**MILESTONE-ASSESSMENT-2**

**Problem Statement**

**The Human Resource Management System can be used to manage the Leaves of employee in a company.**

**The core modules of the project.**

**1. Creating employee.**

**2. Applying Leave.**

**3. Fetch all leaves with employee name associated, by employee id**

**4. Delete leave by leave id.**

**5. Delete employee by employee id.**

**Design console app for Human Resource Management with C#.Net, ADO.Net, SQL Server.**

**Sample Output :-**

**Options are :**

**1. Create Employee**

**2. Apply Leave**

**3. Get all Leaves by EmployeeId**

**4. Delete Leave**

**5. Delete Employee**

**6. Exit**

**Select Option: 2**

**Enter EmployeeId : 5**

**Enter FromDate : 05-10-2021**

**Enter ToDate : 07-10-2021**

**Enter FromSession(1: Morning Session,2Afternoon Session):1**

**Enter ToSession(1: Morning Session,2Afternoon Session):1**

**Applied Days: 2(should be auto calculated as difference between FromDate& ToDate and also FromSession to ToSession)**

**Success! Leave Created.**

**Select Option: 3**

**Enter Employee ID :28**

**LeaveId : 47**

**FromDate : 05-10-2021**

**ToDate : 07-10-2021**

**FromSession(1: Morning Session,2Afternoon Session):1**

**ToSession(1: Morning Session,2Afternoon Session):2**

**Employee Name- Rakesh**

**LeaveId : 5**

**FromDate : 09-11-2021**

**ToDate : 15-11-2021**

**FromSession(1: Morning Session,2Afternoon Session):1**

**ToSession(1: Morning Session,2Afternoon Session):2**

**Employee Name- Rakesh**

create database HumanResourceManagement

create table Employee

(

id int primary key,

E\_Name varchar(255),

E\_Address varchar(255),

EmailId varchar(255) unique,

JoinDate varchar(255),

ContactNumber varchar(255)

)

create table Leave

(

LeaveId int primary key identity(1,1),

EmployeeId int foreign key references Employee(id),

FromDate date,

ToDate date,

FromSession tinyint,

Tosession tinyint,

AppliedDays decimal(18,2)

)

insert into Employee

(id,E\_Name,E\_Address,EmailId,JoinDate,ContactNumber)

Values

(2,'Ram Kumar','Chennai','Ram@mail.com','05/07/2021','9876523140'),

(2,'Raj Kiran','Chennai','Raj@mail.com','05/07/2021','9876653140'),

(3,'Rahul S','Chennai','Rahul@mail.com','05/07/2021','9876653240'),

(4,'Abishek Venkat','Chennai','Abi@mail.com','05/07/2021','9826653140'),

(5,'Aakash S','Chennai','Aakash@mail.com','05/07/2021','9876653141');

insert into Leave

(EmployeeId,FromDate,ToDate,FromSession,Tosession,AppliedDays)

values(1,'2021-10-11','2021-10-13',1,2,2);

create procedure Apply\_leave

@eid nvarchar(100),

@fd date,

@td date,

@fs int ,

@ts int,

@applied int

AS

BEGIN

Insert into Leave(EmployeeId,FromDate,ToDate,FromSession,Tosession,AppliedDays)

values(@eid,@fd,@td,@fs,@ts,@applied)

END

create procedure Employee\_Add

@id int,

@name nvarchar(100),

@address nvarchar(100),

@email nvarchar(100),

@joindate nvarchar(100) ,

@contact varchar(100)

AS

BEGIN

Insert into Employee(id,E\_Name,E\_Address,EmailId,JoinDate,ContactNumber)

values(@id,@name,@address,@email,@joindate,@contact)

END

create procedure Delete\_leave

@lid int

AS

BEGIN

DELETE Leave

WHERE LeaveId = @lid

END

create procedure Delete\_employee

@Eid int

AS

BEGIN

DELETE Employee

WHERE id = @eid

END

create procedure Employee\_leave

@eid int

AS

BEGIN

select id,E\_Name,FromDate,ToDate,AppliedDays from Leave l

inner join Employee e on e.id=l.EmployeeId

where e.id=@eid

END

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Data.SqlClient;

using System.Web;

using System.Data;

namespace MAssessment2

{

class Program

{

static void Main(string[] args)

{

char ans;

do

{

Console.Clear();

Console.WriteLine("1. Create Employee");

Console.WriteLine("2. Applying Leave");

Console.WriteLine("3. Fetch all leaves with employee name associated, by employee id");

Console.WriteLine("4. Delete leave by leave id");

Console.WriteLine("5. Delete employee by employee id.");

Console.WriteLine("6. Exit");

Console.WriteLine("----------------------------------------------------------------------------------------");

Console.Write("Enter Your Choice Here: -");

int option = Convert.ToInt32(Console.ReadLine());

switch (option)

{

case 1:

addEmloyee();

display\_Employee();

break;

case 2:

applyLeave();

display\_leave();

break;

case 3:

EmployeeLeaves();

break;

case 4:

deleteLeave();

display\_leave();

break;

case 5:

DeleteEmployee();

display\_Employee();

break;

case 6:

Environment.Exit(0);

break;

default:

Console.WriteLine("Invalid Choice....!!! Please Enter Correct Choice...!!!");

break;

}

Console.Write("Would You Like to Continue(Y/N):");

ans = Convert.ToChar(Console.ReadLine());

} while (ans == 'y' || ans == 'Y');

}

private static void DeleteEmployee()

{

SqlConnection con = new SqlConnection();

try

{

con = new SqlConnection(@"Data Source=(local)\SQLEXPRESS;Initial Catalog= HumanResourceManagement;Integrated Security=True;MultipleActiveResultSets=True");

con.Open();

Console.WriteLine("Enter Employee Id");

int eid = int.Parse(Console.ReadLine());

SqlCommand cmd = new SqlCommand("Delete\_employee", con);

cmd.CommandType = CommandType.StoredProcedure;

cmd.Parameters.AddWithValue("@eid", eid);

SqlDataAdapter da = new SqlDataAdapter(cmd);

DataTable dt = new DataTable();

da.Fill(dt);

con.Open();

cmd.ExecuteNonQuery();

con.Close();

}

catch (Exception ex)

{

Console.WriteLine(ex.Message.ToString());

}

}

private static void deleteLeave()

{

SqlConnection con = new SqlConnection();

try

{

con = new SqlConnection(@"Data Source=(local)\SQLEXPRESS;Initial Catalog= HumanResourceManagement;Integrated Security=True;MultipleActiveResultSets=True");

con.Open();

Console.WriteLine("Enter LeaveId");

int lid = int.Parse(Console.ReadLine());

SqlCommand cmd = new SqlCommand("Delete\_leave", con);

cmd.CommandType = CommandType.StoredProcedure;

cmd.Parameters.AddWithValue("@lid", lid);

SqlDataAdapter da = new SqlDataAdapter(cmd);

DataTable dt = new DataTable();

da.Fill(dt);

con.Open();

cmd.ExecuteNonQuery();

con.Close();

}

catch (Exception ex)

{

Console.WriteLine(ex.Message.ToString());

}

}

private static void EmployeeLeaves()

{

SqlConnection con = new SqlConnection();

try

{

con = new SqlConnection(@"Data Source=(local)\SQLEXPRESS;Initial Catalog= HumanResourceManagement;Integrated Security=True;MultipleActiveResultSets=True");

con.Open();

Console.WriteLine("Enter EmployeeId");

int eid = int.Parse(Console.ReadLine());

SqlCommand cmd = new SqlCommand("Employee\_leave", con);

cmd.CommandType = CommandType.StoredProcedure;

cmd.Parameters.AddWithValue("@eid", eid);

SqlDataReader rdr1 = cmd.ExecuteReader();

Console.WriteLine("EmployeeId | Employee Name | FromDate | ToDate | AppliedDays |");

while (rdr1.Read())

{

Console.WriteLine("{0} {1} {2} {3} {4} ",

rdr1["id"] + "|", rdr1["E\_Name"] + "|", rdr1["FromDate"] + "|",

rdr1["ToDate"] + "|",rdr1["AppliedDays"]);

}

}

catch (Exception ex)

{

Console.WriteLine(ex.Message.ToString());

}

}

private static void applyLeave()

{

SqlConnection con = new SqlConnection();

con = new SqlConnection(@"Data Source=(local)\SQLEXPRESS;Initial Catalog= HumanResourceManagement;Integrated Security=True;MultipleActiveResultSets=True");

con.Open();

Console.WriteLine("Enter EmployeeId");

int id = int.Parse(Console.ReadLine());

Console.WriteLine("Enter FromDate");

DateTime fromd =DateTime.Parse(Console.ReadLine());

Console.WriteLine(" Enter ToDate");

DateTime tod = DateTime.Parse(Console.ReadLine());

Console.WriteLine("Enter FromSession");

int froms = int.Parse(Console.ReadLine());

Console.WriteLine("Enter ToSession");

int tos = int.Parse(Console.ReadLine());

Console.WriteLine("Enter Applied Days");

int ad = int.Parse(Console.ReadLine());

try

{

SqlCommand cmd = new SqlCommand("Apply\_leave", con);

cmd.CommandType = CommandType.StoredProcedure;

cmd.Parameters.AddWithValue("@eid", id);

cmd.Parameters.AddWithValue("@fd", fromd);

cmd.Parameters.AddWithValue("@td", tod);

cmd.Parameters.AddWithValue("@fs", froms);

cmd.Parameters.AddWithValue("@ts", tod);

cmd.Parameters.AddWithValue("@applied",ad);

SqlDataAdapter da = new SqlDataAdapter(cmd);

DataTable dt = new DataTable();

da.Fill(dt);

con.Open();

cmd.ExecuteNonQuery();

con.Close();

}

catch (Exception ex)

{

Console.WriteLine(ex.Message.ToString());

}

}

private static void addEmloyee()

{

SqlConnection con = new SqlConnection();

con = new SqlConnection(@"Data Source=(local)\SQLEXPRESS;Initial Catalog= HumanResourceManagement;Integrated Security=True;MultipleActiveResultSets=True");

con.Open();

try

{

Console.WriteLine("Enter Employee Name:");

string name = Console.ReadLine();

Console.WriteLine("Enter Employee Address:");

string address = Console.ReadLine();

Console.WriteLine("Enter Employee Email:");

string email = Console.ReadLine();

Console.WriteLine("Enter Employee date of joining:");

string doj = Console.ReadLine();

Console.WriteLine("Enter Employee Contact:");

string contact = Console.ReadLine();

SqlCommand cmd = new SqlCommand("Employee\_Add", con);

cmd.CommandType = CommandType.StoredProcedure;

cmd.Parameters.AddWithValue("@name", name);

cmd.Parameters.AddWithValue("@address", address);

cmd.Parameters.AddWithValue("@email", email);

cmd.Parameters.AddWithValue("@joindate", doj);

cmd.Parameters.AddWithValue("@contact", contact);

SqlDataAdapter da = new SqlDataAdapter(cmd);

DataTable dt = new DataTable();

da.Fill(dt);

con.Open();

cmd.ExecuteNonQuery();

con.Close();

}

catch (Exception ex)

{

Console.WriteLine(ex.Message.ToString());

}

}

private static void display\_Employee()

{

SqlConnection con = new SqlConnection();

con = new SqlConnection(@"Data Source=(local)\SQLEXPRESS;Initial Catalog= HumanResourceManagement;Integrated Security=True;MultipleActiveResultSets=True");

con.Open();

string query = "select \* from Employee";

SqlCommand sel1 = new SqlCommand();

sel1.Connection = con;

sel1.CommandText = query;

SqlDataReader rdr1 = sel1.ExecuteReader();

Console.WriteLine("ID | Name | Address | Email | JoinDate | Contact |");

while (rdr1.Read())

{

Console.WriteLine("{0} {1} {2} {3} {4} {5} ",

rdr1["id"]+"|", rdr1["E\_Name"] + "|", rdr1["E\_Address"] + "|",

rdr1["EmailId"] + "|", rdr1["JoinDate"] + "|", rdr1["ContactNumber"] + "|");

}

}

private static void display\_leave()

{

SqlConnection con = new SqlConnection();

con = new SqlConnection(@"Data Source=(local)\SQLEXPRESS;Initial Catalog= HumanResourceManagement;Integrated Security=True;MultipleActiveResultSets=True");

con.Open();

string query = "select \* from Leave";

SqlCommand sel1 = new SqlCommand();

sel1.Connection = con;

sel1.CommandText = query;

SqlDataReader rdr1 = sel1.ExecuteReader();

Console.WriteLine("LeaveId | EmployeeId | FromDate | ToDate | FromSession | Tosession | AppliedDays |");

while (rdr1.Read())

{

Console.WriteLine("{0} {1} {2} {3} {4} {5} {6} ",

rdr1["LeaveId"]+"|", rdr1["EmployeeId"] + "|", rdr1["FromDate"] + "|",

rdr1["ToDate"] + "|", rdr1["FromSession"] + "|", rdr1["Tosession"] + "|", rdr1["AppliedDays"]);

}

}

}

}









