Creation of a DataSet object in code with 2 DataTables for companies and for Employees.

The two DataTable objects are joined by using a DataRelation named Company\_Employee.

private DataSet GetDataSet()

{

DataSet companyData = new DataSet("CompanyList");

DataTable company = companyData.Tables.Add("company");

company.Columns.Add("Id", typeof(Guid));

company.Columns.Add("CompanyName", typeof(string));

company.PrimaryKey = new DataColumn[] { company.Columns["Id"] };

DataTable employee = companyData.Tables.Add("employee");

employee.Columns.Add("Id", typeof(Guid));

employee.Columns.Add("companyId", typeof(Guid));

employee.Columns.Add("LastName", typeof(string));

employee.Columns.Add("FirstName", typeof(string));

employee.Columns.Add("Salary", typeof(decimal));

employee.PrimaryKey = new DataColumn[] { employee.Columns["Id"] };

companyData.Relations.Add( "Company\_Employee",

company.Columns["Id"],

employee.Columns["CompanyId"]);

return companyData;

}

The following code sample shows how to add rows to existing DataTable objects. These objects were defined in the previous example. This code uses the DataTable.Rows.Add method. This method allows you to define a new DataRow object and add it to the Rows collections. The code populates the Id columns by creating a new globally unique identifier (GUID). After a company is created and added to the company DataTable, the employee names for that company are created and added.

DataTable company = companyData.Tables["Company"];

DataTable employee = companyData.Tables["Employee"];

Guid coId, empId;

coId = Guid.NewGuid();

company.Rows.Add(coId, "Northwind Traders");

empId = Guid.NewGuid();

employee.Rows.Add(empId, coId, "JoeLast", "JoeFirst", 40.00);

empId = Guid.NewGuid();

employee.Rows.Add(empId, coId, "MaryLast", "MaryFirst", 70.00);

empId = Guid.NewGuid();

employee.Rows.Add(empId, coId, "SamLast", "SamFirst", 12.00);

coId = Guid.NewGuid();

company.Rows.Add(coId, "Contoso");

empId = Guid.NewGuid();

employee.Rows.Add(empId, coId, "SueLast", "SueFirst", 20.00);

empId = Guid.NewGuid();

employee.Rows.Add(empId, coId, "TomLast", "TomFirst", 68.00);

empId = Guid.NewGuid();

employee.Rows.Add(empId, coId, "MikeLast", "MikeFirst", 18.99);