ADO.NET

# What is ADO.NET?

ADO.NET is not a different technology. In simple terms, we can think of ADO.NET, **as a set of classes (Framework), that can be used to interact with data sources like Databases and XML files**. This data can, then be consumed in any.NET application. **ADO stands for Microsoft ActiveX Data Objects**.

The following are, a few of the different types of.NET applications that use ADO.NET to connect to a database, execute commands, and retrieve data.

* ASP.NET Web Applications
* Windows Applications
* Console Applications

## Dot Net Data Providers:

* Data Provider for SQL Server-System.Data.SqlClient
* Data Provider for Oracle - System.Data.OracleClient
* Data Provider for OLEDB-System.Data.OleDb
* Data Provider for ODBC-System.Data.Odbc

All the required classes are residing inside the Namespaces.

## Steps

1. Need to established an **SQLConnection** **con**.
2. Need an **SQLCommand** **cmd**, with the connection object **con**.
3. Need to open the connection
4. Need **ExecuteReader** thatwill execute the **SQLCommand** and retrieve the data. This will return the data as a SQL data format. So, we may need an **SQLDataReader** object get the data in the for of datatable.
5. Do the work/ create Dataset/ etc.
6. Close Connection
7. Dispose the connection

using System.Data.SqlClient;

SqlConnection con = new SqlConnection("data source=.; database=MySQLDB; integrated security=SSPI");

SqlCommand cmd = new SqlCommand("Select \* from tmp\_costing\_data", con);

con.Open();

SqlDataReader rdr=cmd.ExecuteReader();

GridView1.DataSource = rdr;

GridView1.DataBind();

con.Close();

con.Dispose();

using System.Data.OracleClient;

OracleConnection con = new OracleConnection("Data Source=TMCTEST;User ID=tmclive;pwd=tmclive;integrated security = no");

OracleCommand cmd = new OracleCommand("Select \* from tmp\_costing\_data", con);

con.Open();

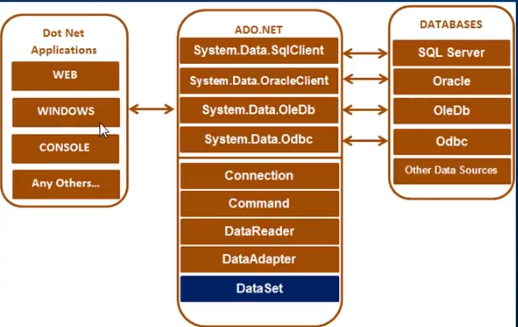
OracleDataReader rdr = cmd.ExecuteReader();

GridView1.DataSource = rdr;

GridView1.DataBind();

con.Close();

con.Dispose();



# SQLConnection objects