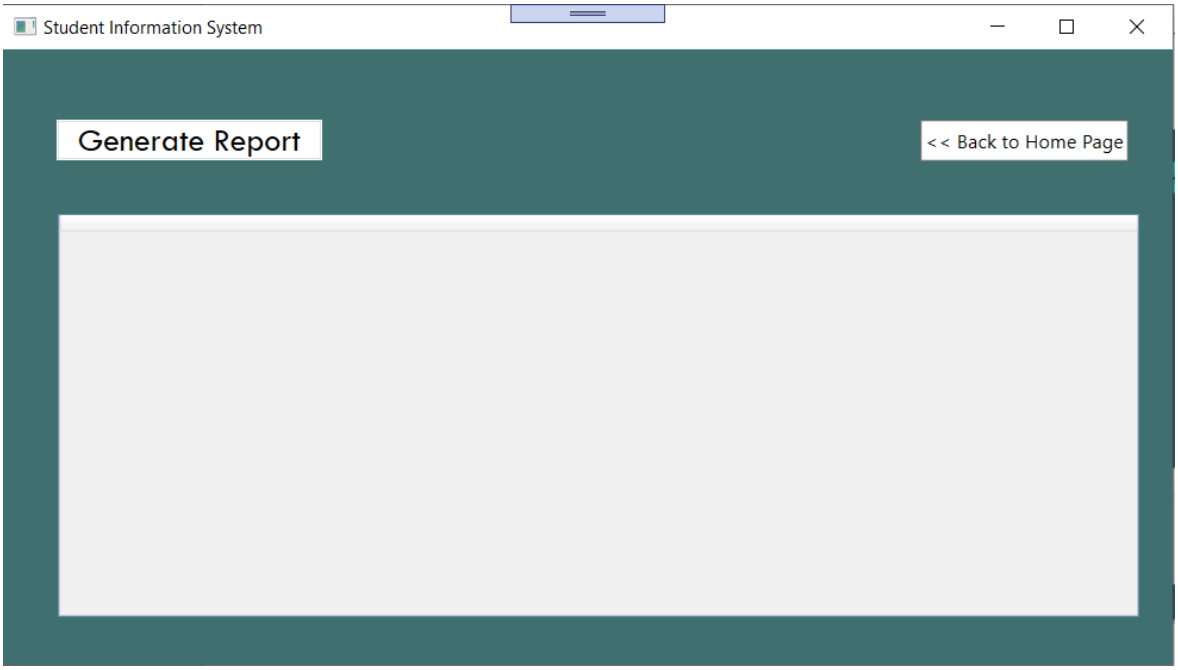


Figure 12: Design of Weekly Report

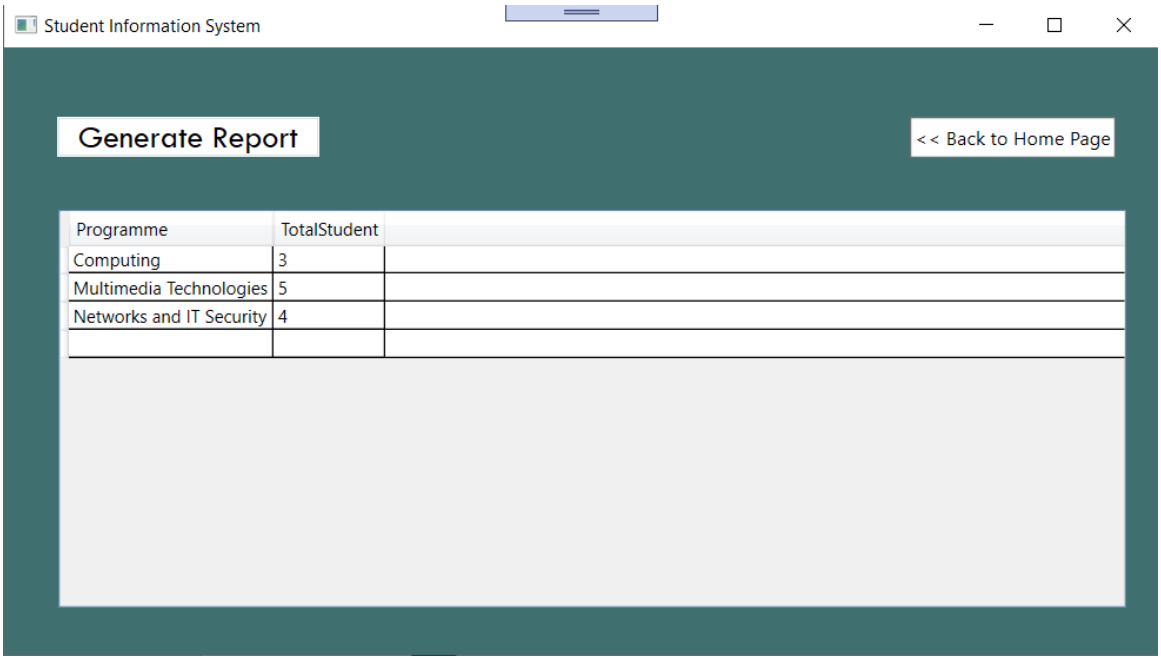


Figure 13: Data of weekly report

2.7 Chart

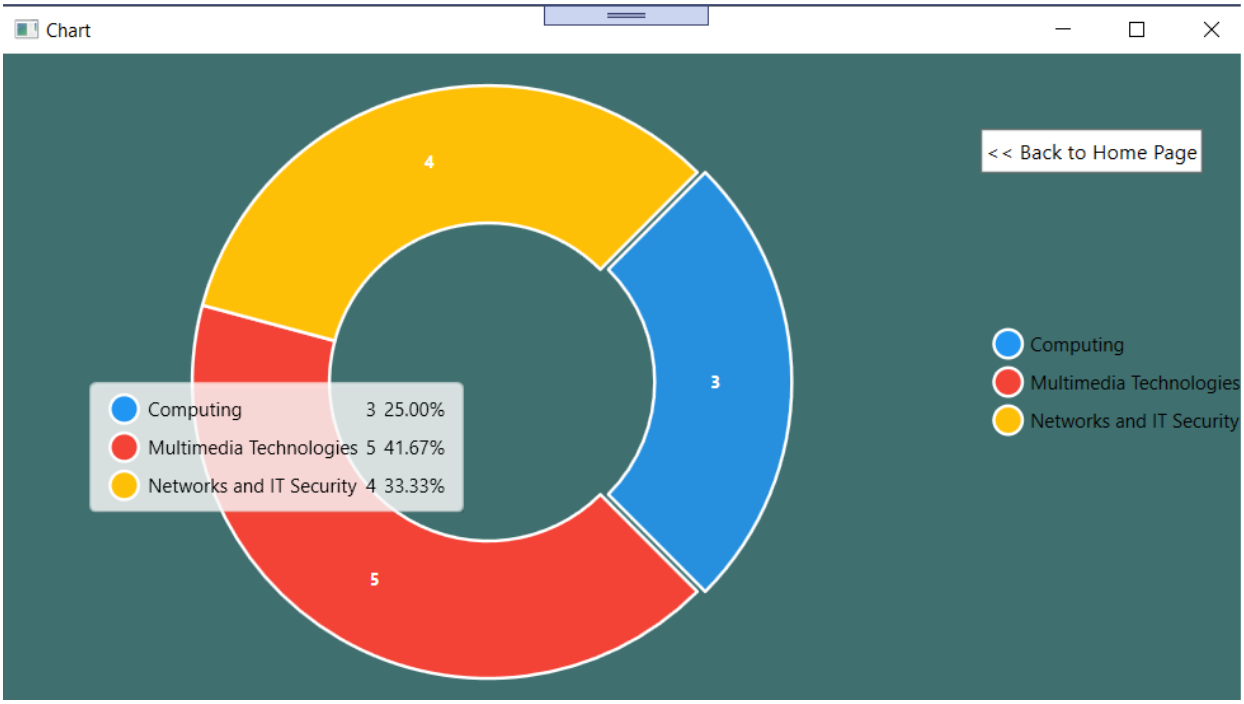


Figure 14: Graphical Representation (Doughnut pie-chart)

3. System Architecture

In the given figure, architecture of the student information system is visualized, as the first step shown is to login into the system for this user need to input correct username and password. Then the user enter the main part of the system Home, It consists all the major activities to be taken in the system like enroll student, Import, report, Chart, Weekly Report.

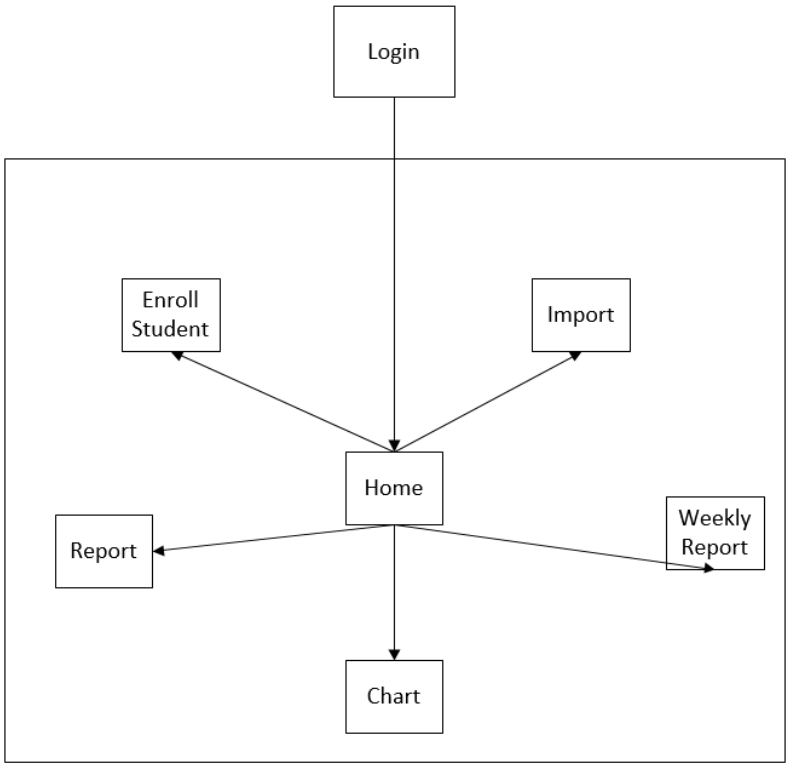


Figure 15: Diagram representing system architecture for Student Information System

4. Description of Classes Properties and Methods

1. MainWindow Class

It handles the login function.

Method	Description
Login	Login button on login page helps to open main menu if correct username and password is entered.

Table 1: Login

2. Home Class

Method	Description
Button_Click_1	Clicking on this button opens Enroll Students
Button_Click_2	Clicking on this button opens Import
Button_Click_3	Clicking on this button opens Report
Button_Click_4	Clicking on this button opens Chart
Button_Click_5	Clicking on this button opens Weekly Report

Table 2: View Home Page

3. Enroll Students

Method	Description
save_studentsDetails	Save button will save all the Student details input in a .csv format
Button_Click	Clicking on this button go back to the Home page

Table 3: View Enrol Students

4. Import class

Method	Description
Button_Click	This Import button will import the file in .csv format
Button_Click_1	Clicking on this button go back to the Home page

Table 4: View Import class

5. Course Chart Class

Method	Description
Button_Click	Clicking on this button_click go back to the Home page

Table 5: View: Course Chart class

6. Weekly Report class

Method	Description
Button_Click	Clicking on this button_click go back to the Home page
Button_Click_1	Generate the details of total number of students added in course enroll

Table 6: Weekly Report class

7. Report class

Method	Description
RadioButton_Checked	Sort the data of the user by name
RadioButton_Checked_1	Sort the data of the user by registration date
Button_Click_1	Clicking on this button_click go back to the Home page
Button_Click	Generate the user data according to clicking in the radio buttons

Table 7: Report class

5. Sorting Algorithm

LINQ stands for Language Integrated Query. LINQ is a data querying API with SQL like query syntaxes. The beauty of LINQ is it provides the ability to *.NET* languages (like C#, VB.NET, etc.) to generate queries to retrieve data from the data source. For example, a program may get information from the student records or accessing employee records, etc. In, past years, such type of data is stored in a separate database from the application, and you need to learn different types of query language to access such type of data like SQL, XML, etc. And also you cannot create a query using C# language or any other .NET language. (ankita_saini, 2018)

Advantage of LINQ

1. LINQ offers an object-based, language-integrated way to query over data no matter where that data came from. So through LINQ we can query database, XML as well as collections.
2. Compile time syntax checking
3. It allows you to query collections like arrays, enumerable classes etc in the native language of your application, like VB or C# in much the same way as you would query a database using SQL (Dwij, 2019)

6. Flowchart

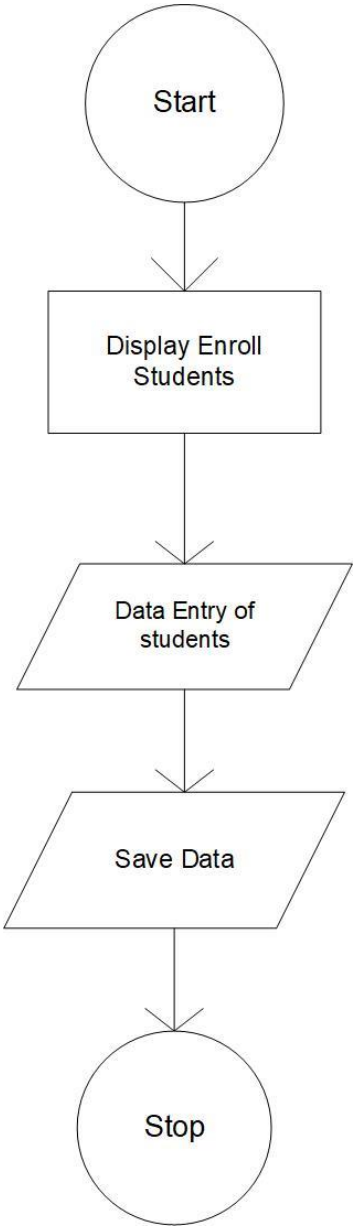


Figure 16: Flowchart of student enrolment Dataflow

7. Algorithm

Step 1: Start

Step 2: Display the Enroll Students page

Step 3: Enter the data in the form as per required

Step 4: Save the data

Step 5: End

8. Reflection

“Student Information System” has been carried out using Visual Studio 2019 with the C# language. This system seems to give great performance. The logic used in the system reflects the real working environment.

About the system, this can perform the entire task proposed in the question. This system allow the user to input the data of the students and save the data in the .CSV file. It generate the report one sorted by the student name and another by the registration date. In addition to that a user can check the weekly report is build showing the total number of students enrolled in each program which is also shown in the graphical representation form (Doughnut Chart).

9. Conclusion

This application "Student Information System" is successfully finished. Each function required for the application was represented on the application and they all work perfectly. This is our first project, or this is the first time that we worked in visual studio with C# .net framework. So, I faced many problems during coding. But, with the help of our teacher and friends, I completed this project successfully on time. While doing coding there were numerous bugs and blunder. I overcome each error one by one. I used to do online research to fix errors. I did a lot of research on C# and visual studio platform during this coursework and I got a chance to learn many things.

6. References

ankita_saini, 2018. *GreeksofGreeks.* [Online]
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[Accessed 9 1 2020].

Dwij, D., 2019. *C#Corner.* [Online]
Available at: https://www.c-sharpcorner.com/UploadFile/72d20e/concept-of-linq-with-C-Sharp/
[Accessed 10 1 2020].

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