Layer 1: Data Access Layer (DAL)

First, we will create a DAL class for each entity. We will name each DAL class using this naming pattern: EntityDAL. Let us see the CustomerDAL class:

```
using DomainModel.BL;
namespace DomainModel.DAL
{
    public class CustomerDAL
    {
        public static void AddCustomer(Customer cs)
        {
            using (SqlConnection con =
                  new SqlConnection(SQLHelper.GetConnectionString()))
            {
                SqlParameter[] par = new SqlParameter[4];
                par[0] = new SqlParameter("@customerID", cs.ID);
                par[0].Direction = ParameterDirection.Output;
                par[1] = new SqlParameter("@name", cs.Name);
                par[2] = new SqlParameter("@address", cs.Address);
                par[3] = new SqlParameter(
                          "@phoneNo", cs.PhoneNumber);
                int rowNo = SQLHelper.ExecuteNonQuery(
                            con, CommandType.StoredProcedure,
                            "OMS_AddCustomer", par);
                cs.ID = Convert.ToInt32(par[0].Value);
            }
        }
        public static void DeleteCustomer(int customerID)
        {
            using (SqlConnection con =
            new SqlConnection(SQLHelper.GetConnectionString()))
            {
                SqlParameter[] par = new SqlParameter[1];
                par[0] = new SqlParameter("@customerID", customerID);
                int rowNo = SQLHelper.ExecuteNonQuery(
                con, CommandType.StoredProcedure,
                "OMS_DeleteCustomer", par);
            }
        }
        public static void UpdateCustomer(Customer cs)
        {
            using (SqlConnection con = new
            SqlConnection(SQLHelper.GetConnectionString()))
            {
                SqlParameter[] par = new SqlParameter[4];
```

```
            par[0] = new SqlParameter("@customerID", cs.ID);
            par[1] = new SqlParameter("@address", cs.Address);
            par[2] = new SqlParameter("@name", cs.Name);
            par[3] = new SqlParameter(
                     "@phoneNo", cs.PhoneNumber);
            int rowNo = SQLHelper.ExecuteNonQuery(
                        con, CommandType.StoredProcedure,
                        "OMS_UpdateCustomer", par);
        }
    }
    public static void GetCustomer(Customer cs)
    {
        using (SqlConnection con =
              new SqlConnection(SQLHelper.GetConnectionString()))
        {
            SqlParameter[] par = new SqlParameter[1];
            par[0] = new SqlParameter("@customerID", customerID);
            using (SqlDataReader dr =
                   SQLHelper.ExecuteReader(con,
                   CommandType.StoredProcedure,
                   "OMS_GetCustomer", par))
            {
                c = new Customer();
                while (dr.Read())
                {
                    c.Name =
                    SQLHelper.CheckStringNull(dr["Name"]);
                    c.PhoneNumber =
                    SQLHelper.CheckStringNull(dr["PhoneNo"]);
                    c.Address =
                    SQLHelper.CheckStringNull(dr["Address"]);
                    c.ID = SQLHelper.CheckIntNull(dr["ID"]);
                }
            }
        }
    }
    public static List<Customer> GetAllCustomers()
    {
        List<Customer> cuList = new List<Customer>();
        using (SqlConnection con =
              new SqlConnection(SQLHelper.GetConnectionString()))
        {
            using (SqlDataReader dr =
            SQLHelper.ExecuteReader(con,CommandType.
            StoredProcedure,"OMS_GetAllCustomer"))
            {
```