

Universitatea „Ovidius” din Constanța  
Facultatea de Matematică și Informatică  
Disciplina: MEDII DE PROIECTARE SI PROGRAMARE  
Specializarea: Informatică  
Anul III  
Grupa 4

# **Aplicatie pt. evidenta studentilor dintr-o facultate**

Echipa  
Nastase Marius  
Nichifor Vlad

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## REPARTIZAREA COMPONENTELOR PE PARTICIPANTI

Componentele implementate de Nastase Marius:

- a. Formuri pentru adaugare/modificare/stergere: Persoane, Transferuri, Abandonuri, Specializari si AniUniversitari
- b. Grafice pentru evenimente

Componentele implementate de Nichifor Vlad:

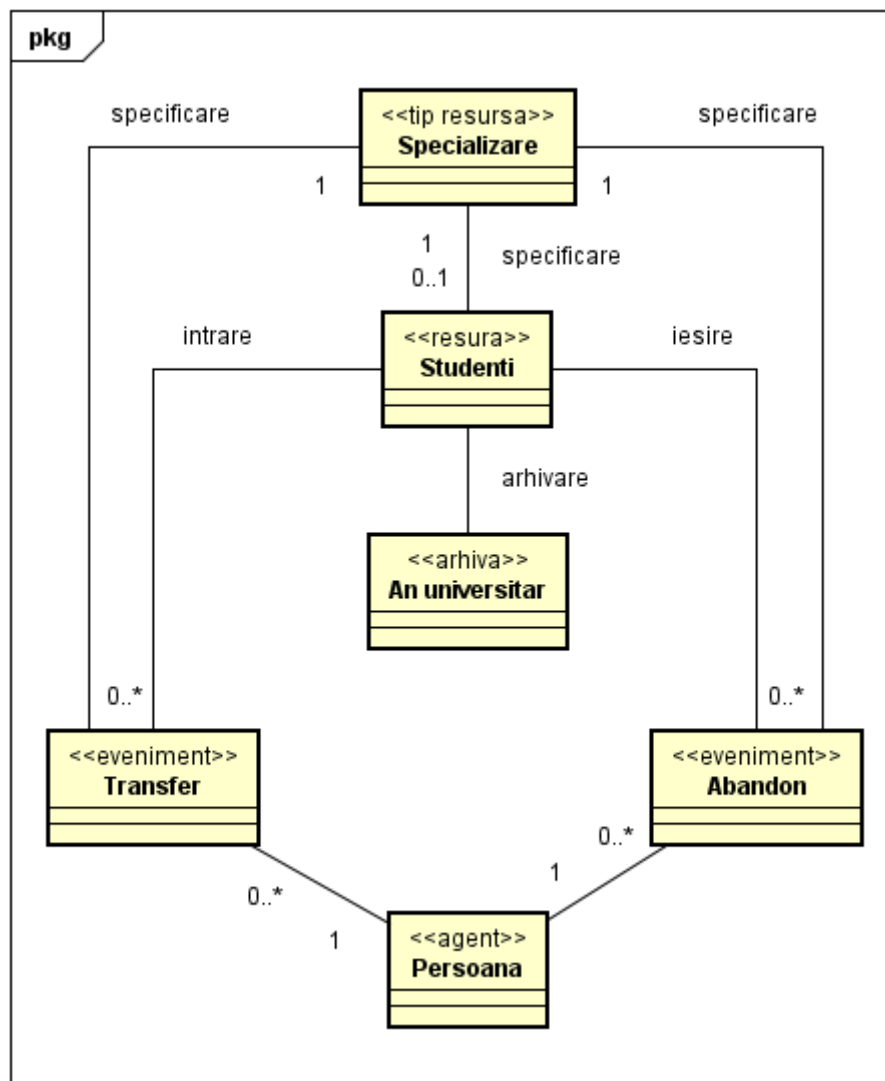
- a. Diagrama REA
- b. Baza de date
- c. Form Start
- d. Rapoarte pentru evenimente
- e. Vizualizarea resursei sub forma de Balanta.

# PROIECTARE

## Diagrama REA

### Conceptele implementate:

1. Agenti: Persoana
2. Evenimente: Transfer, Abandon
3. Resursa: Studenti
4. Tip resursa: Specializari
5. Arhiva: AnUniversitar



### Atributele conceptelor:

1. Persoana
  - a. nume: Text Required
  - b. CNP: Number Required
2. Transfer
  - a. data: DATE Required
3. Abandon

- a. data: DATE Required
- 4. Specializare
  - a. denumire: Text Required
  - b. numarAni: Number Required
- 5. AnUniversitar
  - a. anUniversitar: Date Required
  - b. anSpecializare: Number Required
  - c. numarStudenti: Number Required
- 6. Studenti
  - a. anSpecializare: Number Required
  - b. numarStudenti: Number Required

## Baza de Date

### Proiectare bazei de date:

Persoana(id\_persoana, nume, CNP)

Transfer(id\_transfer, data, id\_specializare, an\_specializare, id\_persoana)

Abandon(id\_abandon, data, id\_specializare, an\_specializare, id\_persoana)

Specializare(id\_specializare, denumire, numar\_ani)

AnUniversitar(an\_universitar, id\_specializare, an\_specializare, numar\_studenti)

Studenti(id\_specializare, an\_specializare, numar\_studenti)

### Capturi:

Persoane

### Design view:

Persoane	
Field Name	Data Type
<u>id_persoana</u>	AutoNumber
nume	Short Text
cnp	Number

### Datasheet View:

Persoane		
id_persoana	nume	cnp
1	Popescu Pop	532452234
2	Georgescu Gec	523432432
3	Ionescu Ionel	523423424
4	Floroiu Floresc	532452525
6	Mihai Ion	234532789
7	Badea Miruna	824531547
8	Mircea Dan	342546789
9	Popa Mihai	432145678
10	Dan Ion	432152321
11	Manea Cosmin	342145674
12	George Gheorg	324531456
13	Marin Ion	342145678
14	Popescu Mihai	432167347

Transfer

Design view:

Transfer	
Field Name	Data Type
id_transfer	AutoNumber
data	Date/Time
id_specializare	Number
an_specializare	Number
id_persoana	Number

Datasheet View:

Transfer				
id_transfer	data	id_specializ	an_specializ	id_persoana
1	10/11/2018	1	1	1
2	15/11/2018	1	1	2
3	25/11/2018	1	1	3
45	16/05/2021	3	2	14
47	10/11/2018	1	1	13
49	20/12/2018	1	1	8

Abandon

Design view:

Abandon	
Field Name	Data Type
id_abandon	AutoNumber
data	Date/Time
id_specializare	Number
an_specializare	Number
id_persoana	Number

Datasheet View:

id_abandon	data	id_specializ	an_specializar	id_persoana
1	10/01/2019	1	1	1
4	26/01/2019	2	2	4
16	14/05/2021	2	2	14
17	14/05/2021	3	3	13
18	14/05/2021	1	1	12
21	16/05/2021	1	1	14
22	16/11/2018	1	1	11

Specializare

Design view:

Specializari	
Field Name	Data Type
id_specializare	AutoNumber
denumire	Short Text
numar_ani	Number

Datasheet View:

id_specializare	denumire	numar_ani
1	Informatica	3
2	Informatica in limba engleza	3
3	Matematica	3
4	Matematica informatica	3

AnUniversitar

Design view:



AnUniversitar	
Field Name	Data Type
an_universitar	Date/Time
id_specializare	Number
an_specializare	Number
numar_studenti	Number

Datasheet View:

AnUniversitar				
an_universitar	id_specializare	an_specializare	numar_studen	
01/10/2018	1	1	80	
01/10/2018	1	2	70	
01/10/2018	1	3	60	
01/10/2018	2	1	80	
01/10/2018	2	2	70	
01/10/2018	2	3	60	

Studenti

Design view:

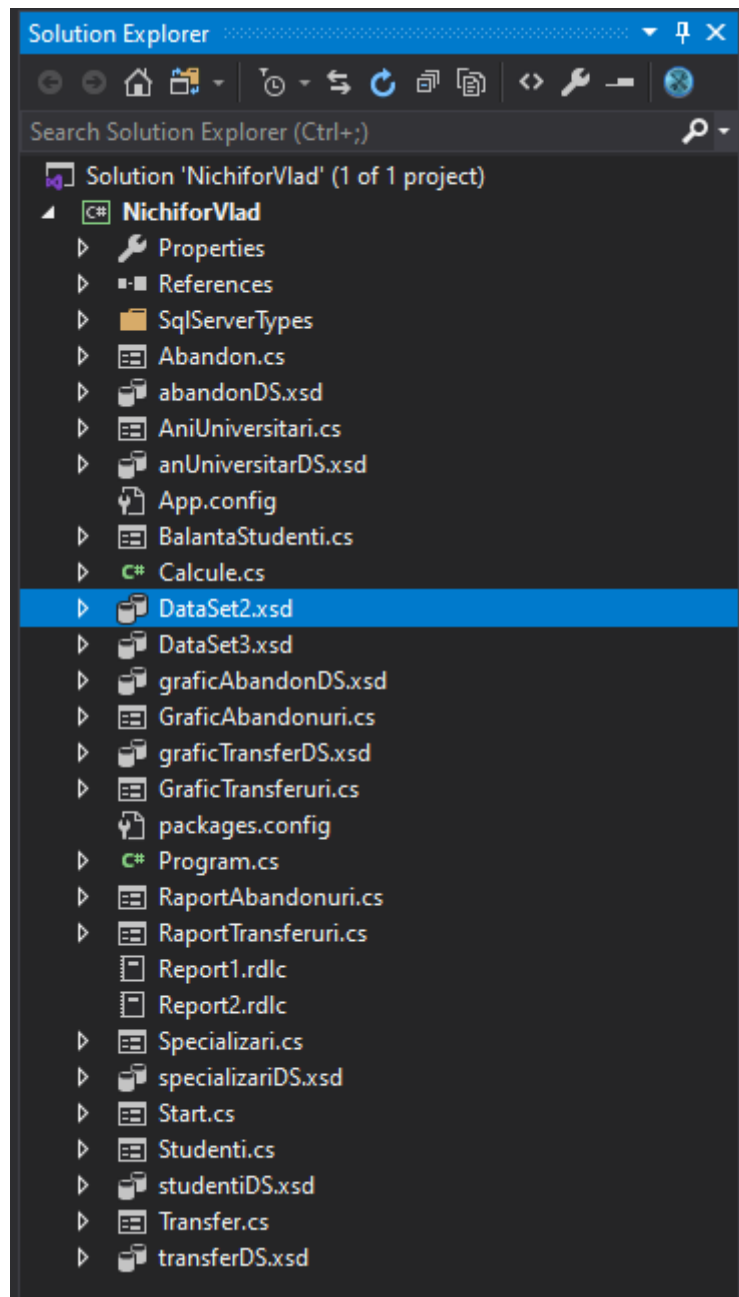
Studenti	
Field Name	Data Type
id_specializare	Number
an_specializare	Number
numar_studenti	Number

Datasheet View:

Studenti		
id_specializ	an_specializ	numar_stud
1	1	82
1	2	70
1	3	60
2	1	80
2	2	69
2	3	60

## CAPTURI

### Solution explorer



### Form Start

Baza de Date

Pentru acest caz de utilizare a fost introdusa o noua tabela in baza de date, anume Utilizatori.

**Design view:**

Utilizatori		
	Field Name	Data Type
	id_utilizator	AutoNumber
	utilizator	Short Text
	parola	Short Text

Datasheet View:

Utilizatori		
id_utilizator	utilizator	parola
	utilizator1	parola1

Design

Start

Balanta
Rapoarte
Grafice
Studenti
Specializari
Ani universitari
Transferuri
Abandonuri

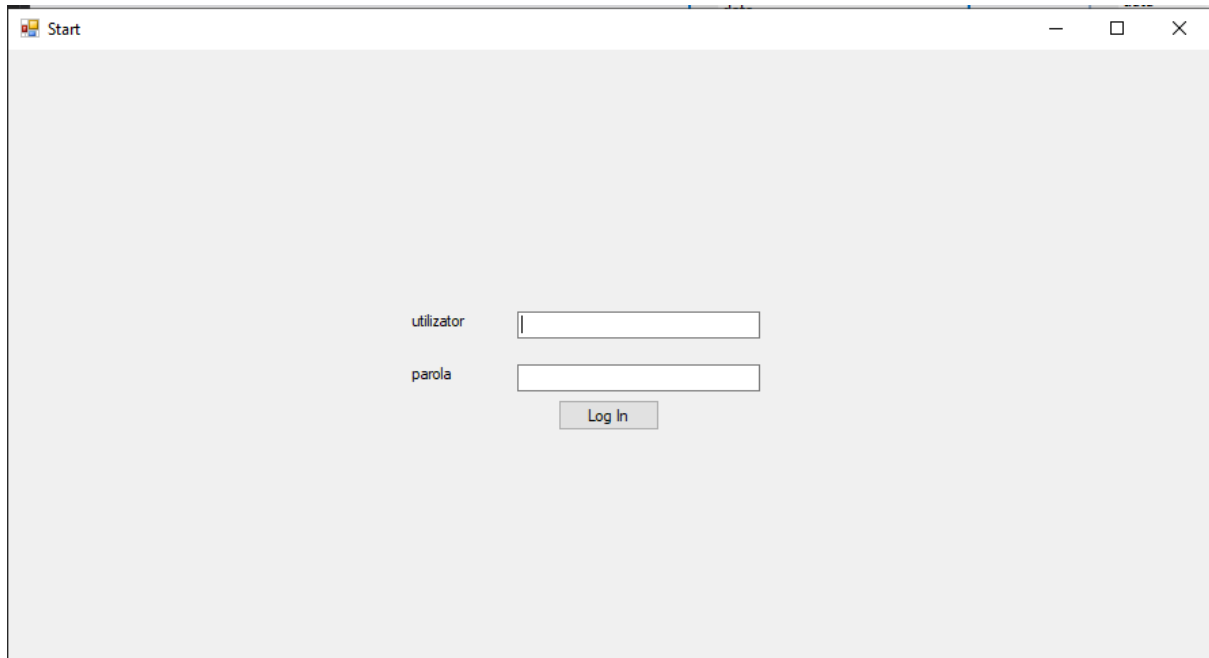
Aplicatie pt. evidenta studentilor dintr-o facultate

utilizator

parola

Login

## Executie

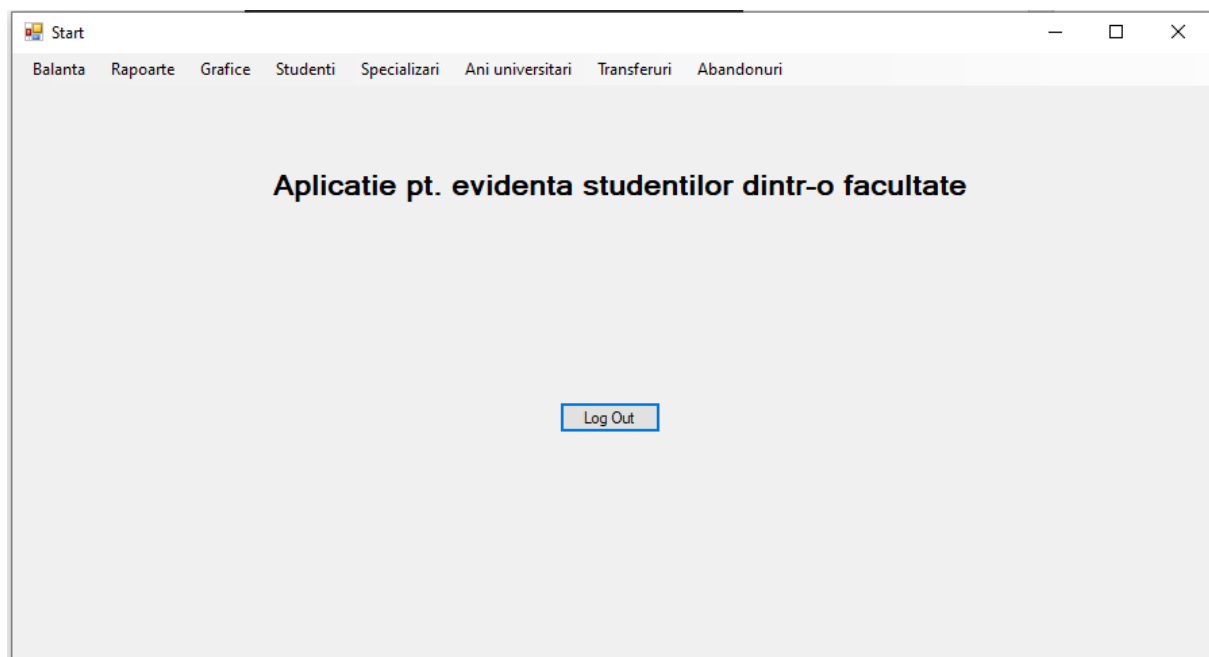


Start

utilizator

parola

Log In



Start

Balanta Rapoarte Grafice Studenti Specializari Ani universitari Transferuri Abandonuri

**Aplicatie pt. evidenta studentilor dintr-o facultate**

Log Out

## Cod

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

namespace NichiforVlad
{
    public partial class Start : Form
```

```

{

private OleDbConnection con = new OleDbConnection();
private OleDbCommand cmd = new OleDbCommand();
private OleDbDataReader rdr;

public Start()
{
    InitializeComponent();
}

private void label3_Click(object sender, EventArgs e)
{

}

private void A1(Boolean v)
{
    menuStrip1.Visible = !v;
    lblTitlu.Visible = !v;
    lblParola.Visible = v;
    txtParola.Visible = v;
    lblUtilizator.Visible = v;
    txtUtilizator.Visible = v;
    if (v) btnStart.Text = "Log In";
    else btnStart.Text = "Log Out";
}
private Boolean Logare_OK()
{
    if (txtUtilizator.Text == "")
    {
        MessageBox.Show("Completati utilizator !");
        txtUtilizator.Focus();
        return false;
    }
    if (txtParola.Text == "")
    {
        MessageBox.Show("Completati parola !");
        txtParola.Focus();
        return false;
    }
    con.ConnectionString = "Provider = Microsoft.ACE.OLEDB.12.0;" +
        "Data Source=D:\\Facultate\\An III\\SEM
2\\MMP\\proiect\\proiect\\proiect.accdb";

    cmd.Connection = con;
    cmd.CommandText = "Select id_utilizator, parola from Utilizatori " +
        "where utilizator = '" + txtUtilizator.Text + "'";
    con.Open();
    rdr = cmd.ExecuteReader();
    if (rdr.Read())
    {
        if (txtParola.Text != rdr.GetString(1))
        {
            MessageBox.Show("Parola eronata");
            txtParola.Focus();
            con.Close();
            return false;
        }
        con.Close();
        return true;
    }
}

```

```

        else
        {
            MessageBox.Show("Utilizator eronat");
            txtUtilizator.Focus();
            con.Close();
            return false;
        }
    }

    private void button1_Click(object sender, EventArgs e)
    {
        if (btnStart.Text == "Log In")
        {
            if (Logare_OK()) A1(false);
        }
        else A1(true);
    }

    private void Form4_Load(object sender, EventArgs e)
    {
        A1(true);
    }

    private void f2ToolStripMenuItem_Click(object sender, EventArgs e)
    {
    }

    private void f1ToolStripMenuItem_Click(object sender, EventArgs e)
    {
        BalantaStudenti balanta = new BalantaStudenti();
        balanta.ShowDialog();
    }

    private void transferuriToolStripMenuItem_Click(object sender, EventArgs e)
    {
        RaportTransferuri raportTransferuri = new RaportTransferuri();
        raportTransferuri.ShowDialog();
    }

    private void abandonuriToolStripMenuItem_Click(object sender, EventArgs e)
    {
        RaportAbandonuri raportAbandonuri = new RaportAbandonuri();
        raportAbandonuri.ShowDialog();
    }

    private void studentiToolStripMenuItem_Click(object sender, EventArgs e)
    {
        Studenti studenti = new Studenti();
        studenti.ShowDialog();
    }

    private void transferuriToolStripMenuItem1_Click(object sender, EventArgs e)
    {
        Transfer transfer = new Transfer();
        transfer.ShowDialog();
    }

    private void abandonuriToolStripMenuItem1_Click(object sender, EventArgs e)
    {
        Abandon abandon = new Abandon();
        abandon.ShowDialog();
    }

```

```

    }

    private void graficeToolStripMenuItem_Click(object sender, EventArgs e)
    {
    }

    private void graficTransferuriToolStripMenuItem2_Click(object sender,
EventArgs e)
    {
        GraficTransferuri graficTransfer = new GraficTransferuri();
        graficTransfer.ShowDialog();
    }

    private void graficAbandonuriToolStripMenuItem2_Click(object sender, EventArgs
e)
    {
        GraficAbandonuri graficAbandon = new GraficAbandonuri();
        graficAbandon.ShowDialog();
    }

    private void anUniversitarToolStripMenuItem_Click(object sender, EventArgs e)
    {
        AniUniversitari aniUniversitari = new AniUniversitari();
        aniUniversitari.ShowDialog();
    }

    private void specializariToolStripMenuItem_Click(object sender, EventArgs e)
    {
        Specializari specializari = new Specializari();
        specializari.ShowDialog();
    }
}

```

## Balanta

Baza de Date

Pentru a calcula Balanta, s-au introdus in baza de date 3 tabele, anume Operatii, CalculStudenti2 si BalantaStudenti.

Operatii

Operatii		Operatii	
id_operatie	denumire	Field Name	Data Type
1	Arhiva an universitar in	id_operatie	AutoNumber
2	Transferuri	denumire	Short Text
3	Abandonuri		
4	Arhiva an universitar fir		

CalculStudenti2

CalculStudenti2	
Field Name	Data Type
id_operatie	Number
data_inceput_an	Date/Time
data_sfarsit_an	Date/Time
data_eveniment	Date/Time
id_specializare	Number
an_specializare	Number
numar_studenti	Number

BalantaStudenti

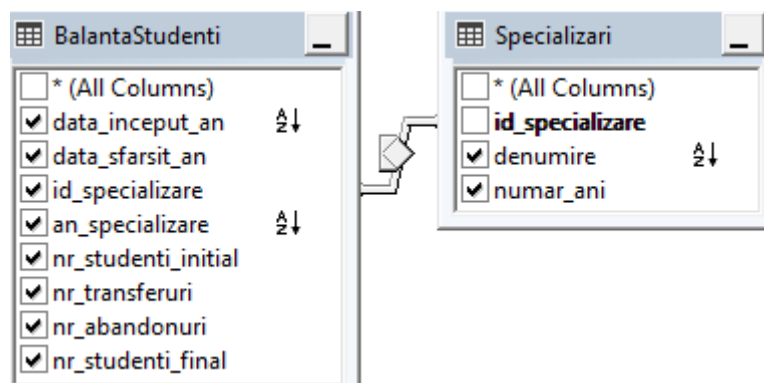
BalantaStudenti	
Field Name	Data Type
data_inceput_an	Date/Time
data_sfarsit_an	Date/Time
id_specializare	Number
an_specializare	Number
nr_studenti_initial	Number
nr_transferuri	Number
nr_abandonuri	Number
nr_studenti_final	Number

Data Set

S-a folosit DataSet3.

<b>Balanta</b> data_inceput_an data_sfarsit_an denumire numar_an an_specializare nr_studenti_initial nr_transferuri nr_abandonuri nr_studenti_final id_specializare <b>BalantaTableAdapter</b> Fill, GetData ()	<b>Intrari</b> data_inceput_an data_sfarsit_an id_specializare an_specializare Total <b>IntrariTableAdapter</b> Fill, GetData ()	<b>Iesiri</b> data_inceput_an data_sfarsit_an id_specializare an_specializare Total <b>IesiriTableAdapter</b> Fill, GetData ()	<b>CalculStudenti2</b> id_operatie data_inceput_an data_sfarsit_an data_eveniment id_specializare an_specializare numar_studenti operatii_denumire specializari_denumire <b>CalculStudenti2TableAdapter</b> Fill, GetData ()
---	---	---	---

Balanta





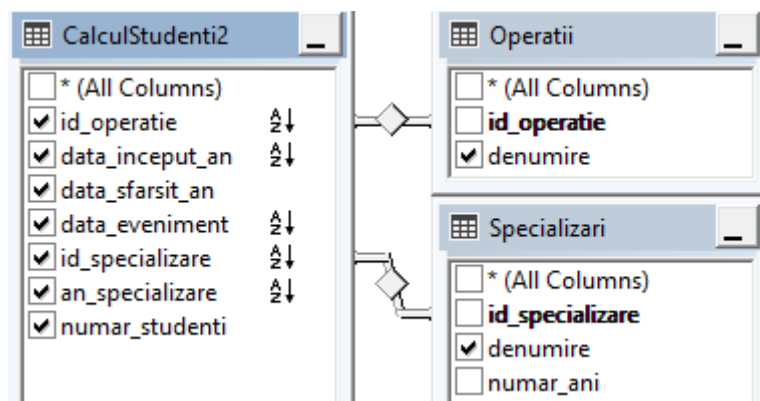
Column	Alias	Table	Outp...	Sort Type	Sort Order
data_inceput_...		BalantaSt...	<input checked="" type="checkbox"/>	Ascending	1
data_sfarsit_an		BalantaSt...	<input checked="" type="checkbox"/>		
denumire		Specializari	<input checked="" type="checkbox"/>	Ascending	2
numar_an		Specializari	<input checked="" type="checkbox"/>		
an_specializare		BalantaSt...	<input checked="" type="checkbox"/>	Ascending	3
nr_studenti_i...		BalantaSt...	<input checked="" type="checkbox"/>		
nr_transferuri		BalantaSt...	<input checked="" type="checkbox"/>		
nr_abandonuri		BalantaSt...	<input checked="" type="checkbox"/>		
nr_studenti_fi...		BalantaSt...	<input checked="" type="checkbox"/>		
id_specializare		BalantaSt...	<input checked="" type="checkbox"/>		

```

SELECT    BalantaStudenti.data_inceput_an, BalantaStudenti.data_sfarsit_an, Specializari.denumire,
Specializari.numar_an, BalantaStudenti.an_specializare, BalantaStudenti.nr_studenti_initial,
BalantaStudenti.nr_transferuri,
          BalantaStudenti.nr_abandonuri, BalantaStudenti.nr_studenti_final, BalantaStudenti.id_specializare
FROM      (BalantaStudenti LEFT OUTER JOIN
          Specializari ON BalantaStudenti.id_specializare = Specializari.id_specializare)
ORDER BY BalantaStudenti.data_inceput_an, Specializari.denumire, BalantaStudenti.an_specializare

```

## CalculStudenti2



Column	Alias	Table	Outp...	Sort Type	Sort Order
id_operatie		CalculStu...	<input checked="" type="checkbox"/>	Ascending	1
data_inceput_...		CalculStu...	<input checked="" type="checkbox"/>	Ascending	2
data_sfarsit_an		CalculStu...	<input checked="" type="checkbox"/>		
data_evenime...		CalculStu...	<input checked="" type="checkbox"/>	Ascending	5
id_specializare		CalculStu...	<input checked="" type="checkbox"/>	Ascending	3
an_specializare		CalculStu...	<input checked="" type="checkbox"/>	Ascending	4
numar_stude...		CalculStu...	<input checked="" type="checkbox"/>		
denumire	operati...	Operatii	<input checked="" type="checkbox"/>		
denumire	special...	Specializari	<input checked="" type="checkbox"/>		

```

SELECT    CalculStudenti2.id_operatie, CalculStudenti2.data_inceput_an, CalculStudenti2.data_sfarsit_an,
CalculStudenti2.data_eveniment, CalculStudenti2.id_specializare, CalculStudenti2.an_specializare,
        CalculStudenti2.numar_studenti, Operatii.denumire AS operatii_denumire, Specializari.denumire AS
specializari_denumire
FROM      ((CalculStudenti2 INNER JOIN
        Operatii ON CalculStudenti2.id_operatie = Operatii.id_operatie) INNER JOIN
        Specializari ON CalculStudenti2.id_specializare = Specializari.id_specializare)
ORDER BY CalculStudenti2.id_operatie, CalculStudenti2.data_inceput_an, CalculStudenti2.id_specializare,
CalculStudenti2.an_specializare, CalculStudenti2.data_eveniment

```

## Intrari

Column	Alias	Table	Outp...	Sort ...	Sort...	Group By	Filter
data_inceput...		CalculStu...	<input checked="" type="checkbox"/>			Group By	
data_sfarsit_an		CalculStu...	<input checked="" type="checkbox"/>			Group By	
id_specializare		CalculStu...	<input checked="" type="checkbox"/>			Group By	
an_specializare		CalculStu...	<input checked="" type="checkbox"/>			Group By	
numar_stude...	Total	CalculStu...	<input checked="" type="checkbox"/>			Sum	
id_operatie		CalculStu...	<input type="checkbox"/>			Where	= 2

```

SELECT    data_inceput_an, data_sfarsit_an, id_specializare, an_specializare, SUM(numar_studenti) AS Total
FROM      CalculStudenti2
WHERE     (id_operatie = 2)
GROUP BY data_inceput_an, data_sfarsit_an, id_specializare, an_specializare

```

## Iesiri

Column	Alias	Table	Outp...	Sort ...	Sort...	Group By	Filter
data_inceput...		CalculStu...	<input checked="" type="checkbox"/>			Group By	
data_sfarsit_an		CalculStu...	<input checked="" type="checkbox"/>			Group By	
id_specializare		CalculStu...	<input checked="" type="checkbox"/>			Group By	
an_specializare		CalculStu...	<input checked="" type="checkbox"/>			Group By	
numar_stude...	Total	CalculStu...	<input checked="" type="checkbox"/>			Sum	
id_operatie		CalculStu...	<input type="checkbox"/>			Where	= 2

Column	Alias	Table	Outp...	Sort ...	Sor...	Group By	Filter
data_inceput_...		CalculStu...	<input checked="" type="checkbox"/>			Group By	
data_sfarsit_an		CalculStu...	<input checked="" type="checkbox"/>			Group By	
id_specializare		CalculStu...	<input checked="" type="checkbox"/>			Group By	
an_specializare		CalculStu...	<input checked="" type="checkbox"/>			Group By	
numar_stude...	Total	CalculStu...	<input checked="" type="checkbox"/>			Sum	
id_operatie		CalculStu...	<input type="checkbox"/>			Where	= 3

```

SELECT data_inceput_an, data_sfarsit_an, id_specializare, an_specializare, SUM(numar_studenti) AS Total
FROM CalculStudenti2
WHERE (id_operatie = 3)
GROUP BY data_inceput_an, data_sfarsit_an, id_specializare, an_specializare

```

## Design

## Executie

Balanta

Calcul studenti

Balanta studenti

	operati_denumire	data_inceput_an	data_sfarsit_an	data_eveniment	specializari_denumi
▶	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Transferuri	01/10/2018	01/08/2019	10/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	10/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	15/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	25/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	20/12/2018	Informatica
	Abandonuri	01/10/2018	01/08/2019	16/11/2018	Informatica
	Abandonuri	01/10/2018	01/08/2019	10/01/2019	Informatica
	Abandonuri	01/10/2018	01/08/2019	26/01/2019	Informatica in lim...

	data_inceput_an	data_sfarsit_an	denumire	numar_an	an_specializare	nr
▶	01/10/2018	01/08/2019	Informatica	3	1	0
	01/10/2018	01/08/2019	Informatica	3	2	0
	01/10/2018	01/08/2019	Informatica	3	3	0
	01/10/2018	01/08/2019	Informatica in lim...	3	1	0
	01/10/2018	01/08/2019	Informatica in lim...	3	2	0
	01/10/2018	01/08/2019	Informatica in lim...	3	3	0

Final

Initial

Transferuri

Abandonuri

Balanta

Calcul studenti

Balanta studenti

	operati_denumire	data_inceput_an	data_sfarsit_an	data_eveniment	specializari_denumi
▶	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Transferuri	01/10/2018	01/08/2019	10/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	10/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	15/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	25/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	20/12/2018	Informatica
	Abandonuri	01/10/2018	01/08/2019	16/11/2018	Informatica
	Abandonuri	01/10/2018	01/08/2019	10/01/2019	Informatica
	Abandonuri	01/10/2018	01/08/2019	26/01/2019	Informatica in lim...

	an_specializare	nr_studenti_initial	nr_transferuri	nr_abandonuri	nr_studenti_final
▶	1	80	0	0	83
	2	70	0	0	70
	3	60	0	0	60
	1	80	0	0	80
	2	70	0	0	69
	3	60	0	0	60

Final

Initial

Transferuri

Abandonuri

Balanta

Calcul studenti

Balanta studenti

	operati_denumire	data_inceput_an	data_sfarsit_an	data_eveniment	specializari_denumi
▶	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Transferuri	01/10/2018	01/08/2019	10/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	10/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	15/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	25/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	20/12/2018	Informatica
	Abandonuri	01/10/2018	01/08/2019	16/11/2018	Informatica
	Abandonuri	01/10/2018	01/08/2019	10/01/2019	Informatica
	Abandonuri	01/10/2018	01/08/2019	26/01/2019	Informatica in lim...

	an_specializare	nr_studenti_initial	nr_transferuri	nr_abandonuri	nr_studenti_final
▶	1	80	5	0	83
	2	70	0	0	70
	3	60	0	0	60
	1	80	0	0	80
	2	70	0	0	69
	3	60	0	0	60

Final

Initial

Transferuri

Abandonuri

Balanta

Calcul studenti

	operati_denumire	data_inceput_an	data_sfarsit_an	data_eveniment	specializari_denumi
▶	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Athiva an univers...	01/10/2018	01/08/2019		Informatica in lim...
	Transferuri	01/10/2018	01/08/2019	10/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	10/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	15/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	25/11/2018	Informatica
	Transferuri	01/10/2018	01/08/2019	20/12/2018	Informatica
	Abandonuri	01/10/2018	01/08/2019	16/11/2018	Informatica
	Abandonuri	01/10/2018	01/08/2019	10/01/2019	Informatica
	Abandonuri	01/10/2018	01/08/2019	26/01/2019	Informatica in lim...

Balanta studenti

	an_specializare	nr_studenti_initial	nr_transferuri	nr_abandonuri	nr_studenti_final
▶	1	80	5	-2	83
	2	70	0	0	70
	3	60	0	0	60
	1	80	0	0	80
	2	70	0	-1	69
	3	60	0	0	60

Final
Initial
Transferuri
Abandonuri

Cod

Clasa auxiliara: Calcule

```

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

namespace NichiforVlad
{
    class Calcule
    {
        private static OleDbConnection con = new OleDbConnection();
        private static OleDbCommand cmd = new OleDbCommand();

        public static void calculStoc(string cs)
        {
            con.ConnectionString = cs;
            cmd.Connection = con;

            con.Open();

            cmd.CommandText = "Delete * from CalculStudenti2";
            cmd.ExecuteNonQuery();

            stocInitial(); intrari(); iesiri();

            stocFinal();
            con.Close();
        }

        private static void stocInitial()
        {
            cmd.CommandText =
                "Insert into CalculStudenti2(id_operatie, data_inceput_an, " +
                data_sfarsit_an, data_eveniment, id_specializare, an_specializare, numar_studenti) " +
                "Select 1, an_universitar, DateAdd(\"m\", 10, an_universitar), NULL, " +
                id_specializare, an_specializare, numar_studenti " +
                "From AnUniversitar";

            try { cmd.ExecuteNonQuery(); }

```

```

        catch (Exception ex) { MessageBox.Show(ex.Message); }
    }

    private static void intrari()
    {
        cmd.CommandText =
            "Insert into CalculStudenti2(id_operatie, data_inceput_an, " +
            data_sfarsit_an, data_eveniment, id_specializare, an_specializare, numar_studenti) " +
            "Select 2, c.data_inceput_an, c.data_sfarsit_an, t.data, " +
            t.id_specializare, t.an_specializare, 1 " +
            "From Transfer AS t, CalculStudenti2 AS c " +
            "WHERE " +
            "t.id_specializare = c.id_specializare AND " +
            "t.data BETWEEN c.data_inceput_an AND c.data_sfarsit_an AND " +
            "t.an_specializare = c.an_specializare AND " +
            "c.id_operatie = 1";

        try { cmd.ExecuteNonQuery(); }
        catch (Exception ex) { MessageBox.Show(ex.Message); }
    }

    private static void iesiri()
    {
        cmd.CommandText =
            "Insert into CalculStudenti2(id_operatie, data_inceput_an, " +
            data_sfarsit_an, data_eveniment, id_specializare, an_specializare, numar_studenti) " +
            "Select 3, c.data_inceput_an, c.data_sfarsit_an, t.data, " +
            t.id_specializare, t.an_specializare, -1 " +
            "From Abandon AS t, CalculStudenti2 AS c " +
            "WHERE " +
            "t.id_specializare = c.id_specializare AND " +
            "t.data BETWEEN c.data_inceput_an AND c.data_sfarsit_an AND " +
            "t.an_specializare = c.an_specializare AND " +
            "c.id_operatie = 1";

        try { cmd.ExecuteNonQuery(); }
        catch (Exception ex) { MessageBox.Show(ex.Message); }
    }

    private static void stocFinal()
    {
        cmd.CommandText =
            "Insert into CalculStudenti2(id_operatie, data_inceput_an, " +
            data_sfarsit_an, data_eveniment, id_specializare, an_specializare, numar_studenti) " +
            "Select 4, data_inceput_an, data_sfarsit_an, NULL, id_specializare, " +
            an_specializare, SUM(numar_studenti) " +
            "From CalculStudenti2 " +
            "GROUP BY data_inceput_an, data_sfarsit_an, id_specializare, " +
            an_specializare";

        cmd.ExecuteNonQuery();
    }
}
}

```

Cod form

```

using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.OleDb;
using System.Drawing;

```

```

using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace NichiforVlad
{
    public partial class BalantaStudenti : Form
    {
        private static OleDbConnection con = new OleDbConnection();
        private static OleDbCommand cmd = new OleDbCommand();

        private System.Windows.Forms.Button[] butoane = new
System.Windows.Forms.Button[4];

        public BalantaStudenti()
        {
            InitializeComponent();
            butoane[0] = btnFinal;
            butoane[1] = btnInitial;
            butoane[2] = btnTransferuri;
            butoane[3] = btnAbandonuri;
        }

        private void seteazaButoane(int index)
        {
            for (int i = 0; i < butoane.Length; i++)
            {
                if (i == index) butoane[i].Enabled = true;
                else butoane[i].Enabled = false;
            }
        }

        private void Form1_Load(object sender, EventArgs e)
        {
            con.ConnectionString = balantaTableAdapter.Connection.ConnectionString;
            cmd.Connection = con;

            con.Open();

            //Sterg continut tabela BalantaStoc
            cmd.CommandText = "Delete * from BalantaStudenti";
            cmd.ExecuteNonQuery();
            con.Close();

            //Calcul stoc
            Calcule.calculStoc(balantaTableAdapter.Connection.ConnectionString);
            calculStudenti2TableAdapter.Fill(dataSet3.CalculStudenti2);

            //seteaza butoane
            seteazaButoane(0);
        }

        private void btnFinal_Click(object sender, EventArgs e)
        {
            con.Open();
            cmd.CommandText =
                "INSERT INTO BalantaStudenti (data_inceput_an, data_sfarsit_an,
id_specializare, an_specializare, nr_studenti_final) " +
                "SELECT data_inceput_an, data_sfarsit_an, id_specializare,
an_specializare, numar_studenti " +

```

```

        "FROM CalculStudenti2 Where id_operatie = 4";
cmd.ExecuteNonQuery();
con.Close();
//Afisez balanta
balantaTableAdapter.Fill(dataSet3.Balanta);

//seteaza butoane
seteazaButoane(1);
}

private void btnInitial_Click(object sender, EventArgs e)
{
    con.Open();
    cmd.CommandText =
        "UPDATE BalantaStudenti AS b, CalculStudenti2 AS c " +
        "SET b.nr_studenti_initial = c.numar_studenti " +
        "WHERE " +
        "c.id_operatie = 1 AND " +
        "c.data_inceput_an = b.data_inceput_an AND " +
        "c.data_sfarsit_an = b.data_sfarsit_an AND " +
        "c.id_specializare = b.id_specializare AND " +
        "c.an_specializare = b.an_specializare";
    cmd.ExecuteNonQuery();
    con.Close();
    //Afisez balanta
    balantaTableAdapter.Fill(dataSet3.Balanta);

    //seteaza butoane
    seteazaButoane(2);
}

private void btnTransferuri_Click(object sender, EventArgs e)
{
    DataSet3TableAdapters.IntrariTableAdapter ta = new
    DataSet3TableAdapters.IntrariTableAdapter();
    ta.Fill(dataSet3.Intrari);

    DataRelation newRelation = new DataRelation("processDataIntrari",
        new DataColumn[] { dataSet3.Balanta.Columns["data_inceput_an"],
        dataSet3.Balanta.Columns["data_sfarsit_an"],
        dataSet3.Balanta.Columns["id_specializare"],
        dataSet3.Balanta.Columns["an_specializare"] },
        new DataColumn[] { dataSet3.Intrari.Columns["data_inceput_an"],
        dataSet3.Intrari.Columns["data_sfarsit_an"],
        dataSet3.Intrari.Columns["id_specializare"],
        dataSet3.Intrari.Columns["an_specializare"] }
    );
    dataSet3.Relations.Add(newRelation);

    foreach (DataRow rb in dataSet3.Balanta)
    {
        foreach (DataRow ri in rb.GetChildRows("processDataIntrari"))
        {
            rb["nr_transferuri"] = ri["Total"];
        }
    }

    //seteaza butoane
    seteazaButoane(3);
}

private void btnAbandonuri_Click(object sender, EventArgs e)

```



```

{
    DataSet3TableAdapters.IesiriTableAdapter ta = new
DataSet3TableAdapters.IesiriTableAdapter();
    ta.Fill(dataSet3.Iesiri);

    DataRelation newRelation = new DataRelation("processDataIesiri",
        new DataColumn[] { dataSet3.Balanta.Columns["data_inceput_an"],
dataSet3.Balanta.Columns["data_sfarsit_an"],
dataSet3.Balanta.Columns["id_specializare"],
dataSet3.Balanta.Columns["an_specializare"] },
        new DataColumn[] { dataSet3.Iesiri.Columns["data_inceput_an"],
dataSet3.Iesiri.Columns["data_sfarsit_an"],
dataSet3.Iesiri.Columns["id_specializare"], dataSet3.Iesiri.Columns["an_specializare"]
    }
    );
    dataSet3.Relations.Add(newRelation);

    foreach (DataRow rb in dataSet3.Balanta)
    {
        foreach (DataRow ri in rb.GetChildRows("processDataIesiri"))
        {
            rb["nr_abandonuri"] = ri["Total"];
        }
    }

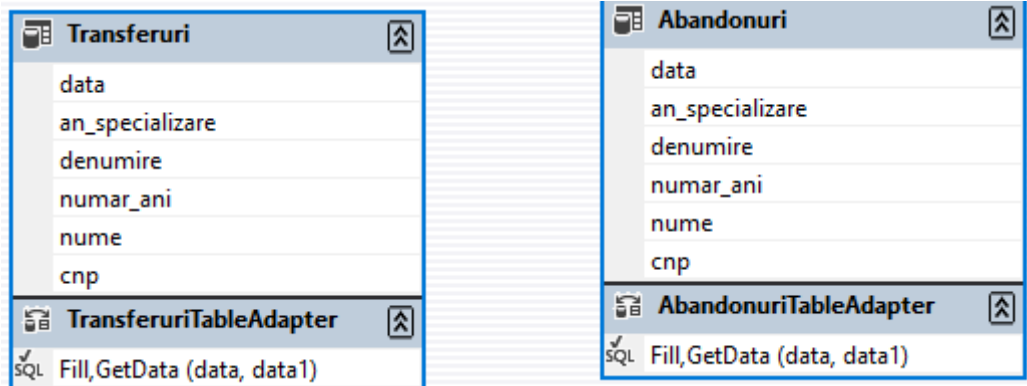
    //seteaza butoane
    seteazaButoane(-1);
}
}
}

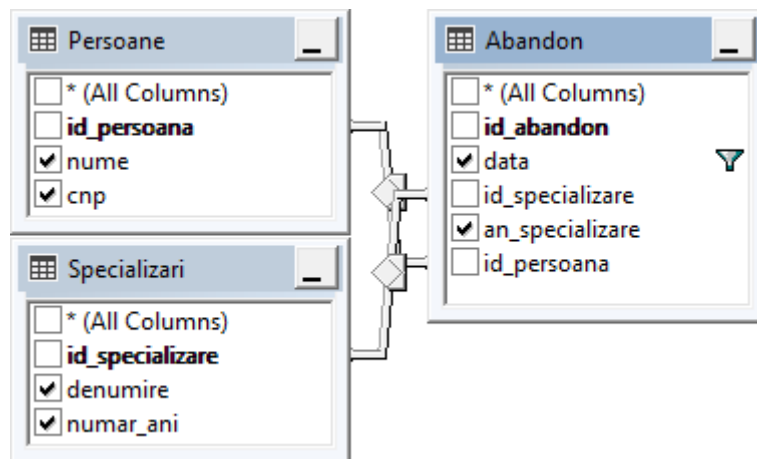
```

## Raport Abandonuri

Data Set

S-a folosit DataSet2.





Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter
data		Abandon	<input checked="" type="checkbox"/>			>= ?
an_specializare		Abandon	<input checked="" type="checkbox"/>			
denumire		Specializari	<input checked="" type="checkbox"/>			
numar_ani		Specializari	<input checked="" type="checkbox"/>			
nume		Persoane	<input checked="" type="checkbox"/>			
cnp		Persoane	<input checked="" type="checkbox"/>			
data		Abandon	<input type="checkbox"/>			<= ?

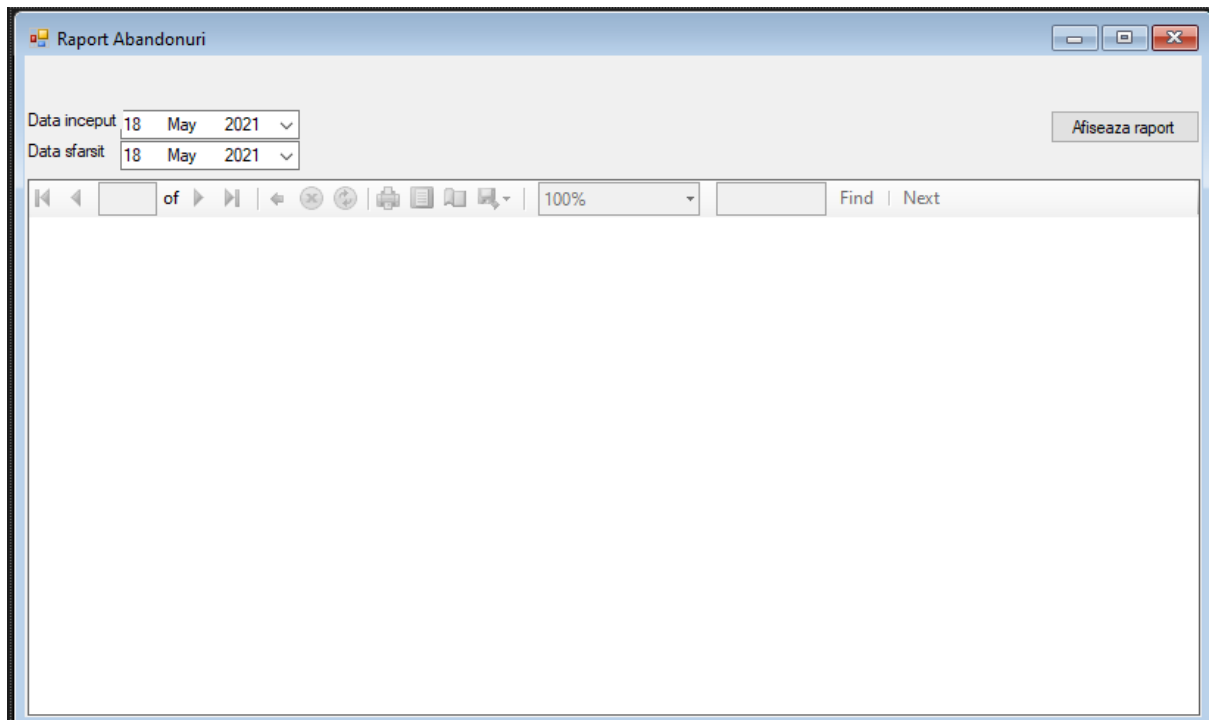
```

SELECT Abandon.data, Abandon.an_specializare, Specializari.denumire, Specializari.numar_ani,
Persoane.nume, Persoane.cnp
FROM ((Persoane RIGHT OUTER JOIN
      Abandon ON Persoane.id_persoana = Abandon.id_persoana) LEFT OUTER JOIN
      Specializari ON Abandon.id_specializare = Specializari.id_specializare)
WHERE (Abandon.data >= ?) AND (Abandon.data <= ?)

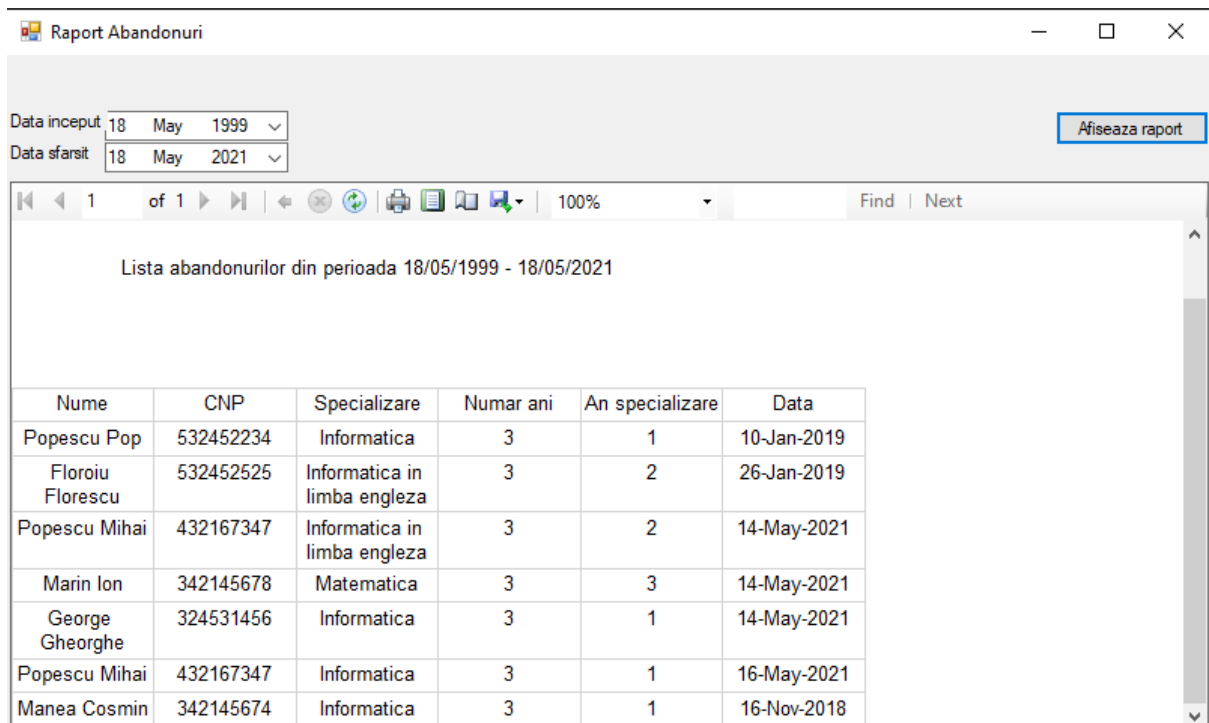
```

Design

[ @Titlu ]					
Nume	CNP	Specializare	Numar ani	An specializare	Data
[nume]	[cnp]	[denumire]	[numar_ani]	an_specializare	«Expr»



## Executie



## Cod

```
using Microsoft.Reporting.WinForms;
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;

namespace NichiforVlad
{
    public partial class RaportAbandonuri : Form
    {
        public RaportAbandonuri()
        {
            InitializeComponent();

            private void Form3_Load(object sender, EventArgs e)
            {
                this.reportViewer1.RefreshReport();
            }

            private void button1_Click(object sender, EventArgs e)
            {
                DateTime d1 = new DateTime(dateTimePicker1.Value.Year,
dateTimePicker1.Value.Month, dateTimePicker1.Value.Day);
                DateTime d2 = new DateTime(dateTimePicker2.Value.Year,
dateTimePicker2.Value.Month, dateTimePicker2.Value.Day);
                this.AbandonuriTableAdapter.Fill(this.DataSet2.Abandonuri, d1, d2);

                //Pregatesc parametrii raportului
                ReportParameter[] parameters = new ReportParameter[1];
                parameters[0] = new ReportParameter("Titlu", "Lista abandonurilor din
perioada " + d1.ToShortDateString() + " - " +
d2.ToShortDateString());
                //Comunicare parametrii
                this.reportViewer1.LocalReport.SetParameters(parameters);

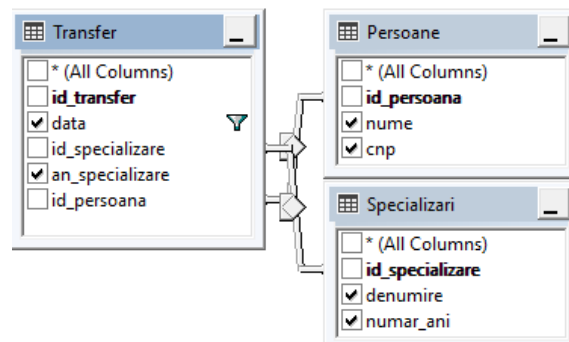
                //Emit raport
                this.reportViewer1.RefreshReport();
            }

            private void label1_Click(object sender, EventArgs e)
            {
            }
        }
    }
}

```

## Raport Transferuri

Data Set



Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter
data		Transfer	<input checked="" type="checkbox"/>			>= ?
an_specializare		Transfer	<input checked="" type="checkbox"/>			
denumire		Specializari	<input checked="" type="checkbox"/>			
numar_ani		Specializari	<input checked="" type="checkbox"/>			
nume		Persoane	<input checked="" type="checkbox"/>			
cnp		Persoane	<input checked="" type="checkbox"/>			
data		Transfer	<input type="checkbox"/>			<= ?

```

SELECT  Transfer.data, Transfer.an_specializare, Specializari.denumire, Specializari.numar_ani, Persoane.numa,
Persoane.cnp
FROM      ((Transfer LEFT OUTER JOIN
            Persoane ON Transfer.id_persoana = Persoane.id_persoana) LEFT OUTER JOIN
            Specializari ON Transfer.id_specializare = Specializari.id_specializare)
WHERE     (Transfer.data >= ?) AND (Transfer.data <= ?)

```

## Design

[@Titlu]

Nume	CNP	Specializare	Numar ani	An specializare	Data
[nume]	[cnp]	[denumire]	[numar_ani]	an_specializare	«Expr»

Raport Transferuri

Data inceput

18 May 2021

▼

Data sfarsit

18 May 2021

▼

Afiseaza raport

◀

▶

of

▶

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100%

Find | Next

## Executie

Raport Transferuri

Data inceput: 18 May 1999  
Data sfarsit: 18 May 2021

Afiseaza raport

1 of 1

100%

Find | Next

Lista transferurilor din perioada 18/05/1999 - 18/05/2021

Nume	CNP	Specializare	Numar ani	An specializare	Data
Popescu Pop	532452234	Informatica	3	1	10-Nov-2018
Georgescu George	523432432	Informatica	3	1	15-Nov-2018
Ionescu Ionel	523423424	Informatica	3	1	25-Nov-2018
Popescu Mihai	432167347	Matematica	3	2	16-May-2021
Marin Ion	342145678	Informatica	3	1	10-Nov-2018
Mircea Dan	342546789	Informatica	3	1	20-Dec-2018

## Cod

```
using Microsoft.Reporting.WinForms;
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;

namespace NichiforVlad
{
    public partial class RaportTransferuri : Form
    {
        public RaportTransferuri()
        {
            InitializeComponent();
        }

        private void Form2_Load(object sender, EventArgs e)
        {
            this.reportViewer1.RefreshReport();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            DateTime d1 = new DateTime(dateTimePicker1.Value.Year,
            dateTimePicker1.Value.Month, dateTimePicker1.Value.Day);
            DateTime d2 = new DateTime(dateTimePicker2.Value.Year,
            dateTimePicker2.Value.Month, dateTimePicker2.Value.Day);
            this.TransferuriTableAdapter.Fill(this.DataSet2.Transferuri, d1, d2);

            //Pregatesc parametrii raportului
        }
    }
}
```

```

ReportParameter[] parameters = new ReportParameter[1];
parameters[0] = new ReportParameter("Titlu", "Lista transferurilor din
perioada " + d1.ToShortDateString() + " - " +
d2.ToShortDateString());
//Comunicare parametrului
this.reportViewer1.LocalReport.SetParameters(parameters);

//Emit raport
this.reportViewer1.RefreshReport();
}
}
}

```

## Grafic Abandonuri

Data set

Column	Alias	Table	Outp...	Sort Type	Sort Order	Group By	Filter
denumire		s	<input checked="" type="checkbox"/>			Group By	
an_specializare	NrAba...	a	<input checked="" type="checkbox"/>			Count	

```

SELECT s.denumire, COUNT(a.an_specializare) AS NrAbandonuri
FROM (Abandon a INNER JOIN
Specializari s ON a.id_specializare = s.id_specializare)
GROUP BY s.denumire

```

## Design

The Design view shows the layout of the application window. It includes a title bar, a text label 'Abandonuri', a text box for 'Total abandonuri', a table with columns 'Specializare', 'NrAbandonuri', and 'Procent', and a bar chart titled 'Numarul de abandonuri'.

## Executie

The Execution view shows the application running. The 'Total abandonuri' text box contains the value 7. The table displays the following data:

	Specializare	NrAbandonuri	Procent
▶	Informatica	4	57,14
	Informatica in limba engleza	2	28,57
	Matematica	1	14,29

The bar chart shows the number of abandonuri for each specialization:

Specializare	Numarul de abandonuri
Informatica	4
Informatica in limba engleza	2
Matematica	1

## Cod

```
using System;
using System.Windows.Forms;
using System.Data.OleDb;
using System.Data;

namespace NichiforVlad
{
    public partial class GraficAbandonuri : Form
    {
        private OleDbConnection con = new OleDbConnection();
        private OleDbCommand cmd = new OleDbCommand();
        private OleDbDataReader rdr;
        private decimal totalAbandonuri;

        public GraficAbandonuri()
        {

```



```

        InitializeComponent();
    }

    private void GravicAbandonuri_Load(object sender, EventArgs e)
    {
        // TODO: This line of code loads data into the
        'graficAbandonDS.statAbandon' table. You can move, or remove it, as needed.
        this.statAbandonTableAdapter.Fill(this.gravicAbandonDS.statAbandon);

        //Pregatire con si cmd
        con = statAbandonTableAdapter.Connection;
        cmd.Connection = con;
        //Total abandonuri
        cmd.CommandText = "select Count(id_abandon) as Total from Abandon";

        con.Open();
        rdr = cmd.ExecuteReader();
        rdr.Read();
        totalAbandonuri = Convert.ToDecimal(rdr.GetValue(0));
        con.Close();
        rdr.Close();

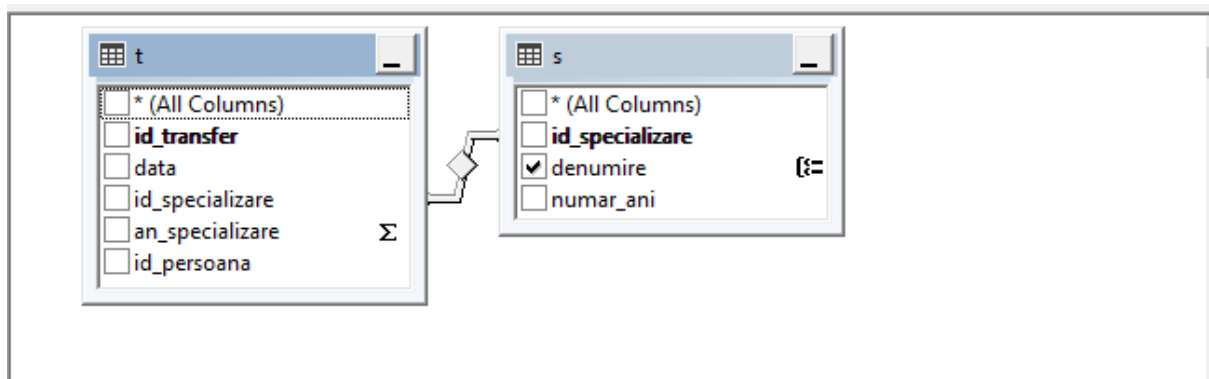
        txtTotal.Text = "" + totalAbandonuri;

        foreach (DataRow r in graficAbandonDS.statAbandon)
        {
            decimal x;
            x = Convert.ToDecimal(r["NrAbandonuri"]) / totalAbandonuri;
            x = Math.Round(x, 4) * 100;
            x = Math.Round(x, 2);
            r["Procent"] = x;
        }
        dataGridView1.Refresh();
    }
}

```

## Gravic Transferuri

Data set



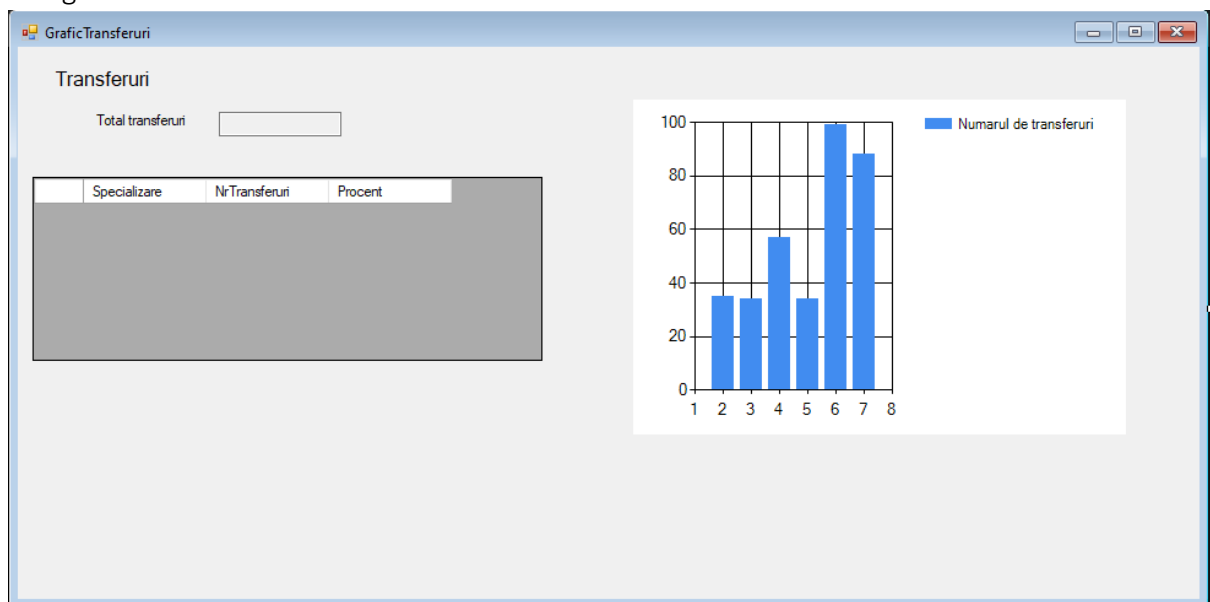
	Column	Alias	Table	Outp...	Sort Type	Sort Order	Group By	Filter
►	denumire		s	<input checked="" type="checkbox"/>			Group By	
	an_specializare	NrTran...	t	<input checked="" type="checkbox"/>			Count	
				<input type="checkbox"/>				

```

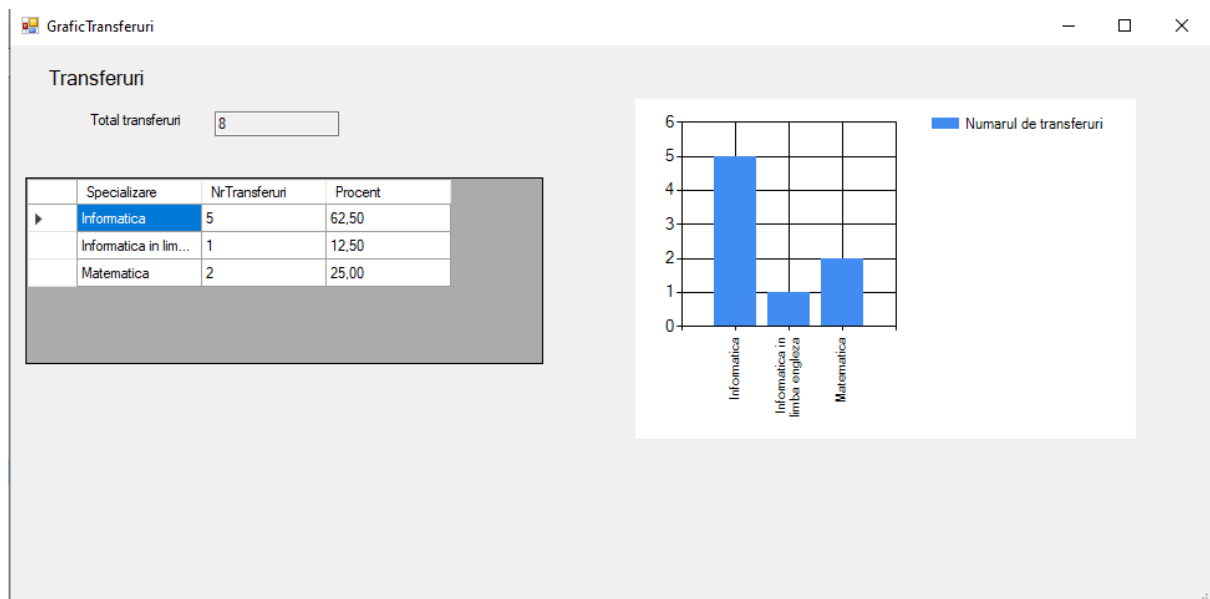
SELECT s.denumire, COUNT(t.an_specializare) AS NrTransferuri
FROM (Transfer t INNER JOIN
      Specializari s ON t.id_specializare = s.id_specializare)
GROUP BY s.denumire

```

## Design



## Executie



## Cod

```

using System;
using System.Windows.Forms;

```

```

using System.Data.OleDb;
using System.Data;

namespace NichiforVlad
{
    public partial class GraficTransferuri : Form
    {
        private OleDbConnection con = new OleDbConnection();
        private OleDbCommand cmd = new OleDbCommand();
        private OleDbDataReader rdr;
        private decimal totalTransferuri;
        public GraficTransferuri()
        {
            InitializeComponent();

            private void GraficTransferuri_Load(object sender, EventArgs e)
            {
                // TODO: This line of code loads data into the
                'graficTransferDS.statTransferuri' table. You can move, or remove it, as needed.

                this.statTransferuriTableAdapter.Fill(this.graficTransferDS.statTransferuri);
                //Pregatire con si cmd
                con = statTransferuriTableAdapter.Connection;
                cmd.Connection = con;
                //Total transferuri
                cmd.CommandText = "select Count(id_transfer) as Total from Transfer";

                con.Open();
                rdr = cmd.ExecuteReader();
                rdr.Read();
                totalTransferuri = Convert.ToDecimal(rdr.GetValue(0));
                con.Close();
                rdr.Close();

                txtTotal.Text = "" + totalTransferuri;

                foreach (DataRow r in graficTransferDS.statTransferuri)
                {
                    decimal x;
                    x = Convert.ToDecimal(r["NrTransferuri"]) / totalTransferuri;
                    x = Math.Round(x, 4) * 100;
                    x = Math.Round(x, 2);
                    r["Procent"] = x;
                }
                dataGridView1.Refresh();
            }
        }
    }
}

```

## Studenti

Data set

Persoane

☐ \* (All Columns)  
☒ **id\_persoana**  
☒ nume  
☒ cnp

	Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter	Or...	
▶	nume		Persoane	<input checked="" type="checkbox"/>					
	cnp		Persoane	<input checked="" type="checkbox"/>					
	id_persoana		Persoane	<input checked="" type="checkbox"/>					
				<input type="checkbox"/>					

SELECT

nume, cnp, id\_persoana

FROM

Persoane

## Design

Studenti

AdaugareModificareStergere

ConfirmareRenuntare

nume

cnp

Nume

CNP

## Executie

Studenti

Adaugare Modificare Stergere

nume	cnp
Popescu Pop	532452234
Georgescu George	523432432
Ionescu Ionel	523423424
Floroiu Florescu	532452525
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456

Nume Popescu Pop

CNP 532452234

## Adaugarea unei inregistrari:

Studenti

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

nume	cnp
Popescu Pop	532452234
Georgescu George	523432432
Ionescu Ionel	523423424
Floroiu Florescu	532452525
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456

Nume

CNP

Studenti

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

nume	cnp
Floroiu Florescu	532452525
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456
Marin Ion	342145678
Popescu Mihai	432167347

Nume Ionescu Maria

CNP 453245678

Insert into Persoane(nume, cnp) Select 'Ionescu Maria','453245678'

OK

Studenti

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

nume	cnp
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456
Marin Ion	342145678
Popescu Mihai	432167347
Ionescu Maria	453245678

Nume

CNP

Modificarea unei inregistrari:

Studenti

Adaugare Modificare Stergere

Confirmare Renuntare MODIFICARE

nume	cnp
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456
Marin Ion	342145678
Popescu Mihai	432167347
Ionescu Maria	453245678

Nume

CNP

Studenti

Adaugare Modificare Stergere

Confirmare Renuntare MODIFICARE

nume	cnp
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456
Marin Ion	342145678
Popescu Mihai	432167347
Ionescu Maria	453245678

Nume

CNP

Update Persoane Set nume = 'Ionescu Maria',cnp = '324534567' Where id\_persoana =15

OK

Studenti

Adaugare Modificare Stergere

nume	cnp
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456
Marin Ion	342145678
Popescu Mihai	432167347
Ionescu Maria	324534567

Nume

CNP

Stergerea unei inregistrari:

Studenti

Adaugare Modificare Stergere

nume	cnp
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456
Marin Ion	342145678
Popescu Mihai	432167347
Ionescu Maria	324534567

Nume

CNP

Stergere inregistrare

Confirmati stergerea

Yes No

Studenti

Adaugare Modificare Stergere

nume	cnp
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456
Marin Ion	342145678
Popescu Mihai	432167347
Ionescu Maria	324534567

Nume

CNP

Delete From Persoane Where id\_persoana = 15

OK

nume	cnp
Floroiu Florescu	532452525
Mihai Ion	234532789
Badea Miruna	824531547
Mircea Dan	342546789
Popa Mihai	432145678
Dan Ion	432152321
Manea Cosmin	342145674
George Gheorghe	324531456
Marin Ion	342145678
Popescu Mihai	432167347

Nume: Popescu Mihai  
CNP: 432167347

```

Cod
using System;
using System.Windows.Forms;
using System.Data.OleDb;

namespace NichiforVlad
{
    public partial class Studenti : Form
    {
        public Studenti()
        {
            InitializeComponent();
        }

        private void Studenti_Load(object sender, EventArgs e)
        {
            // TODO: This line of code loads data into the 'studentiDS.Persoane'
            table. You can move, or remove it, as needed.
            this.persoaneTableAdapter.Fill(this.studentiDS.Persoane);

            //Protectie grid
            dataGridView1.AllowUserToAddRows = false;
            dataGridView1.AllowUserToDeleteRows = false;
            dataGridView1.ReadOnly = true;

            //Initializare lblOp
            lblOp.Text = "";

            //Configurare(butoane)
            configureazaButoane(true);

            //Protectie componente Panel
            protectiePanel(true);

            //Legare controale
            legareControale(true);
        }

        private void configureazaButoane(bool v)

```



```

{
    bRenuntare.Visible = !v;
    bConfirmare.Visible = !v;
    lId.Visible = false;

    bAdaugare.Enabled = v;
    bModificare.Enabled = v;
    bStergere.Enabled = v;
}
private void legareControale(bool v)
{
    if (v)
    {
        txtNume.DataBindings.Add("Text", persoaneBindingSource, "nume");
        txtCNP.DataBindings.Add("Text", persoaneBindingSource, "cnp");
        lId.DataBindings.Add("Text", persoaneBindingSource, "id_persoana");
    }
    else
    {
        txtNume.DataBindings.Clear();
        txtCNP.DataBindings.Clear();
        lId.DataBindings.Clear();
    }
}
private void protectiePanel(bool v)
{
    txtNume.ReadOnly = v;
    txtCNP.ReadOnly = v;
}
private void golireCampuri()
{
    txtNume.Text = "";
    txtCNP.Text = "";
}
private bool validareCampuriObligatorii()
{
    //Validare de completare obligatorie campurile
    if (txtNume.Text == "")
    {
        MessageBox.Show("Completati Nume!");
        txtNume.Focus();
        return false;
    }
    if (txtCNP.Text == "")
    {
        MessageBox.Show("Completati CNP !");
        txtCNP.Focus();
        return false;
    }
    return true;
}

private void adauga_inregistrare()
{
    string listaCampuri;
    string listaValori;
    OleDbConnection con = new OleDbConnection();
    OleDbCommand cmd = new OleDbCommand();
    con.ConnectionString = persoaneTableAdapter.Connection.ConnectionString;
    cmd.Connection = con;
    listaCampuri = "nume, cnp";
    listaValori = "'" + txtNume.Text + "'" + "," + txtCNP.Text + "'";
}

```

```

        cmd.CommandText = "Insert into Persoane(" + listaCampuri + ") " + "Select
" + listaValori;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
    }
    private void refresh_grid(int p)
    {
        persoaneTableAdapter.Fill(studentiDS.Persoane);
        persoaneBindingSource.Position = p;
    }
    private void modifica_inregistrare()
    {
        string listaSet;
        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        con.ConnectionString = persoaneTableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        listaSet = "nume = '" + txtNume.Text + "'," + "cnp = '" + txtCNP.Text +
        ""';
        cmd.CommandText = "Update Persoane Set " + listaSet + " Where id_persoana
=" + lId.Text;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
    }

    private void bAdaugare_Click(object sender, EventArgs e)
    {
        //Configurare butoane
        configureazaButoane(false);

        //Dezlegare controale Panel
        legareControale(false);

        //Ridicare protectie controale Panel
        protectiePanel(false);

        //Modificare lblOp
        lblOp.Text = "ADAUGARE";

        //Pozitionare cursor pe primul camp
        txtNume.Focus();

        // Golire campuri
        golireCampuri();
    }

    private void bModificare_Click(object sender, EventArgs e)
    {
        //Configurare butoane
        configureazaButoane(false);

        //Dezlegare controale Panel
        legareControale(false);

        //Ridicare protectie controale Panel
        protectiePanel(false);

        //Modificare lblOp

```

```

        lOp.Text = "MODIFICARE";

        //Pozitionare cursor pe primul camp
        txtNume.Focus();
    }

    private void bStergere_Click(object sender, EventArgs e)
    {
        const string mesaj = "Confirmati stergerea";
        const string titlu = "Stergere inregistrare";
        var rezultat = MessageBox.Show(mesaj, titlu, MessageBoxButtons.YesNo,
        MessageBoxIcon.Warning);
        if (rezultat == DialogResult.No)
            return;

        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        con.ConnectionString = persoaneTableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        cmd.CommandText = "Delete From Persoane Where id_persoana = " + lId.Text;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
        refresh_grid(persoaneBindingSource.Position);
    }

    private void bConfirmare_Click(object sender, EventArgs e)
    {
        if (lOp.Text == "ADAUGARE")
        {
            if (!validareCampuriObligatorii())
                return;
            adauga_inregistrare();
            golireCampuri();

            //Pune cursor pe primul camp
            txtNume.Focus();
            refresh_grid(persoaneBindingSource.Position);
        }
        else if (lOp.Text == "MODIFICARE")
        {
            modifica_inregistrare();
            refresh_grid(persoaneBindingSource.Position);

            //Initializare lblOp
            lOp.Text = "";

            //Configurare(butoane)
            configureazaButoane(true);

            //Protectie componente Panel
            protectiePanel(true);

            //Legare controale
            legareControale(true);
        }
        else
            MessageBox.Show("Operatie actualizare neefectuata");
    }

    private void bRenuntare_Click(object sender, EventArgs e)

```

```

{
    //Initializare lblOp
    lblOp.Text = "";

    //Configurare(butoane)
    configureazaButoane(true);

    //Protectie componente Panel
    protectiePanel(true);

    //Legare controale
    legareControale(true);
}
private void txtCNP_Leave(object sender, EventArgs e)
{
    decimal p;
    OleDbConnection con = new OleDbConnection();
    OleDbCommand cmd = new OleDbCommand();
    OleDbDataReader r;
    if (lblOp.Text == "")
        return;
    if (txtCNP.Text == "")
        return;
    if (bRenuntare.Focused)
        return;
    try
    {
        p = Convert.ToDecimal(txtCNP.Text);
    }
    catch
    {
        MessageBox.Show("Format eronat");
        txtCNP.Focus();
        return;
    }
    con.ConnectionString = persoaneTableAdapter.Connection.ConnectionString;
    cmd.Connection = con;
    if (lblOp.Text == "ADAUGARE")
    {
        cmd.CommandText = "Select nume From Persoane where cnp=" +
txtCNP.Text;
        con.Open();
        r = cmd.ExecuteReader();
        if (r.Read())
        {
            MessageBox.Show("CNP deja existent");
            txtCNP.Focus();
            return;
        }
        con.Close();
    }
    else if (lblOp.Text == "MODIFICARE")
    {
        cmd.CommandText = "Select nume From Persoane where cnp=" + txtCNP.Text
+ " and id_persoana <> " + lblId.Text;
        con.Open();
        r = cmd.ExecuteReader();
        if (r.Read())
        {
            MessageBox.Show("CNP deja existent");
            txtCNP.Focus();
            return;
        }
    }
}

```

```

    }
    con.Close();
}
}
}
}

```

## Specializari

Data set

Specializari

☐ \* (All Columns)
 ☒ id\_specializare
 ☒ denumire
 ☒ numar\_ani

	Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter	Or...	
▶	denumire		Specializari	<input checked="" type="checkbox"/>					
	numar_ani		Specializari	<input checked="" type="checkbox"/>					
	id_specializare		Specializari	<input checked="" type="checkbox"/>					

SELECT denumire, numar\_ani, id\_specializare  
FROM Specializari

Design

Specializari

Adaugare

Modificare

Stergere

Confirmare

Renuntare

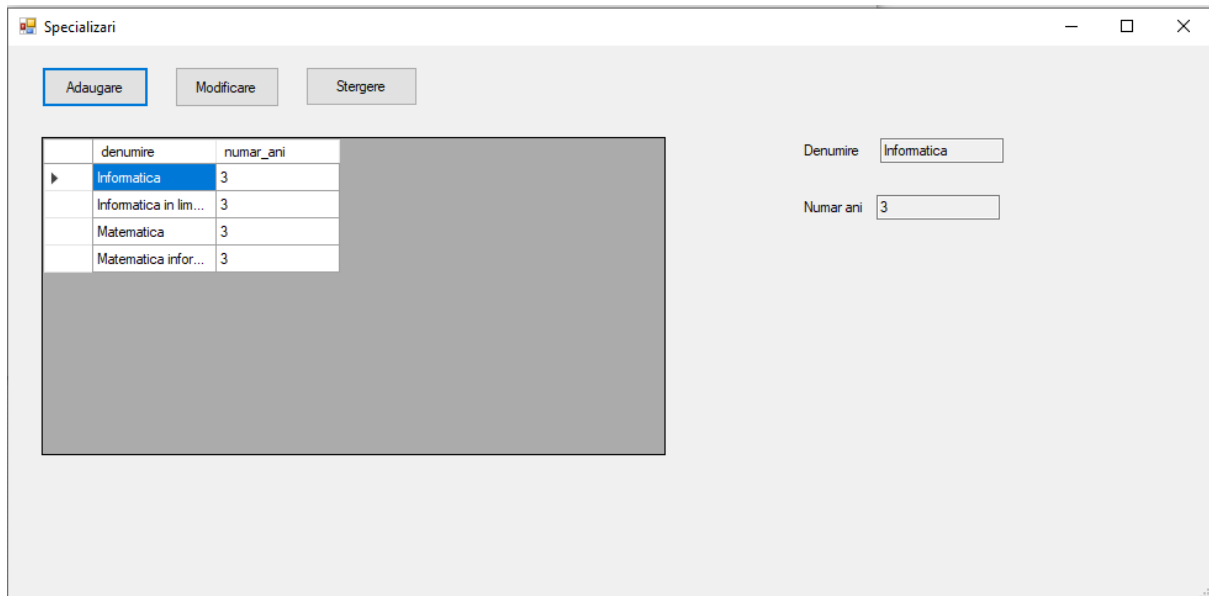
denumire

numar\_ani

Denumire

Numar ani

## Executie



Specializari

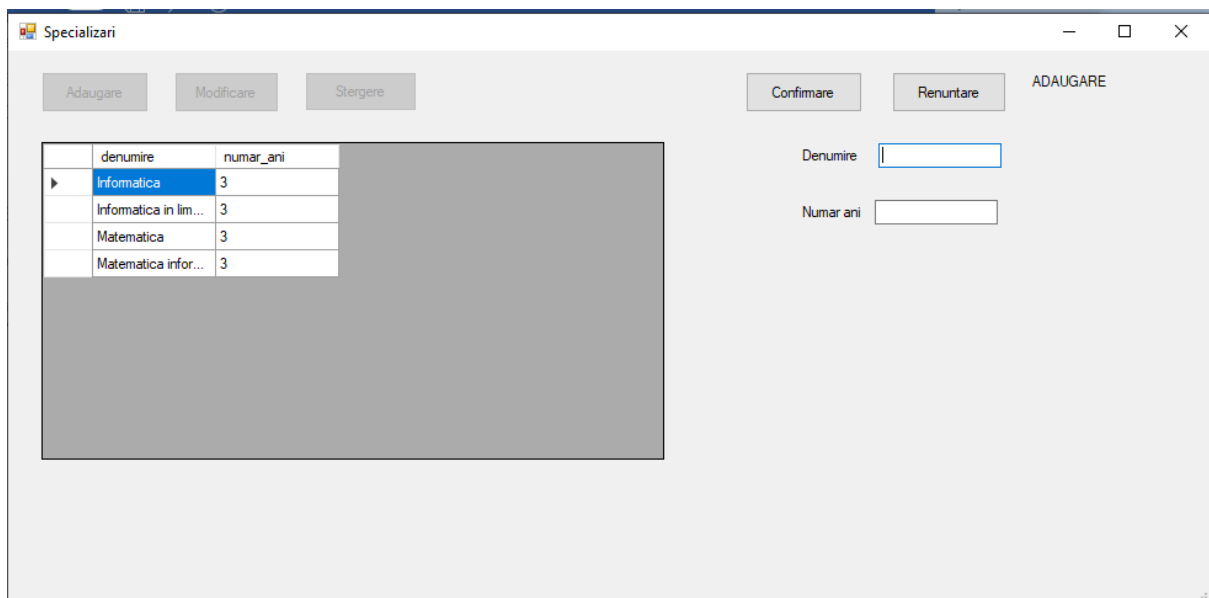
Adaugare Modificare Stergere

	denumire	numar_anii
►	Informatica	3
	Informatica in lim...	3
	Matematica	3
	Matematica infor...	3

Denumire Informatica

Numar ani 3

## Adaugare inregistrare:



Specializari

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

	denumire	numar_anii
►	Informatica	3
	Informatica in lim...	3
	Matematica	3
	Matematica infor...	3

Denumire

Numar ani

Specializari

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

	denumire	numar_ani
►	Informatica	3
	Informatica in lim...	3
	Matematica	3
	Matematica infor...	3

Denumire

Numar ani

Insert into Specializari(denumire, numar\_ani) Select 'Geografie','3'

OK

Specializari

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

	denumire	numar_ani
►	Informatica	3
	Informatica in lim...	3
	Matematica	3
	Matematica infor...	3
	Geografie	3

Denumire

Numar ani

Modificare inregistrare:

Specializari

Adaugare Modificare Stergere

denumire	numar_anii
Informatica	3
Informatica in lim...	3
Matematica	3
Matematica infor...	3
Geografie	3

Confirmare Renuntare MODIFICARE

Denumire

Numar ani

Specializari

Adaugare Modificare Stergere

denumire	numar_anii
Informatica	3
Informatica in lim...	3
Matematica	3
Matematica infor...	3
Geografie	3

Confirmare Renuntare MODIFICARE

Denumire

Numar ani

Update Specializari Set denumire = 'Istorie',numar\_anii = '4' Where id\_specializare = 6

OK

Specializari

Adaugare Modificare Stergere

denumire	numar_anii
Informatica	3
Informatica in lim...	3
Matematica	3
Matematica infor...	3
Istorie	4

Denumire

Numar ani



## Stergere inregistrare:

Specializari

Adaugare Modificare Stergere

	denumire	numar_ani
	Informatica	3
	Informatica in lim...	3
	Matematica	3
	Matematica infor...	3
▶	Istorie	4

Denumire Istorie

Numar ani 4

Stergere inregistrare

! Confirmati stergerea

Yes No

Specializari

Adaugare Modificare Stergere

	denumire	numar_ani
	Informatica	3
	Informatica in lim...	3
	Matematica	3
	Matematica infor...	3
▶	Istorie	4

Denumire Istorie

Numar ani 4

Delete From Specializari Where id\_specializare = 6

OK

Specializari

Adaugare Modificare Stergere

	denumire	numar_ani
	Informatica	3
	Informatica in lim...	3
	Matematica	3
▶	Matematica infor...	3

Denumire

Numar ani

Cod

```
using System;
using System.Windows.Forms;
using System.Data.OleDb;

namespace NichiforVlad
{
    public partial class Specializari : Form
    {
        public Specializari()
        {
            InitializeComponent();
        }

        private void Specializari_Load(object sender, EventArgs e)
        {
            // TODO: This line of code loads data into the
            'specializariDS.Specializari' table. You can move, or remove it, as needed.
            this.specializariTableAdapter.Fill(this.specializariDS.Specializari);

            //Protectie grid
            dataGridView1.AllowUserToAddRows = false;
            dataGridView1.AllowUserToDeleteRows = false;
            dataGridView1.ReadOnly = true;

            //Initializare lblOp
            lblOp.Text = "";

            //Configurare(butoane)
            configureazaButoane(true);

            //Protectie componente Panel
            protectiePanel(true);

            //Legare controale
            legareControale(true);
        }
    }
}
```

```

private void configureazaButoane(bool v)
{
    bRenuntare.Visible = !v;
    bConfirmare.Visible = !v;
    lId.Visible = false;

    bAdaugare.Enabled = v;
    bModificare.Enabled = v;
    bStergere.Enabled = v;
}
private void legareControale(bool v)
{
    if (v)
    {
        txtDenumire.DataBindings.Add("Text", specializariBindingSource,
"denumire");
        txtNrAni.DataBindings.Add("Text", specializariBindingSource,
"numar_an");
        lId.DataBindings.Add("Text", specializariBindingSource,
"id_specializare");
    }
    else
    {
        txtDenumire.DataBindings.Clear();
        txtNrAni.DataBindings.Clear();
        lId.DataBindings.Clear();
    }
}
private void protectiePanel(bool v)
{
    txtDenumire.ReadOnly = v;
    txtNrAni.ReadOnly = v;
}
private void golireCampuri()
{
    txtDenumire.Text = "";
    txtNrAni.Text = "";
}
private bool validareCampuriObligatorii()
{
    //Validare de completare obligatorie campurile
    if (txtDenumire.Text == "")
    {
        MessageBox.Show("Completati Denumirea!");
        txtDenumire.Focus();
        return false;
    }
    if (txtNrAni.Text == "")
    {
        MessageBox.Show("Completati Numarul de ani!");
        txtNrAni.Focus();
        return false;
    }
    return true;
}

private void adauga_inregistrare()

```

```

{
    string listaCampuri;
    string listaValori;
    OleDbConnection con = new OleDbConnection();
    OleDbCommand cmd = new OleDbCommand();
    con.ConnectionString =
specializariTableAdapter.Connection.ConnectionString;
    cmd.Connection = con;
    listaCampuri = "denumire, numar_anii";
    listaValori = "'" + txtDenumire.Text + "'" + "," + txtNrAni.Text + "'";
    cmd.CommandText = "Insert into Specializari(" + listaCampuri + ") " +
"Select " + listaValori;
    MessageBox.Show(cmd.CommandText);
    con.Open();
    cmd.ExecuteNonQuery();
    con.Close();
}
private void refresh_grid(int p)
{
    specializariTableAdapter.Fill(specializariDS.Specializari);
    specializariBindingSource.Position = p;
}
private void modifica_inregistrare()
{
    string listaSet;
    OleDbConnection con = new OleDbConnection();
    OleDbCommand cmd = new OleDbCommand();
    con.ConnectionString =
specializariTableAdapter.Connection.ConnectionString;
    cmd.Connection = con;
    listaSet = "denumire = '" + txtDenumire.Text + "'," + "numar_anii = '" +
txtNrAni.Text + "'";
    cmd.CommandText = "Update Specializari Set " + listaSet + " Where
id_specializare =" + lId.Text;
    MessageBox.Show(cmd.CommandText);
    con.Open();
    cmd.ExecuteNonQuery();
    con.Close();
}

private void bAdaugare_Click(object sender, EventArgs e)
{
    //Configurare butoane
    configureazaButoane(false);

    //Dezlegare controale Panel
    legareControale(false);

    //Ridicare protectie controale Panel
    protectiePanel(false);

    //Modificare lblOp
    lblOp.Text = "ADAUGARE";

    //Pozitionare cursor pe primul camp
    txtDenumire.Focus();
}

```

```

        // Golire campuri
        golireCampuri();
    }

    private void bModificare_Click(object sender, EventArgs e)
    {
        //Configurare butoane
        configureazaButoane(false);

        //Dezlegare controale Panel
        legareControale(false);

        //Ridicare protectie controale Panel
        protectiePanel(false);

        //Modificare lblOp
        lblOp.Text = "MODIFICARE";

        //Pozitionare cursor pe primul camp
        txtDenumire.Focus();
    }

    private void bStergere_Click(object sender, EventArgs e)
    {
        const string mesaj = "Confirmati stergerea";
        const string titlu = "Stergere inregistrare";
        var rezultat = MessageBox.Show(mesaj, titlu, MessageBoxButtons.YesNo,
        MessageBoxIcon.Warning);
        if (rezultat == DialogResult.No)
            return;

        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        OleDbDataReader r;
        con.ConnectionString =
        specializariTableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        cmd.CommandText = "Select id_specializare From AnUniversitar where
        id_specializare=" + lblId.Text;
        con.Open();
        r = cmd.ExecuteReader();
        if (r.Read())
        {
            MessageBox.Show("Specializare referita in tabela AnUniversitar! Nu se
        poate sterge!");
            con.Close();
            return;
        }
        con.Close();
        cmd.CommandText = "Delete From Specializari Where id_specializare = " +
        lblId.Text;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
        refresh_grid(specializariBindingSource.Position);
    }

```

```

private void bConfirmare_Click(object sender, EventArgs e)
{
    if (lOp.Text == "ADAUGARE")
    {
        if (!validareCampuriObligatorii())
            return;
        adauga_inregistrare();
        golireCampuri();

        //Pune cursor pe primul camp
        txtDenumire.Focus();
        refresh_grid(specializariBindingSource.Position);
    }
    else if (lOp.Text == "MODIFICARE")
    {
        modifica_inregistrare();
        refresh_grid(specializariBindingSource.Position);

        //Initializare lblOp
        lOp.Text = "";

        //Configurare(butoane)
        configureazaButoane(true);

        //Protectie componente Panel
        protectiePanel(true);

        //Legare controale
        legareControale(true);
    }
    else
        MessageBox.Show("Operatie actualizare neefectuata");
}

```

```

private void bRenuntare_Click(object sender, EventArgs e)
{
    //Initializare lblOp
    lOp.Text = "";

    //Configurare(butoane)
    configureazaButoane(true);

    //Protectie componente Panel
    protectiePanel(true);

    //Legare controale
    legareControale(true);
}

```

```

private void txtNrAni_Leave(object sender, EventArgs e)
{
    decimal p;
    if (lOp.Text == "")
        return;
    if (txtNrAni.Text == "")
        return;
}

```

```

        if (bRenuntare.Focused)
            return;
        try
        {
            p = Convert.ToDecimal(txtNrAni.Text);
        }
        catch
        {
            MessageBox.Show("Format eronat");
            txtNrAni.Focus();
            return;
        }
    }

    private void txtDenumire_Leave(object sender, EventArgs e)
    {
        decimal p;
        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        OleDbDataReader r;
        if (lOp.Text == "")
            return;
        if (txtDenumire.Text == "")
            return;
        if (bRenuntare.Focused)
            return;
        con.ConnectionString =
specializariTableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        if (lOp.Text == "ADAugARE")
        {
            cmd.CommandText = "Select denumire From Specializari where denumire='"
+ txtDenumire.Text + "'";
            con.Open();
            r = cmd.ExecuteReader();
            if (r.Read())
            {
                MessageBox.Show("Specializarea deja exista");
                txtDenumire.Focus();
                return;
            }
            con.Close();
        }
        else if (lOp.Text == "MODIFICARE")
        {
            cmd.CommandText = "Select denumire From Specializari where denumire='"
+ txtDenumire.Text + "' and id_specializare <> " + lId.Text;
            con.Open();
            r = cmd.ExecuteReader();
            if (r.Read())
            {
                MessageBox.Show("Specializare deja existenta");
                txtDenumire.Focus();
                return;
            }
            con.Close();
        }
    }

```

```

    }
}
}

```

## AniUniversitari

Data set

Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter	Or...	Or...	Or...
an_universitar		AnUnivers...	<input checked="" type="checkbox"/>						
id_specializare		AnUnivers...	<input checked="" type="checkbox"/>						
denumire		Specializari	<input checked="" type="checkbox"/>						

```

SELECT AnUniversitar.an_universitar, AnUniversitar.id_specializare, Specializari.denumire, AnUniversitar.an_specializare, AnUniversitar.numar_studenti
FROM (AnUniversitar INNER JOIN
      Specializari ON AnUniversitar.id_specializare = Specializari.id_specializare)

```

## Design

Adaugare

Modificare

Stergere

Confirmare

Renuntare

an_universitar	denumire	an_specializare	numar_studenti

Data incept an universitar

Tuesday, 18 May 2021

Specializare

An Specializare

Numar Studenti



## Executie

AniUniversitari

Adaugare Modificare Stergere

	an_universitar	denumire	an_specializare	numar_studenti
▶	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data inceput an universitar Monday , 1 October 2018

Specializare Informatica

An Specializare 1

Numar Studenti 80

## Adaugare inregistrare:

AniUniversitari

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

	an_universitar	denumire	an_specializare	numar_studenti
▶	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data inceput an universitar Tuesday , 18 May 2021

Specializare

An Specializare

Numar Studenti

AniUniversitari

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

	an_universitar	denumire	an_specializare	numar_studenti
▶	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data inceput an universitar Tuesday , 18 May 2021

Specializare Informatica in limba e

An Specializare 2

Numar Studenti 20

Insert into AniUniversitar(an\_universitar, id\_specializare, an\_specializare, numar\_studenti) Select #5/18/2021#, '2', '2', '20'

OK

AniUniversitari

Adaugare Modificare Stergere

	an_universitar	denumire	an_specializare	numar_studenti
▶	18/05/2021	Informatica in lim...	2	20
	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data inceput an universitar Tuesday , 18 May 2021

Specializare Informatica in limba e

An Specializare 2

Numar Studenti 20

Modificare inregistrare:

AniUniversitari

Adaugare Modificare Stergere

Confirmare Renuntare MODIFICARE

	an_universitar	denumire	an_specializare	numar_studenti
▶	18/05/2021	Informatica in lim...	2	20
	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data inceput an universitar Tuesday , 18 May 2021

Specializare Informatica in limba e

An Specializare 2

Numar Studenti 20

AniUniversitari

Adaugare Modificare Stergere

Confirmare Renuntare MODIFICARE

	an_universitar	denumire	an_specializare	numar_studenti
▶	18/05/2021	Informatica in lim...	2	20
	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data incept an universitar Tuesday , 18 May 2021

Specializare Matematica informati

An Specializare 3

Numar Studenti 90

Update AnUniversitar Set an\_universitar = #5/18/2021#, id\_specializare = 4, an\_specializare = 3, numar\_studenti = 90 Where an\_universitar = #5/18/2021# and id\_specializare = 2 and an\_specializare = 2

OK

AniUniversitari

Adaugare Modificare Stergere

	an_universitar	denumire	an_specializare	numar_studenti
▶	18/05/2021	Matematica infor...	3	90
	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data incept an universitar Tuesday , 18 May 2021

Specializare Matematica informati

An Specializare 3

Numar Studenti 90

Stergere inregistrare:

AniUniversitari

Adaugare Modificare Stergere

	an_universitar	denumire	an_specializare	numar_studenti
▶	18/05/2021	Matematica infor...	3	90
	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data incept an universitar Tuesday , 18 May 2021

Specializare Matematica informati

An Specializare 3

Numar Studenti 90

Stergere inregistrare

Confirmati stergerea

Yes No

AniUniversitari

Adaugare Modificare Stergere

	an_universitar	denumire	an_specializare	numar_studenti
▶	18/05/2021	Matematica infor...	3	90
	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data inceput an universitar Tuesday , 18 May 2021

Specializare Matematica informati

An Specializare 3

Numar Studenti 90

Delete From AniUniversitar Where an\_universitar = #5/18/2021# and id\_specializare = 4 and an\_specializare = 3

OK

AniUniversitari

Adaugare Modificare Stergere

	an_universitar	denumire	an_specializare	numar_studenti
▶	01/10/2018	Informatica	1	80
	01/10/2018	Informatica	2	70
	01/10/2018	Informatica	3	60
	01/10/2018	Informatica in lim...	1	80
	01/10/2018	Informatica in lim...	2	70
	01/10/2018	Informatica in lim...	3	60

Data inceput an universitar Monday , 1 October 2018

Specializare Informatica

An Specializare 1

Numar Studenti 80

Cod

```
using System;
using System.Windows.Forms;
using System.Data.OleDb;

namespace NichiforVlad
{
    public partial class AniUniversitari : Form
    {
        string AnSpec = "";
        public AniUniversitari()
        {
            InitializeComponent();
        }
        private void AniUniversitari_Load(object sender, EventArgs e)
        {
            // TODO: This line of code loads data into the
            'anUniversitarDS.DataTable1' table. You can move, or remove it, as needed.
            this.dataTable1TableAdapter.Fill(this.anUniversitarDS.DataTable1);
        }
    }
}
```

```

        // TODO: This line of code loads data into the
        'specializariDS.Specializari' table. You can move, or remove it, as needed.
        this.specializariTableAdapter.Fill(this.specializariDS.Specializari);
        //Initializare lblOp
        lblOp.Text = "";

        //Configurare(butoane)
        configureazaButoane(true);

        //Protectie componente Panel
        protectiePanel(true);

        //Legare controale
        legareControale(true);
    }
    private void configureazaButoane(bool v)
    {
        bRenuntare.Visible = !v;
        bConfirmare.Visible = !v;
        lblSpec.Visible = false;

        bAdaugare.Enabled = v;
        bModificare.Enabled = v;
        bStergere.Enabled = v;
    }
    private void legareControale(bool v)
    {
        if (v)
        {
            dateTimePicker1.DataBindings.Add("Value", dataTable1BindingSource,
            "an_universitar");
            cmbSpec.DataBindings.Add("Text", dataTable1BindingSource, "denumire");
            txtAnSpec.DataBindings.Add("Text", dataTable1BindingSource,
            "an_specializare");
            lblSpec.DataBindings.Add("Text", dataTable1BindingSource,
            "id_specializare");
            txtNrStud.DataBindings.Add("Text", dataTable1BindingSource,
            "numar_studenti");
        }
        else
        {
            dateTimePicker1.DataBindings.Clear();
            txtAnSpec.DataBindings.Clear();
            cmbSpec.DataBindings.Clear();
            txtNrStud.DataBindings.Clear();
            lblSpec.DataBindings.Clear();
        }
    }
    private void protectiePanel(bool v)
    {
        txtAnSpec.ReadOnly = v;
        cmbSpec.Enabled = !v;
        dateTimePicker1.Enabled = !v;
        txtNrStud.ReadOnly = v;
    }

```

```

private void golireCampuri()
{
    txtAnSpec.Text = "";
    dateTimePicker1.Text = "";
    cmbSpec.Text = "";
    txtNrStud.Text = "";
}

private bool validareCampuriObligatorii()
{
    //Validare de completare obligatorie campurile
    if (txtAnSpec.Text == "")
    {
        MessageBox.Show("Completati Anul specializarii!");
        txtAnSpec.Focus();
        return false;
    }
    if (cmbSpec.Text == "")
    {
        MessageBox.Show("Alegeti o specializare!");
        cmbSpec.Focus();
        return false;
    }
    if (txtNrStud.Text == "")
    {
        MessageBox.Show("Completati nr de studenti!");
        txtNrStud.Focus();
        return false;
    }
    if (dateTimePicker1.Text == "")
    {
        MessageBox.Show("Alegeti o data!");
        dateTimePicker1.Focus();
        return false;
    }
    return true;
}

private void adauga_inregistrare()
{
    string listaCampuri;
    string listaValori;
    OleDbConnection con = new OleDbConnection();
    OleDbCommand cmd = new OleDbCommand();
    con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
    cmd.Connection = con;
    listaCampuri = "an_universitar, id_specializare, an_specializare,
numar_studenti";
    string idSpec = cmbSpec.SelectedValue.ToString();
    DateTime d = dateTimePicker1.Value;
    listaValori = "#" + Convert.ToString(d.Month) + "/" +
Convert.ToString(d.Day) + "/" + Convert.ToString(d.Year) + "#" + "," + idSpec + "," +
+ txtAnSpec.Text + "," + txtNrStud.Text + "";
    cmd.CommandText = "Insert into AnUniversitar(" + listaCampuri + ") " +
"Select " + listaValori;
    MessageBox.Show(cmd.CommandText);
    con.Open();
    cmd.ExecuteNonQuery();
}

```

```

        con.Close();
    }
    private void refresh_grid(int p)
    {
        dataTable1TableAdapter.Fill(anUniversitarDS.DataTable1);
        dataTable1BindingSource.Position = p;
    }
    private void modifica_inregistrare()
    {
        string listaSet;
        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        DateTime d = dateTimePicker1.Value;
        string idSpec = cmbSpec.SelectedValue.ToString();
        listaSet = "an_universitar = #" + Convert.ToString(d.Month) + "/" +
        Convert.ToString(d.Day) + "/" + Convert.ToString(d.Year) + "#, " + "id_specializare = "
        + idSpec + "," +
        " an_specializare = " + txtAnSpec.Text + " , numar_studenti = " +
        txtNrStud.Text;
        cmd.CommandText = "Update AnUniversitar Set " + listaSet + " Where
        an_universitar = #" + Convert.ToString(d.Month) + "/" + Convert.ToString(d.Day) + "/"
        + Convert.ToString(d.Year) +
        "# and id_specializare = " + lIdSpec.Text + " and an_specializare = "
        + AnSpec;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
    }

    private void bAdaugare_Click(object sender, EventArgs e)
    {
        //Configurare butoane
        configureazaButoane(false);

        //Dezlegare controale Panel
        legareControale(false);

        //Ridicare protectie controale Panel
        protectiePanel(false);

        //Modificare lblOp
        lblOp.Text = "ADAUGARE";

        //Pozitionare cursor pe primul camp
        dateTimePicker1.Focus();

        // Golire campuri
        golireCampuri();
    }

    private void bModificare_Click(object sender, EventArgs e)
    {
        //Configurare butoane
        configureazaButoane(false);
    }

```

```

        //Dezlegare controale Panel
        legareControale(false);

        //Ridicare protectie controale Panel
        protectiePanel(false);

        //Modificare lblOp
        lOp.Text = "MODIFICARE";

        //Pozitionare cursor pe primul camp
        dateTimePicker1.Focus();
        AnSpec = txtAnSpec.Text;
    }

    private void bStergere_Click(object sender, EventArgs e)
    {
        const string mesaj = "Confirmati stergerea";
        const string titlu = "Stergere inregistrare";
        var rezultat = MessageBox.Show(mesaj, titlu, MessageBoxButtons.YesNo,
        MessageBoxIcon.Warning);
        if (rezultat == DialogResult.No)
            return;
        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        DateTime d = dateTimePicker1.Value;
        string idSpec = cmbSpec.SelectedValue.ToString();
        cmd.CommandText = "Delete From AnUniversitar Where an_universitar = #" +
        Convert.ToString(d.Month) + "/" + Convert.ToString(d.Day) + "/" +
        Convert.ToString(d.Year) +
        "# and id_specializare = " + idSpec + " and an_specializare = " +
        txtAnSpec.Text;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
        dataTable1BindingSource.RemoveCurrent();
    }

    private void bConfirmare_Click(object sender, EventArgs e)
    {
        if (lOp.Text == "ADAUGARE")
        {
            if (!validareCampuriObligatorii())
                return;
            adauga_inregistrare();
            golireCampuri();

            //Pune cursor pe primul camp
            dateTimePicker1.Focus();
            refresh_grid(dataTable1BindingSource.Position);
        }
        else if (lOp.Text == "MODIFICARE")
        {
            modifica_inregistrare();
        }
    }

```



```

        refresh_grid(dataTable1BindingSource.Position);

        //Initializare lblOp
        lOp.Text = "";

        //Configurare(butoane)
        configureazaButoane(true);

        //Protectie componente Panel
        protectiePanel(true);

        //Legare controale
        legareControale(true);
    }
    else
        MessageBox.Show("Operatie actualizare neefectuata");
}

private void bRenuntare_Click(object sender, EventArgs e)
{
    //Initializare lblOp
    lOp.Text = "";

    //Configurare(butoane)
    configureazaButoane(true);

    //Protectie componente Panel
    protectiePanel(true);

    //Legare controale
    legareControale(true);
}

private void txtNrStud_Leave(object sender, EventArgs e)
{
    decimal p;
    if (lOp.Text == "")
        return;
    if (txtNrStud.Text == "")
        return;
    if (bRenuntare.Focused)
        return;
    try
    {
        p = Convert.ToDecimal(txtNrStud.Text);
    }
    catch
    {
        MessageBox.Show("Format eronat");
        txtNrStud.Focus();
        return;
    }
}

private void txtAnSpec_Leave(object sender, EventArgs e)
{
    decimal p;

```

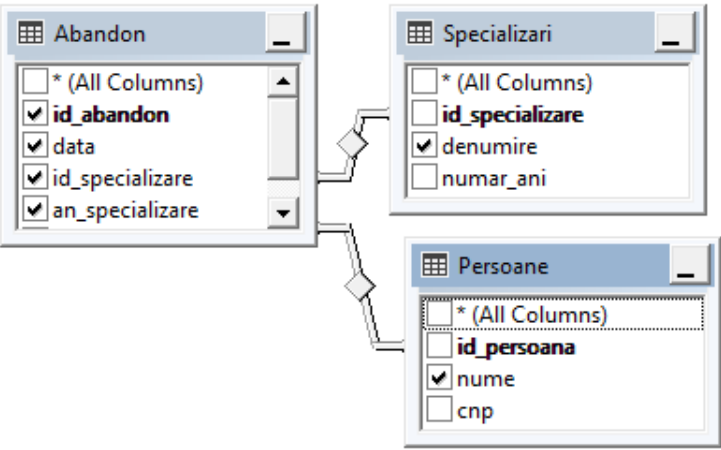
```

        if (lop.Text == "")
            return;
        if (txtAnSpec.Text == "")
            return;
        if (bRenuntare.Focused)
            return;
        try
        {
            p = Convert.ToDecimal(txtAnSpec.Text);
        }
        catch
        {
            MessageBox.Show("Format eronat");
            txtAnSpec.Focus();
            return;
        }
    }
}
}

```

## Abandon

Data set



	Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter	Or...	Or...	Or...
▶	id_abandon		Abandon	<input checked="" type="checkbox"/>						
	data		Abandon	<input checked="" type="checkbox"/>						
	id_specializare		Abandon	<input checked="" type="checkbox"/>						
	denumire		Specializari	<input checked="" type="checkbox"/>						
	an_specializare		Abandon	<input checked="" type="checkbox"/>						
	id_persoana		Abandon	<input checked="" type="checkbox"/>						
	nume		Persoane	<input checked="" type="checkbox"/>						
				<input type="checkbox"/>						

```

SELECT Abandon.id_abandon, Abandon.data, Abandon.id_specializare, Specializari.denumire, Abandon.an_specializare, Abandon.id_persoana, Persoane.nume
FROM ((Abandon INNER JOIN
      Specializari ON Abandon.id_specializare = Specializari.id_specializare) INNER JOIN
      Persoane ON Abandon.id_persoana = Persoane.id_persoana)

```

## Design

Abandon

Adaugare Modificare Stergere

Confirmare Renuntare

Data: Tuesday, 18 May 2021

Specializare

An specializare

Nume Student

data	denumire specializare	an_specializare	nume
------	-----------------------	-----------------	------

## Executie

Abandon

Adaugare Modificare Stergere

Data: Thursday, 10 January 2019

Specializare: Informatica

An specializare: 1

Nume Student: Popescu Pop

data	denumire specializare	an_specializare	nume
10/01/2019	Informatica	1	Popescu Pop
26/01/2019	Informatica in lim...	2	Floroiu Florescu
14/05/2021	Informatica in lim...	2	Popescu Mihai
14/05/2021	Matematica	3	Marin Ion
14/05/2021	Informatica	1	George Gheorghe
16/05/2021	Informatica	1	Popescu Mihai
16/11/2018	Informatica	1	Manea Cosmin

Adaugare inregistrare:

Abandon

Adaugare

Modificare

Stergere

Confirmare

Renuntare

ADAUGARE

	data	denumire specializare	an_specializare	nume
▶	10/01/2019	Informatica	1	Popescu Pop
	26/01/2019	Informatica in lim...	2	Floroiu Florescu
	14/05/2021	Informatica in lim...	2	Popescu Mihai
	14/05/2021	Matematica	3	Marin Ion
	14/05/2021	Informatica	1	George Gheorghe
	16/05/2021	Informatica	1	Popescu Mihai
	16/11/2018	Informatica	1	Manea Cosmin

Data

Tuesday . 18 May 2021

Specializare

An specializare

Nume Student

Abandon

Adaugare

Modificare

Stergere

Confirmare

Renuntare

ADAUGARE

	data	denumire specializare	an_specializare	nume
▶	10/01/2019	Informatica	1	Popescu Pop
	26/01/2019	Informatica in lim...	2	Floroiu Florescu
	14/05/2021	Informatica in lim...	2	Popescu Mihai
	14/05/2021	Matematica	3	Marin Ion
	14/05/2021	Informatica	1	George Gheorghe
	16/05/2021	Informatica	1	Popescu Mihai
	16/11/2018	Informatica	1	Manea Cosmin

Data

Tuesday . 18 May 2021

Specializare

Matematica informati

An specializare

1

Nume Student

Badea Miruna

Insert into Abandon(data, id\_specializare, an\_specializare, id\_persoana)

Select #5/18/2021#, 4, 1, 7

OK

Abandon

Adaugare

Modificare

Stergere

Confirmare

Renuntare

ADAUGARE

Data

Tuesday . 18 May 2021

Specializare

An specializare

Nume Student

	data	denumire specializare	an_specializare	nume
▶	10/01/2019	Informatica	1	Popescu Pop
	26/01/2019	Informatica in limba engleza	2	Floroiu Florescu
	14/05/2021	Informatica in limba engleza	2	Popescu Mihai
	14/05/2021	Matematica	3	Marin Ion
	14/05/2021	Informatica	1	George Gheorghe
	16/05/2021	Informatica	1	Popescu Mihai
	16/11/2018	Informatica	1	Manea Cosmin
	18/05/2021	Matematica informatica	1	Badea Miruna

Modificare inregistrare:

Abandon

Adaugare

Modificare

Stergere

Confirmare

Renuntare

MODIFICARE

Data

Tuesday . 18 May 2021

Specializare

Matematica informatica

An specializare

1

Nume Student

Badea Miruna

	data	denumire specializare	an_specializare	nume
	10/01/2019	Informatica	1	Popescu Pop
	26/01/2019	Informatica in limba engleza	2	Floroiu Florescu
	14/05/2021	Informatica in limba engleza	2	Popescu Mihai
	14/05/2021	Matematica	3	Marin Ion
	14/05/2021	Informatica	1	George Gheorghe
	16/05/2021	Informatica	1	Popescu Mihai
	16/11/2018	Informatica	1	Manea Cosmin
▶	18/05/2021	Matematica informatica	1	Badea Miruna

Abandon

Adaugare Modificare Stergere

data	denumire specializare	an_specializare	nume
10/01/2019	Informatica	1	Popescu Pop
26/01/2019	Informatica in limba engleza	2	Floroiu Florescu
14/05/2021	Informatica in limba engleza	2	Popescu Mihai
14/05/2021	Matematica	3	Marin Ion
14/05/2021	Informatica	1	George Gheorghe
16/05/2021	Informatica	1	Popescu Mihai
16/11/2018	Informatica	1	Manea Cosmin
18/05/2021	Matematica informatica	1	Badea Miruna

Confirmare Renuntare MODIFICARE

Data Tuesday , 18 May 2021

Specializare Informatica in limba e

An specializare 3

Nume Student Badea Miruna

Update Abandon Set data = #5/18/2021#, id\_specializare = 2, an\_specializare = 3 , id\_persoana = 7 Where id\_abandon = 23

OK

Abandon

Adaugare Modificare Stergere

data	denumire specializare	an_specializare	nume
10/01/2019	Informatica	1	Popescu Pop
26/01/2019	Informatica in limba engleza	2	Floroiu Florescu
14/05/2021	Informatica in limba engleza	2	Popescu Mihai
14/05/2021	Matematica	3	Marin Ion
14/05/2021	Informatica	1	George Gheorghe
16/05/2021	Informatica	1	Popescu Mihai
16/11/2018	Informatica	1	Manea Cosmin
18/05/2021	Informatica in limba engleza	3	Badea Miruna

Data Tuesday , 18 May 2021

Specializare Informatica in limba e

An specializare 8

Nume Student Badea Miruna

Stergere inregistrare:

Abandon

Adaugare

Modificare

Stergere

	data	denumire specializare	an_specializare	nume
	10/01/2019	Informatica	1	Popescu Pop
	26/01/2019	Informatica in limba engleza	2	Floroiu Florescu
	14/05/2021	Informatica in limba engleza	2	Popescu Mihai
	14/05/2021	Matematica	3	Marin Ion
	14/05/2021	Informatica	1	George Gheorghe
	16/05/2021	Informatica	1	Popescu Mihai
	16/11/2018	Informatica	1	Manea Cosmin
▶	18/05/2021	Informatica in limba engleza	3	Badea Miruna

Data

Tuesday , 18 May 2021

Specializare

Informatica in limba e

An specializare

3

Nume Student

Badea Miruna

Stergere inregistrare

Confirmati stergerea

Yes

No

Abandon

Adaugare

Modificare

Stergere

	data	denumire specializare	an_specializare	nume
	10/01/2019	Informatica	1	Popescu Pop
	26/01/2019	Informatica in limba engleza	2	Floroiu Florescu
	14/05/2021	Informatica in limba engleza	2	Popescu Mihai
	14/05/2021	Matematica	3	Marin Ion
	14/05/2021	Informatica	1	George Gheorghe
	16/05/2021	Informatica	1	Popescu Mihai
	16/11/2018	Informatica	1	Manea Cosmin
▶	18/05/2021	Informatica in limba engleza	3	Badea Miruna

Data

Tuesday , 18 May 2021

Specializare

Informatica in limba e

An specializare

3

Nume Student

Badea Miruna

Delete From Abandon Where id\_abandon = 23

OK

Abandon

data	denumire specializare	an_specializare	nume
10/01/2019	Informatica	1	Popescu Pop
26/01/2019	Informatica in limba engleza	2	Floroiu Florescu
14/05/2021	Informatica in limba engleza	2	Popescu Mihai
14/05/2021	Matematica	3	Marin Ion
14/05/2021	Informatica	1	George Gheorghe
16/05/2021	Informatica	1	Popescu Mihai
16/11/2018	Informatica	1	Manea Cosmin

Data: Friday, 16 November 2018

Specializare: Informatica

An specializare: 1

Nume Student: Manea Cosmin

Cod

```
using System;
using System.Windows.Forms;
using System.Data.OleDb;

namespace NichiforVlad
{
    public partial class Abandon : Form
    {
        public Abandon()
        {
            InitializeComponent();
        }

        private void Abandon_Load(object sender, EventArgs e)
        {
            // TODO: This line of code loads data into the 'studentiDS.Persoane'
            table. You can move, or remove it, as needed.
            this.persoaneTableAdapter.Fill(this.studentiDS.Persoane);
            // TODO: This line of code loads data into the
            'specializariDS.Specializari' table. You can move, or remove it, as needed.
            this.specializariTableAdapter.Fill(this.specializariDS.Specializari);
            // TODO: This line of code loads data into the 'abandonDS.DataTable1'
            table. You can move, or remove it, as needed.
            this.dataTable1TableAdapter.Fill(this.abandonDS.DataTable1);

            //Initializare lblOp
            lblOp.Text = "";

            //Configurare(butoane)
            configureazaButoane(true);

            //Protectie componente Panel
            protectiePanel(true);

            //Legare controale
```



```

        legareControale(true);
    }

    private void configureazaButoane(bool v)
    {
        bRenuntare.Visible = !v;
        bConfirmare.Visible = !v;
        lIdAb.Visible = false;
        lIdSpec.Visible = false;
        lIdPers.Visible = false;

        bAdaugare.Enabled = v;
        bModificare.Enabled = v;
        bStergere.Enabled = v;
    }
    private void legareControale(bool v)
    {
        if (v)
        {
            dateTimePicker1.DataBindings.Add("Value", dataTable1BindingSource,
"date");
            cmbSpec.DataBindings.Add("Text", dataTable1BindingSource, "denumire");
            txtAnSpec.DataBindings.Add("Text", dataTable1BindingSource,
"an_specializare");
            cmbNume.DataBindings.Add("Text", dataTable1BindingSource, "nume");
            lIdSpec.DataBindings.Add("Text", dataTable1BindingSource,
"id_specializare");
            lIdAb.DataBindings.Add("Text", dataTable1BindingSource, "id_abandon");
            lIdPers.DataBindings.Add("Text", dataTable1BindingSource,
"id_persoana");
        }
        else
        {
            dateTimePicker1.DataBindings.Clear();
            cmbNume.DataBindings.Clear();
            txtAnSpec.DataBindings.Clear();
            cmbSpec.DataBindings.Clear();
            lIdSpec.DataBindings.Clear();
            lIdAb.DataBindings.Clear();
            lIdPers.DataBindings.Clear();
        }
    }
    private void protectiePanel(bool v)
    {
        txtAnSpec.ReadOnly = v;
        cmbNume.Enabled = !v;
        cmbSpec.Enabled = !v;
        dateTimePicker1.Enabled = !v;
    }
    private void golireCampuri()
    {
        txtAnSpec.Text = "";
        dateTimePicker1.Text = "";
        cmbSpec.Text = "";
        cmbNume.Text = "";
    }
}

```

```

private bool validareCampuriObligatorii()
{
    //Validare de completare obligatorii campurile
    if (txtAnSpec.Text == "")
    {
        MessageBox.Show("Completati Anul specializarii!");
        txtAnSpec.Focus();
        return false;
    }
    if (cmbSpec.Text == "")
    {
        MessageBox.Show("Alegeti o specializare!");
        cmbSpec.Focus();
        return false;
    }
    if (cmbNume.Text == "")
    {
        MessageBox.Show("Alegeti un student!");
        cmbNume.Focus();
        return false;
    }
    if (dateTimePicker1.Text == "")
    {
        MessageBox.Show("Alegeti o data!");
        dateTimePicker1.Focus();
        return false;
    }
    return true;
}

private void adauga_inregistrare()
{
    string listaCampuri;
    string listaValori;
    OleDbConnection con = new OleDbConnection();
    OleDbCommand cmd = new OleDbCommand();
    con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
    cmd.Connection = con;
    listaCampuri = "data, id_specializare, an_specializare, id_persoana";
    string idSpec = cmbSpec.SelectedValue.ToString();
    string idPers = cmbNume.SelectedValue.ToString();
    DateTime d = dateTimePicker1.Value;
    listaValori = "#" + Convert.ToString(d.Month) + "/" +
    Convert.ToString(d.Day) + "/" + Convert.ToString(d.Year) + "#" + "," + idSpec + "," +
    + txtAnSpec.Text + "," + idPers + ",";
    cmd.CommandText = "Insert into Abandon(" + listaCampuri + ") " + "Select "
    + listaValori;
    MessageBox.Show(cmd.CommandText);
    con.Open();
    cmd.ExecuteNonQuery();
    con.Close();
}

private void refresh_grid(int p)
{
    dataTable1TableAdapter.Fill(abandonDS.DataTable1);
    dataTable1BindingSource.Position = p;
}

```

```

private void modifica_inregistrare()
{
    string listaSet;
    OleDbConnection con = new OleDbConnection();
    OleDbCommand cmd = new OleDbCommand();
    con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
    cmd.Connection = con;
    DateTime d = dateTimePicker1.Value;
    string idSpec = cmbSpec.SelectedValue.ToString();
    string idPers = cmbNume.SelectedValue.ToString();
    listaSet = "data = #" + Convert.ToString(d.Month) + "/" +
Convert.ToString(d.Day) + "/" + Convert.ToString(d.Year) + "#, " + "id_specializare = "
+ idSpec + "," +
        " an_specializare = " + txtAnSpec.Text + " , id_persoana = " + idPers;
    cmd.CommandText = "Update Abandon Set " + listaSet + " Where id_abandon ="
+ lIdAb.Text;
    MessageBox.Show(cmd.CommandText);
    con.Open();
    cmd.ExecuteNonQuery();
    con.Close();
}

private void bAaugare_Click(object sender, EventArgs e)
{
    //Configurare butoane
    configureazaButoane(false);

    //Dezlegare controale Panel
    legareControale(false);

    //Ridicare protectie controale Panel
    protectiePanel(false);

    //Modificare lblOp
    lOp.Text = "ADAUGARE";

    //Pozitionare cursor pe primul camp
    dateTimePicker1.Focus();

    // Golire campuri
    golireCampuri();
}

private void bModificare_Click(object sender, EventArgs e)
{
    //Configurare butoane
    configureazaButoane(false);

    //Dezlegare controale Panel
    legareControale(false);

    //Ridicare protectie controale Panel
    protectiePanel(false);

    //Modificare lblOp
    lOp.Text = "MODIFICARE";
}

```

```

        //Pozitionare cursor pe primul camp
        dateTimePicker1.Focus();
    }

    private void bStergere_Click(object sender, EventArgs e)
    {
        const string mesaj = "Confirmati stergerea";
        const string titlu = "Stergere inregistrare";
        var rezultat = MessageBox.Show(mesaj, titlu, MessageBoxButtons.YesNo,
        MessageBoxIcon.Warning);
        if (rezultat == DialogResult.No)
            return;
        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        cmd.CommandText = "Delete From Abandon Where id_abandon = " + lIdAb.Text;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
        dataTable1BindingSource.RemoveCurrent();
    }

    private void bConfirmare_Click(object sender, EventArgs e)
    {
        if (lOp.Text == "ADUGARE")
        {
            if (!validareCampuriObligatorii())
                return;
            adauga_inregistrare();
            golireCampuri();

            //Pune cursor pe primul camp
            dateTimePicker1.Focus();
            refresh_grid(dataTable1BindingSource.Position);
        }
        else if (lOp.Text == "MODIFICARE")
        {
            modifica_inregistrare();
            refresh_grid(dataTable1BindingSource.Position);

            //Initializare lblOp
            lOp.Text = "";

            //Configurare(butoane)
            configureazaButoane(true);

            //Protectie componente Panel
            protectiePanel(true);

            //Legare controale
            legareControale(true);
        }
        else
            MessageBox.Show("Operatie actualizare neefectuata");
    }

```

```

    }

    private void bRenuntare_Click(object sender, EventArgs e)
    {
        //Initializare lblOp
        lOp.Text = "";

        //Configurare(butoane)
        configureazaButoane(true);

        //Protectie componente Panel
        protectiePanel(true);

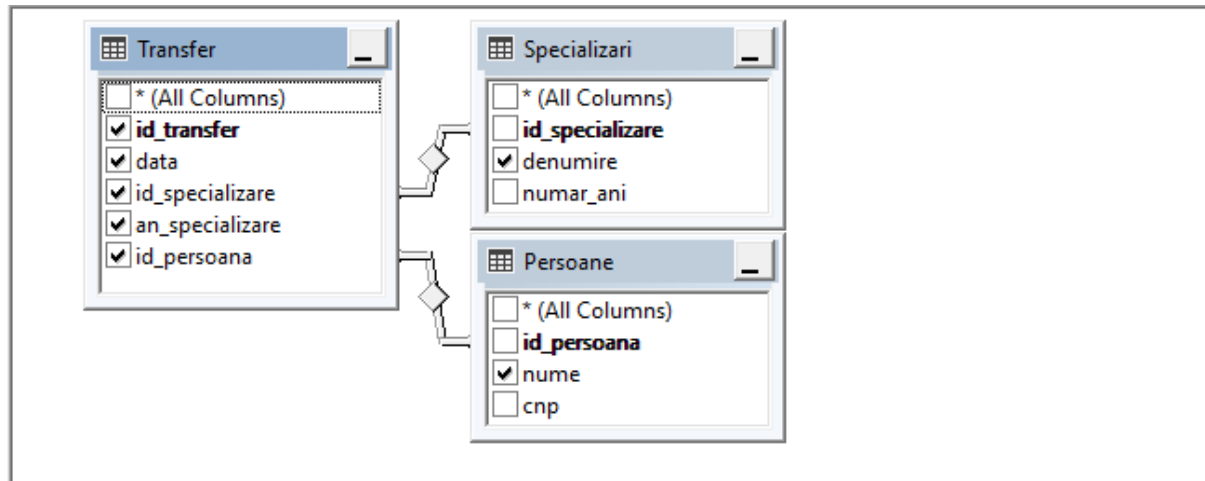
        //Legare controale
        legareControale(true);
    }

    private void txtAnSpec_Leave(object sender, EventArgs e)
    {
        decimal p;
        if (lOp.Text == "")
            return;
        if (txtAnSpec.Text == "")
            return;
        if (bRenuntare.Focused)
            return;
        try
        {
            p = Convert.ToDecimal(txtAnSpec.Text);
        }
        catch
        {
            MessageBox.Show("Format eronat");
            txtAnSpec.Focus();
            return;
        }
    }
}

```

# Transfer

Data set



	Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter	Or...	Or...	Or...
►	id_transfer		Transfer	<input checked="" type="checkbox"/>						
	data		Transfer	<input checked="" type="checkbox"/>						
	id_specializare		Transfer	<input checked="" type="checkbox"/>						
	denumire		Specializari	<input checked="" type="checkbox"/>						
	an_specializare		Transfer	<input checked="" type="checkbox"/>						
	id_persoana		Transfer	<input checked="" type="checkbox"/>						
	nume		Persoane	<input checked="" type="checkbox"/>						
				<input type="checkbox"/>						

SELECT Transfer.id\_transfer, Transfer.data, Transfer.id\_specializare, Specializari.denumire, Transfer.an\_specializare, Transfer.id\_persoana, Persoane.num  
FROM ((Transfer INNER JOIN Specializari ON Transfer.id\_specializare = Specializari.id\_specializare) INNER JOIN Persoane ON Transfer.id\_persoana = Persoane.id\_persoana)

## Design

The screenshot shows the design of the Transfer application. The window title is "Transfer". It features a toolbar with buttons for "Adaugare", "Modificare", "Stergere", "Confirmare", and "Renuntare". The main area displays a table with columns: nume, data, denumire, an\_specializare. On the right side, there are input fields for "Data" (Tuesday, 18 May 2021), "Specializare", "An specializare", and "Nume Student".

## Executie

Transfer

Adaugare Modificare Stergere

	nume	data	denumire	an_specializare
▶	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2

Data: Saturday , 10 November 2018

Specializare: Informatica

An specializare: 1

Nume Student: Popescu Pop

## Adaugare inregistrare:

Transfer

Adaugare Modificare Stergere

Confirmare Renuntare ADAUGARE

	nume	data	denumire	an_specializare
▶	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2

Data: Tuesday , 18 May 2021

Specializare:

An specializare:

Nume Student:

Transfer

Adaugare Modificare Stergere

	nume	data	denumire	an_specializare
▶	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2

Confirmare Renuntare ADAUGARE

Data Tuesday , 18 May 2021

Specializare Matematica informati

An specializare 2

Nume Student Mihai Ion

Insert into Transfer(data, id\_specializare, an\_specializare, id\_persoana)  
Select #5/18/2021#, '4', '2', '6'

OK

Transfer

Adaugare Modificare Stergere

	nume	data	denumire	an_specializare
	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2
▶	Mihai Ion	18/05/2021	Matematica infor...	2

Data Tuesday , 18 May 2021

Specializare Matematica informati

An specializare 2

Nume Student Mihai Ion

Modificare inregistrare:



Transfer

Adaugare
Modificare
Stergere

	nume	data	denumire	an_specializare
	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2
▶	Mihai Ion	18/05/2021	Matematica infor...	2

Confirmare
Renuntare
MODIFICARE

Data
Tuesday , 18 May 2021

Specializare
Matematica informati

An specializare
2

Nume Student
Mihai Ion

Transfer

Adaugare
Modificare
Stergere

	nume	data	denumire	an_specializare
	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2
▶	Mihai Ion	18/05/2021	Matematica infor...	2

Confirmare
Renuntare
MODIFICARE

Data
Tuesday , 18 May 2021

Specializare
Informatica

An specializare
3

Nume Student
Mihai Ion

Update Transfer Set data = #5/18/2021#, id\_specializare = 1, an\_specializare = 3, id\_persoana = 6 Where id\_transfer = 52
OK

Transfer

Adaugare
Modificare
Stergere

	nume	data	denumire	an_specializare
	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2
▶	Mihai Ion	18/05/2021	Informatica	3

Data
Tuesday , 18 May 2021

Specializare
Informatica

An specializare
3

Nume Student
Mihai Ion

## Stergere inregistrare:

Transfer

Adaugare Modificare **Stergere**

	nume	data	denumire	an_specializare
	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2
▶	Mihai Ion	18/05/2021	Informatica	3

Data Tuesday , 18 May 2021

Specializare Informatica

An specializare 3

Nume Student Mihai Ion

**Stergere inregistrare**

! Confirmati stergerea

Yes No

Transfer

Adaugare Modificare **Stergere**

	nume	data	denumire	an_specializare
	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
	Badea Miruna	18/05/2021	Informatica in lim...	2
▶	Mihai Ion	18/05/2021	Informatica	3

Data Tuesday , 18 May 2021

Specializare Informatica

An specializare 3

Nume Student Mihai Ion

Delete From Transfer Where id\_transfer = 52

OK

Transfer

Adaugare   Modificare   **Stergere**

	nume	data	denumire	an_specializare
	Popescu Pop	10/11/2018	Informatica	1
	Georgescu George	15/11/2018	Informatica	1
	Ionescu Ionel	25/11/2018	Informatica	1
	Popescu Mihai	16/05/2021	Matematica	2
	Marin Ion	10/11/2018	Informatica	1
	Mircea Dan	20/12/2018	Informatica	1
	Popa Mihai	16/05/2021	Matematica	1
▶	Badea Miruna	18/05/2021	Informatica in limba...	2

Data: Tuesday, 18 May 2021

Specializare: Informatica in limba e

An specializare: 2

Nume Student: Badea Miruna

Cod

```
using System;
using System.Windows.Forms;
using System.Data.OleDb;

namespace NichiforVlad
{
    public partial class Transfer : Form
    {
        public Transfer()
        {
            InitializeComponent();

            private void Transfer_Load(object sender, EventArgs e)
            {
                // TODO: This line of code loads data into the 'studentiDS.Persoane'
                table. You can move, or remove it, as needed.
                this.persoaneTableAdapter.Fill(this.studentiDS.Persoane);
                // TODO: This line of code loads data into the
                'specializariDS.Specializari' table. You can move, or remove it, as needed.
                this.specializariTableAdapter.Fill(this.specializariDS.Specializari);
                // TODO: This line of code loads data into the 'transferDS.DataTable1'
                table. You can move, or remove it, as needed.
                this.dataTable1TableAdapter.Fill(this.transferDS.DataTable1);

                //Initializare lblOp
                lblOp.Text = "";

                //Configurare(butoane)
                configureazaButoane(true);

                //Protectie componente Panel
                protectiePanel(true);

                //Legare controale
                legareControale(true);
            }
        }
    }
}
```

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    }

    private void configureazaButoane(bool v)
    {
        bRenuntare.Visible = !v;
        bConfirmare.Visible = !v;
        lIdTr.Visible = false;
        lIdSpec.Visible = false;
        lIdPers.Visible = false;

        bAdaugare.Enabled = v;
        bModificare.Enabled = v;
        bStergere.Enabled = v;
    }

    private void legareControale(bool v)
    {
        if (v)
        {
            dateTimePicker1.DataBindings.Add("Value", dataTable1BindingSource,
"date");
            cmbSpec.DataBindings.Add("Text", dataTable1BindingSource, "denumire");
            cmbNume.DataBindings.Add("Text", dataTable1BindingSource, "nume");
            txtAnSpec.DataBindings.Add("Text", dataTable1BindingSource,
"an_specializare");
            lIdSpec.DataBindings.Add("Text", dataTable1BindingSource,
"id_specializare");
            lIdTr.DataBindings.Add("Text", dataTable1BindingSource,
"id_transfer");
            lIdPers.DataBindings.Add("Text", dataTable1BindingSource,
"id_persoana");
        }
        else
        {
            dateTimePicker1.DataBindings.Clear();
            cmbNume.DataBindings.Clear();
            cmbSpec.DataBindings.Clear();
            txtAnSpec.DataBindings.Clear();
            lIdSpec.DataBindings.Clear();
            lIdTr.DataBindings.Clear();
            lIdPers.DataBindings.Clear();
        }
    }

    private void protectiePanel(bool v)
    {
        txtAnSpec.ReadOnly = v;
        cmbNume.Enabled = !v;
        cmbSpec.Enabled = !v;
        dateTimePicker1.Enabled = !v;
    }

    private void golireCampuri()
    {
        txtAnSpec.Text = "";
        dateTimePicker1.Text = "";
        cmbSpec.Text = "";
        cmbNume.Text = "";
    }

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    }
    private bool validareCampuriObligatorii()
    {
        //Validare de completare obligatorie campurile
        if (txtAnSpec.Text == "")
        {
            MessageBox.Show("Completati Anul specializarii!");
            txtAnSpec.Focus();
            return false;
        }
        if (cmbSpec.Text == "")
        {
            MessageBox.Show("Alegeti o specializare!");
            cmbSpec.Focus();
            return false;
        }
        if (cmbNume.Text == "")
        {
            MessageBox.Show("Alegeti un student!");
            cmbNume.Focus();
            return false;
        }
        if (dateTimePicker1.Text == "")
        {
            MessageBox.Show("Alegeti o data!");
            dateTimePicker1.Focus();
            return false;
        }
        return true;
    }

    private void adauga_inregistrare()
    {
        string listaCampuri;
        string listaValori;
        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        listaCampuri = "data, id_specializare, an_specializare, id_persoana";
        string idSpec = cmbSpec.SelectedValue.ToString();
        string idPers = cmbNume.SelectedValue.ToString();
        DateTime d = dateTimePicker1.Value;
        listaValori = "#" + Convert.ToString(d.Month) + "/" +
        Convert.ToString(d.Day) + "/" + Convert.ToString(d.Year) + "#" + "," + idSpec + "," +
        + txtAnSpec.Text + "," + idPers + ",";
        cmd.CommandText = "Insert into Transfer(" + listaCampuri + ") " + "Select
" + listaValori;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
    }
    private void refresh_grid(int p)
    {
        dataTable1TableAdapter.Fill(transferDS.DataTable1);
        dataTable1BindingSource.Position = p;
    }

```

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    }
    private void modifica_inregistrare()
    {
        string listaSet;
        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        DateTime d = dateTimePicker1.Value;
        string idSpec = cmbSpec.SelectedValue.ToString();
        string idPers = cmbNume.SelectedValue.ToString();
        listaSet = "data = #" + Convert.ToString(d.Month) + "/" +
        Convert.ToString(d.Day) + "/" + Convert.ToString(d.Year) + "#, " + "id_specializare = " + idSpec + "," +
        " an_specializare = " + txtAnSpec.Text + " , id_persoana = " + idPers;
        cmd.CommandText = "Update Transfer Set " + listaSet + " Where id_transfer " + lIdTr.Text;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
    }

    private void bAdaugare_Click(object sender, EventArgs e)
    {
        //Configurare butoane
        configureazaButoane(false);

        //Dezlegare controale Panel
        legareControale(false);

        //Ridicare protectie controale Panel
        protectiePanel(false);

        //Modificare lblOp
        lOp.Text = "ADAUGARE";

        //Pozitionare cursor pe primul camp
        dateTimePicker1.Focus();

        // Golire campuri
        golireCampuri();
    }

    private void bModificare_Click(object sender, EventArgs e)
    {
        //Configurare butoane
        configureazaButoane(false);

        //Dezlegare controale Panel
        legareControale(false);

        //Ridicare protectie controale Panel
        protectiePanel(false);

        //Modificare lblOp
        lOp.Text = "MODIFICARE";
    }

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        //Pozitionare cursor pe primul camp
        dateTimePicker1.Focus();
    }

    private void bStergere_Click(object sender, EventArgs e)
    {
        const string mesaj = "Confirmati stergerea";
        const string titlu = "Stergere inregistrare";
        var rezultat = MessageBox.Show(mesaj, titlu, MessageBoxButtons.YesNo,
        MessageBoxIcon.Warning);
        if (rezultat == DialogResult.No)
            return;
        OleDbConnection con = new OleDbConnection();
        OleDbCommand cmd = new OleDbCommand();
        con.ConnectionString = dataTable1TableAdapter.Connection.ConnectionString;
        cmd.Connection = con;
        cmd.CommandText = "Delete From Transfer Where id_transfer = " +
        lIdTr.Text;
        MessageBox.Show(cmd.CommandText);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
        dataTable1BindingSource.RemoveCurrent();
    }

    private void bConfirmare_Click(object sender, EventArgs e)
    {
        if (lOp.Text == "ADAUGARE")
        {
            if (!validareCampuriObligatorii())
                return;
            adauga_inregistrare();
            golireCampuri();

            //Pune cursor pe primul camp
            dateTimePicker1.Focus();
            refresh_grid(dataTable1BindingSource.Position);
        }
        else if (lOp.Text == "MODIFICARE")
        {
            modifica_inregistrare();
            refresh_grid(dataTable1BindingSource.Position);

            //Initializare lblOp
            lOp.Text = "";

            //Configurare(butoane)
            configureazaButoane(true);

            //Protectie componente Panel
            protectiePanel(true);

            //Legare controale
            legareControale(true);
        }
        else
    }

```

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        MessageBox.Show("Operatie actualizare neefectuata");
    }

    private void bRenuntare_Click(object sender, EventArgs e)
    {
        //Initializare lblOp
        lOp.Text = "";

        //Configurare(butoane)
        configureazaButoane(true);

        //Protectie componente Panel
        protectiePanel(true);

        //Legare controale
        legareControale(true);
    }

    private void txtAnSpec_Leave(object sender, EventArgs e)
    {
        decimal p;
        if (lOp.Text == "")
            return;
        if (txtAnSpec.Text == "")
            return;
        if (bRenuntare.Focused)
            return;
        try
        {
            p = Convert.ToDecimal(txtAnSpec.Text);
        }
        catch
        {
            MessageBox.Show("Format eronat");
            txtAnSpec.Focus();
            return;
        }
    }
}

```