## SGBD Lab 1

PHD Pop Dănuț Informatics

## Introduction

- Connection of Database
- Insert Query
- Command DataReader
- Command DataSet and DataAdapter
- Attachments

## Connection

- http://www.connectionstrings.com/
- -for all types of database connection Ex Acces

Provider/Server name

OleDbConnection connection = new/ OleDbConnection("Provider=Microsoft.Jet.OLEDB.4.0 ;Data Source=Studenti.mdb;");

DataBase Name

## Connection

Ex SQL

SqlConnection sqlConnection1 = new SqlConnection(Data Source = ServerName/Server Address; Initial Catalog=DataBaseName; Integrated Security=SSPI ....)

For more information and types of connection www.connectionstrings.com

# Query

Help you for insert a sql query

```
Ex Acces/Sql
OleDbCommand cmd=
connction.CreateCommand();
cmd.CommandText = "Select * from Studenti";
SqlCommand cmd = new SqlCommand();
cmd.CommandText = "Select * from Studenti";
```

## **DataReader**

- You use the Read method of the DataReader object to obtain a row from the results of the query
- Ex Acces

```
OleDbDataReader reader = comand.ExecuteReader();
    string s = null;
    while (reader.Read())
    {
        s+= reader[2].ToString();
    }
    Number of table/Name
    of table from DB
```

### **DataReader**

Ex Sql SqlDataReader reader; reader = cmd.ExecuteReader();

## DataSet and DataAdapter

- The DataSet consists of a collection of DataTable objects that you can relate to each other with DataRelation objects
- The DataAdapter represents a set of SQL commands and a database connection that are used to fill the DataSet and update the data source
- Attention for all tables you must to create a dataadapter
- Ex
- https://msdn.microsoft.com/enus/library/system.data.dataset%28v=vs.110%29.aspx

## **Attachments**

#### Connection + DataReader

```
OleDbConnection connction = new
OleDbConnection("Provider=Microsoft.Jet.OLEDB.4.0;Data Source=Studenti.mdb;");
     OleDbCommand comand = connction.CreateCommand();
     comand.CommandText = "Select * from Studenti":
     comand.CommandType = System.Data.CommandType.Text;
     connction.Open();
     OleDbDataReader reader = comand.ExecuteReader():
     string s = null;
     while (reader.Read())
       s+= reader[2].ToString();
     textBox1.Text = s;
     connction.Close();
```

## **Attachments**

#### Connection +DataReader

```
SqlConnection sqlConnection1 = new SqlConnection("Your Connection
String");
SqlCommand cmd = new SqlCommand();
SqlDataReader reader;
cmd.CommandText = "SELECT * FROM Customers";
cmd.CommandType = CommandType.Text;
cmd.Connection = sqlConnection1;
sqlConnection1.Open();
reader = cmd.ExecuteReader():
// Data is accessible through the DataReader object here.
sqlConnection1.Close();
```

## **Attachments**

#### DataSet

```
https://msdn.microsoft.com/en-us/library/system.data.dataset%28v=vs.110%29.aspx
Connection
DataSet myDataSet = new DataSet();
     string strAccessSelect = "SELECT * FROM studenti";
     OleDbCommand myAccessCommand = new OleDbCommand(strAccessSelect,
connection):
     OleDbDataAdapter myDataAdapter = new OleDbDataAdapter(myAccessCommand);
     string strAccessSelect2 = "Select * from sectii";
     OleDbCommand myAccessCommand2 = new OleDbCommand(strAccessSelect2,
connection):
     OleDbDataAdapter myDataAdapter2 = new OleDbDataAdapter(myAccessCommand2);
     connection.Open();
     myDataAdapter.Fill(myDataSet, "studenti");
     dataGridView1.DataSource = myDataSet.Tables[0];
     myDataAdapter2.Fill(myDataSet);
    dataGridView2.DataSource = myDataSet.Tables[1];
    connection.Close();
```