# Quiz # 1 Web Programming - Section (B)

**Total Marks: 10 Time: 60 minutes**

1. What is the difference between manage code and unmanaged code? **(1 marks)**

**Manage code requires CLR at execution (.net framework code) and unmanaged code doesnot.**

1. Write a Program that take command line arguments of first name, last name, age, gpa and Cgpa, concatenate name and last name and display name, age, gpa and Cgpa on console**. (2 marks)**

class Program

{

static void Main(string[] args)

{

String name = args[0] + args[1];

System.Console.WriteLine("Name " + name);

int age;

double gpa, cgpa;

age = int.Parse(args[2]);

gpa = double.Parse(args[3]);

cgpa = double.Parse(args[4]);

System.Console.WriteLine("Age " + age);

System.Console.WriteLine("Gpa " + gpa);

System.Console.WriteLine("Cgpa " + cgpa);

}

}

1. **Code the following: (7 marks)**

Henry is your project manager. Currently he is working on a mobile services management system. Right now, he is implementing CMS (Customer management module). Rough Database structure is as follows

Customer (id, Username, password, FullName, Location, AccountType)

Where id and username are unique.

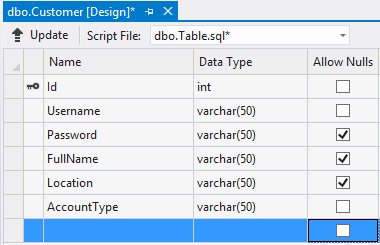
Account Type are:

1. Administrator

2.Customer

He has hired you as a fresh software engineer, he wants you to implement the customer management module using **3 tier architecture**.

Henry plans to work with database so he has instructed you to use Data base system this means you have to make table of customer in database. Schema is like



**Note:** Parameterized queries should be used in program

**Task (Administrator functions)**

Admin should have an admin panel through which he/she can

* insert customer
* update customer
* delete customer
* search customer
* display all customer

**Task (Customer functions)**

Customer can

* login
* logout
* change password

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using BO;

using System.Data.SqlClient;

namespace DAL

{

public class adminDAL

{

public void verify(adminBO obj)

{

string connectionString=@"Data Source=(LocalDB)\v11.0;AttachDbFilename=C:\Users\Adeem\Desktop\ead\_lab2\ead\_lab2\database.mdf;Integrated Security=True";

SqlConnection con = new SqlConnection(connectionString);

string q = "select \* from customer where userName = @u AND password = @p AND accountType = 'admin' ";

SqlParameter p1 = new SqlParameter("u" , obj.Username);

SqlParameter p2 = new SqlParameter("p", obj.Password);

SqlCommand cmd = new SqlCommand(q, con);

cmd.Parameters.Add(p1);

cmd.Parameters.Add(p2);

con.Open();

SqlDataReader dr = cmd.ExecuteReader();

if (dr.Read())

{

obj.verifier = true;

}

else

{

obj.verifier = false;

}

}

public void addCustomer(customerBO obj)

{

string connectionString = @"Data Source=(LocalDB)\v11.0;AttachDbFilename=C:\Users\Adeem\Desktop\ead\_lab2\ead\_lab2\database.mdf;Integrated Security=True";

SqlConnection con = new SqlConnection(connectionString);

string q = "select \* from customer where userName = @u AND accountType = 'customer' ";

SqlParameter p1 = new SqlParameter("u", obj.Username);

SqlCommand cmd = new SqlCommand(q, con);

cmd.Parameters.Add(p1);

con.Open();

SqlDataReader dr = cmd.ExecuteReader();

if (dr.Read())

{

obj.verifier = false;

}

else

{

SqlConnection con1 = new SqlConnection(connectionString);

string nq = "insert into customer(userName,password,fullName,location,accountType) values(@un , @p, @f, @l, 'customer')";

SqlParameter p3 = new SqlParameter("un", obj.Username);

SqlParameter p4 = new SqlParameter("p", obj.Password);

SqlParameter p5 = new SqlParameter("f", obj.Fullname);

SqlParameter p6 = new SqlParameter("l", obj.Location);

SqlCommand cmd1 = new SqlCommand(nq, con1);

cmd1.Parameters.Add(p3);

cmd1.Parameters.Add(p4);

cmd1.Parameters.Add(p5);

cmd1.Parameters.Add(p6);

con1.Open();

int i = cmd1.ExecuteNonQuery();

obj.verifier = true;

}

}

public void updateCustomer(customerBO obj)

{

string connectionString = @"Data Source=(LocalDB)\v11.0;AttachDbFilename=C:\Users\Adeem\Desktop\ead\_lab2\ead\_lab2\database.mdf;Integrated Security=True";

SqlConnection con = new SqlConnection(connectionString);

string q1 = "update customer set password = @p , fullName = @fn , location = @l where userName = @u";

SqlParameter p1 = new SqlParameter("p", obj.Password);

SqlParameter p2 = new SqlParameter("fn", obj.Fullname);

SqlParameter p3 = new SqlParameter("l", obj.Location);

SqlParameter p4 = new SqlParameter("u", obj.Username);

SqlCommand cmd = new SqlCommand(q1, con);

cmd.Parameters.Add(p1);

cmd.Parameters.Add(p2);

cmd.Parameters.Add(p3);

cmd.Parameters.Add(p4);

con.Open();

int a = cmd.ExecuteNonQuery();

if (a <= 0)

{

obj.verifier = false;

}

else

{

obj.verifier = true;

}

}

public void deleteCustomer(customerBO obj)

{

string connectionString = @"Data Source=(LocalDB)\v11.0;AttachDbFilename=C:\Users\Adeem\Desktop\ead\_lab2\ead\_lab2\database.mdf;Integrated Security=True";

SqlConnection con = new SqlConnection(connectionString);

string q = "delete from customer where userName = @u";

SqlParameter p = new SqlParameter("u", obj.Username);

SqlCommand cmd = new SqlCommand(q, con);

cmd.Parameters.Add(p);

con.Open();

int a = cmd.ExecuteNonQuery();

if (a <= 0)

{

obj.verifier = false;

}

else

{

obj.verifier = true;

}

}

public void searchCustomer(customerBO obj)

{

string connectionString = @"Data Source=(LocalDB)\v11.0;AttachDbFilename=C:\Users\Adeem\Desktop\ead\_lab2\ead\_lab2\database.mdf;Integrated Security=True";

SqlConnection con = new SqlConnection(connectionString);

string q = "select \* from customer where userName = @u";

SqlParameter p = new SqlParameter("u", obj.Username);

SqlCommand cmd = new SqlCommand(q, con);

cmd.Parameters.Add(p);

con.Open();

SqlDataReader dr = cmd.ExecuteReader();

if (dr.Read())

{

obj.sql=dr;

obj.verifier = true;

}

else

{

obj.verifier = false;

}

}

public void displayAllCustomer(customerBO obj)

{

string connectionString = @"Data Source=(LocalDB)\v11.0;AttachDbFilename=C:\Users\Adeem\Desktop\ead\_lab2\ead\_lab2\database.mdf;Integrated Security=True";

SqlConnection con = new SqlConnection(connectionString);

string q = "select \* from customer";

SqlCommand cmd = new SqlCommand(q, con);

con.Open();

SqlDataReader dr = cmd.ExecuteReader();

obj.sql = dr;

obj.verifier = true;

}

}

public class customerDAL

{

public void verify(customerBO obj)

{

string connectionString = @"Data Source=(LocalDB)\v11.0;AttachDbFilename=C:\Users\Adeem\Desktop\ead\_lab2\ead\_lab2\database.mdf;Integrated Security=True";

SqlConnection con = new SqlConnection(connectionString);

string q = "select \* from customer where userName = '" + obj.Username + "' AND password = '" + obj.Password + "' AND accountType = 'customer' ";

SqlCommand cmd = new SqlCommand(q, con);

con.Open();

SqlDataReader dr = cmd.ExecuteReader();

if (dr.Read())

{

obj.verifier = true;

}

else

{

obj.verifier = false;

}

}

public void changePassword(customerBO obj)

{

string connectionString = @"Data Source=(LocalDB)\v11.0;AttachDbFilename=C:\Users\Adeem\Desktop\ead\_lab2\ead\_lab2\database.mdf;Integrated Security=True";

SqlConnection con = new SqlConnection(connectionString);

string q1 = "update customer set password = @p where userName = @u";

SqlParameter p1 = new SqlParameter("p", obj.Password);

SqlParameter p2 = new SqlParameter("u", obj.Username);

SqlCommand cmd = new SqlCommand(q1, con);

cmd.Parameters.Add(p1);

cmd.Parameters.Add(p2);

con.Open();

int a = cmd.ExecuteNonQuery();

if (a <= 0)

{

obj.verifier = false;

}

else

{

obj.verifier = true;

}

}

public void logout()

{

customerBO obj = new customerBO();

obj.verifier = true;

}

}

}