**DataAccessLayer**

**Models -> Student**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace DataAccessLayer.Models

{

public class Student

{

public int Id { get; set; }

public string Name { get; set; }

public string IndexNumber { get; set; }

public decimal AverageMark { get; set; }

}

}

**Constants**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace DataAccessLayer

{

public class Constants

{

public static string connectionString = "Data Source=(localdb)\\MSSQLLocalDB;Initial Catalog=FacultyDB;Integrated Security=True;Connect Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False";

}

}

**StudentRepository (sa metodama za citanje studenata iz baze I unosenje studenta)**

using DataAccessLayer.Models;

using System;

using System.Collections.Generic;

using System.Data.SqlClient;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace DataAccessLayer

{

public class StudentRepository

{

public List<Student> GetAllStudents()

{

List<Student> results = new List<Student>();

using (SqlConnection sqlConnection = new SqlConnection(Constants.connectionString))

{

SqlCommand sqlCommand = new SqlCommand();

sqlCommand.Connection = sqlConnection;

sqlCommand.CommandText = "SELECT \* FROM Students";

sqlConnection.Open();

SqlDataReader sqlDataReader = sqlCommand.ExecuteReader();

while(sqlDataReader.Read())

{

Student s = new Student();

s.Id = sqlDataReader.GetInt32(0);

s.Name = sqlDataReader.GetString(1);

s.IndexNumber = sqlDataReader.GetString(2);

s.AverageMark = sqlDataReader.GetDecimal(3);

results.Add(s);

}

}

return results;

}

public int InsertStudent(Student s)

{

using(SqlConnection sqlConnection = new SqlConnection(Constants.connectionString))

{

SqlCommand sqlCommand = new SqlCommand();

sqlCommand.Connection = sqlConnection;

sqlCommand.CommandText =

string.Format("INSERT INTO Students VALUES ('{0}', '{1}', {2})",

s.Name, s.IndexNumber, s.AverageMark);

sqlConnection.Open();

return sqlCommand.ExecuteNonQuery();

}

}

}

}

**BusinessLayer**

**StudentBusiness klasa (vraca spisak studenata, dodavanje studenata zatim I metodu koja vraca stavku na osnovu unite min I max cene)**

using DataAccessLayer;

using DataAccessLayer.Models;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace BusinessLayer

{

public class StudentBusiness

{

private readonly StudentRepository studentRepository;

public StudentBusiness()

{

this.studentRepository = new StudentRepository();

}

public List<Student> GetAllStudents()

{

return this.studentRepository.GetAllStudents();

}

public bool InsertStudent(Student s)

{

if (this.studentRepository.InsertStudent(s) > 0)

{

return true;

}

return false;

}

public List<Student> GetStudentsGTAvgMark(decimal averageMark)

{

return this.studentRepository.GetAllStudents()

.Where(s => s.AverageMark > averageMark).ToList();

}

}

}

**PresentationLayer (forma za prikaz svih studenata I ubacivanje novog)**

using BusinessLayer;

using DataAccessLayer.Models;

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 PresentationLayer

{

public partial class Form1 : Form

{

private readonly StudentBusiness studentBusiness;

public Form1()

{

this.studentBusiness = new StudentBusiness();

InitializeComponent();

}

private void Form1\_Load(object sender, EventArgs e)

{

RefreshData();

}

private void RefreshData()

{

List<Student> students = this.studentBusiness.GetAllStudents();

listBoxStudents.Items.Clear();

foreach(Student s in students)

{

listBoxStudents.Items.Add(s.Id + ". " + s.Name + "(" + s.IndexNumber + ") - " +

s.AverageMark);

}

}

private void buttonInsertStudent\_Click(object sender, EventArgs e)

{

Student s = new Student();

s.Name = textBoxName.Text;

s.IndexNumber = textBoxIndexNumber.Text;

s.AverageMark = Convert.ToDecimal(textBoxAverageMark.Text);

if (this.studentBusiness.InsertStudent(s))

{

RefreshData();

textBoxName.Text = "";

textBoxIndexNumber.Text = "";

textBoxAverageMark.Text = "";

}

else

{

MessageBox.Show("Greska!");

}

}

}

}

**WEB**

**View code**

using BusinessLayer;

using DataAccessLayer.Models;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

namespace PresentationLayerWeb

{

public partial class \_Default : Page

{

private StudentBusiness studentBusiness;

protected void Page\_Load(object sender, EventArgs e)

{

this.studentBusiness = new StudentBusiness();

List<Student> students = this.studentBusiness.GetAllStudents();

listBoxStudents.Items.Clear();

foreach (Student s in students)

{

listBoxStudents.Items.Add(s.Id + ". " + s.Name + "(" + s.IndexNumber + ") - " +

s.AverageMark);

}

}

}

}

**DEFAULT za web**

<%@ Page Title="Home Page" Language="C#" MasterPageFile="~/Site.Master" AutoEventWireup="true" CodeBehind="Default.aspx.cs" Inherits="PresentationLayerWeb.\_Default" %>

<asp:Content ID="BodyContent" ContentPlaceHolderID="MainContent" runat="server">

<asp:ListBox runat="server" ID ="listBoxStudents"></asp:ListBox>

<div class="jumbotron">

<h1>ASP.NET</h1>

<p class="lead">ASP.NET is a free web framework for building great Web sites and Web applications using HTML, CSS, and JavaScript.</p>

<p><a href="http://www.asp.net" class="btn btn-primary btn-lg">Learn more &raquo;</a></p>

</div>

<div class="row">

<div class="col-md-4">

<h2>Getting started</h2>

<p>

ASP.NET Web Forms lets you build dynamic websites using a familiar drag-and-drop, event-driven model.

A design surface and hundreds of controls and components let you rapidly build sophisticated, powerful UI-driven sites with data access.

</p>

<p>

<a class="btn btn-default" href="https://go.microsoft.com/fwlink/?LinkId=301948">Learn more &raquo;</a>

</p>

</div>

<div class="col-md-4">

<h2>Get more libraries</h2>

<p>

NuGet is a free Visual Studio extension that makes it easy to add, remove, and update libraries and tools in Visual Studio projects.

</p>

<p>

<a class="btn btn-default" href="https://go.microsoft.com/fwlink/?LinkId=301949">Learn more &raquo;</a>

</p>

</div>

<div class="col-md-4">

<h2>Web Hosting</h2>

<p>

You can easily find a web hosting company that offers the right mix of features and price for your applications.

</p>

<p>

<a class="btn btn-default" href="https://go.microsoft.com/fwlink/?LinkId=301950">Learn more &raquo;</a>

</p>

</div>

</div>

</asp:Content>