Marking Scheme

Informatics College Pokhara



Application Development CS6004NI Course Work 1

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London Met ID: Enter ID Here Module Leader

Component Grade a	nd Comments
A. Implementation of Application	
User Interface and proper controls used for designing	missing controls in the interface
Manual data entry or import from csv	not properly saved or imported data
Data Validation	Only basic validation
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	1
User Manual for running the application	User Manual is below average. Is textual only.

Marking Scheme Application architecture & description of the average work with very limited explanation of the classes ad methods sued classes and methods used Flow chart, algoriathms and data sctructures average work with very limited explanation and missing diagramatic representation. used Reflective essay Very poorly written C. Programming Style Clarity of code, Popper Naming convention & very poorly written code and no comments at all comments System Usability very poorly developed application D+ |D+ **Overall Grade: Overall Comment:** Code should be self explainable with less comments. Need some proper naming of the componer 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

Informatics College Pokhara



Application Development CS6004NP Coursework 1

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Introduction

Windows Presentation Foundation (WPF) is a development framework used to create a desktop application. It is a part of the NET framework. The WPF has a resolution-independent and vector-based rendering engine which is helpful to deal with modern graphics hardware. The latest version of WPF is *4.6*. In this framework, UI of the application is designed in XAML language and Application logic is written in C# programming language (Geeksforgeeks, 2020).

This project is also based on WPF. In this task we need to create Student Information framework. The application enable the client to enter the understudy individual detail including enlistment date with the goal that a framework can create a week after week enrolment report of the understudy. Framework incorporate detail like Name, address, contact no, program select, enrolment date. The application is to monitor the understudy's subtleties, program select and enlistment date.

Current scenario

Most of the education institution use manual system writing the student information in paper and every few of the education institution use computerized system. By using this manual system many data are lost and input wrong information. Later on there will be difficult in generate report like as weekly or monthly. By using systematic system there is less chance of loss of data so company owner are excited to use computerized system.

User Manual

User manual is commonly made to give assistance to people using this system.

Login Form

■ LogIn Page			_	×
	Lo	ogin Form		
	Username:			
	Password:			
		Login		

Figure 1: Login Page

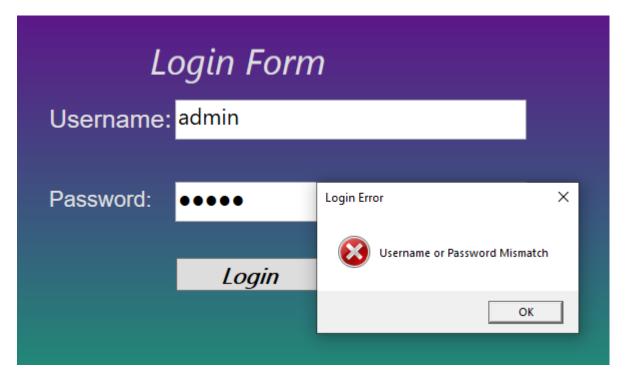


Figure 2: Show error message while user input incorrect user name or password

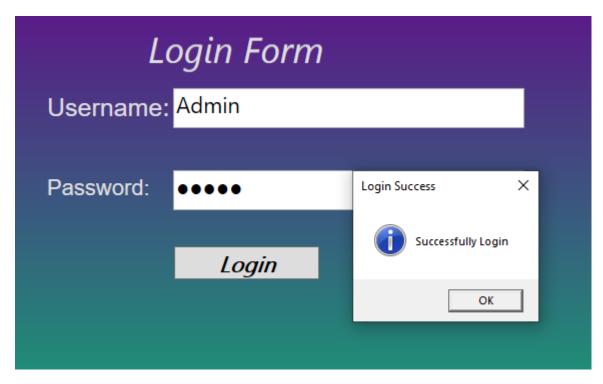


Figure 3: Success information after input valid username and password

2. Student Info System Layout

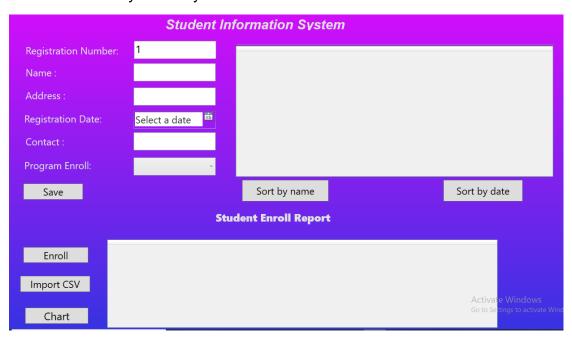


Figure 4: Student Information System Layout

3. Layout of open CSV file

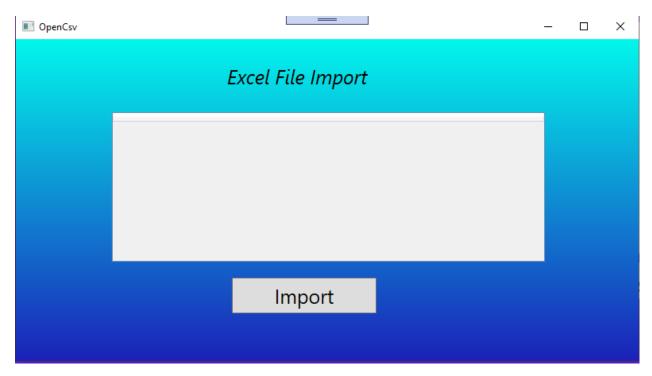


Figure 5: Layout for open csv file

Inserting Student Info

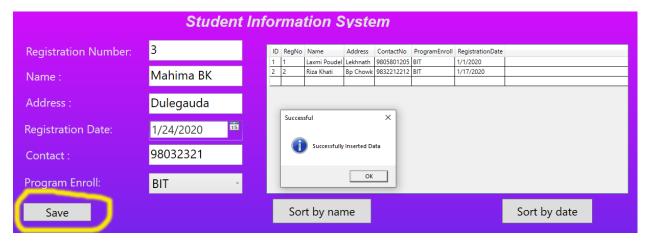


Figure 6: Message shown while successfully inserted the data

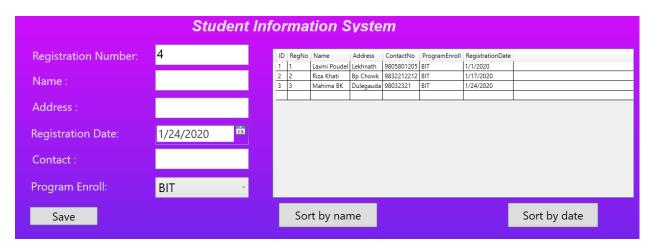


Figure 7: Added data after press ok button from pop up message box After saved button clicked following file is create in selected location

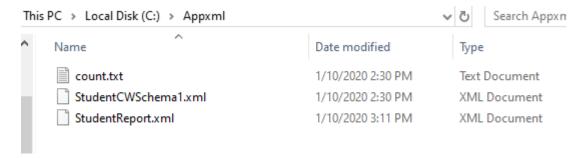


Figure 8: File automatically build after save button click

When save button is clicked after input the student information individual xml file also generated.

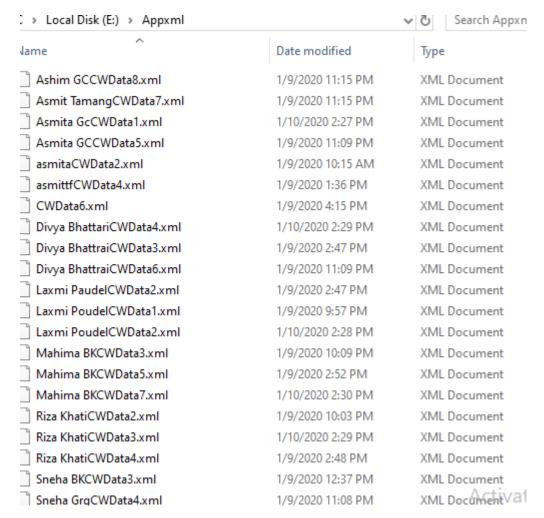


Figure 9: Individual xml file created of student

Sorted by Name

ID	RegNo	Name	Address	ContactNo	ProgramEnroll	Registration Date	
1	1	Laxmi Poudel	Lekhnath	9805801205	BIT	1/1/2020	
2	2	Riza Khati	Bp Chowk	9832212212	BIT	1/17/2020	
3	3	Mahima BK	Dulegauda	98032321	BIT	1/24/2020	
4	4	Sneha Grg	Milan Tole	9837325	BIT	1/21/2020	
5	5	Asmita GC	Parshyang	983727222	BIT	1/31/2020	
6	6	Divya Bhattrai	Birauta	98323223	BIT	1/15/2020	
7	7	Asmit Tamang	Arghaun Chowk	98843634	BBA	1/11/2020	
8	8	Ashim GC	Baneshwor	983723	BBA	1/5/2020	
	Sor	t by nam	ne			Sort by date	Э

Figure 10: Before sorted by Name

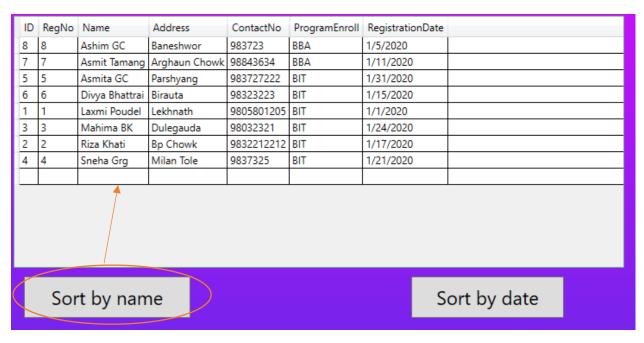


Figure 11: After Sorted by name

Sorted by Date

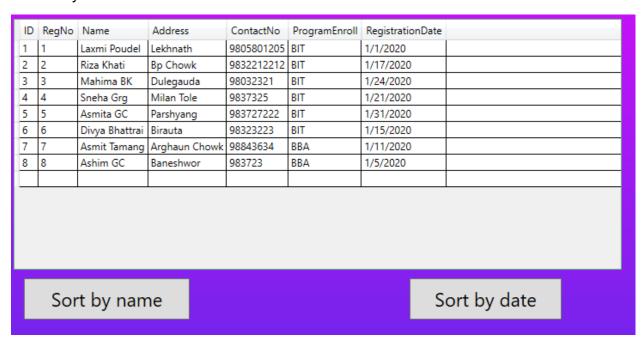


Figure 12: Before sorted by date

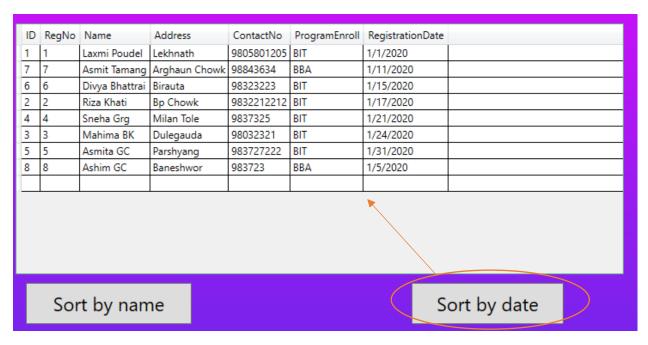
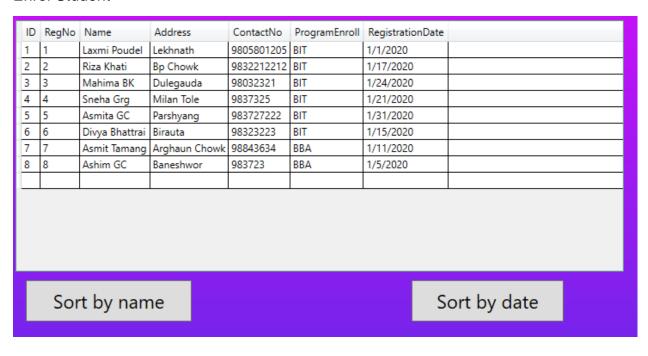


Figure 13: After Sorted by Date

Enrol Student



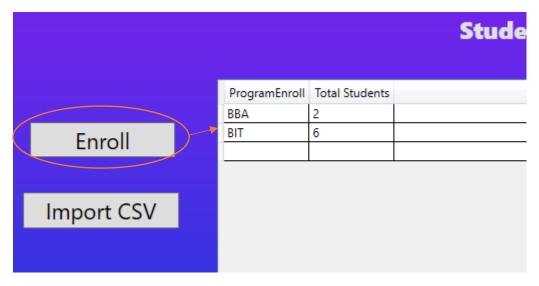


Figure 14: After click the Enroll button

CSV File Import Layout

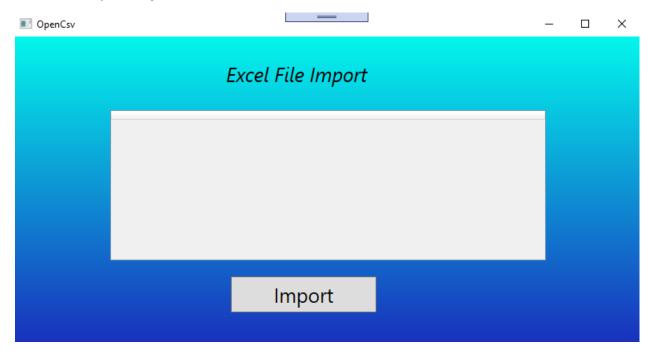


Figure 15: CSV file import

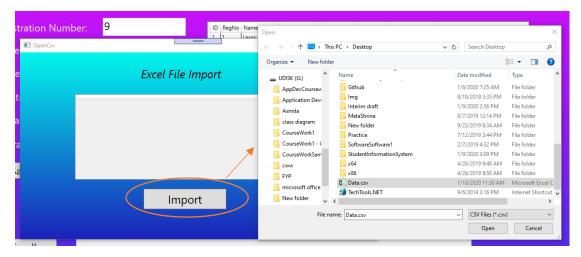


Figure 16: After clicking the import button

ID	RegNo	Name	Address	ContactNo	ProgramEnroll	RegistrationDate	
6	6	Divya Bhattrai	Birauta	98323223	BIT	1/15/2020	^
7	7	Asmit Tamang	Arghaun Chowk	98843634	BBA	1/11/2020	
8	8	Ashim GC	Baneshwor	983723	BBA	1/5/2020	
1	1000	Haroon Tariq	pakistan	+98655443	BBA	11/01/2019	
2	1001	Malik Traiq	Islambad	+973263652	BBA	11/12/2019	
1	1000	Haroon Tariq	pakistan	+98655443	BBA	11/01/2019	
2	1001	Malik Traiq	Islambad	+973263652	BBA	11/12/2019	

Figure 17: Shows data in grid after Importing file from the excel file

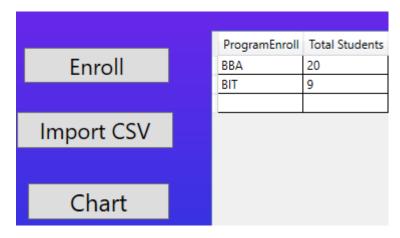


Figure 18: Total Number of enroll student

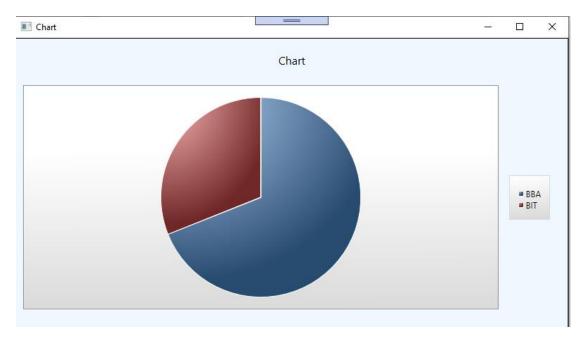


Figure 19: Pie Chart of total no of people enroll in BIT and BBA

Journals Article

- Our Online understudy enlistment framework empowers understudies to select into their subjects preceding the initiation of their semesters. This enlistment framework not just enables worldwide understudies to enlist through web without going to the grounds yet in addition fuses the business rules. These business rules spread a wide scope of guidelines and approach, for example, subject pre-imperative, understudy's instalment status, course facilitator's choice and the correspondence of understudies' position to the proposed selecting subjects. Other than business controls, the framework additionally consolidates different notice components like Short Messaging Service and Email. XML is utilized to store the business rules and subsequently permit the trans-portability of the framework interface to more extensive scope of gadgets, for example, Personal Device Assistant. The interface autodistinguishes the client's gadget either PC/PC or a lot littler screen gadget, for example, PDA. To put it plainly, the enlistment framework upheld motor runs dependent on the business rules and front-end motor rushes to give high fulfillment client experience. With the business and UI, the framework can run the work process of understudy enlistment from the online enlistment structure to endorsement work process cycle running parallel with the notice capacity. (H.H., 2006)
- This investigation intended to improve the effectiveness of the current Student Information System of Kalinga State University Rizal grounds. To achieve this target, an appraisal of the current framework was done through observation and meeting techniques from the Acting Registrar, Campus Secretary, Faculty Members and students. Results uncover that the current understudy data framework met the five necessities: re-usability, maintainability, security, helpfulness and functionality and assessment on the framework intrigue of a quality programming just to a "moderate degree". Also, unwavering quality of the current framework was given a "low degree" rating. In view of the evaluation results, the current understudy data framework was refined to incorporate proposals, for example, the inclusion of online inquiry get to, online accessibility of understudy data, and a job based security in the system. During the attempt out of the created understudy data framework, it was surveyed with "high

degree" of viability as far as all framework segments with the exception of its ease of use and productivity which is evaluated as "moderate degree". The created Student Information System gave more noteworthy fulfillment to the clients contrasted and the existing system for an effective questioning of understudy data records, keeping the understudy records in a more secured manner, and it gives progressively solid data records of understudies in Kalinga State University Rizal grounds (Chim, 2016).

Another kind of understudy data the executive's framework is intended to actualize understudy data distinguishing proof and the executives dependent on unique mark recognizable proof. So as to guarantee the security of information transmission, this paper proposes an information encryption technique dependent on an improved AES calculation. Another - box is cunningly planned, which can altogether diminish the encryption time by improving Byte Sub, Shift Row, and Mix Column in the round change of the conventional AES calculation with the procedure of look-into table. Exploratory outcomes show that the proposed calculation can altogether improve the encryption time contrasted and the conventional AES calculation (Anon., 2017). Student Information Management System (SIMS) provides a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. The creation and management of accurate, up-to-date information regarding a students' academic career is critically important in the university as well as colleges. Student information system deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details and other resource related details too. It tracks all the details of a student from the day one to the end of the course which can be used for all reporting purpose, tracking of attendance, progress in the course, completed semesters, years, coming semester year curriculum details, exam details, project or any other assignment details, final exam result and all these will be available through a secure, online interface embedded in the college's website. It will also have faculty details, batch execution details, students' details in all aspects, the various academic notifications to the staff and students updated by the college administration. It also facilitate us explore all the activities happening in the college, Different reports and Queries can be generated based

on vast options related to students, batch, course, faculty, exams, semesters, certification and even for the entire college (S.R.Bharamagoudar, 2013).

System Architecture

Set of shows, rules, and measures utilized in a PC framework's specialized structure, in addition to client prerequisites and determinations, that the framework's producer (or a framework integrator) follows in planning (or incorporating) the framework's different parts, (for example, hardware, programming and systems) (Businessdictionary, 2020).

Architecture Diagram

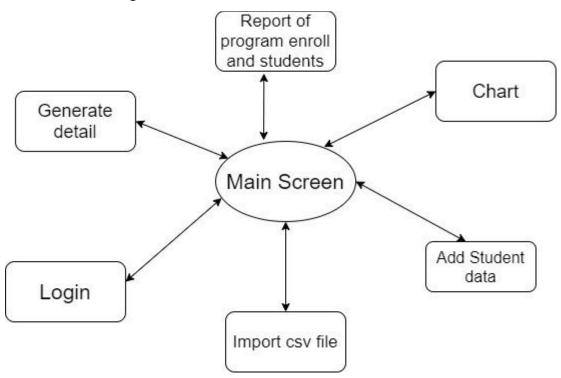


Figure 20: Architecture Diagram

The above diagram shows the architecture diagram of the project developed by me. Here in this project functionality like report of program enrollment by faculty, chart, and add student information to the system, login page for the admin who can only access the information of the student. Import csv file to the system.

Class Diagram

Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application.

Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modeling of object-oriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages.

Class diagram shows a collection of classes, interfaces, associations, collaborations, and constraints. It is also known as a structural diagram (Tutorials point, 2020).

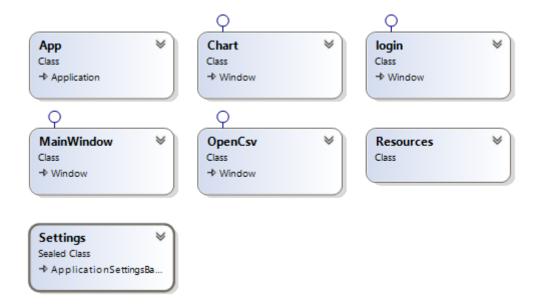


Figure 21: Class Diagram

Individual Diagram

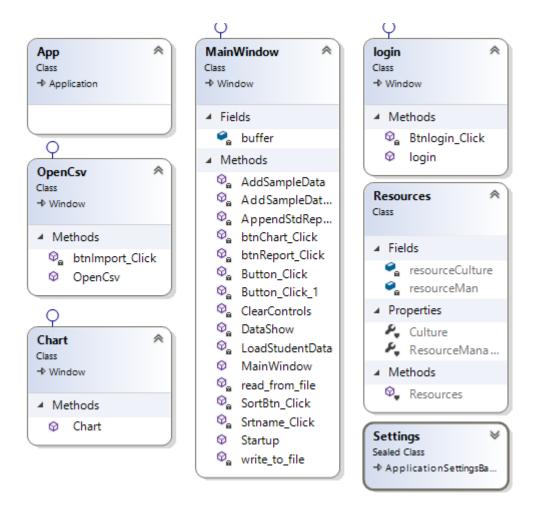


Figure 22: Individual Class Diagram

Flow Chart

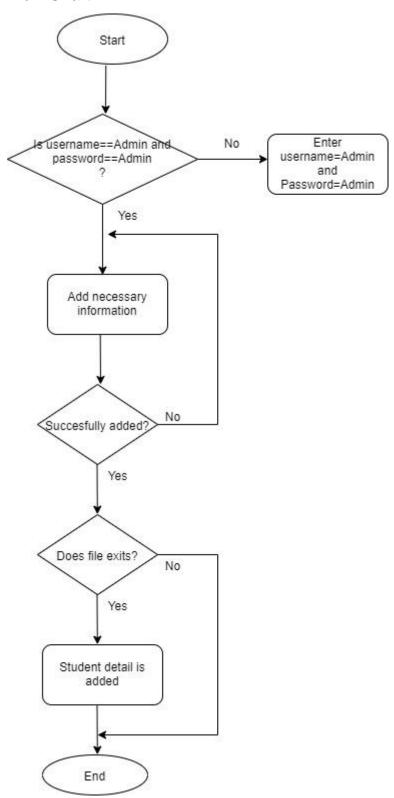


Figure 23: Flow Chart

Algorithm

Step 1: Start

Step 2: check whether the user input valid username or password.

Step 3: If user does not input valid username or password then show error message.

Step 4: If user input valid username and password the go to step 5.

Step 5: Show Student Information add layout and add the necessary information.

Step 6: check whether information is successfully added or not.

Step 7: If not go to Step 5.

Step 8: If data added successfully check file exits or not.

Step 9: if not go to step 11.

Step 10: File exits then add student detail.

Step 11: End

Bubble Sort

Bubble Sort is a simple algorithm which is used to sort a given set of n elements provided in form of an array with n number of elements. Bubble Sort compares the entire element one by one and sort them based on their values. If the given array has to be sorted in ascending order, then bubble sort will start by comparing the first element of the array with the second element, if the first element is greater than the second element, it will swap both the elements, and then move on to compare the second and the third element, and so on. If we have total n elements, then we need to repeat this process for n-1 times. It is known as bubble sort, because with every complete iteration the largest element in the given array, bubbles up towards the last place or the highest index, just like a water bubble rises up to the water surface. Sorting takes place by stepping through all the elements one-by-one and comparing it with the adjacent element and swapping them if required (studynight, 2020).

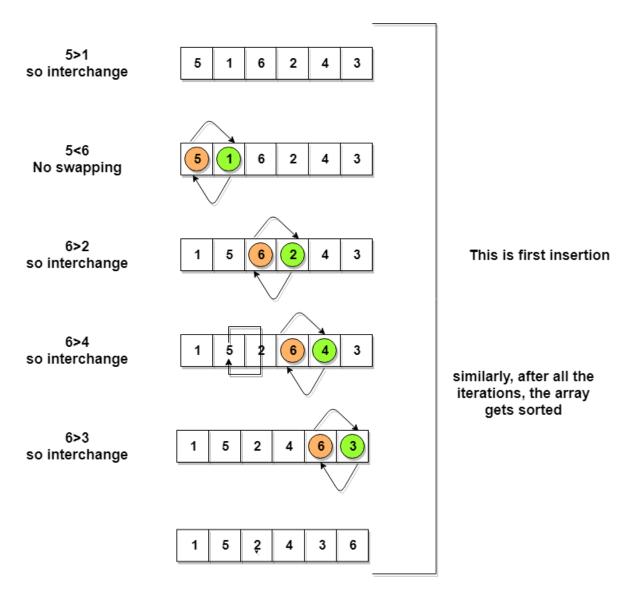


Figure 24: Bubble sort

Source: https://www.studytonight.com/data-structures/images/basic-bubble-

sort.png

Conclusion

This is the report of the application development (CS6004NA). To complete this coursework lot of researches was done. I have visited many website and journals. While making this project many errors bugs are seen and at the same time that problem was solved by the help of friends, module leader.

This project consists of login page main window where admin put all the information of the student and save. The saved files are saving to the xml file and schemas also develop and CSV file also import.

References

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- S.R.Bharamagoudar, G. R. (2013). Web Based Student Information Management. *International Journal of Advanced Research in Computer and Communication Engineering, Vol.* 2(Issue 6), 2342-2348.
- studynight. (2020, jan 05). Retrieved from https://www.studytonight.com/datastructures/bubble-sort
- Tutorials point. (2020, Jan 05). Retrieved from https://www.tutorialspoint.com/uml/uml_class_diagram.htm

Appendix

```
Login Page
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System. Threading. Tasks;
using System.Windows;
using System.Windows.Controls;
using System.Windows.Data;
using System.Windows.Documents;
using System.Windows.Input;
using System.Windows.Media;
using System.Windows.Media.Imaging;
using System. Windows. Shapes;
using AppDevCoursewrk;
namespace AppDevCoursewrk
{
  /// <summary>
  /// Interaction logic for login.xaml
  /// </summary>
  public partial class login: Window
  {
```

```
public login()
    {
       InitializeComponent();
    }
    private void Btnlogin_Click(object sender, RoutedEventArgs e)
    {
       var user = txtuser.Text;
       var pass = txtpass.Password;
       if (user.Equals("") || pass.Equals(""))
       {
         MessageBox.Show("Empty
                                                        "Login
                                          value",
                                                                     Error",
MessageBoxButton.OK, MessageBoxImage.Error);
       }
       else if (user != "Admin" || pass != "Admin")
       {
         MessageBox.Show("Username or Password Mismatch", "Login
Error", MessageBoxButton.OK, MessageBoxImage.Error);
         txtuser.Clear();
         txtpass.Clear();
       }
       else
```

```
{
         MessageBox.Show("Successfully
                                           Login",
                                                     "Login
                                                              Success",
MessageBoxButton.OK, MessageBoxImage.Information);
         this.Hide();
         MainWindow mainWindow = new MainWindow();
         mainWindow.Show();
      }
    }
  }
}
Main Window
using System;
using System.Collections.Generic;
using System.Data;
using System.IO;
using System.Windows;
using CourseWorkOne;
using DataHandler;
using Microsoft.Win32;
namespace AppDevCoursewrk
{
  /// <summary>
  /// Interaction logic for MainWindow.xaml
```

```
/// </summary>
public partial class MainWindow: Window
{
  private DataTable buffer;
  public MainWindow()
  {
    InitializeComponent();
     Startup();
    txtRegNo.Text = read_from_file();
    LoadStudentData();
  }
  public void Startup()
  {
    //var handler = new Handler();
    //var dataSet = handler.CreateDataSet();
    //AddSampleData(dataSet);
    //dataSet.WriteXmlSchema(@"D:\StudentCWSchema.xml");
```

```
//dataSet.WriteXml(@"D:\StudentCWData.xml");
  //var dataSet = new DataSet();
  //dataSet.ReadXmlSchema(@"D:\StudentCWSchema.xml");
  //dataSet.ReadXml(@"D:\StudentCWData.xml");
  //vari = 0;
}
private void AddSampleData(DataSet dataSet)
{
  var dr = dataSet.Tables["Course"].NewRow();
  dr["Name"] = "BBA";
  dr["DisplayText"] = "BBA Hons";
  dataSet.Tables["Course"].Rows.Add(dr);
  dr = dataSet.Tables["Course"].NewRow();
  dr["Name"] = "Network & Communication";
  dr["DisplayText"] = "BCA Network";
  dataSet.Tables["Course"].Rows.Add(dr);
  dr = dataSet.Tables["Course"].NewRow();
  dr["Name"] = "Programming & Application Development";
```

}

{

```
dr["DisplayText"] = "BSc CSIT Application Development";
  dataSet.Tables["Course"].Rows.Add(dr);
  dr = dataSet.Tables["Student"].NewRow();
  dr["Name"] = "Laxmi Poudel";
  dr["Address"] = "Budi Bazar";
  dr["ContactNo"] = "98938328";
  dr["CourseEnroll"] = 1;
  dr["RegistrationDate"] = DateTime.Today.AddDays(-2);
  dataSet.Tables["Student"].Rows.Add(dr);
  dr = dataSet.Tables["Student"].NewRow();
  dr["Name"] = "Riza Khati";
  dr["Address"] = "BP chowk";
  dr["ContactNo"] = "838732873";
  dr["CourseEnroll"] = 2;
  dr["RegistrationDate"] = DateTime.Today.AddDays(-1);
  dataSet.Tables["Student"].Rows.Add(dr);
private void AddSampleDataforStd(DataSet dataSet)
```

```
var dr = dataSet.Tables["Course"].NewRow();
       dr["Name"] = "BBA";
       dr["DisplayText"] = "BBA Hons";
       dataSet.Tables["Course"].Rows.Add(dr);
       var dr1 = dataSet.Tables["Student"].NewRow();
       dr1["Name"] = txtName.Text;
       dr1["Address"] = txtAddress.Text;
       dr1["ContactNo"] = txtContact.Text;
       dr1["ProgramEnroll"] = combo.Text;
       dr1["RegistrationDate"] = DateTime.Today.AddDays(-2);
       dataSet.Tables["Student"].Rows.Add(dr1);
    }
    private void AppendStdReport(DataSet dataSet)
    {
       if (File.Exists(@"C:\Appxml\StudentReport.xml"))
       {
         var handler = new Handler();
dataSet.Tables["StudentReport"].ReadXml(@"C:\Appxml\StudentReport.xml")
```

```
var dr2 = dataSet.Tables["StudentReport"].NewRow();
         dr2["RegNo"] = txtRegNo.Text;
         dr2["Name"] = txtName.Text;
         dr2["Address"] = txtAddress.Text;
         dr2["ContactNo"] = txtContact.Text;
         dr2["ProgramEnroll"] = combo.Text;
         dr2["RegistrationDate"] = txtdate.Text;
         dataSet.Tables["StudentReport"].Rows.Add(dr2);
dataSet.Tables["StudentReport"].WriteXml(@"C:\Appxml\StudentReport.xml")
       }
       else
       {
dataSet.Tables["StudentReport"].WriteXml(@"C:\Appxml\StudentReport.xml")
         AppendStdReport(dataSet);
       }
    }
     private void Button_Click_1(object sender, RoutedEventArgs e)
```

```
{
       var handler = new Handler();
       var dataSet = handler.CreateDataSet();
       AddSampleDataforStd(dataSet);
       MessageBox.Show("Successfully
                                         Inserted
                                                    Data",
                                                             "Successful",
MessageBoxButton.OK, MessageBoxImage.Information);
       AppendStdReport(dataSet);
       var regno = txtRegNo.Text;
       var name = txtName.Text;
       dataSet.WriteXmlSchema(@"C:\Appxml\StudentCWSchema1.xml");
       dataSet.Tables["Student"].WriteXml(@"E:\APPXML\"
                                                                name
"CWData" + regno + ".xml");
       dataSet.Tables[2].WriteXml(@"C:\Appxml\StudentReport.xml");
       write_to_file(txtRegNo.Text);
       txtRegNo.Text = read_from_file();
       ClearControls();
       LoadStudentData();
    }
    private void write_to_file(string text)
```

{

```
File.WriteAllText(@"C:\Appxml\count.txt", text);
```

```
}
     private string read_from_file()
     {
       /*
                                     System.IO.File.ReadAllText(@"C:\Appxml
       string
                   text
                             =
storage\count.txt");
       int i;
       i = int.Parse(text.ToString());
       i = i + 1;
       return i.ToString();*/
       int i = 1;
       if (File.Exists(@"C:\Appxml\count.txt"))
       {
          string text = File.ReadAllText(@"C:\Appxml\count.txt");
          i = int.Parse(text.ToString());
          i = i + 1;
       }
       else
       {
```

```
//File.WriteAllText(@"E:\APPXML\count.txt", "text");
  }
  return i.ToString();
}
private void ClearControls()
{
  txtName.Text = "";
  txtAddress.Text = "";
  txtContact.Text = "";
}
private void LoadStudentData()
{
  if (System.IO.File.Exists(@"C:\Appxml\StudentReport.xml"))
  {
     var handler = new Handler();
     var dataSet = new DataSet();
     dataSet.ReadXml(@"C:\Appxml\StudentReport.xml");
```

```
DataTable dtStdReport = new DataTable();
     dtStdReport = dataSet.Tables[0];
     grdStd.DataContext = dtStdReport.DefaultView;
  }
}
private void Button_Click(object sender, RoutedEventArgs e)
{
  var dataSet = new DataSet();
  dataSet.ReadXml(@"C:\Appxml\StudentReport.xml");
  DataTable dtStdReport = dataSet.Tables[0];
  int total_BIT = 0;
  int total_BBA = 0;
  DataTable dt = new DataTable("newTable");
  dt.Columns.Add("ProgramEnroll", typeof(string));
  dt.Columns.Add("Total Students", typeof(int));
```

```
for (int i = 0; i < dtStdReport.Rows.Count; i++)
  {
     string col = dtStdReport.Rows[i]["ProgramEnroll"].ToString();
     if (col == "BIT")
     {
       total_BIT++;
     }
     else if (col == "BBA")
     {
       total_BBA++;
     }
  }
  dt.Rows.Add("BBA", total_BBA);
  dt.Rows.Add("BIT", total_BIT);
  grdreport.DataContext = dt.DefaultView;
}
private void Srtname_Click(object sender, RoutedEventArgs e)
{
  var dataSet = new DataSet();
```

```
dataSet.ReadXml(@"C:\Appxml\StudentReport.xml");
  DataTable DataTable = dataSet.Tables["StudentReport"];
  DataTable.DefaultView.Sort = "Name Asc";
  grdStd.DataContext = DataTable.DefaultView;
}
private void SortBtn_Click(object sender, RoutedEventArgs e)
{
  var dataSet = new DataSet();
  dataSet.ReadXml(@"C:\Appxml\StudentReport.xml");
  DataTable DataTable = dataSet.Tables["StudentReport"];
  DataTable.DefaultView.Sort = "RegistrationDate Asc";
  grdStd.DataContext = DataTable.DefaultView;
}
private void DataShow()
{
  string dataXMLFile = @"C:\Appxml\StudentReport.xml";
  System.Data.DataSet dataset = new DataSet();
  dataset.ReadXml(dataXMLFile);
  buffer = new DataTable("dt");
  buffer.Columns.Add("RegNo", typeof(string));
  buffer.Columns.Add("Name", typeof(string));
  buffer.Columns.Add("Address", typeof(string));
```

```
buffer.Columns.Add("ContactNo", typeof(string));
  buffer.Columns.Add("ProgramEnroll", typeof(string));
  buffer.Columns.Add("RegistrationDate", typeof(string));
  for (int i = 0; i < dataset.Tables[0].Rows.Count; i++)
  {
     string s = dataset.Tables[0].Rows[i][5].ToString();
     DateTime dtime = DateTime.Parse(s);
     buffer.Rows.Add(
       dataset.Tables[0].Rows[i][0].ToString(),
       dataset.Tables[0].Rows[i][1].ToString(),
       dataset.Tables[0].Rows[i][2].ToString(),
       dataset.Tables[0].Rows[i][3].ToString(),
       dataset.Tables[0].Rows[i][4].ToString(),
       dtime.ToShortDateString());
  }
  DataView dataView = new DataView(buffer);
  grdreport.ItemsSource = dataView;
}
private void btnReport_Click(object sender, RoutedEventArgs e)
{
  var import = new OpenCsv();
```

```
import.Show();
     }
     private void btnChart_Click(object sender, RoutedEventArgs e)
     {
       var chart = new Chart();
       chart.Show();
    }
  }
  }
Import CSV file page
using Microsoft.Win32;
using System;
using System.Collections.Generic;
using System.Data;
using System.Data.OleDb;
using System.Globalization;
using System.IO;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows;
using System.Windows.Controls;
using System.Windows.Data;
using System.Windows.Documents;
using System.Windows.Input;
using System.Windows.Media;
using System.Windows.Media.Imaging;
```

using System.Windows.Shapes;

```
namespace AppDevCoursewrk
    /// <summary>
    /// Interaction logic for OpenCsv.xaml
    /// </summary>
    public partial class OpenCsv : Window
        public OpenCsv()
             InitializeComponent();
        }
        private void btnImport_Click(object sender, RoutedEventArgs e)
             var dataSet = new DataSet();
             dataSet.ReadXml(@"C:\Appxml\StudentReport.xml");
             OpenFileDialog openFileDialog = new OpenFileDialog();
             openFileDialog.Filter = "CSV Files|*.csv";
             openFileDialog.DefaultExt = ".csv";
             bool? fileselect = openFileDialog.ShowDialog();
             if (fileselect == true)
                 string filePath = openFileDialog.FileName;
                 //read all std from file code copy
                 using (var reader = new StreamReader(filePath))
                 {
                     reader.ReadLine();
                     while (!reader.EndOfStream)
                     {
                          var line = reader.ReadLine();
                         var values = line.Split(',');
                         var newRow = dataSet.Tables["StudentReport"].NewRow();
                         newRow["ID"] = values[0];
                         newRow["RegNo"] = values[1];
                         newRow["Name"] = values[2];
                         newRow["Address"] = values[3];
newRow["ContactNo"] = values[4];
newRow["ProgramEnroll"] = values[5];
                         newRow["RegistrationDate"] = values[6];
                         dataSet.Tables["StudentReport"].Rows.Add(newRow);
                     }
                     dataSet.WriteXml(@"C:\Appxml\StudentReport.xml");
                     dataGrid1.ItemsSource =
dataSet.Tables["StudentReport"].DefaultView;
                 }
             }
        }
    }
    }
```

Chart

```
using System;
using System.Collections.Generic;
using System.Data;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows;
using System.Windows.Controls;
using System.Windows.Controls.DataVisualization.Charting;
using System.Windows.Data;
using System.Windows.Documents;
using System.Windows.Input;
using System.Windows.Media;
using System.Windows.Media.Imaging;
using System.Windows.Shapes;
namespace CourseWorkOne
    /// <summary>
    /// Interaction logic for Chart.xaml
    /// </summary>
    public partial class Chart : Window
        public Chart()
        {
             InitializeComponent();
             var dataSet = new DataSet();
             dataSet.ReadXml(@"C:\Appxml\StudentReport.xml");
            DataTable dtStdReport = dataSet.Tables[0];
             int total_BIT = 0;
             int total_BBA = 0;
            DataTable dt = new DataTable("newTable");
             dt.Columns.Add("ProgramEnroll", typeof(string));
             dt.Columns.Add("Total Students", typeof(int));
             for (int i = 0; i < dtStdReport.Rows.Count; i++)</pre>
             {
                 string col = dtStdReport.Rows[i]["ProgramEnroll"].ToString();
                 if (col == "BIT")
                     total_BIT++;
                 }
                 else if (col == "BBA")
                 {
                     total_BBA++;
                 }
            dt.Rows.Add("BBA", total_BBA);
dt.Rows.Add("BIT", total_BIT);
             ((PieSeries)PieChart).ItemsSource = new KeyValuePair<string, int>[]
{
                 new KeyValuePair<string, int>("BBA", total_BBA),
```

```
new KeyValuePair<string, int>("BIT", total_BIT++),
};
}
}
}
```