

Data Grid View :- Data Grid View is used to display the data in tabular format to the user. It also provide adding deleting editing and sorting facility by default.

Properties With data Grid View :-

1. Data Source

2. Data member

1. **Data Source :-** this property is used to set the collections data set name ~~from~~ ^{from} which we want to display the data to the user.

2. **Data Member :-** this property is used to set the member name of the collections or table name of the dataset from which we want to display the data to the user.

Methods With dataset table :-

1. Accept changes ()

2. New row ()

3. Reset ()

4. Select (String filter Expression)

5. Reject changes ()

2. **NEW ROW () :-** This method is used to create a new row or new record with the same structure of dataset table.

* **NEW ROW** method will return the row with database type.

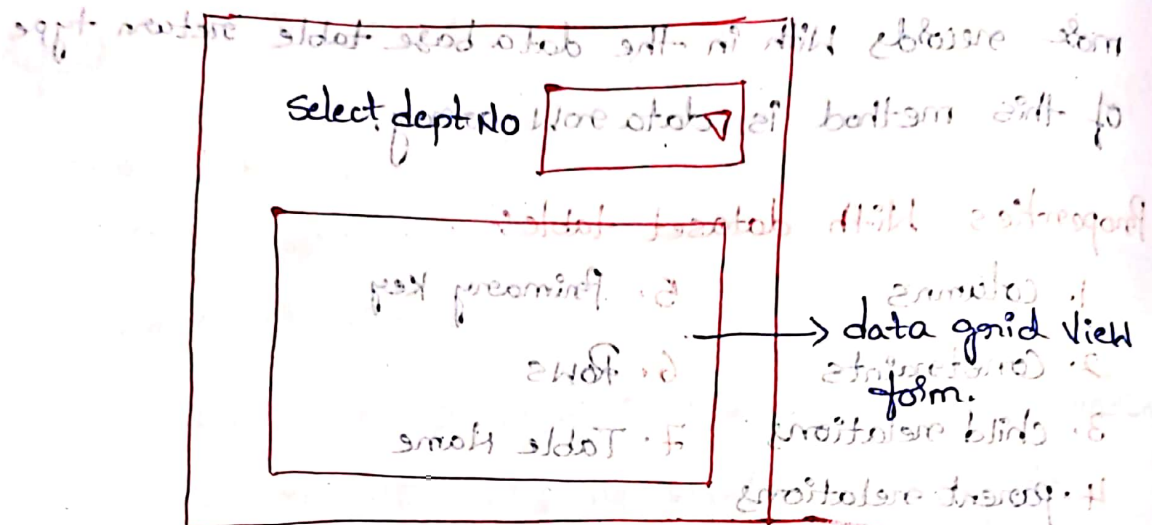
2. **Reset**:- The method is used to delete the data of dataset table.
3. **select**:- This method is used to search for one or more records within the database table. Return type of this method is data row array.

Properties With dataset table:-

- | | |
|---------------------|----------------|
| 1. columns | 5. Primary Key |
| 2. Constraints | 6. Rows |
| 3. child relations | 7. Table Name |
| 4. parent relations | |

1. **columns**:- This is a collection property used to set or get one or more columns of the dataset table.
2. **constraints**:- This is a collection property used to set or get one or more constraints into the dataset table.
3. **child Relations**:- This is a collection property used to set or get the child relationships available to the dataset table.
4. **parent relation**:- This is a collection property used to set or get on the parent relations available to the table within the dataset.
5. **primary Key**:- used to set or get the primary Key field Name to the dataset table.
6. **Rows**:- This is a collection property used to set or get one or more rows into the dataset table.

7. TableName is used to set or get Name of the table.
 Within the dataset example to display the selected
 deptNo Employees details in the data grid view.



Code:

Using System.Data.SqlClient;

Public partial class

{

Sql connection con; sql data Reader DR; sql data Adapter DA; dataset DS;

Sql data Adapter DA; dataset DS;

}

Private void form22_Load (object sender, event args e)

{

String sql con string = "server = ; user id = ;

con = new sql connection (sql con string);

cmd = new sql command ("Select * from deptNo from
 department", con);

con.open();

DR = cmd.execute Reader();

While (DR.Read())

cmb DeptNo.Items.Add (DR[0]);

con.close();

}

```

Private Void cmbDeptNo_SelectedIndexChanged
    (Object sender, EventArgs e)
{

```

```

    string Query = "select * from Empdetails Where DeptNo = " + cmbDeptNo.SelectedItem;

```

```

    DA = new SqlDataAdapter(Query, con);

```

```

    DS = new DataSet();

```

```

    DA.Fill(DS, "Emp");

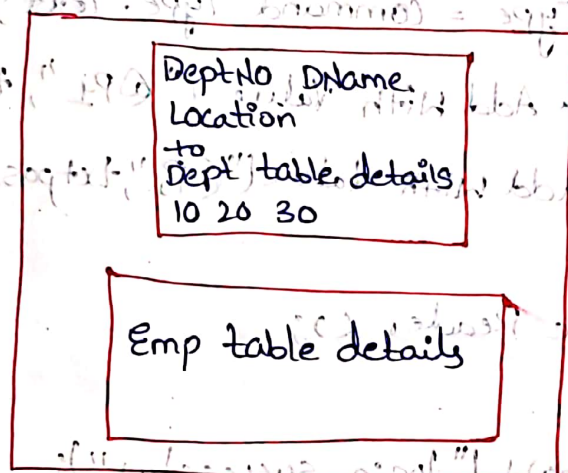
```

```

    DataGridView EmpDetails.DataSource = DS.Tables[0];
}

```

Eg 2: Display selected department Employees details in data Grid View.



Using system.data.sqlclient;

```

Public partial class form24 : form
{

```

```

    SqlConnection con;

```

```

    SqlDataAdapter DA; DataSet DS;

```

```

    Private void form24_Load(Object sender, EventArgs e)
    {

```

```

        string sqlCon string = "server = ; user Id = ";

```

```

        con = new SqlConnection(sqlCon string);

```

```

        DA = new SqlDataAdapter("select * from department", con);

```

```

        DS = new DataSet();
    }
}

```



```

DA.Fill(DB, "Dept");
DGV.Dept.DataSource = DS.Tables[0];
}
System.Data.SqlClient;
SqlConnection con;
SqlDataAdapter
Private Void btn_login_Click(Object sender, EventArgs e)
{
    String sqlConString = "Server = { (userId = '311') }";
    con = new SqlConnection(sqlConString);
    String query = "Select * from user Where UserName = @P1 and password = @P2";
    cmd = new SqlCommand(query, con);
    cmd.CommandType = CommandType.Text;
    cmd.Parameters.AddWithValue("@P1", txtName.Text);
    cmd.Parameters.AddWithValue("@P2", txtPassword.Text);
    con.Open();
    DR = cmd.ExecuteReader();
    if (DR.Read())
        MessageBox.Show("login successful");
    else
        MessageBox.Show("username / password incorrect");
    con.Close();
}

```

Query:- Select count(*) from users Where

```

String query = "Select count(*) from user Where
UserName = @P1 and password = @P2";
con = new SqlConnection(sqlConString);
cmd = new SqlCommand(query, con);
cmd.CommandType = CommandType.Text;

```

```

cmd.Parameters.AddWithValue("@P1", txtName.Text);
cmd.Parameters.AddWithValue("@P2", txtPassword.Text);
con.Open();
int C = Convert.ToInt32(cmd.ExecuteScalar());
if (C == 1)
    MessageBox.Show("Login successful");
else
    MessageBox.Show("username/Password Incorrect");
con.Close();
}

```

Example to perform operations on dataset:-

Enter EmpId

Enter EName

Enter Designation

Enter DOJ

Enter Salary

Enter DeptNo

↓

Grid View Box

Steps to add a new record into dataset table:-

- 1) Create a new DataRow class object
 Syn: DataRow class Name object Name;
 Ex: DataRow Rec;
- 2) Copy the structure of dataset table Row into DataRow object.

Syn: DataSet object = DataSetName.Tables[Index].NewRow()

Ex: Rec = DS.Tables[0].NewRow();

3) Store the data into data row

Ex: Rec[0] = 112; Rec[1] = "Anand"; Rec[2] = "Developer";
Rec[3] = "01/01/2023"; Rec[4] = 50000; Rec[5] = 10;

4) Add the data row object into dataset table

Syn: DataSetName.Tables[Index].Rows.Add [data row
class object]

Ex: DS.Tables[0].Rows.Add(Rec);

Code:

using System.Data.SqlClient;

Public partial class Form23 : Form

{

Sql connection con; Sql data Adapter da; DataSet DS;

Data row Rec; Sql command builder Bldr;

Private void Form23_Load(object sender, EventArgs e)

{

String sqlconstring = "

con = new SqlConnection (sqlconstring);

da = new SqlDataAdapter ("Select * from empdetails", con);

DS = new DataSet ();

da.Fill (DS, "emp");

da.FillSchema (DS, SchemaType.Source, "emp");

Bldr = new SqlCommandBuilder (da);

DGV = Emp details . data source = DS.Tables[0];

}

Private void btnInsert_Click

{

REC = DS.Tables[0].NEW ROW();

REC[0] = txtEmpId.Text;

REC[1] = txtName.Text;

REC[2] = txtDesignation.Text;

REC[3] = txt DOJ .Text;

REC[4] = txt Salary. Text;

REC[5] = txt deptNo. Text;

DS.Tables[0].Rows.Add (REC);

Message box.Show ("Records is Added successfully into dataset table")

Example problems:

Publisher details

Publisher Id → int → PK

Publisher Name → varchar(50)

Publisher Address → varchar(50)

Publisher Contact No → bigint

Publisher Email →

varchar(50)

Books details

ISBN → big int → PK

Book Name → varchar(50)

Author Name → varchar(50)

MRP → Money

Publisher Id → int → FK

① Windows form:

Enter publisher Id

Enter publisher Name

Enter publisher Address

Enter publisher Mobile

Enter publisher email

② Widows form

Enter ISBN Number

Enter Book Name

Enter Author Name

Enter MRP of the book

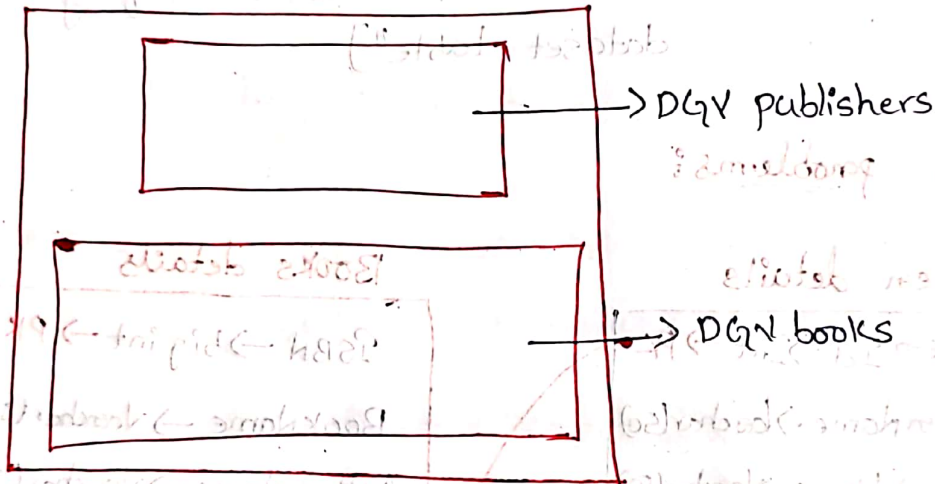
Select publisher Id

Insert

Update

Delete

Clear

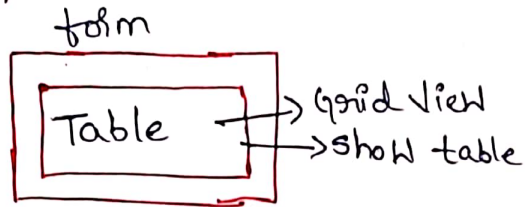


Task 1: In form load Event get all publishers details, from publishers details table and display in DGV publishers.

Task 2:

When selects any publishers id & get all the books details published by that publisher and display in data grid view. DGV Books.

Example to fill multiple tables data as a single table to dataset:-



Code:-

Using system.data.sqlclient;

Sql Connection con; SqlDataAdapter Da; DataSet DS;

private void form_28_Load (Object sender, EventArgs e)

{

string sqlcon string = "server = ";

con = new Sql Connection (sqlcon string);

string query = " select Emp details. EmpId , Empdetails.

ENAME , " + " Emp details. Designation , Empdetails. salary , "

+ " Department. Deptno , Department. DName , " +

" Department. Location from Emp details join " +

" Department on emp details . Deptno = Department. Deptno";

Da = new Sql Adapter (query, con);

DS = new data set ();

Da.Fill (DS, "EmpDept");

DGV sample. Data Source = DS.Tables [0];

}