


Name	Lehjanny Ann V. Ilao			Date	06/17/2022
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SOURCE CODE

- FORM1

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using Library_System;
using Library_System.Forms;
using Library_System.Data_Model;

namespace Library_System
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
            User.Deserialize();
            Student.Deserialize();
            Author. Deserialize();
        }

        private void userToolStripMenuItem_Click(object sender, EventArgs e)
        {
            ListofUsers u = new ListofUsers();
            u.ShowDialog();
        }

        private void Form1_Load(object sender, EventArgs e) // Kapag nagload na yung form, Una
itong bubukas, yung LOGIN form
        {
            Login login = new Login();
            if (login.ShowDialog() != DialogResult.OK) //Kapag Hindi OK ang pinili, magkoClose
ang Application
                Application.Exit();
        }

        private void authorToolStripMenuItem_Click(object sender, EventArgs e)
        {
            ListOfAuthor a = new ListOfAuthor();
            a.ShowDialog();
        }

        private void studentsToolStripMenuItem_Click(object sender, EventArgs e)
        {
            ListOfStudent s = new ListOfStudent();
            s.ShowDialog();
        }
    }
}
```

• UTILITIES

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Library_System
{
    internal class Utilities
    {
        //Purpose: Open DialogResult then Pick an Image
        public static string BrowseImage(PictureBox pb)
        //Ang naopen niyang image ay iseset niya into picture box
        {
            try
            {
                OpenFileDialog dialog = new OpenFileDialog();
                dialog.Filter = "JPEG Files (*.jpeg)|*.jpg|PNG Files (*.png)|*png| JPG Files (*.jpg)|*jpg| GIF Files (*.gif) |*.gif| All Files (*.*)| *.* ";
                if (dialog.ShowDialog() == DialogResult.OK)
                {
                    string imagePath = dialog.FileName.ToString();
                    pb.ImageLocation = imagePath; //Yung location na makukuha naten, yun yung Image na iaassign natin kay PictureBox
                    dialog.Dispose();
                    return imagePath;
                }
                else return null;
            }
            catch { return null; }
        }
    }
}
```

DATA MODELS

1. AUTHOR.CS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Runtime.Serialization.Formatters.Binary;
using System.IO;

namespace Library_System.Data_Model
{
    [Serializable]
    public class Author
    {
        public int Id { get; set; } // Unique Id or Primary Key
        public string Name { get; set; }
        public string About { get; set; }

        public static List<Author> ListOfAuthor = new List<Author>();

        public static bool Add(Author author) //Means magpasa ka ng OBJECT na ang Parameter
        Type is User
        {
            ListOfAuthor.Add(author);
            return Serialize();
        }

        public static bool Update(Author author)
        {
            foreach (var item in ListOfAuthor.Where(a => a.Id == author.Id)) //Hahanapin yung specific Id para hindi sabay sabay mag Update if ever na Name ang hanapin //Magiging kinalabasan is WHERE Id ="_____"; ganyan parang sa database
            {
                item.Name = author.Name;
            }
        }
    }
}
```

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```
        item.About = author.About;
    }
    return Serialize();
}

public static bool Delete(Author author) //Delete is Method
{
    ListOfAuthor.Remove(author);
    return Serialize();
}

public static bool Serialize()
{
    try
    {
        FileStream fs = new FileStream("Author", FileMode.Create, FileAccess.Write,
        FileShare.None);
        BinaryFormatter formatter = new BinaryFormatter();
        formatter.Serialize(fs, ListOfAuthor);
        fs.Dispose();
        fs.Close();
        return true;
    }
    catch { return false; }
}
public static bool Deserialize()
{
    try
    {
        if (System.IO.File.Exists("Author")) // Is the file exists? if exists it will
        deserialize and it will be assigned to the ListofUser
        {
            FileStream fs = new FileStream("Author", FileMode.Open);
            BinaryFormatter formatter = new BinaryFormatter();
            ListOfAuthor = ((List<Author>)(formatter.Deserialize(fs)));
            fs.Dispose();
            fs.Close();
            return true;
        }
        return false;
    }
    catch { return false; }
}
}
```

2. USER.CS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Runtime.Serialization.Formatters.Binary;
using System.IO;

namespace Library_System.Data_Model
{
    [Serializable]

    public class User // User is an object
    {
        //PROPERTIES
        public int Id { get; set; } // Unique Id or Primary Key
        public string Name { get; set; }
        public System.Drawing.Image Image { get; set; } = null;
        public string Username { get; set; }
        public string Password { get; set; }
        public int PositionId { get; set; }
        public bool Status { get; set; } = true;
        //--
    }
}
```

```
public static List<User> ListofUser = new List<User>();
public static bool Add (User user) //Means magpasa ka ng OBJECT na ang Parameter Type
is User
{
    ListofUser.Add(user);
    return Serialize();
}

public static bool Update (User user)
{
    foreach(var item in ListofUser.Where(a=>a.Id == user.Id)) //Hahanapin yung specific
Id para hindi sabay sabay mag Update if ever na Name ang hanapin
    //Magiging kinalabasan is WHERE Id ="_____"; ganyan parang sa database
    {
        item.Name = user.Name;
        item.Password = user.Password;
        item.PositionId = user.PositionId;
        item.Image = user.Image;
        item.Status = user.Status;
    }
    return Serialize();
}

public static bool Delete(User user) //Delete is Method
{
    ListofUser.Remove(user);
    return Serialize();
}

public static bool Serialize()
{
    try
    {
        FileStream fs = new FileStream("User", FileMode.Create, FileAccess.Write,
FileShare.None);
        BinaryFormatter formatter = new BinaryFormatter();
        formatter.Serialize(fs, ListofUser);
        fs.Dispose();
        fs.Close();
        return true;
    }
    catch { return false; }
}

public static bool Deserialize()
{
    try
    {
        if (System.IO.File.Exists("User")) // Is the file exists? if exists it will
deserialize and it will be assigned to the ListofUser
        {
            FileStream fs = new FileStream("User", FileMode.Open);
            BinaryFormatter formatter = new BinaryFormatter();
            ListofUser = ((List<User>)(formatter.Deserialize(fs)));
            fs.Dispose();
            fs.Close();
            return true;
        }
        return false;
    }
    catch { return false; }
}
}
```

3. STUDENT.CS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
```

```
using System.Runtime.Serialization.Formatters.Binary;
using System.IO;
using System.Drawing;

namespace Library_System.Data_Model
{
    [Serializable]
    public class Student
    {
        public int Id { get; set; } // Unique Id or Primary Key

        public Image Image { get; set; }
        public string Name { get; set; }
        public bool Status { get; set; } = true;

        public static List<Student> ListOfStudent = new List<Student>();

        public static bool Add(Student student) //Means magpasa ka ng OBJECT na ang Parameter
        {
            ListOfStudent.Add(student);
            return Serialize();
        }

        public static bool Update(Student student)
        {
            foreach (var item in ListOfStudent.Where(a => a.Id == student.Id)) //Hahanapin yung
            {
                item.Name = student.Name;
                item.Image = student.Image;
                item.Status = student.Status;
            }
            return Serialize();
        }

        public static bool Delete(Student student) //Delete is Method
        {
            ListOfStudent.Remove(student);
            return Serialize();
        }

        public static bool Serialize()
        {
            try
            {
                FileStream fs = new FileStream("Student", FileMode.Create, FileAccess.Write,
                FileShare.None);
                BinaryFormatter formatter = new BinaryFormatter();
                formatter.Serialize(fs, ListOfStudent);
                fs.Dispose();
                fs.Close();
                return true;
            }
            catch { return false; }
        }

        public static bool Deserialize()
        {
            try
            {
                if (System.IO.File.Exists("Student")) // Is the file exists? if exists it will
                {
                    FileStream fs = new FileStream("Student", FileMode.Open);
                    BinaryFormatter formatter = new BinaryFormatter();
                    ListOfStudent = ((List<Student>)(formatter.Deserialize(fs)));
                    fs.Dispose();
                    fs.Close();
                    return true;
                }
                return false;
            }
        }
    }
}
```

```
        catch { return false; }

    }
}
```

4. BOOK BORROWED

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Library_System.Data_Model
{
    [Serializable]
    internal class Book_Borrowed
    {
        public int Id { get; set; } // Unique Id or Primary Key
        public int StudentId { get; set; }
        public int UserId { get; set; } //Kung sino yung gumamit ng system na nagpahiram
                                     //Para malaman rin kung sino ang nagpahiram

        public int BookId { get; set; }
        public DateTime Date { get; set; }
        public DateTime DateReturn { get; set; }
        public string Remarks { get; set; } //To know if there is a damage in the book
    }
}
```

5. BOOK CATEGORY.CS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Library_System.Data_Model
{
    [Serializable]
    internal class Book_Category
    {
        public int Id { get; set; } // Unique Id or Primary Key
        public string Name { get; set; }
        public string Description { get; set; }
    }
}
```

6. BOOK.CS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Library_System.Data_Model
{
    [Serializable]
    internal class Book
    {
        public int Id { get; set; } // Unique Id or Primary Key
        public string Title { get; set; }
        public int AuthorId { get; set; }
        public DateTime DatePublished { get; set; }
        public string Description { get; set; }
        public int CategoryId { get; set; }
        public bool Status { get; set; }
    }
}
```

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7. POSITION.CS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Library_System.Data_Model
{
    [Serializable]
    internal class Position //Position of User
    {
        public int Id { get; set; } // Unique Id or Primary Key
        public string Name { get; set; }
        public string Description { get; set; }
    }
}
```

FORMS

1. ADD EDIT AUTHOR.CS

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using Library_System.Data_Model;
using Library_System.Forms;

namespace Library_System.Forms
{
    public partial class AddEditAuthor : Form
    {
        public AddEditAuthor(Author author = null)
        {
            InitializeComponent();
            Author = author;
            if (author != null)
                DisplaySelectedAuthor();
        }
        Author Author;

        private void btnOk_Click(object sender, EventArgs e)
        {
            if (Author == null)
            {
                Author author = new Author()
                {
                    Id = NewId2(),
                    Name = tbName2.Text,
                    About = tbAbout.Text
                };

                if (Author.Add(author))
                    DialogResult = DialogResult.OK;
            }
            else
            {
                if (Author.Update(Author)) // Mag uupdate
                    DialogResult = DialogResult.OK; // Pag nag OK mag coclose na siya
            }
        }

        private void btnCancel_Click(object sender, EventArgs e)
        {
            this.DialogResult = DialogResult.Cancel; //Automatic close
        }

        int NewId2()
    }
}
```

```
{
    try
    {
        //x => ____ (Anong property ang gusto kunin - edi yung Id sa User)
        return Author.ListOfAuthor.Max(x => x.Id) + 1; // +1 means everytime na
magkecreate ng bago
    }
    catch { return 0; }
}

void DisplaySelectedAuthor() // Kapag Mag EEDIT, tatawagin ito ---->
{
    tbName2.DataBindings.Add("Text", Author, "Name");
    tbAbout.DataBindings.Add("Text", Author, "About");
}
}
```

2. ADD EDIT STUDENT.CS

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using Library_System.Data_Model;

namespace Library_System.Forms
{
    public partial class AddEditStudent : Form
    {
        public AddEditStudent(Student student = null)
        {
            InitializeComponent();
            Student = student;
            if (student != null)
                DisplaySelectedStudent();
        }
        Student Student;

        private void btnOK_Click(object sender, EventArgs e)
        {
            if (Student == null)
            {
                Student student = new Student()
                {
                    Id = NewId3(),
                    Name = tbName3.Text,
                    Status = cbActive2.Checked, //Boolean
                    Image = pictureBox1.Image
                };

                if (Student.Add(student))
                    DialogResult = DialogResult.OK;
            }
            else
            {
                Student.Image = pictureBox1.Image; //Para mag update ren yung Image, the sinet
rin yung Iamge na property ni User sa laman ng PictureBox
                if (Student.Update(Student)) // Mag uupdate
                    DialogResult = DialogResult.OK; // Pag nag OK mag coclose na siya
            }
        }

        private void btnCancel_Click(object sender, EventArgs e)
        {
            this.DialogResult = DialogResult.Cancel; //Automatic close
        }

        int NewId3()
        {
            try
            {

```



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```
//x => ___ (Anong property ang gusto kunin - edi yung Id sa User)
return Student.ToListOfStudent.Max(x => x.Id) + 1; // +1 means everytime na
magkecreate ng bago
    }
    catch { return 0; }
}

void DisplaySelectedStudent() // Kapag Mag EEDIT, tatawagin ito ---->
{
    pictureBox1.Image = Student.Image;
    tbName3.DataBindings.Add("Text", Student, "Name");
    cbActive2.DataBindings.Add("Checked", Student, "Status");
}

private void pictureBox1_DoubleClick(object sender, EventArgs e)
{
    Utilities.BrowseImage(pictureBox1); //User to Open Dialog Box
}

}

3. ADD EDIT USER.CS

using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using Library_System.Data_Model;

namespace Library_System.Forms
{
    public partial class AddEditUser : Form
    {
        public AddEditUser(User user = null)
        {
            InitializeComponent();
            User = user;
            if (user != null)
                DisplaySelectedUser();
        }
        User User;
        private void btnOk_Click(object sender, EventArgs e)
        {
            if (ComparePassword())
            {
                //Dito na magdadagdag ng info
                if (User == null)
                {
                    User user = new User()
                    {
                        Id = NewId(),
                        Name = tbName.Text,
                        Username = tbUsername.Text,
                        Password = tbPassword.Text,
                        PositionId = cbPosition.SelectedIndex, //Selected Index siya dahil may
choices,
                        Status = cbActive.Checked, //Boolean
                        Image = pictureBox1.Image
                    };

                    if (User.Add(user))
                        DialogResult = DialogResult.OK;
                }
                else
                {
                    User.Image = pictureBox1.Image; //Para mag update ren yung Image, the sinet
rin yung Iamge na property ni User sa laman ng PictureBox
                    if (User.Update(User)) // Mag uupdate
                        DialogResult = DialogResult.OK; // Pag nag OK mag coclose na siya
                }
            }
        }
    }
}
```

```
        }
    }
}

private void btnCancel_Click(object sender, EventArgs e)
{
    this.DialogResult = DialogResult.Cancel; //Automatic close
}

int NewId()
{
    try
    {
        //x => ____ (Anong property ang gusto kunin - edi yung Id sa User)
        return User.ListofUser.Max(x => x.Id) + 1; // +1 means everytime na magkecreate
    }
    catch { return 0; }
}

void DisplaySelectedUser() // Kapag Mag EEDIT, tatawagin ito ---->
{
    //pictureBox1.DataBindings.Add("Image", User, "Image");
    pictureBox1.Image = User.Image;
    tbName.DataBindings.Add("Text", User, "Name");
    tbUsername.DataBindings.Add("Text", User, "Username");
    tbPassword.DataBindings.Add("Text", User, "Password");
    cbPosition.DataBindings.Add("SelectedValue", User, "PositionId");
    cbPosition.SelectedIndex = User.PositionId; //Ginagamit para hindi yung default ang
    cbActive.DataBindings.Add("Checked", User, "Status");
}

bool ComparePassword() // For password
{
    if (tbPassword.Text == tbRetypePassword.Text)
        return true;
    return false;
}

private void pictureBox1_DoubleClick(object sender, EventArgs e)
{
    Utilities.BrowseImage(pictureBox1); //User to Open Dialog Box
}
}
```

4. LIST OF AUTHOR.CS

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using Library_System.Data_Model;
using System.Windows.Forms;
using Library_System;

namespace Library_System.Forms
{
    public partial class ListOfAuthor : Form
    {
        public ListOfAuthor()
        {
            InitializeComponent();
            Reload2();
        }

        private void btnNew2_Click(object sender, EventArgs e)
        {
            AddEditAuthor add = new AddEditAuthor();
            if (add.ShowDialog() == DialogResult.OK)
                Reload2(); //Function itong Reload()
        }
    }
}
```

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```
void Reload2() //Ireset lang yung laman ng data grid view
{
    dataGridView2.DataSource = null; // Gawing null para di madoble
    dataGridView2.DataSource = Author.ListOfAuthor;

}

private void btnEdit2_Click(object sender, EventArgs e)
{
    Author selectedAuthor = Author.ListOfAuthor.First(y => y.Id ==
int.Parse(dataGridView2.SelectedCells[0].Value.ToString()));
    //kung ano yung number ang pinili ayun ang ma eedit
    //Ang kinukuha dito ay yung Selected Cells, whichi means yung Isang ROW

    AddEditAuthor add = new AddEditAuthor(selectedAuthor); //For edit
    if (add.ShowDialog() == DialogResult.OK)
        Reload2();
}

private void btnDelete2_Click(object sender, EventArgs e)
{
    if (MessageBox.Show("Sigurado ka ba?", "Delete", MessageBoxButtons.YesNo,
MessageBoxIcon.Warning) == DialogResult.Yes)
    {
        Author selectedAuthor = Author.ListOfAuthor.First(y => y.Id ==
int.Parse(dataGridView2.SelectedCells[0].Value.ToString()));
        // Yung [0] ito ay tinatawag na index which means ito yung ID

        if (Author.Delete(selectedAuthor))
            Reload2();
    }
}

private void textBox1_KeyDown(object sender, KeyEventArgs e)
{
    if (e.KeyCode == Keys.Enter)
    {
        List<Author> x = Author.ListOfAuthor.Where(a =>
a.Name.ToString().ToUpper().Contains(textBox1.Text.ToUpper())).ToList(); // Kung anong nahanap
niya since sa SEARCH ito, ayun yung ipapakita
        dataGridView2.DataSource = null;
        dataGridView2.DataSource = x;
    }
}

}
```

5. LIST OF STUDENT.CS

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using Library_System.Data_Model;
using System.Windows.Forms;
using Library_System;

namespace Library_System.Forms
{
    public partial class ListOfStudent : Form
    {
        public ListOfStudent()
        {
            InitializeComponent();
            Reload3();
        }

        private void btnNew3_Click(object sender, EventArgs e)
        {
            AddEditStudent add = new AddEditStudent();
            if (add.ShowDialog() == DialogResult.OK)
                Reload3(); //Function itong Reload()
        }
    }
}
```

```
    }

    void Reload3() //Ireset lang yung laman ng data grid view
    {
        dataGridView3.DataSource = null; // Gawing null para di madoble
        dataGridView3.DataSource = Student.ListOfStudent;

    }

    private void btnEdit3_Click(object sender, EventArgs e)
    {
        Student selectedStudent = Student.ListOfStudent.First(y => y.Id ==
int.Parse(dataGridView3.SelectedCells[0].Value.ToString()));
        //kung ano yung number ang pinili ayun ang ma eedit
        //Ang kinukuha dito ay yung Selected Cells, whichi means yung Isang ROW

        AddEditStudent add = new AddEditStudent(selectedStudent); //For edit
        if (add.ShowDialog() == DialogResult.OK)
            Reload3();
    }

    private void btnDelete3_Click(object sender, EventArgs e)
    {
        if (MessageBox.Show("Sigurado ka ba?", "Delete", MessageBoxButtons.YesNo,
MessageBoxIcon.Warning) == DialogResult.Yes)
        {
            Student selectedStudent = Student.ListOfStudent.First(y => y.Id ==
int.Parse(dataGridView3.SelectedCells[0].Value.ToString()));
            // Yung [0] ito ay tinatawag na index which means ito yung ID

            if (Student.Delete(selectedStudent))
                Reload3();
        }
    }

    private void textBox1_KeyDown(object sender, KeyEventArgs e)
    {
        if (e.KeyCode == Keys.Enter)
        {
            List<Student> x = Student.ListOfStudent.Where(a =>
a.Name.ToString().ToUpper().Contains(textBox1.Text.ToUpper())).ToList(); // Kung anong nahanap
niya since sa SEARCH ito, ayun yung ipapakita
            dataGridView3.DataSource = null;
            dataGridView3.DataSource = x;
        }
    }
}
```

6. LIST OF USERS.CS

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using Library_System.Data_Model;
using System.Windows.Forms;

namespace Library_System.Forms
{
    public partial class ListofUsers : Form
    {
        public ListofUsers()
        {
            InitializeComponent();
            Reload();

            //dataGridView1.DataSource = User.ListofUser; //Iassign kay DATAGRID VIEW yung list
of users, then automatically icoconvert niya na ito into rows and columns
        }

        private void btnNew_Click(object sender, EventArgs e)
        {
            AddEditUser ad = new AddEditUser();
            if (ad.ShowDialog() == DialogResult.OK)
```

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```
Reload(); //Funtion itong Reload()

}

void Reload() //Ireset lang yung laman ng data grid view
{
    dataGridView1.DataSource = null; // Gawing null para di madoble
    dataGridView1.DataSource = User.ListofUser;
    // dataGridView1.Columns [2].Visible = false; //Ihide yung Column 2 sa form which
    is yung Image kasi hindi naman siya nakikita ng buo
}

private void btnEdit_Click(object sender, EventArgs e)
{
    User selectedUser = User.ListofUser.First(x=> x.Id ==
int.Parse(dataGridView1.SelectedCells[0].Value.ToString()));
    //kung ano yung number ang pinili ayun ang ma eedit
    //Ang kinukuha dito ay yung Selected Cells, whichi means yung Isang ROW

    AddEditUser ad = new AddEditUser(selectedUser); //For edit
    if (ad.ShowDialog() == DialogResult.OK)
        Reload();
}

private void btnDelete_Click(object sender, EventArgs e)
{
    if(MessageBox.Show("Sigurado ka ba?", "Delete", MessageBoxButtons.YesNo,
MessageBoxIcon.Warning) == DialogResult.Yes)
    {
        User selectedUser = User.ListofUser.First(x => x.Id ==
int.Parse(dataGridView1.SelectedCells[0].Value.ToString()));
        // Yung [0] ito ay tinatawag na index which means ito yung ID

        if (User.Delete(selectedUser))
            Reload();
    }
}

private void textBox1_KeyDown(object sender, KeyEventArgs e)
{
    if (e.KeyCode == Keys.Enter)
    {
        List<User> x = User.ListofUser.Where(a =>
a.Name.ToString().ToUpper().Contains(textBox1.Text.ToUpper())).ToList(); // Kung anong nahanap
niya since sa SEARCH ito, ayun yung ipapakita
        dataGridView1.DataSource = null;
        dataGridView1.DataSource = x;
    }
}
}
```

7. LOGIN.CS

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using Library_System.Data_Model;

namespace Library_System.Forms
{
    public partial class Login : Form
    {
        public Login()
        {
            InitializeComponent();
        }

        private void btnOk_Click(object sender, EventArgs e)
        {
            if (CheckUser()) // Icheck kung nag eexist si User, if nag eexist at tama
password, mag O-OK

```

```
        DialogResult = DialogResult.OK;
    }

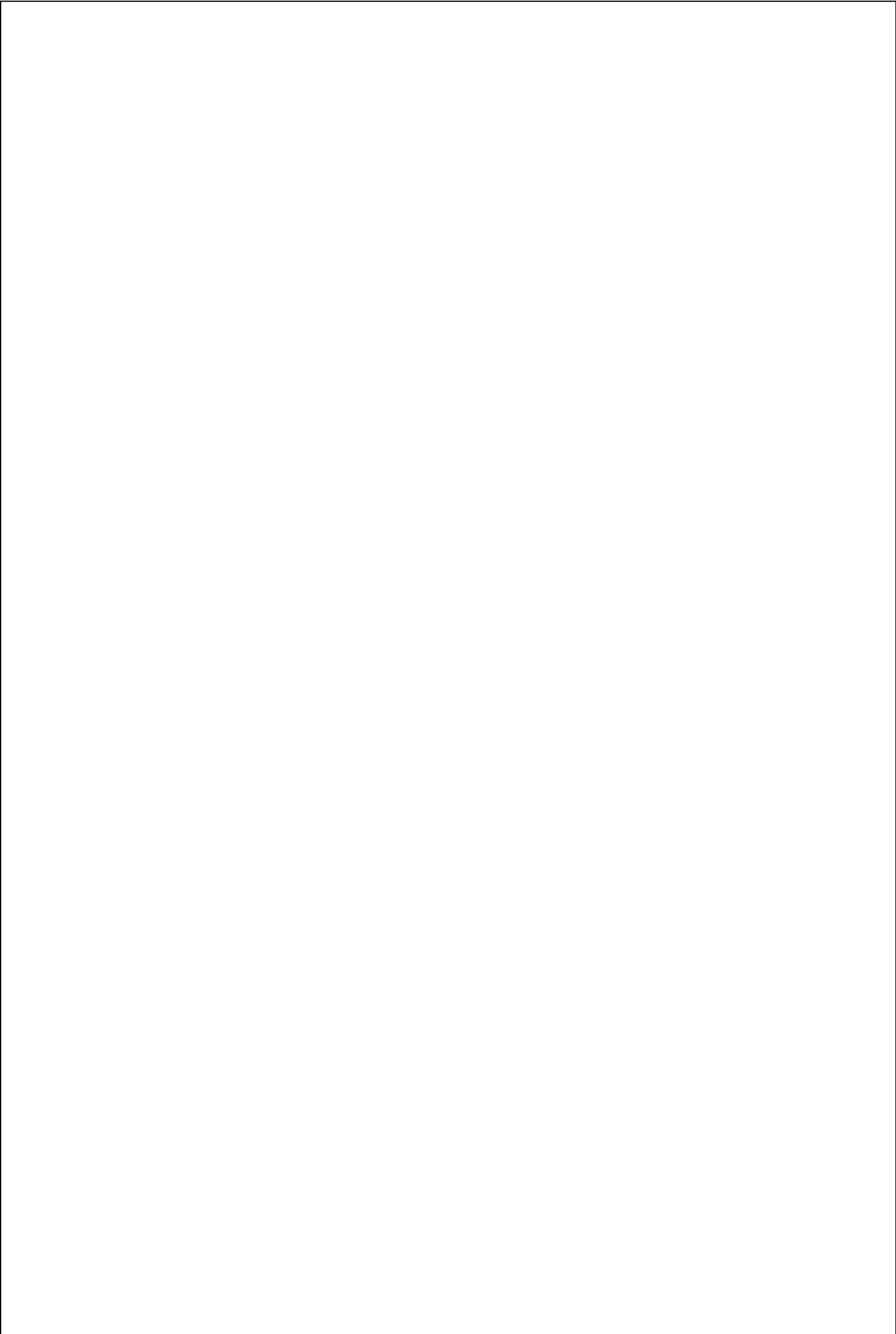
    private void btnCancel_Click(object sender, EventArgs e)
    {
        DialogResult = DialogResult.Cancel;
    }

    bool CheckUser() // Para malaman kung yung username ay nag eexist na sa database
    {
        try
        {
            if (User.ListofUser.Count > 0) //Para malaman kung nag eexist na yung Name sa
ating DATA, AND ANG DATA natin ay yung ListofUser
            {
                User u = User.ListofUser.First(t => t.Username == tbUsername.Text);
                //Hahanapin yung first element na kung saan ang Username ay equal sa
linagay na Username sa TEXTBOX

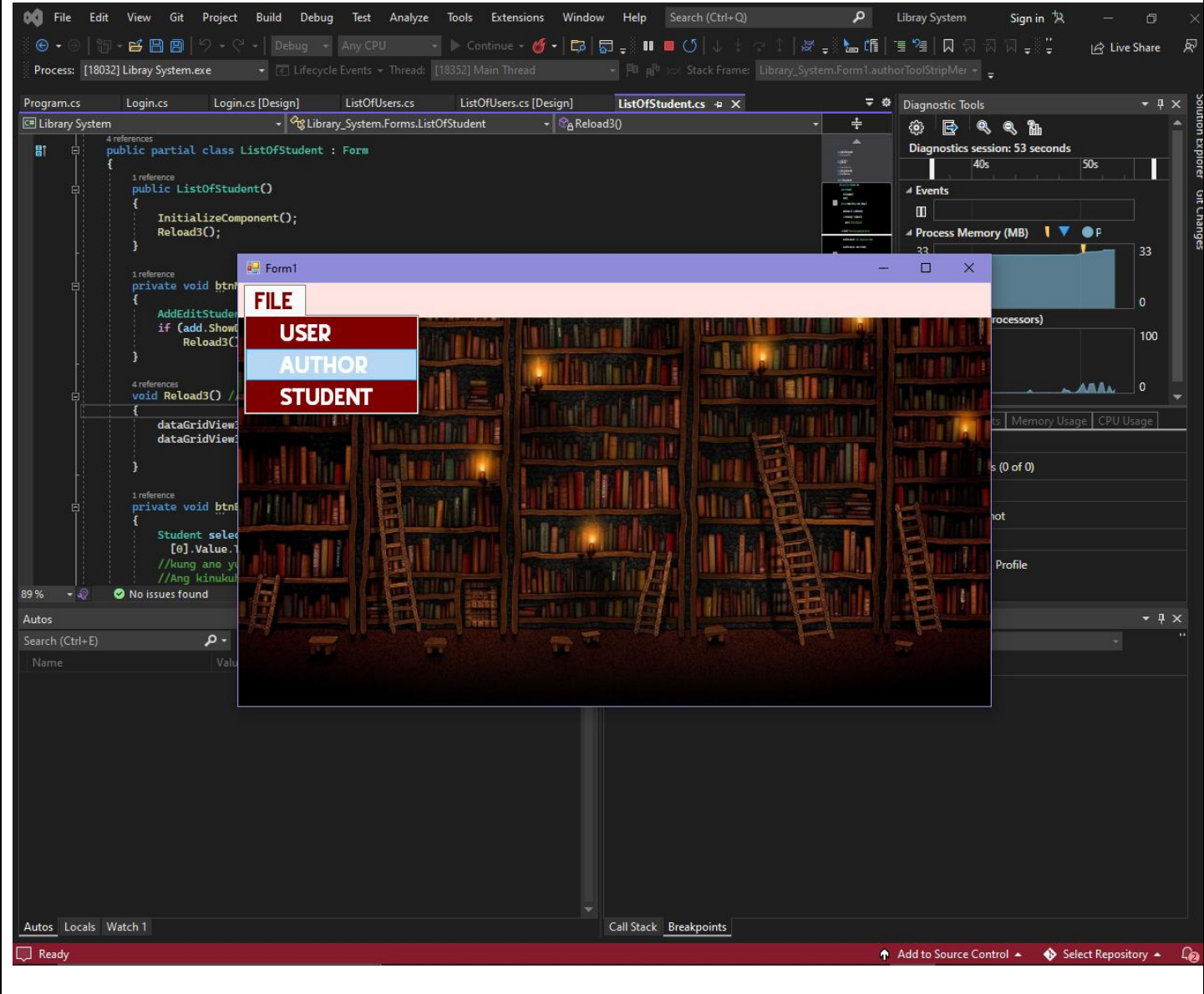
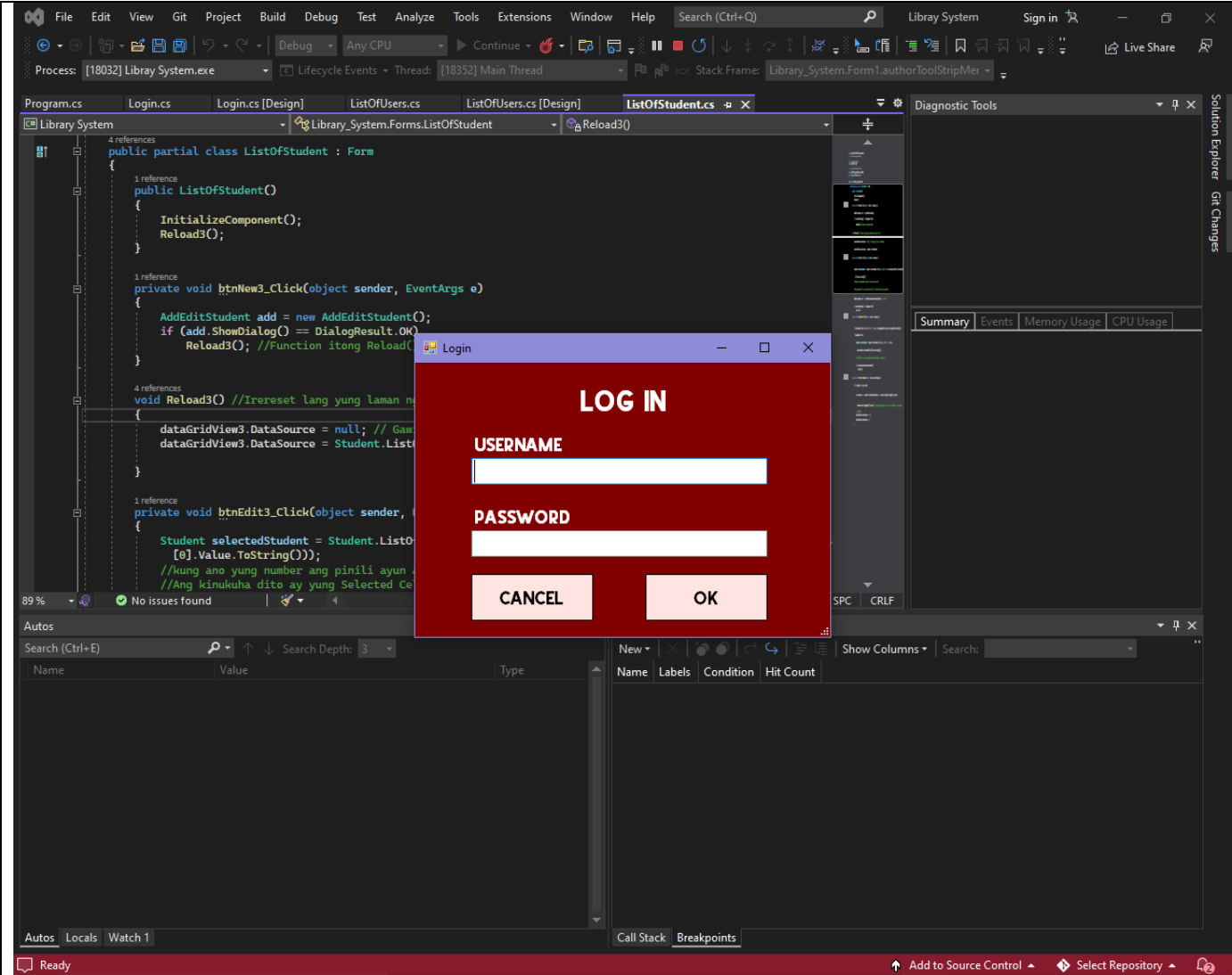
                if (u.Password == tbPassword.Text) //Para malaman kung same yung password
                    return true; // if same ang password

                MessageBox.Show("Incorrect Password"); // Kapag hindi same
            }
            return false; // kapag wala pang laman yung User mag fafalse siya
        }
        catch
        {
            MessageBox.Show("Wala Naman"); //Kapag hindi mahanap or nag eexist, ito lalabas
            return false;
        }
    }
}
```

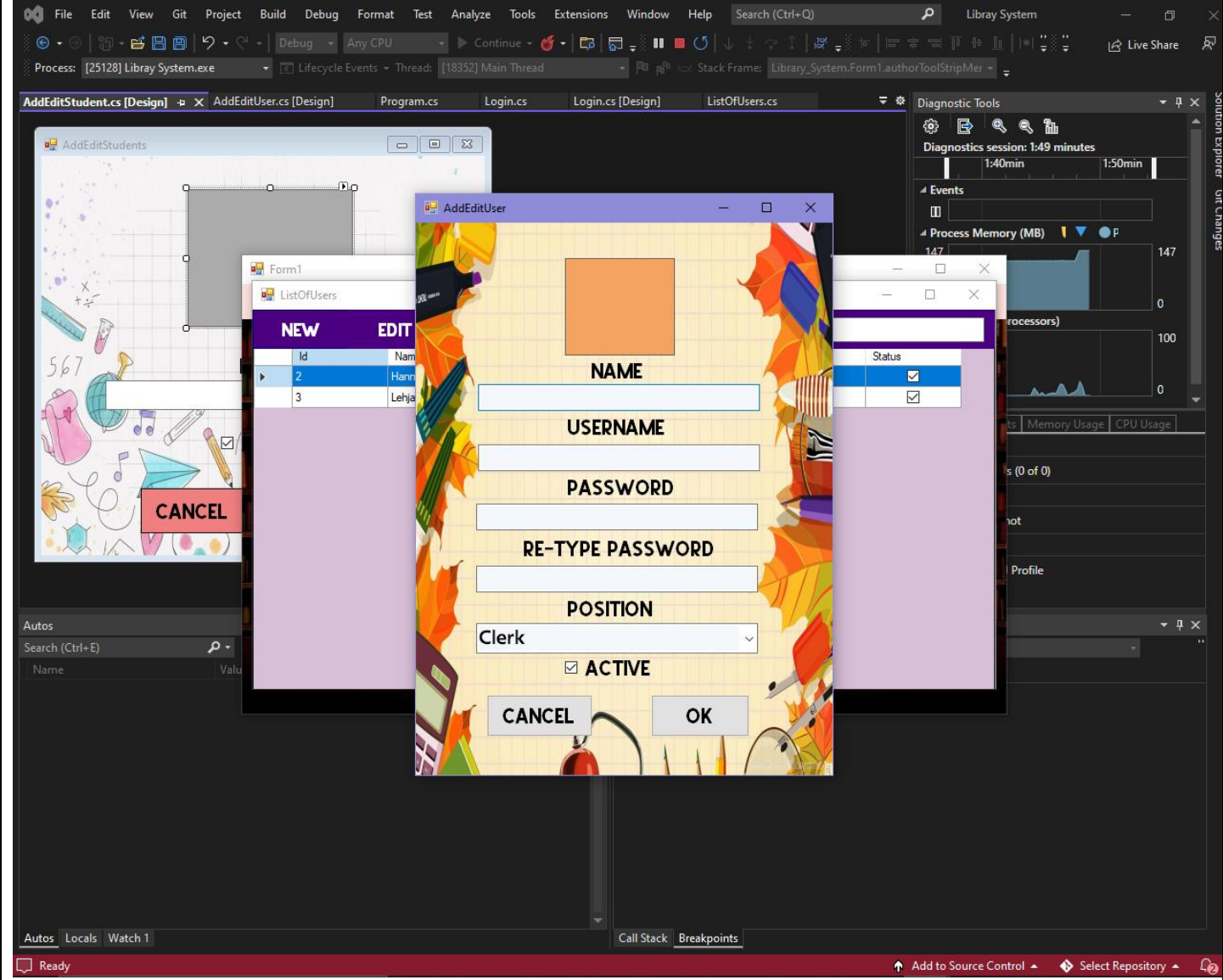
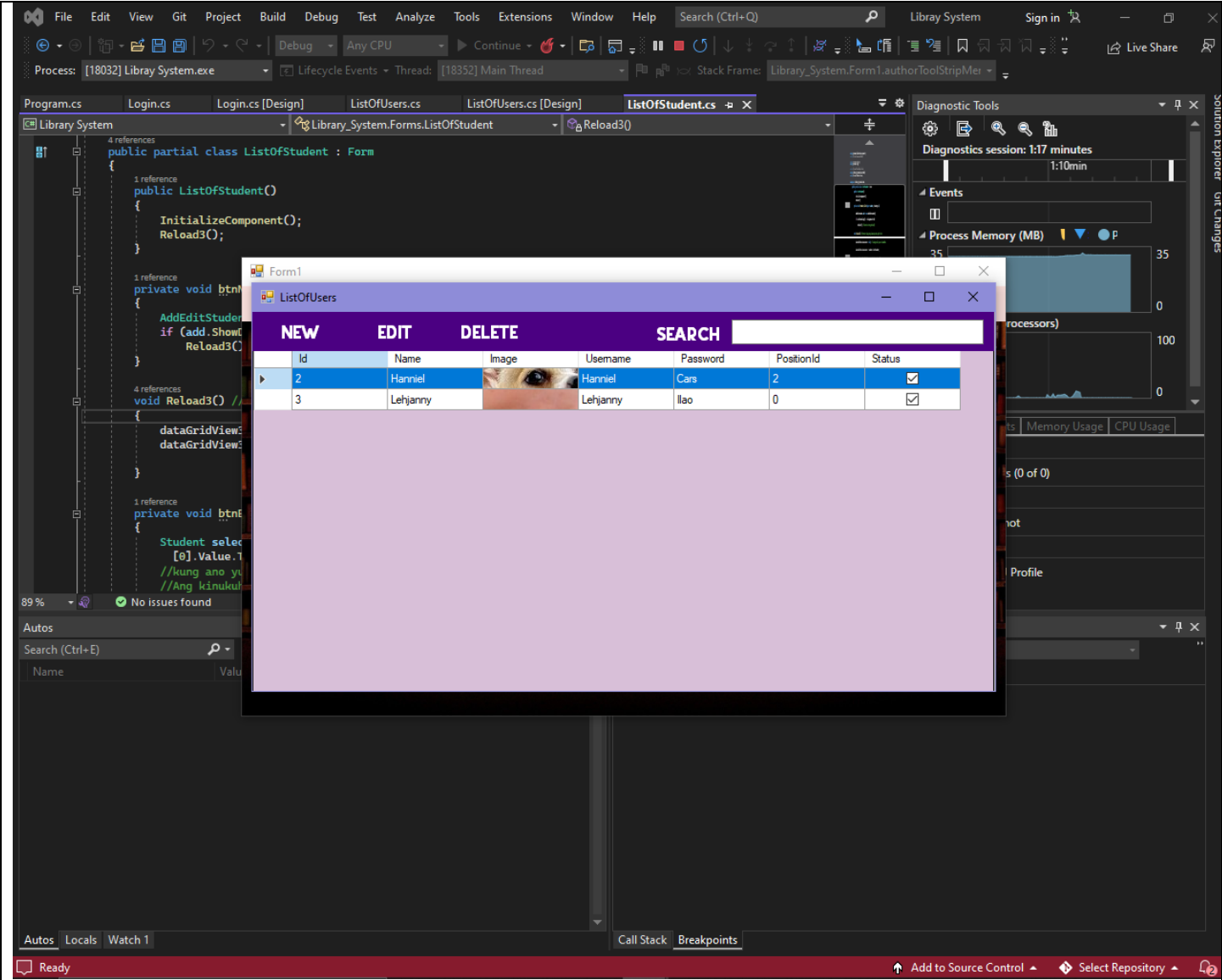
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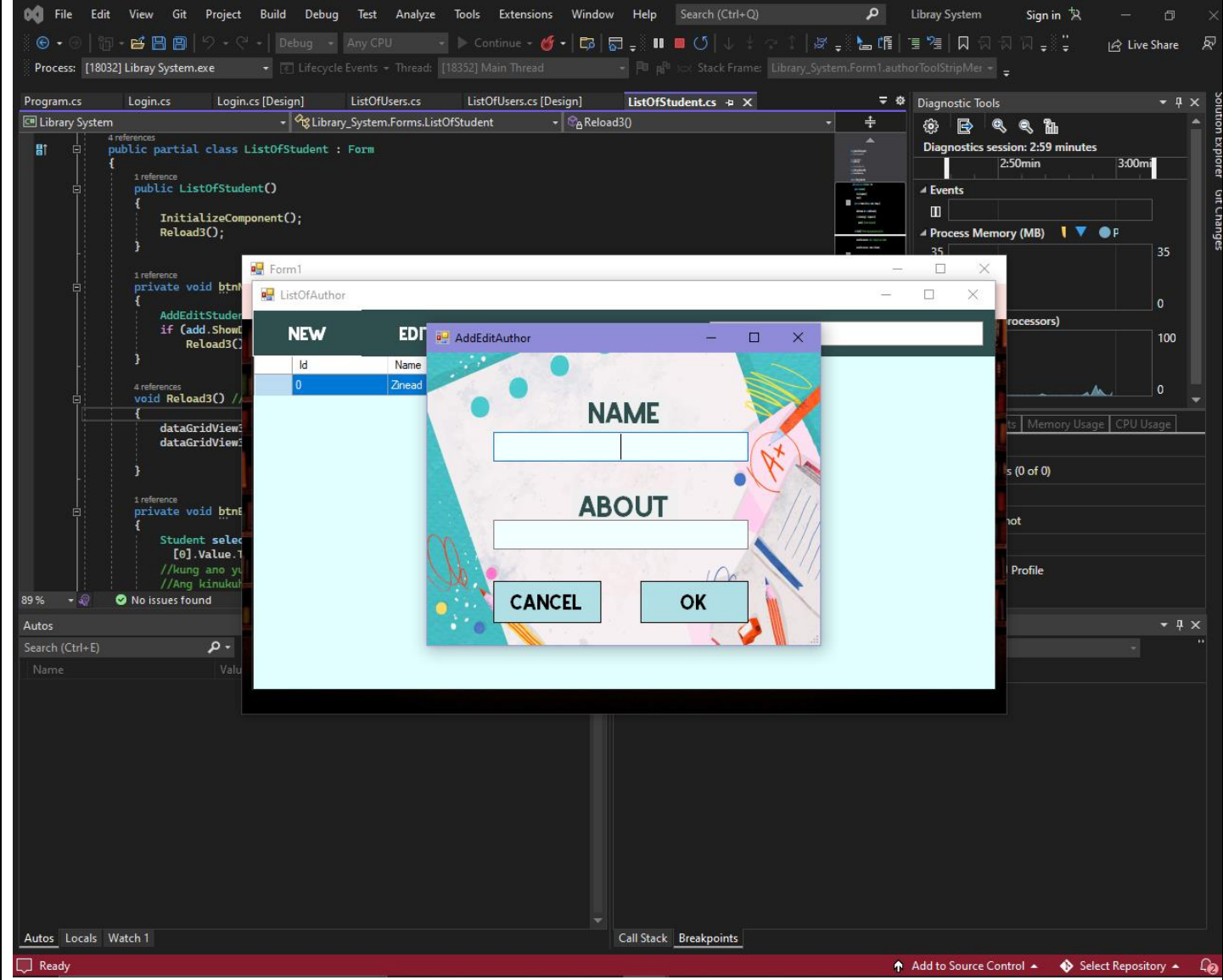
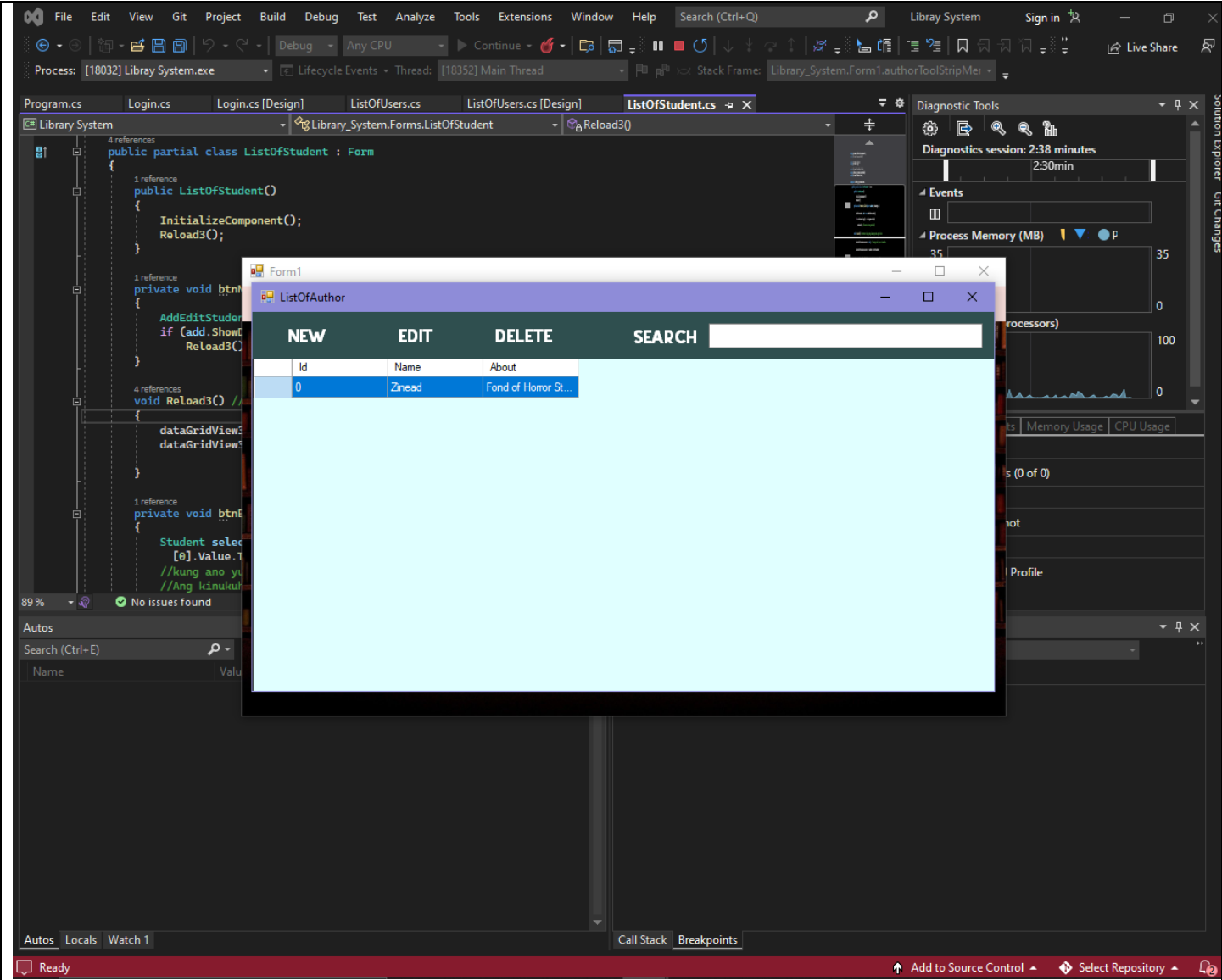


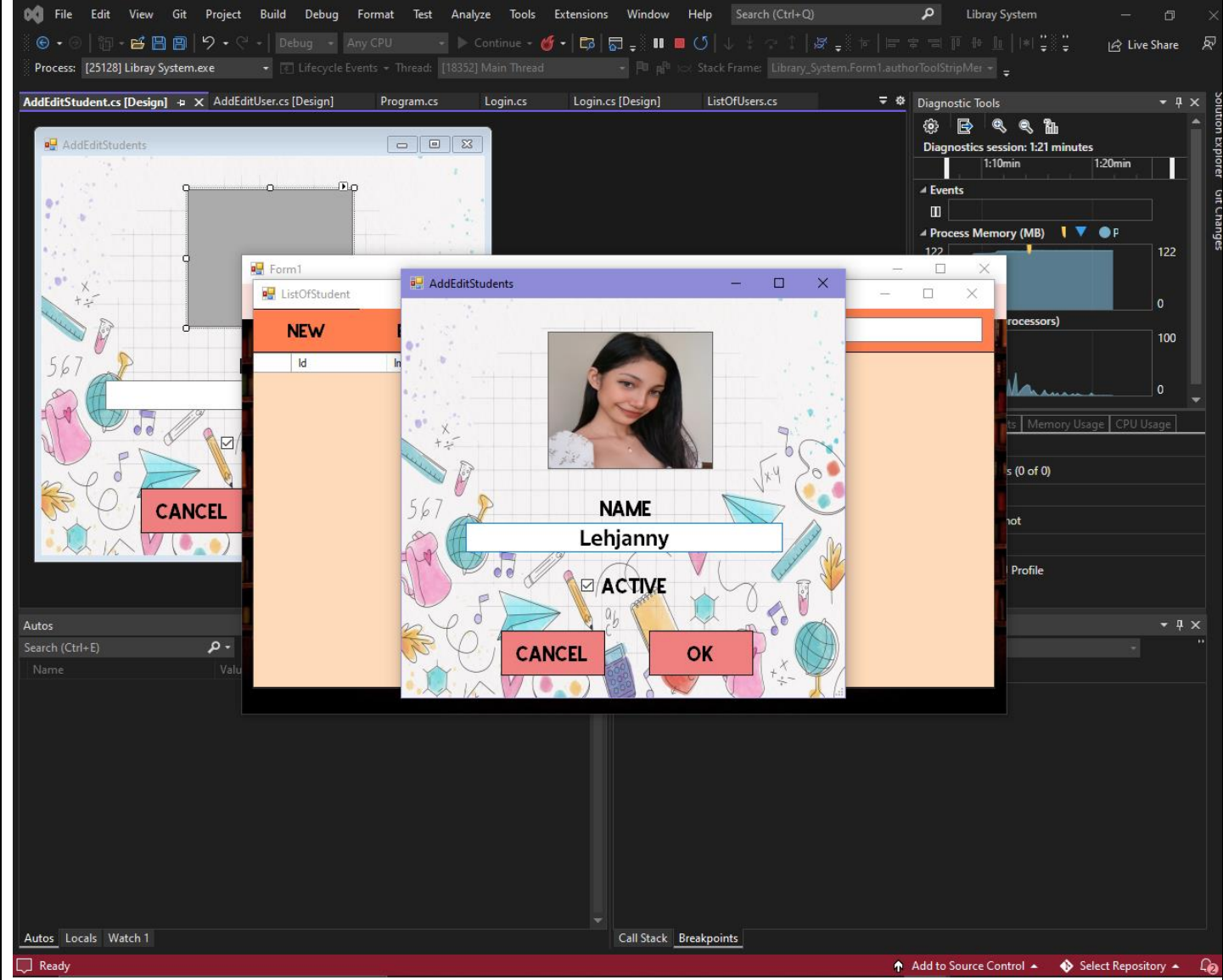
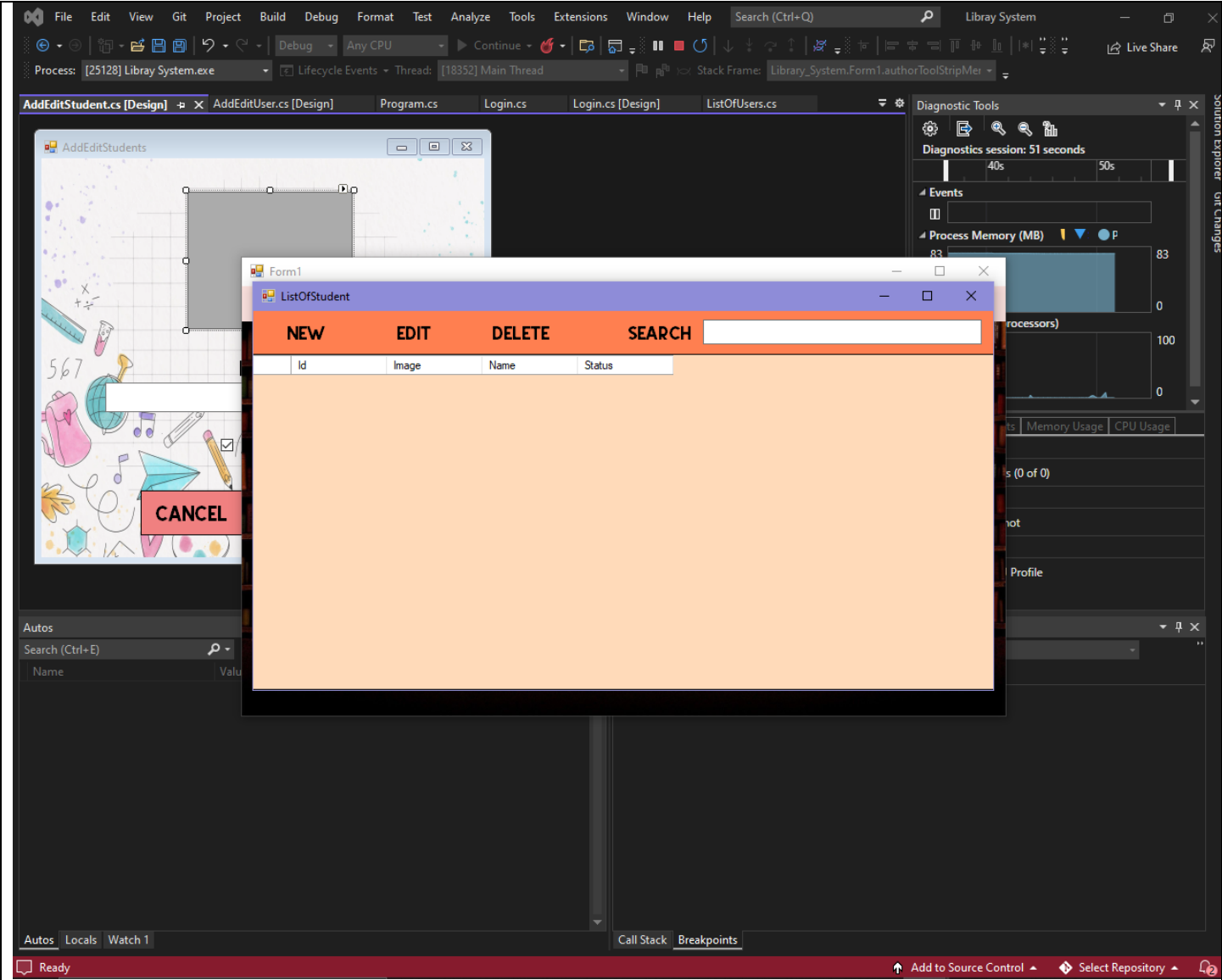















NEW ERROR ENCOUNTERED AND SOLUTION (if any)

Error/s Encountered	Solution
1. N/A	1. N/A

WHAT I LEARNED  
*It could be new code, terms, techniques, procedures, and/or tips in programming.*

- I discovered that we can use a variety of tools in the toolbox, such as buttons, textboxes, and so on.
- I learned that we can customize buttons and textboxes by changing their forecolor, background color, and so on.
- I learned that we must take extra care when removing methods because they may cause an error, and to avoid this, we must remove them from the Designer.cs file.
- I learned that using VScode studio, we can create a system and also add folders to it.

SELF-EVALUATION

PROGRAM INDICATORS (90 Points)					
	45	33.75	22.5	11.25	Points

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Programming Logic / Algorithmic Analysis	The program compilers have no I/O or logic errors and meets specifications.	The program compiles and has no I/O or logic errors and meets most specifications.	The program compiles, some minimal I/O or logic errors and meets most specifications.	The program produces incorrect results and/or does not compile at and fails to meet majority of specifications.	45
Documentation	10 Points	7.5 Points	5 Points	2.25 Point	10
	The documentation is well written and clearly explains what the code is accomplishing and how.	The documentation is terse but gives a brief overview of what the code is accomplishing and how.	The documentation is vague or does not give a brief overview of what the code is accomplishing and how.	The documentation is vague and does not give a brief overview of what the code is accomplishing and how.	
Delivery	15 Points	11.25 Points	7.5 Points	3.75 Points	15
	The program was delivered on time	The program was delivered within 24 hours of the due date.	The program was delivered within 72 hours of the due date.	The program was delivered within 48 hours of the due date.	
Efficiency	20 Points	15 Points	10 Points	5 Points	20
	The code is extremely efficient without sacrificing readability and understanding	The code is fairly efficient without sacrificing readability and understanding.	The code is brute force and unnecessary long.	The code is huge and appears to be patched together	
RATING					90
LEARNED INDICATORS (10 Points)					
What I learned.	10 Points	7.5 Points	5 Points	2.5 Points	Points
	I learned 4 or more new Code, Terms, Techniques, Procedure, and/or Tips in Programming	I learned 3 new Code, Terms, Techniques, Procedures, and/or Tips in Programming	I learned 2 new Code, Terms, Techniques, Procedures, and/or Tips in Programming	I learned 1 new Code, Term, Technique, Procedures, and/or Tips in Programming	10
RATING					10
FINAL RATING					100