In this video we will discuss **how to handle deadlock errors in an ADO.NET application**.   
  
   
  
**To handle deadlock errors in ADO.NET**  
**1.** Catch the SqlException object  
**2.** Check if the error is deadlock error using the Number property of the SqlException object   
  
**Stored Procedure 1 Code**

Alter procedure spTransaction1

as

Begin

    Begin Tran

    Update TableA Set Name = 'Mark Transaction 1' where Id = 1

    Waitfor delay '00:00:05'

    Update TableB Set Name = 'Mary Transaction 1' where Id = 1

    Commit Transaction

End

**Stored Procedure 2 Code**

Alter procedure spTransaction2

as

Begin

    Begin Tran

    Update TableB Set Name = 'Mark Transaction 2' where Id = 1

    Waitfor delay '00:00:05'

    Update TableA Set Name = 'Mary Transaction 2' where Id = 1

    Commit Transaction

End

**WebForm1.aspx HTML**

<table>

    <tr>

        <td>

            <asp:Button ID="Button1" runat="server"

                Text="Update Table A and then Table B"

                OnClick="Button1\_Click" />

        </td>

    </tr>

    <tr>

        <td>

            <asp:Label ID="Label1" runat="server"></asp:Label>

        </td>

    </tr>

</table>

**WebForm1.aspx.cs code**

using System;

using System.Configuration;

using System.Data;

using System.Data.SqlClient;

namespace Demo

{

    public partial class WebForm1 : System.Web.UI.Page

    {

        protected void Page\_Load(object sender, EventArgs e)

        { }

        protected void Button1\_Click(object sender, EventArgs e)

        {

            try

            {

                string cs =ConfigurationManager.ConnectionStrings["DBCS"].ConnectionString;

                using (SqlConnection con = new SqlConnection(cs))

                {

                    SqlCommand cmd = new SqlCommand("spTransaction1", con);

                    cmd.CommandType = CommandType.StoredProcedure;

                    con.Open();

                    cmd.ExecuteNonQuery();

                    Label1.Text = "Transaction successful";

                    Label1.ForeColor = System.Drawing.Color.Green;

                }

            }

            catch (SqlException ex)

            {

                if (ex.Number == 1205)

                {

                    Label1.Text = "Deadlock. Please retry";

                }

                else

                {

                    Label1.Text = ex.Message;

                }

                Label1.ForeColor = System.Drawing.Color.Red;

            }

        }

    }

}

**WebForm2.aspx HTML**

<table>

    <tr>

        <td>

            <asp:Button ID="Button1" runat="server"

                Text="Update Table B and then Table A"

                OnClick="Button1\_Click" />

        </td>

    </tr>

    <tr>

        <td>

            <asp:Label ID="Label1" runat="server"></asp:Label>

        </td>

    </tr>

</table>

**WebForm2.aspx.cs code**

using System;

using System.Configuration;

using System.Data;

using System.Data.SqlClient;

namespace Demo

{

    public partial class WebForm1 : System.Web.UI.Page

    {

        protected void Page\_Load(object sender, EventArgs e)

        { }

        protected void Button1\_Click(object sender, EventArgs e)

        {

            try

            {

                string cs = ConfigurationManager.ConnectionStrings["DBCS"].ConnectionString;

                using (SqlConnection con = new SqlConnection(cs))

                {

                    SqlCommand cmd = new SqlCommand("spTransaction1", con);

                    cmd.CommandType = CommandType.StoredProcedure;

                    con.Open();

                    cmd.ExecuteNonQuery();

                    Label1.Text = "Transaction successful";

                    Label1.ForeColor = System.Drawing.Color.Green;

                }

            }

            catch (SqlException ex)

            {

                if (ex.Number == 1205)

                {

                    Label1.Text = "Deadlock. Please retry";

                }

                else

                {

                    Label1.Text = ex.Message;

                }

                Label1.ForeColor = System.Drawing.Color.Red;

            }

        }

    }

}