

ASP.NET MVC 5.2

Model classes to
perform **CRUD**
Operations on Dept
table using **ADO.NET**

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File1: **/Models/Dept.cs**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

namespace MvcApplication1.Models
{
    public class Dept
    {
        public int Deptno { get; set; }
        public string Dname { get; set; }
        public string Loc { get; set; }
    }
}
```

FileName: **/Models/DataContext.cs**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

using System.Data;
using System.Data.SqlClient;
```

```
namespace MvcApplication1.Models
{
    public class DataContext
    {
        public List<Dept> GetDepts()
        {
            List<Dept> deptList = new List<Dept>();
            string connStr = "Server=narasimha-pc;
Database=TestDb; Integrated Security=true;";
            string cmdText = "SELECT * FROM DEPT";

            SqlDataAdapter da = new SqlDataAdapter(cmdText,
connStr);
            DataTable dt = new DataTable();
            da.Fill(dt);

            foreach (DataRow item in dt.Rows)
            {
                Dept obj = new Dept();
                obj.Deptno = (int)item["Deptno"];
                obj.Dname = (string)item["Dname"];
                obj.Loc = (string)item["Loc"];

                deptList.Add(obj);
            }
            return deptList;
        }
    }
}
```

```
public Dept GetDept(int n)
{
    Dept obj = new Dept();

    string cmdText = "SELECT * FROM DEPT WHERE
DEPTNO=" + n;
    string connStr = "Server=narasimha-pc;
Database=TestDb; Integrated Security=true;";

    SqlConnection conn = new SqlConnection(connStr);
    SqlCommand cmd = new SqlCommand(cmdText, conn);
    conn.Open();
    SqlDataReader dr = cmd.ExecuteReader();

    if (dr.HasRows == true)
    {
        dr.Read();
        obj.Deptno = (int)dr["DEPTNO"];
        obj.Dname = (string)dr["DNAME"];
        obj.Loc = (string)dr["LOC"];
    }

    dr.Close();
    conn.Close();
    return obj;
}
```

```
public void AddDept(Dept obj)
{
    string cmdText = string.Format("INSERT INTO
DEPT VALUES({0}, '{1}', '{2}')" , obj.Deptno, obj.Dname,
obj.Loc);

    string connStr = "Server=narasimha-pc;
Database=TestDb; Integrated Security=true;";

    SqlConnection conn = new SqlConnection(connStr);
    SqlCommand cmd = new SqlCommand(cmdText, conn);
    conn.Open();
    cmd.ExecuteNonQuery();
    conn.Close();
}

public void EditDept(Dept obj)
{
    string cmdText = string.Format(" UPDATE DEPT
SET  DNAME='{0}' , LOC='{1}'  WHERE DEPTNO={2}" ,
obj.Dname, obj.Loc, obj.Deptno);

    string connStr = "Server=narasimha-pc;
Database=TestDb; Integrated Security=true;";

    SqlConnection conn = new SqlConnection(connStr);
    SqlCommand cmd = new SqlCommand(cmdText, conn);
    conn.Open();
    cmd.ExecuteNonQuery();
    conn.Close();
}
```

```
public void DeleteDept(int n)
{
    string cmdText = string.Format(" DELETE FROM
DEPT WHERE DEPTNO={0}", n);
    string connStr = "Server=narasimha-pc;
Database=TestDb; Integrated Security=true;";

SqlConnection conn = new SqlConnection(connStr);
SqlCommand cmd = new SqlCommand(cmdText, conn);
    conn.Open();
    cmd.ExecuteNonQuery();
    conn.Close();
}
}
```

- ➔ Prepare similar type of classes for Emp and Student Tables.
- ➔ Prepare the Emp and Student tables in Database
 - **Emp** : Empno, Ename, Job, Sal, Deptno
 - **Student** : StudentId, Sname, Course, Email, ContactNo
- ➔ Develop MVC Applications to implement the CRUD operations on these tables.