Experiment Title: Display parameterized data using SQLDataReader and GridView in ASP.NET

Objective:

To learn and implement parameterized data using SQLDataReader and GridView in ASP.NET

Theory:

ADO.NET SqlDataReader Class

This class is used to read data from SQL Server database. It reads data in forward-only stream of rows from a SQL Server database. it is sealed class so that cannot be inherited. It inherits DbDataReader class and implements IDisposable interface.

SqlDataReader Signature

1. public class SqlDataReader : System.Data.Common.DbDataReader, IDisposable

SqlDataReader Properties

Property	Description
Connection	It is used to get the SqlConnection associated with the SqlDataReader.
Depth	It is used to get a value that indicates the depth of nesting for the current row.
FieldCount	It is used to get the number of columns in the current row.
HasRows	It is used to get a value that indicates whether the SqlDataReader contains one or more rows.
IsClosed	It is used to retrieve a boolean value that indicates whether the specified SqlDataReader ins closed.
Item[String]	It is used to get the value of the specified column in its native format given the column name.
Item[Int32]	It is used to get the value of the specified column in its native format given the column ordinal.
RecordsAffected	It is used to get the number of rows changed, inserted or deleted by execution of the Transact-S
VisibleFieldCount	It is used to get the number of fields in the SqlDataReader that are not hidden.

Methods

Method	Description
Close()	It is used to closes the SqlDataReader object.
GetBoolean(Int32)	It is used to get the value of the specified column as a Boolean.
GetByte(Int32)	It is used to get the value of the specified column as a byte.
GetChar(Int32)	It is used to get the value of the specified column as a single character.
GetDateTime(Int32)	It is used to get the value of the specified column as a DateTime object.
GetDecimal(Int32)	It is used to get the value of the specified column as a Decimal object.
GetDouble(Int32)	It is used to get the value of the specified column as a double-precision floating point num
GetFloat(Int32)	It is used to get the value of the specified column as a single-precision floating point numb
GetName(Int32)	It is used to get the name of the specified column.
GetSchemaTable()	It is used to get a DataTable that describes the column metadata of the SqlDataReader.
GetValue(Int32)	It is used to get the value of the specified column in its native format.
GetValues(Object[])	It is used to populate an array of objects with the column values of the current row.
NextResult()	It is used to get the next result, when reading the results of SQL statements.
Read()	It is used to read record from the SQL Server database.

To create a SqlDataReader instance, we must call the ExecuteReader method of the SqlCommand object.

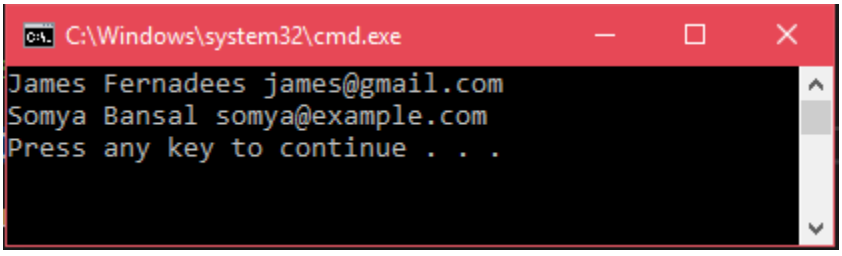
Example

In the following program, we are using SqlDataReader to get data from the SQL Server. A C# code is given below

Program.cs

```
using System;
using System.Data.SqlClient;
namespace AdoNetConsoleApplication
{      class Program
   {          static void Main(string[] args)
      {               new Program().GetData();
      }
      public void GetData()
      {               SqlConnection con = null;
         try
         {                  // Creating Connection
            con = new SqlConnection("data source=.; database=student; integrated
security=SSPI");
            // writing sql query
            SqlCommand cm = new SqlCommand("select * from student", con);
            // Opening Connection
            con.Open();
            // Executing the SQL query
            SqlDataReader sdr = cm.ExecuteReader();
            while (sdr.Read())
            {                     Console.WriteLine(sdr["name"]+" "+ sdr["email"]);
            }
         }
         catch (Exception e)
         {                  Console.WriteLine("OOPs, something went wrong." + e);
         }
         // Closing the connection
         finally
         {                  con.Close();
         }
      }
   }
}
Output:
```

Execute this program by combination of Ctrl+F5 and it will produce the following output.



Procedure :

Write web application implementing above codes with HTML Content.

Conclusion: