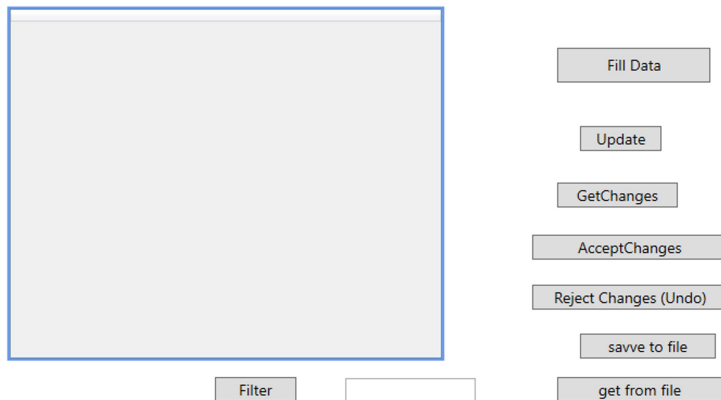


DB3-DataSet

16 December 2020 23:55



Fill Data: With DataSet

```
DataSet ds;
1 reference
private void Button_Click(object sender, RoutedEventArgs e)
{
    SqlConnection cn = new SqlConnection();
    cn.ConnectionString = @"Data Source=(localdb)\MsSqlLocalDb;Initial Catalog=JKDec20;Integrated Security=true";

    cn.Open();
    SqlCommand cmd = new SqlCommand();
    cmd.Connection = cn;
    cmd.CommandType = CommandType.Text;
    cmd.CommandText = "select * from Employees";

    SqlDataAdapter da = new SqlDataAdapter();
    da.SelectCommand = cmd;

    ds = new DataSet();
    da.Fill(ds, "Emps");

    cmd.CommandText = "select * from Departments";
    da.Fill(ds, "Deps");

    //primary key validation
    DataColumn[] arrCols = new DataColumn[1];
    arrCols[0] = ds.Tables["Emps"].Columns["EmpNo"];
    ds.Tables["Emps"].PrimaryKey = arrCols;

    //foreign key validation
    ds.Relations.Add(ds.Tables["Deps"].Columns["DeptNo"], ds.Tables["Emps"].Columns["DeptNo"]);

    //column level constraints
    //ds.Tables["Deps"].Columns["DeptName"].Unique = true;

    // dgEmps.ItemsSource = ds.Tables[0].DefaultView;
    dgEmps.ItemsSource = ds.Tables["Emps"].DefaultView;
    cn.Close();
}
```

Update :

```

1 reference
private void Button_Click_1(object sender, RoutedEventArgs e)
{
    SqlConnection cn = new SqlConnection();
    cn.ConnectionString = @"Data Source=(localdb)\MsSqlLocalDb;Initial Catalog=JKDec20;Integrated Security=true";

    cn.Open();

    SqlCommand cmdUpdate = new SqlCommand();
    cmdUpdate.Connection = cn;
    cmdUpdate.CommandType = CommandType.Text;
    cmdUpdate.CommandText = "update Employees set Name =@Name, Basic= @Basic, DeptNo = @DeptNo where EmpNo =@EmpNo";

    cmdUpdate.Parameters.Add(new SqlParameter { ParameterName = "@Name", SourceColumn = "Name", SourceVersion = DataRowVersion.Current });
    cmdUpdate.Parameters.Add(new SqlParameter { ParameterName = "@Basic", SourceColumn = "Basic", SourceVersion = DataRowVersion.Current });
    cmdUpdate.Parameters.Add(new SqlParameter { ParameterName = "@DeptNo", SourceColumn = "DeptNo", SourceVersion = DataRowVersion.Current });
    cmdUpdate.Parameters.Add(new SqlParameter { ParameterName = "@EmpNo", SourceColumn = "EmpNo", SourceVersion = DataRowVersion.Original });

    //similarly create the insert command
    //similarly create the delete command

```

Update ke under ka insert

```

// Insert .....

SqlCommand cmdInsert = new SqlCommand();
cmdInsert.Connection = cn;
cmdInsert.CommandType = CommandType.Text;
cmdInsert.CommandText = "insert into Employees values(@EmpNo,@Name,@Basic,@DeptNo)";

cmdInsert.Parameters.Add(new SqlParameter { ParameterName = "@Name", SourceColumn = "Name", SourceVersion = DataRowVersion.Current });
cmdInsert.Parameters.Add(new SqlParameter { ParameterName = "@Basic", SourceColumn = "Basic", SourceVersion = DataRowVersion.Current });
cmdInsert.Parameters.Add(new SqlParameter { ParameterName = "@DeptNo", SourceColumn = "DeptNo", SourceVersion = DataRowVersion.Current });
cmdInsert.Parameters.Add(new SqlParameter { ParameterName = "@EmpNo", SourceColumn = "EmpNo", SourceVersion = DataRowVersion.Current });

```

Update ke under ka delete

```

//Delete ....
SqlCommand cmdDelete = new SqlCommand();
cmdDelete.Connection = cn;
cmdDelete.CommandType = CommandType.Text;
cmdDelete.CommandText = "delete from Employees where EmpNo=@EmpNo";

cmdDelete.Parameters.Add(new SqlParameter { ParameterName = "@EmpNo", SourceColumn = "EmpNo", SourceVersion = DataRowVersion.Current });
//da.InsertCommand = cmdInsert;

```

Update ka finally :

```

SqlDataAdapter da = new SqlDataAdapter();
da.UpdateCommand = cmdUpdate;
da.InsertCommand = cmdInsert;
da.DeleteCommand = cmdDelete;

da.ContinueUpdateOnError = true; //ignore error and keep updating

da.Update(ds, "Emps");
}

```

Get Changes : Pehale ka code jaise ke waisa (update wala)

```

DataSet ds2 = ds.GetChanges(DataRowState.Modified);

da.Update(ds2, "Emps");
}

```

Accept Changes : Pehale ka code jaise ke waisa (update wala)

```

da.Update(ds, "Emps");
ds.AcceptChanges();
}

```

Reject Changes

```

// Reject changes
1 reference
private void Button_Click_4(object sender, RoutedEventArgs e)
{

```

```

// Reject changes
1 reference
private void Button_Click_4(object sender, RoutedEventArgs e)
{
    ds.RejectChanges();
}

1 reference

```

Save to XML File

```

1 reference
private void Button_Click_6(object sender, RoutedEventArgs e)
{
    // MessageBox.Show(ds.GetXml());
    // ds.GetXmlSchema();

    ds.WriteXmlSchema("a.xsd");
    ds.WriteXml("a.xml", XmlWriteMode.DiffGram);
}

```

Get From File

```

1 reference
private void Button_Click_7(object sender, RoutedEventArgs e)
{
    ds = new DataSet();
    ds.ReadXmlSchema("a.xml");
    ds.ReadXml("a.xml", XmlReadMode.DiffGram);
    dgEmps.ItemsSource = ds.Tables["Emps"].DefaultView;
}

```

Filter:

```

1 reference
private void Button_Click_5(object sender, RoutedEventArgs e)
{
    //DataView dv = new DataView(ds.Tables["Emps"]);
    //dv.RowFilter = "DeptNo="+ txtDeptNo.Text; //whrere clause
    //dv.Sort = "Name"; //ordery clause

    //dgEmps.ItemsSource = dv;

    ds.Tables["Emps"].DefaultView.RowFilter= "DeptNo=" + txtDeptNo.Text;

    //ds.Tables["Emps"].DefaultView.RowFilter = ""; =>Show all the table field
}

```