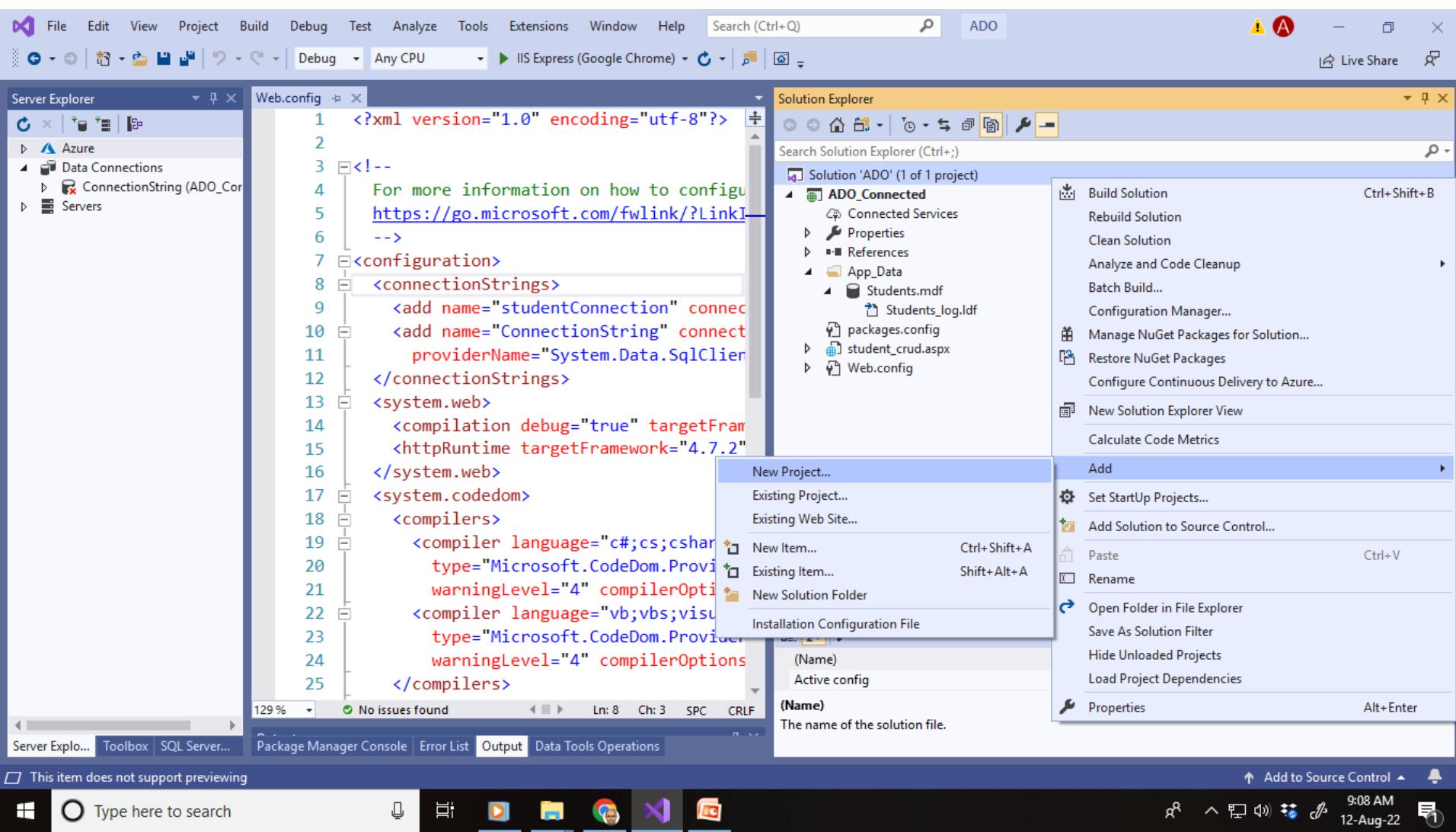
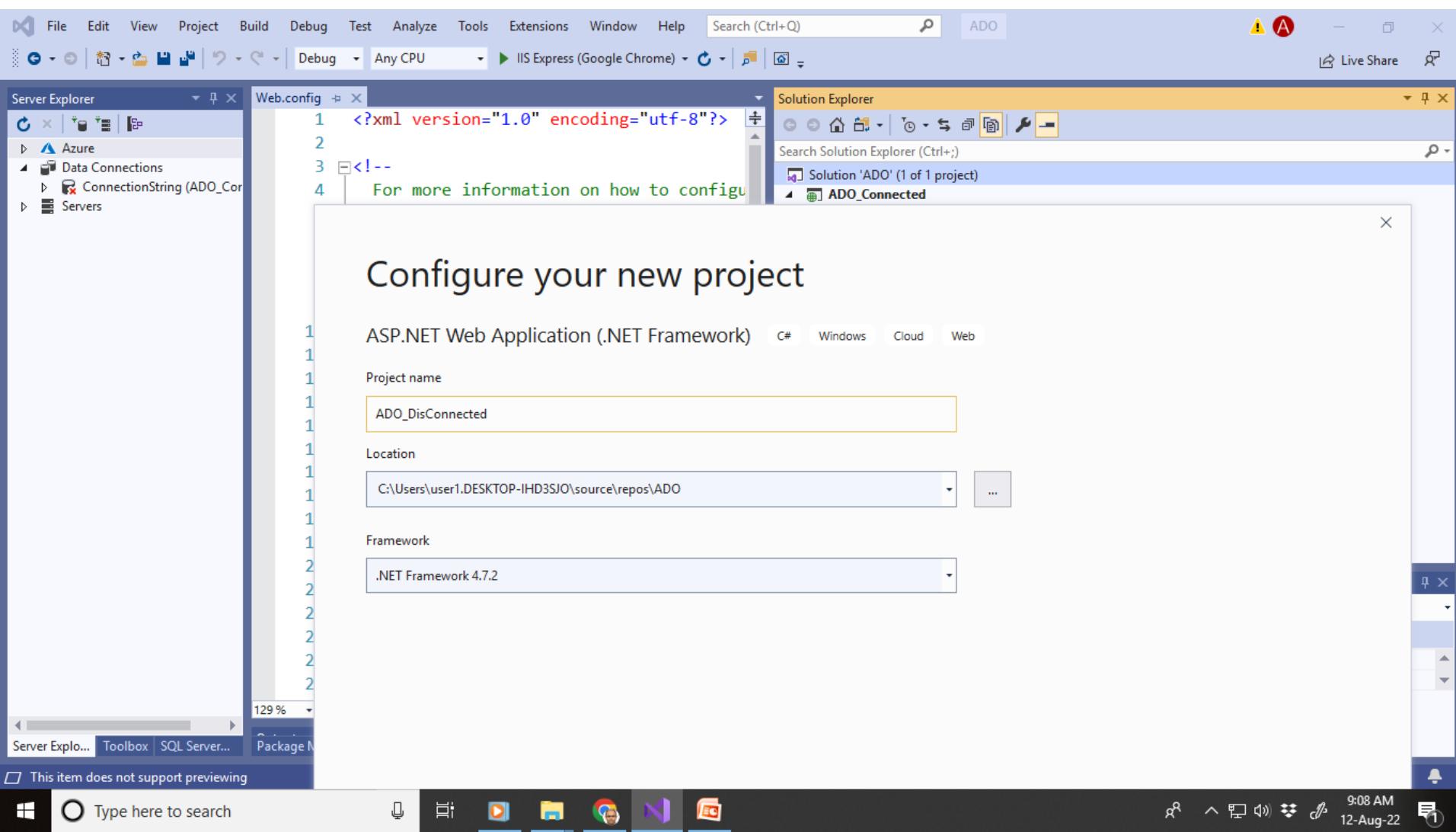


# ADO.NET and ASP.NET

Prepared for V<sup>th</sup> semester DDU-CE students  
2022-23 WAD

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**Create a new ASP.NET Web Application**

**Empty**  
An empty project template for creating ASP.NET applications. This template does not have any content in it.

**Web Forms**  
A project template for creating ASP.NET Web Forms applications. ASP.NET Web Forms lets you build dynamic websites using a familiar drag-and-drop, event-driven model. A design surface and hundreds of controls and components let you rapidly build sophisticated, powerful UI-driven sites with data access.

**MVC**  
A project template for creating ASP.NET MVC applications. ASP.NET MVC allows you to build applications using the Model-View-Controller architecture. ASP.NET MVC includes many features that enable fast, test-driven development for creating applications that use the latest standards.

**Web API**  
A project template for creating RESTful HTTP services that can reach a broad range of clients including browsers and mobile devices.

**Single Page Application**  
A project template for creating rich client side JavaScript driven HTML5 applications using ASP.NET Web API. Single Page Applications provide a rich user experience which includes client-side interactions using HTML5, CSS3, and JavaScript.

**Authentication**  
No Authentication  
[Change](#)

**Add folders & core references**

Web Forms  
 MVC  
 Web API

**Advanced**

Configure for HTTPS  
 Docker support  
(Requires Docker Desktop)  
 Also create a project for unit tests  
ADO\_DisConnected.Tests

[Back](#) [Create](#)

**Server Explorer**

File Edit View F Live Share

Server Explorer

Azure Data Connections ConnectionString Servers

Type here to search Add to Source Control

9:11 AM 12-Aug-22

Screenshot of Microsoft Visual Studio 2022 showing a context menu open over a project in the Solution Explorer.

The context menu is titled "ADO" and contains the following items:

- New Item... (Ctrl+Shift+A)
- Existing Item... (Shift+Alt+A)
- New Scaffolded Item...
- New Folder
- Add ASP.NET Folder
- From Cookiecutter...
- Container Orchestrator Support...
- Docker Support...
- Application Insights Telemetry...
- REST API Client...
- Client-Side Library...
- New Azure WebJob Project
- Existing Project as Azure WebJob
- Reference...
- Service Reference...
- Connected Service
- Analyzer...
- HTML Page
- JavaScript File
- Style Sheet
- Web Form
- MVC 5 View Page (Razor)
- Web API Controller Class (v2.1)
- SQL Server Database** (highlighted)
- Global Application Class
- ADO.NET Entity Data Model
- Web Service (ASMX)
- OWIN Startup class
- Class...

The Solution Explorer on the right shows the following options:

- Build
- Rebuild
- Clean
- View
- Analyze and Code Cleanup
- Publish...
- Overview
- Scope to This
- New Solution Explorer View
- Build Dependencies
- Add
- Manage NuGet Packages...
- Manage Client-Side Libraries...
- Manage User Secrets
- Set as StartUp Project
- Debug
- Initialize Interactive with Project
- Source Control
- Cut (Ctrl+X)
- Paste (Ctrl+V)
- Remove (Del)
- Rename
- Unload Project
- Load Project Dependencies
- Open Folder in File Explorer
- Properties (Alt+Enter)

The main window displays the "ASP.NET" landing page with sections like "Build Your App", "Get started with ASP.NET", and ".NET application architecture".

Screenshot of Microsoft Visual Studio IDE showing the creation of a new ASP.NET project.

The main window displays the "ASP.NET" landing page with the heading "Learn about the .NET platform, create your first application and extend it to the cloud." Below the heading are three icons: a code brace icon, a cloud icon, and a tools icon. A tooltip for the code brace icon says "earn Your IDE".

A modal dialog titled "Specify Name for Item" is open in the center, containing a text input field with the value "Cinema". It includes "OK" and "Cancel" buttons.

The "Server Explorer" pane on the left shows "Azure", "Data Connections" (ConnectionString (ADO\_Connected)), and "Servers".

The "Solution Explorer" pane on the right shows two projects: "ADO\_Connected" and "ADO\_DisConnected". "ADO\_DisConnected" is selected, showing its files: "Connected Services", "Properties", "References", "packages.config", and "Web.config".

The "Properties" pane at the bottom right shows "ADO\_DisConnected Project Properties" with the "Always Start When" dropdown set to "False".

The status bar at the bottom indicates "Creating project 'ADO\_DisConnected'... project creation successful." and shows the date and time: "12-Aug-22 9:14 AM".

Screenshot of Microsoft Visual Studio 2022 showing a warning dialog about adding an .mdf file to an ASP.NET Web site.

The dialog box is titled "Microsoft Visual Studio" and contains the following message:

You are attempting to add a special file type (.mdf) to an ASP.NET Web site. In general, to use this type of item in your site, you should place it in the 'App\_Data' folder. Do you want to place the file in the 'App\_Data' folder?

Buttons at the bottom of the dialog are: Yes, No, and Cancel.

The Solution Explorer shows two projects: ADO\_Connected and ADO\_DisConnected. The ADO\_DisConnected project is selected. It contains files like Connected Services, Properties, References, packages.config, student\_crud.aspx, and Web.config.

The Properties window shows "ADO\_DisConnected Project Properties".

A notification from Dropbox indicates "Screenshot Added" and "A screenshot was added to your Dropbox." with a timestamp of 9:14 AM on 12-Aug-22.

The taskbar at the bottom includes icons for File Explorer, Task View, Start, Search, and several pinned applications.

Cluster is a database object which contains groups of tables together and also shares same data block.

In all databases cluster database object is used to improves performance of the Joins that's why cluster database object is created by database Adminisnistrator only.

Cluster tables must have a ccommon column name, this common column is also called as cluster key.

ASC or DESC specifies the order in which index rows are retrieved when the the forward chain is followed

The screenshot shows the SSMS interface with the following details:

- Server Explorer:** Shows the database structure. A table named 'Timings' is selected in the 'Tables' node under 'Cinema.mdf'.
- Design View:** Displays the table structure with two columns: 'Id' (int, primary key, clustered) and 'Slot' (time(7)).
- T-SQL View:** Shows the CREATE TABLE T-SQL script:

```
1 CREATE TABLE [dbo].[Timings] (
2     [Id] INT IDENTITY (1, 1) NOT NULL,
3     [Slot] TIME (7) NULL,
4     PRIMARY KEY CLUSTERED ([Id] ASC)
5 );
```
- Properties View:** Shows the properties for the 'Tables' node, including the primary key and clustered index.
- Solution Explorer:** Shows two projects: 'ADO\_Connected' and 'ADO\_DisConnected'. The 'ADO\_DisConnected' project is selected.
- Toolbox:** Standard SSMS toolbox icons.
- Task List:** Shows 'Connection Ready'.
- Status Bar:** Shows the connection path: '(LocalDB)\MSSQLLocalDB | DESKTOP-IHD3SJ0\user1 | C:\USERS\USER1\Desktop...' and the date/time: '12-Aug-22 9:16 AM'.

Screenshot of Microsoft Visual Studio IDE showing a database connection and a table view.

**Server Explorer** pane:

- Azure
- Data Connections
  - Cinema.mdf
    - Tables
      - Timings- Views
- Stored Procedures
- Functions
- Synonyms
- Types
- Assemblies
- ConnectionString (ADO\_Connected)
- Servers

**dbo.Timings [Data]** pane:

	Id	Slot
1	14:30:00	
2	17:45:00	
3	09:10:00	
4	20:40:00	
	NULL	NULL

**Solution Explorer** pane:

- Search Solution Explorer (Ctrl+;)
  - Solution 'ADO' (2 of 2 projects)
    - ADO\_Connected
      - Connected Services
      - Properties
      - References
    - App\_Data
      - Students.mdf
        - Students\_log.ldf
        - packages.config
      - student\_crud.aspx
      - Web.config
  - ADO\_DisConnected
    - Connected Services
    - Properties
    - References
    - App\_Data
      - packages.config
      - Web.config

**Properties** pane:

- Connection Ready
- (LocalDB)\MSSQLLocalDB | DESKTOP-IHD3SJO\user1 | C:\USERS\USER1.DESKTOP...

**Bottom Navigation Bar:**

- Server Explor... Toolbox SQL Server...
- Package Manager Console Error List Output Data Tools Operations
- 4 Rows | Cell is Read Only
- Add to Source Control

**Taskbar:**

- Type here to search
- File Edit View Project Build Debug SQL Test Analyze Tools Extensions Window Help
- Search (Ctrl+Q) ADO
- Live Share

**System Tray:**

- 9:17 AM 12-Aug-22

Screenshot of Microsoft Visual Studio IDE showing the creation of a database table.

**Server Explorer:** Shows the connection to "Cinema.mdf" and its tables: Timings (with sub-items Id and Slot), Views, Stored Procedures, Functions, Synonyms, Types, Assemblies, and ConnectionString (ADO\_Connected).

**Toolbox:** Standard Visual Studio toolbox icons.

**Script Editor:** Displays the T-SQL script for creating the "Movie" table.

**Properties:** Shows the properties for the "Movie" table, including Keys (1), Check Constraints (0), Indexes (0), Foreign Keys (0), and Triggers (0).

**Solution Explorer:** Shows two projects: "ADO' (2 of 2 projects) and "ADO\_DisConnected".

**Task List:** Shows "No issues found".

**Output:** Shows the connection status: "Connection Ready" and the connection path: "(LocalDB)\MSSQLLocalDB | DESKTOP-IHD3SJ0\user1 | C:\USERS\USER1\Desktop...".

**System Tray:** Windows taskbar icons for search, file explorer, browser, and system notifications.

```
CREATE TABLE [dbo].[Movie] (
    [MId] INT IDENTITY (1, 1) NOT NULL,
    [Released] DATE NULL,
    [Name] NVARCHAR (50) NOT NULL,
    [SID] INT NULL,
    PRIMARY KEY CLUSTERED ([MId] ASC),
);
```

Screenshot of Microsoft Visual Studio showing the creation of a database table.

The Server Explorer shows the connection to "Cinema.mdf" and its tables: "Timings" (containing "Id" and "Slot") and "Movie" (containing "MId", "Released", "Name", and "SID").

The Solution Explorer shows two projects: "ADO\_Connected" and "ADO\_DisConnected".

The main window displays the "dbo.Movie [Design]" view, showing the table structure:

	Name	Data Type	Allow Nulls	Default
MId	int	<input type="checkbox"/>		
Released	date	<input checked="" type="checkbox"/>		
Name	nvarchar(50)	<input type="checkbox"/>		
SID	int	<input checked="" type="checkbox"/>		

The "T-SQL" tab shows the generated SQL script:

```
CREATE TABLE [dbo].[Movie] (
    [MId] INT IDENTITY (1, 1) NOT NULL,
    [Released] DATE NULL,
    [Name] NVARCHAR (50) NOT NULL,
    [SID] INT NULL,
    PRIMARY KEY CLUSTERED ([MId] ASC),
);
```

A context menu is open over the "Triggers (0)" section, with options: "Add New Foreign Key" and "Switch to T-SQL Pane".

The status bar at the bottom indicates "Connection Ready" and the path "(LocalDB)\MSSQLLocalDB | DESKTOP-IHD3SJ0\user1 | C:\USERS\USER1\Desktop...".



Type here to search



9:18 AM  
12-Aug-22

Screenshot of Microsoft Visual Studio showing the creation of a table named 'Movie'.

The 'Server Explorer' pane shows the database 'Cinema.mdf' with its tables, including 'Timings' which has columns 'Id' and 'Slot'.

The 'Solution Explorer' pane shows two projects: 'ADO\_Connected' and 'ADO\_DisConnected'. The 'ADO\_DisConnected' project contains files like 'Connected Services', 'Properties', 'References', 'App\_Data', and 'Web.config'.

The 'Properties' pane is open for the 'Movie' table, showing the schema object 'Movie'.

The 'Toolbox' and 'Output' tabs are visible at the bottom.

Code Editor:

```
1 CREATE TABLE [dbo].[Movie] (
2     [MId]      INT          IDENTITY (1, 1) NOT NULL,
3     [Released] DATE         NULL,
4     [Name]      NVARCHAR (50) NOT NULL,
5     [SID]       INT          NULL,
6     PRIMARY KEY CLUSTERED ([MId] ASC),
7 );
8
9
```

Screenshot of Microsoft Visual Studio IDE showing the creation of a database table.

**Server Explorer:** Shows the connection to "Cinema.mdf" and its tables: Movie and Timings.

**dbo.Movie [Design]:** Displays the table structure with columns MId, Released, Name, and SId.

**Properties:** Shows the table's properties, including Primary Key (MId), Clustered Index (MId), and a Foreign Key constraint (FK\_Movie\_Timings) referencing Timings.Id.

**T-SQL Editor:** Displays the SQL script for creating the table:

```
CREATE TABLE [dbo].[Movie] (
    [MId] INT IDENTITY (1, 1) NOT NULL,
    [Released] DATE NULL,
    [Name] NVARCHAR (50) NOT NULL,
    [SId] INT NULL,
    PRIMARY KEY CLUSTERED ([MId] ASC),
    CONSTRAINT [FK_Movie_Timings] FOREIGN KEY ([SId]) REFERENCES [dbo].[Timings] ([Id])
);
```

**Data Tools Operations:** Shows an update operation for the table.

**Solution Explorer:** Shows two projects: "ADO\_Connected" and "ADO\_DisConnected".

**Taskbar:** Shows the Windows Start button, a search bar, pinned icons for File Explorer, File Manager, and Edge, and the system tray with the date and time (9:20 AM, 12-Aug-22).

Screenshot of Microsoft Visual Studio IDE showing a database project named 'ADO\_DisConnected'.

The Server Explorer pane shows the database structure:

- Azure
- Data Connections
  - Cinema.mdf
    - Tables
      - Movie (selected)
      - Mld
      - Released
      - Name
      - Sld
    - Timings
  - Views
  - Stored Procedures
  - Functions
  - Synonyms
  - Types
  - Assemblies
- ConnectionString (ADO\_DisConnected)
- Servers

The Data Tools Operations pane shows an update operation for the 'CINEMA.MDF' file:

- Update for (LocalDB)\MSSQLLocalDB.C:\USERS\USER1.DESKTOP-IHD3SJO\SOURCE\REPOS\ADO\ADO\_DisConnected\APP\_DATA\CINEMA.MDF 9:20:14 AM -
- Creating update preview...

The Solution Explorer pane shows two projects:

- ADO (2 of 2 projects)
  - ADO\_Connected
    - Connected Services
    - Properties
    - References
  - App\_Data
    - Students.mdf
      - Students\_log.ldf
      - packages.config
    - student\_crud.aspx
  - Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
    - packages.config
  - Web.config

The Data Explorer pane displays the 'Movie' table data:

MId	Released	Name	Sld
1	18-Aug-12	Udaan	1
2	19-Jul-13	D Day	2
3	26-Oct-07	No Smoking	3
4	21-May-99	The Straight Story	4
NULL	NULL	NULL	NULL

The bottom status bar shows:

- 4 Rows | Cell is Read Only
- Ln 4 Col 4
- Add to Source Control
- 9:23 AM 12-Aug-22

Screenshot of Microsoft Visual Studio IDE showing a database connection to 'Cinema.mdf' and a 'WebForm1' dialog.

**Server Explorer** pane shows the database structure:

- Azure
- Data Connections (Cinema.mdf)
- Tables (Movie, Timings)
- Views
- Stored Procedures
- Functions
- Synonyms
- Types
- Assemblies
- ConnectionString (ADO\_DisConnected)
- Servers

**Toolbox** pane is visible at the bottom left.

**Data Tools Operations** pane shows a task: "Update for (LocalDB)\MSSQLLocalDB.C:\USERS\USER1.DESKTOP-IHD3SJO\SOURCE\REPOS\ADO\ADO\_DisConnected\APP\_DATA\CINE...".

**Solution Explorer** pane shows two projects:

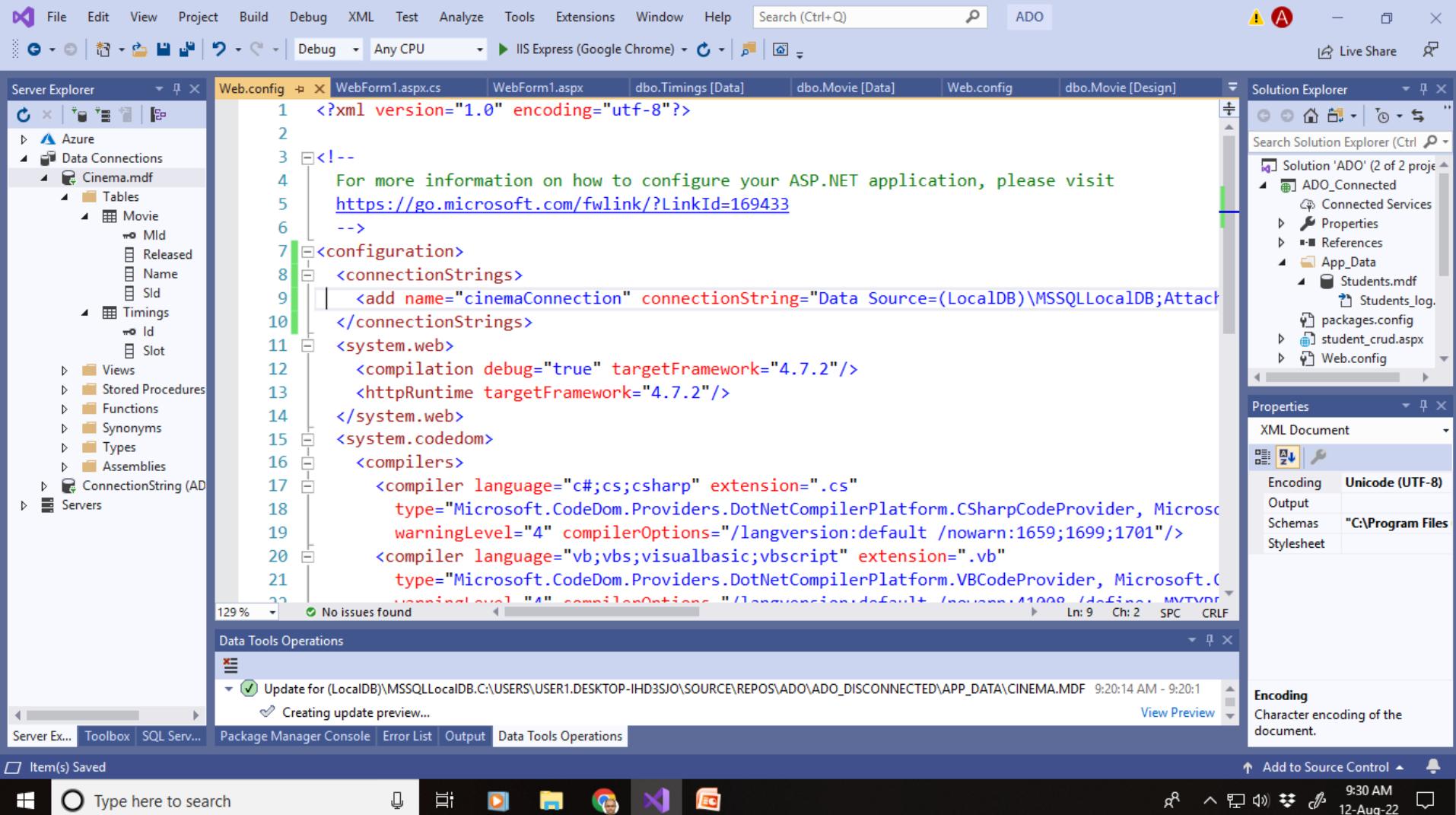
- ADO\_Connected**: Contains Connected Services, Properties, References, App\_Data (Students.mdf, Students\_log.ldf), packages.config, student\_crud.aspx, and Web.config.
- ADO\_DisConnected**: Contains Connected Services, Properties, References, App\_Data, packages.config, and Web.config.

**Properties** pane for the ADO\_DisConnected project shows:

- Always Start When Debug: False
- Anonymous Authentication: Enabled

**Always Start When Debugging**: Start the local Web server even when not the startup project.

**Taskbar** at the bottom right shows the date and time: 9:28 AM 12-Aug-22.



File Edit View Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Live Share

Toolbox : WebForm1.aspx Web.config WebForm1.aspx.cs ADO\_DisConnected

Search Tool ADO\_DisConnected ADO\_DisConnected.WebForm1 Page\_Load(object sender, EventArgs e)

General

There are no usable controls in this group. Drag an item onto this text to add it to the toolbox.

```
13 public partial class WebForm1 : System.Web.UI.Page
14 {
15     It is a collection of data tables that contain the data. It is used to fetch data
16     without interacting with a Data Source that's why, it also known as
17     disconnected data access method.
18     protected void Page_Load(object sender, EventArgs e)
19     {
20         string conStr = WebConfigurationManager.ConnectionStrings["cinemaConnection"].ConnectionString;
21         SqlConnection con = new SqlConnection(conStr);
22         SqlCommand cmd = new SqlCommand();
23         cmd.Connection = con;
24         cmd.CommandText = "Select * from Movie";
25         SqlDataAdapter da = new SqlDataAdapter(cmd);
26         ds = new DataSet();
27         try
28         {
29             using(con)
30             {
31                 con.Open();
32                 da.Fill(ds, "Movie");  
It is used to add rows in the DataSet to match those in the data source.
33             }
34         }
35         catch(Exception ex)
36     }
37 }
```

129% No issues found Ln: 38 Ch: 35 SPC CRLF

Data Tools Operations

- Update for (LocalDB)\MSSQLLocalDB.C:\USERS\USER1.DESKTOP-IHD3SJO\SOURCE\REPOS\ADO\ADO\_DISCONNECTED\APP\_DATA\CINEMA.MDF 9:20:14 AM - 9:20:18 AM (0:00:03)  
Creating update preview... View Preview

Package Manager Console Error List Output Data Tools Operations

Add to Source Control

Item(s) Saved

Type here to search

9:39 AM 12-Aug-22

Solution Explorer

Search Solution

ADO\_DisConnected Conn Properties References App\_Data packa Web.c

Properties

File Edit View Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Live Share

Toolbox : WebForm1.aspx Web.config WebForm1.aspx.cs ADO\_DisConnected

Search Tool ADO\_DisConnected

General

There are no usable controls in this group. Drag an item onto this text to add it to the toolbox.

```
24 ds = new DataSet();
25 try
26 {
27     using(con)
28     {
29         con.Open();
30         da.Fill(ds, "Movie");
31     }
32 }
33 catch(Exception ex)
34 {
35     Console.WriteLine(ex.Message);
36 }
37 GridViewMV.DataSource = ds.Tables["Movie"];
38 GridViewMV.DataBind();
39 }
40 }
41 }
```

Solution Explorer

Search Solution

ADO\_DisConnected

Conn Prop References App\_Data packa Web.c

Properties

129% No issues found

Data Tools Operations

Update for (LocalDB)\MSSQLLocalDB.C:\USERS\USER1.DESKTOP-IHD3SJO\SOURCE\REPOS\ADO\ADO\_DISCONNECTED\APP\_DATA\CINEMA.MDF 9:20:14 AM - 9:20:18 AM (0:00:03)

Creating update preview... View Preview

Package Manager Console Error List Output Data Tools Operations

Add to Source Control

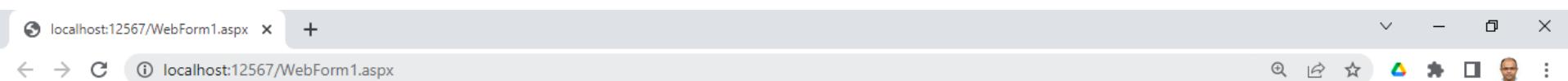
Item(s) Saved

Type here to search

9:39 AM 12-Aug-22

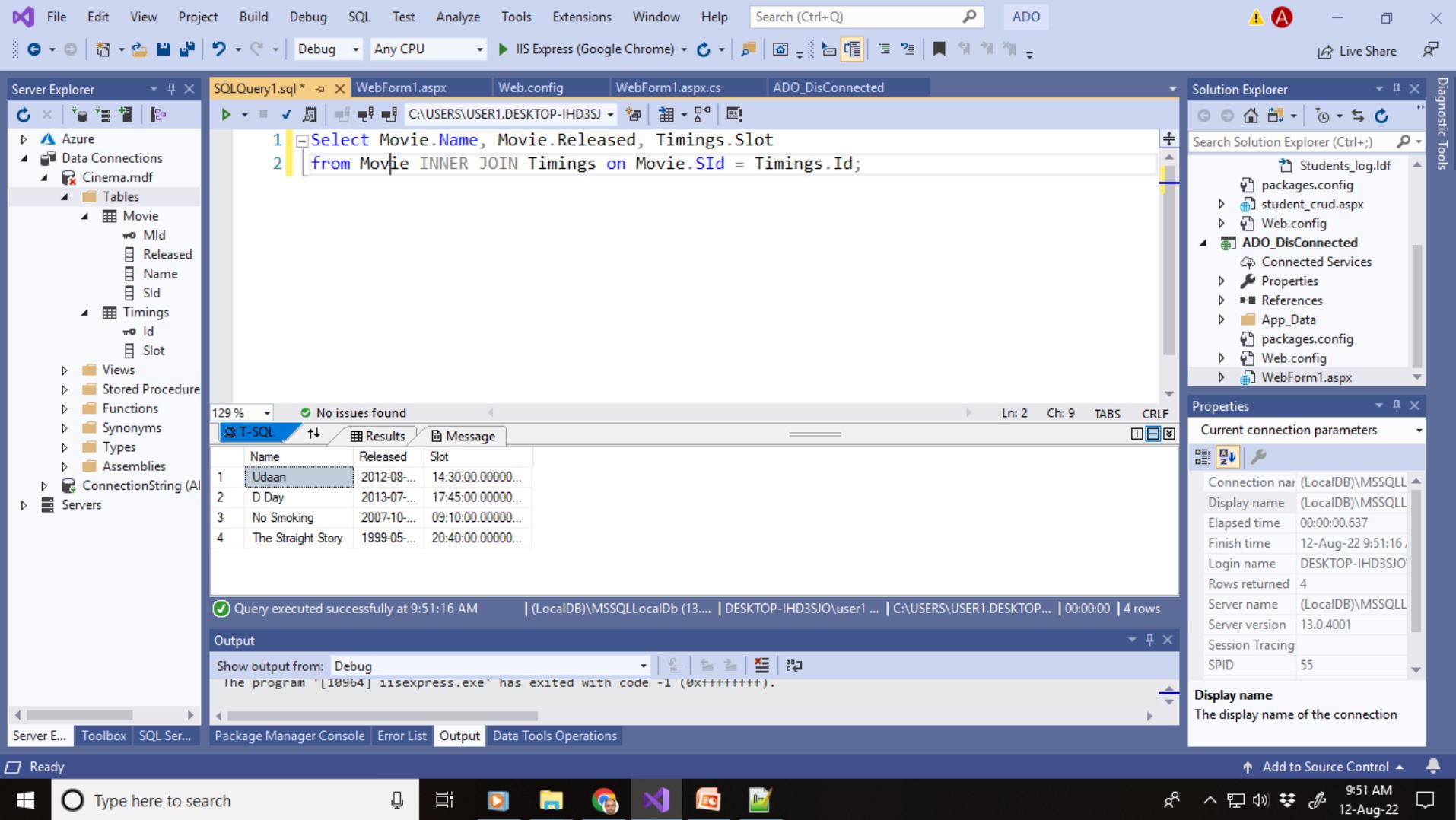
MId	Released	Name	SId
1	18-Aug-12 12:00:00 AM	Udaan	1
2	19-Jul-13 12:00:00 AM	D Day	2
3	26-Oct-07 12:00:00 AM	No Smoking	3
4	21-May-99 12:00:00 AM	The Straight Story	4





Name	Released	Slot
Udaan	18-Aug-12 12:00:00 AM	14:30:00
D Day	19-Jul-13 12:00:00 AM	17:45:00
No Smoking	26-Oct-07 12:00:00 AM	09:10:00
The Straight Story	21-May-99 12:00:00 AM	20:40:00



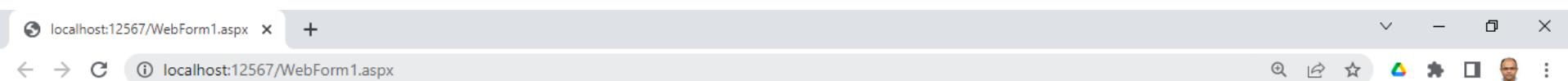


The screenshot shows the Microsoft Visual Studio IDE interface with the following details:

- File Bar:** File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help.
- Search Bar:** Search (Ctrl+Q).
- Toolbars:** Standard toolbar with icons for New, Open, Save, Print, etc.
- Project Explorer:** Shows the solution "ADO\_DisConnected" with files like "WebForm1.aspx", "Web.config", and "WebForm1.aspx.cs".
- Server Explorer:** Shows the database connection "Cinema.mdf" with tables "Movie" and "Timings".
- Code Editor:** Displays the C# code for "WebForm1.aspx.cs" under the "ADO\_DisConnected" namespace. The code uses ADO.NET to query the "Movie" table.

```
ADO_DisConnected
cmd.Connection = con;
cmd.CommandText = "Select Movie.Name, Movie.Released, Timings.Slot from SqlDataAdapter da = new SqlDataAdapter(cmd);
ds = new DataSet();
try
{
    using(con)
    {
        con.Open();
        da.Fill(ds, "MyMovie");
    }
}
catch(Exception ex)
{
    Console.WriteLine(ex.Message);
}
GridViewMV.DataSource = ds.Tables["MyMovie"];
GridViewMV.DataBind();
```

- Output Window:** Shows the message: "The program '[10964] iisexpress.exe' has exited with code -1 (0xffffffff)."
- Taskbar:** Includes icons for Server Explorer, Toolbox, SQL Server Object Explorer, Package Manager Console, Error List, Output (selected), Data Tools Operations, and Add to Source Control.
- System Tray:** Shows the date and time (9:51 AM, 12-Aug-22) and system icons.



Name	Released	Slot
Udaan	18-Aug-12 12:00:00 AM	14:30:00
D Day	19-Jul-13 12:00:00 AM	17:45:00
No Smoking	26-Oct-07 12:00:00 AM	09:10:00
The Straight Story	21-May-99 12:00:00 AM	20:40:00



Screenshot of Microsoft Visual Studio IDE showing a web application project.

**Toolbox:** Standard category selected, showing Button, ImageButton, LinkButton, RadioButton, RadioButtonList, and Input (Button).

**Design View:** Shows a table with three columns (Column0, Column1, Column2) containing the value "abc" repeated five times. Below the table is a button labeled "Add Time slot".

**Solution Explorer:** Lists the project structure:

- Properties
- References
- App\_Data
  - Students.mdf
    - Students\_log.ldf
  - packages.config
  - student\_crud.aspx
  - Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
  - packages.config
  - Web.config
  - WebForm1.aspx

**Properties Window:** Selected button is "btnAddTime".

- (Expressions)
- (ID) **btnAddTime**
- AccessKey
- BackColor
- BorderColor
- BorderStyle
- NotSet

**Text:** The text to be shown on the button.

**Status Bar:** Add to Source Control, 9:57 AM, 12-Aug-22.

Screenshot of Microsoft Visual Studio IDE showing an ASP.NET web application project.

**Toolbox:** Standard pane (Panel, UpdatePanel).

**Code Editor:** SQLQuery1.sql, WebForm1.aspx\*, Web.config, WebForm1.aspx.cs\*, ADO\_DisConnected

```
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10  <form id="form1" runat="server">
11    <div>
12      <asp:GridView ID="GridViewMV" runat="server"></asp:GridView>
13      <br />
14      <asp:Button ID="btnAddTime" runat="server" OnClick="btnAddTime_Click" />
15      <br />
16      <asp:Panel ID="Panel1" runat="server">
17        <asp:Label ID="Label1" runat="server" Text="Label" />
18      </asp:Panel>
19    </div>
20  </form>
21 </body>
22 </html>
23
```

**Solution Explorer:**

- Properties
- References
- App\_Data
- Students.mdf
  - Students\_log.ldf
  - packages.config
- student\_crud.aspx
- Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
  - packages.config
  - Web.config
  - WebForm1.aspx

**Properties:** Panel1 <PANEL>

(ID)	Panel1
AccessKey	
BackColor	
BackImageUrl	
BorderColor	
BorderStyle	NotSet

**Status Bar:** 129%, No issues found, Design, Split, Source, Output, Show output from: Debug, The program '[12648] iisexpress.exe' has exited with code -1 (0xffffffff).

**Taskbar:** Server E..., Toolbox, SQL Ser..., Package Manager Console, Error List ..., Output, Data Tools Operations, Add to Source Control, Type here to search, 10:02 AM, 12-Aug-22

The screenshot shows the Microsoft Visual Studio IDE interface. The main area displays the code editor for `WebForm1.aspx.cs`, which contains the following ASP.NET markup:

```
6 <head runat="server">
7     <title></title>
8 </head>
9 <body>
10    <form id="form1" runat="server">
11        <div>
12            <asp:GridView ID="GridViewMV" runat="server"></asp:GridView>
13            <br />
14            <asp:Button ID="btnAddTime" runat="server" OnClick="btnAddTime_Click" Text='
15            <br />
16            <asp:Panel ID="Panel1" runat="server">
17                Slot: <asp:TextBox ID="tbSlot" runat="server"></asp:TextBox>
18                <asp:Button ID="btnCommitT" runat="server" Text="Commit" />
19            </asp:Panel>
20        </div>
21    </form>
22 </body>
23 </html>
```

The code editor includes a status bar at the bottom showing zoom level (129%), issues found (No issues found), and line/column information (Ln: 23 Ch: 8 SPC CRLF). Below the code editor are tabs for Design, Split, and Source, with Source selected.

The Solution Explorer on the right lists the project structure:

- Properties
- References
- App\_Data
  - Students.mdf
    - Students\_log.ldf
  - packages.config
  - student\_crud.aspx
  - Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
    - packages.config
    - Web.config
  - WebForm1.aspx

The Properties window on the far right shows the `Class` property for the `WebForm1.aspx` item, with the tooltip: "Defines class of the page body." The status bar at the bottom right shows the date and time: 10:03 AM 12-Aug-22.

Screenshot of Microsoft Visual Studio IDE showing a web application project named "ADO\_DisConnected".

The main window displays the code editor for "WebForm1.aspx.cs". The code includes event handlers for button clicks:

```
34     {
35         Console.WriteLine(ex.Message);
36     }
37     GridViewMV.DataSource = ds.Tables["MyMovie"];
38     GridViewMV.DataBind();
39 }
40 protected void btnAddTime_Click(object sender, EventArgs e)
41 {
42 }
43
44 protected void btnCommitT_Click(object sender, EventArgs e)
45 {
46 }
47
48 }
49 }
50 }
51 }
```

The Solution Explorer shows the project structure with files like "Students.mdf", "packages.config", and "WebForm1.aspx". The Properties window is also visible.

The Output window shows the message: "The program '[12648] iisexpress.exe' has exited with code -1 (0xffffffff)".

The status bar at the bottom indicates the date and time: "10:04 AM 12-Aug-22".

Screenshot of Microsoft Visual Studio IDE showing a web application project.

The main window displays the code editor for `WebForm1.aspx`, which contains ASP.NET markup:

```
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10  <form id="form1" runat="server">
11    <div>
12      <asp:GridView ID="GridViewMV" runat="server"></asp:GridView>
13      <br />
14      <asp:Button ID="btnAddTime" runat="server" OnClick="btnAddTime_Click" Text="Add Time" />
15      <br />
16      <asp:Panel ID="PanelTime" runat="server">
17        Slot: <asp:TextBox ID="tbSlot" runat="server"></asp:TextBox>
18        <asp:Button ID="btnCommitT" runat="server" Text="Commit" OnClick="btnCommitT_Click" />
19      </asp:Panel>
20    </div>
21  </form>
22 </body>
23 </html>
24
```

The Solution Explorer shows the project structure:

- Properties
- References
- App\_Data
  - Students.mdf
  - Students\_log.ldf
  - packages.config
- student\_crud.aspx
- Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
  - packages.config
  - Web.config
  - WebForm1.aspx

The Properties panel shows the properties for the `<DIV>` element:

(id)	accesskey
	aria-activedesc
	aria-atomic False
	aria-autocomp none
	aria-hissv False
	(id)

The Output window shows the message: "The program '[12648] iisexpress.exe' has exited with code -1 (0xffffffff)".

The status bar at the bottom right indicates the time is 10:05 AM and the date is 12-Aug-22.

The screenshot shows the Microsoft Visual Studio IDE interface. The main area is a code editor displaying C# code for a web page. The code is part of the `WebForm1.aspx.cs` file, specifically the `Page_Load` event handler. The code uses ADO.NET to query a database named `cinemaConnection` for movie details.

```
11  space ADO_DisConnected
12
13  public partial class WebForm1 : System.Web.UI.Page
14  {
15      DataSet ds;
16      protected void Page_Load(object sender, EventArgs e)
17      {
18          PanelTime.Visible = false;
19          string conStr =
20              WebConfigurationManager.ConnectionStrings["cinemaConnection"].ConnectionString;
21          SqlConnection con = new SqlConnection(conStr);
22          SqlCommand cmd = new SqlCommand();
23          cmd.Connection = con;
24          cmd.CommandText =
25              "Select Movie.Name, Movie.Released, Timings.Slot " +
26              "from Movie INNER JOIN Timings on Movie.SId = Timings.Id;";
27          SqlDataAdapter da = new SqlDataAdapter(cmd);
28          ds = new DataSet();
29          try
30          {
31              using (con)
32              {
33                  da.Fill(ds);
34                  BindData();
35              }
36          }
37      }
38  }
```

The Solution Explorer on the right side of the interface lists the project structure, including files like `App_Data`, `Students.mdf`, `WebForm1.aspx`, and `WebForm2.aspx`. The Properties window is also visible on the far right.

A screenshot of the Microsoft Visual Studio IDE interface. The main area shows the code editor with C# code for a web form. The code uses ADO.NET to query a database named 'Movie' for movie names, release dates, and timing slots. It then fills a dataset 'ds' with the results and binds it to a grid view control named 'GridViewMV'. The code editor has syntax highlighting and line numbers. The top menu bar includes File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help, and a search bar. The toolbar contains icons for file operations like Open, Save, and Print. The bottom navigation bar includes Package Manager Console, Error List, Output, Data Tools Operations, and Item(s) Saved. The status bar at the bottom right shows the date and time: 12-Aug-22, 1:27 PM.

```
24 cmd.CommandText =
25     "Select Movie.Name, Movie.Released, Timings.Slot " +
26     "from Movie INNER JOIN Timings on Movie.SId = Timings.Id;";
27 SqlDataReader da = new SqlDataReader(cmd);
28 ds = new DataSet();
29 try
30 {
31     using(con)
32     {
33         con.Open();
34         da.Fill(ds, "MyMovie");
35     }
36 }
37 catch(Exception ex)
38 {
39     Console.WriteLine(ex.Message);
40 }
41 GridViewMV.DataSource = ds.Tables["MyMovie"];
42 GridViewMV.DataBind();
43 }
```

File Edit View Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Live Share

Toolbox

SQLQuery1.sql WebForm1.aspx Web.config WebForm1.aspx.cs ADO\_DisConnected

ADO\_DisConnected

```
32 }  
33 }  
34 catch(Exception ex)  
35 {  
36     Console.WriteLine(ex.Message);  
37 }  
38 GridViewMV.DataSource = ds.Tables["MyMovie"];  
39 GridViewMV.DataBind();  
40 }  
41  
42 protected void btnAddTime_Click(object sender, EventArgs e)  
43 {  
44     PanelTime.Visible = true;  
45 }  
46  
47 protected void btnCommitT_Click(object sender, EventArgs e)  
48 {  
49 }  
50 }  
51 }  
52 }
```

Search Solution Explorer (Ctrl+;) Properties References App\_Data Students.mdf Students\_log.ldf packages.config student\_crud.aspx Web.config ADO\_DisConnected Connected Services Properties References App\_Data packages.config Web.config WebForm1.aspx

Properties

No issues found

Output

Show output from: Debug  
The program '[12648] iisexpress.exe' has exited with code -1 (0xffffffff).

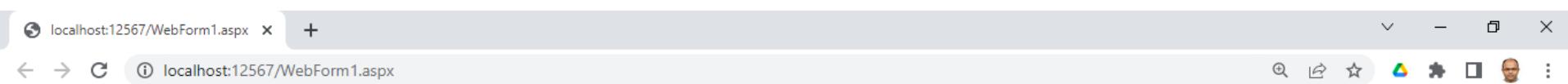
Server E... Toolbox SQL Ser... Package Manager Console Error List ... Output Data Tools Operations

Add to Source Control

Item(s) Saved

Type here to search

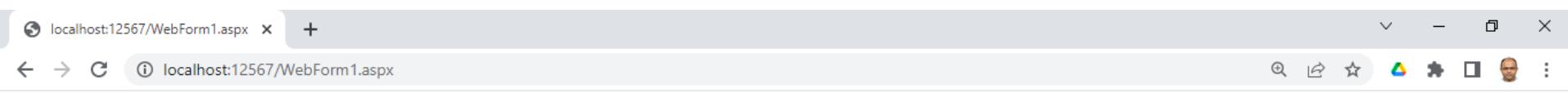
10:05 AM 12-Aug-22



Name	Released	Slot
Udaan	18-Aug-12 12:00:00 AM	14:30:00
D Day	19-Jul-13 12:00:00 AM	17:45:00
No Smoking	26-Oct-07 12:00:00 AM	09:10:00
The Straight Story	21-May-99 12:00:00 AM	20:40:00

Add Time slot



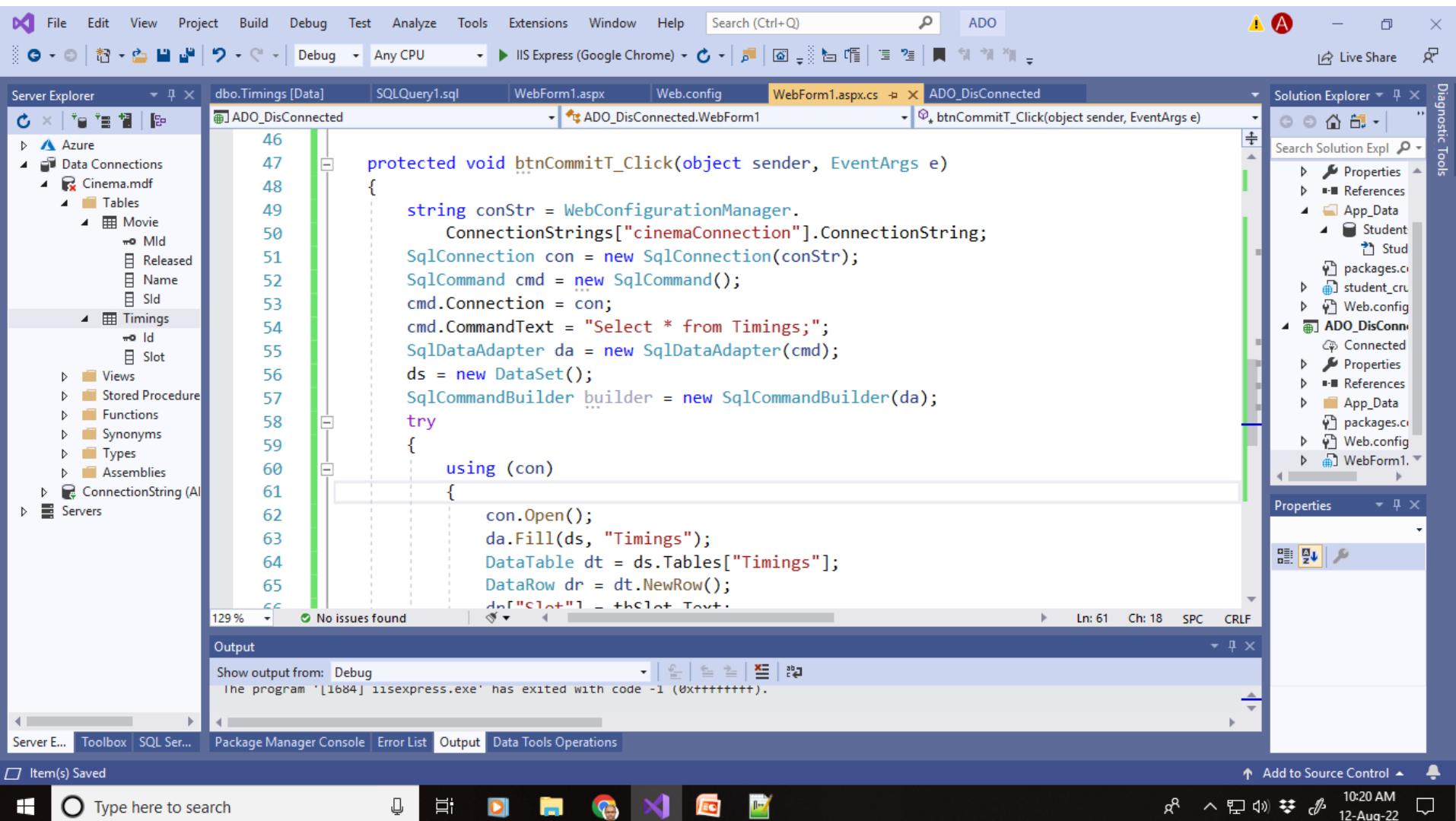


Name	Released	Slot
Udaan	18-Aug-12 12:00:00 AM	14:30:00
D Day	19-Jul-13 12:00:00 AM	17:45:00
No Smoking	26-Oct-07 12:00:00 AM	09:10:00
The Straight Story	21-May-99 12:00:00 AM	20:40:00

Add Time slot

Slot:  Commit

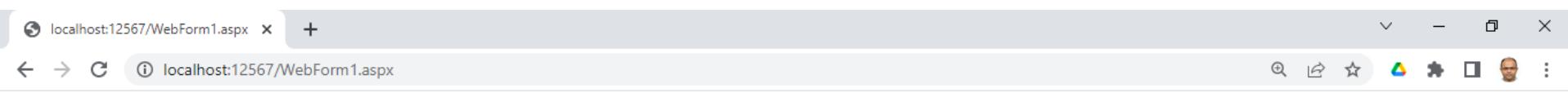




The screenshot shows the Microsoft Visual Studio IDE interface with the following details:

- Menu Bar:** File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help.
- Search Bar:** Search (Ctrl+Q) with a magnifying glass icon.
- Toolbars:** Standard toolbar with icons for New, Open, Save, Print, etc.
- Project Explorer:** Shows the project structure with "ADO\_DisConnected" selected. It includes "WebForm1.aspx.cs" and "WebForm1.aspx".
- Server Explorer:** Shows database connections, including "Cinema.mdf" with tables "Movie" and "Timings".
- Solution Explorer:** Shows files like "Properties", "References", "App\_Data", "Student", "Web.config", and "WebForm1.cs".
- Properties Explorer:** Shows properties for selected items.
- Toolbox:** Standard .NET toolbox.
- Output Window:** Shows the message: "The program '[1684] iisexpress.exe' has exited with code -1 (0xffffffff)".
- Code Editor:** Displays the C# code for "WebForm1.aspx.cs". The code uses ADO.NET to interact with a local database. A tooltip is visible over the "CommonBuilder" class definition.
- Status Bar:** Shows the current line (Ln: 74), character (Ch: 14), and file type (SPC, CRLF).
- Taskbar:** Shows the Windows Start button, a search bar, and pinned icons for File Explorer, File Manager, and other applications.

```
ds = new DataSet();
SqlCommandBuilder builder = new SqlCommandBuilder(da);
try
{
    using (con)
    {
        con.Open();
        da.Fill(ds, "Timings");
        DataTable dt = ds.Tables["Timings"];
        DataRow dr = dt.NewRow();
        dr["Slot"] = tbSlot.Text;
        dt.Rows.Add(dr);
        da.Update(ds, "Timings");
    }
}
catch (Exception ex)
{
    Console.WriteLine(ex.Message);
}
```



Name	Released	Slot
Udaan	18-Aug-12 12:00:00 AM	14:30:00
D Day	19-Jul-13 12:00:00 AM	17:45:00
No Smoking	26-Oct-07 12:00:00 AM	09:10:00
The Straight Story	21-May-99 12:00:00 AM	20:40:00

Add Time slot  
Slot:  Commit



Screenshot of Microsoft Visual Studio IDE showing a database query results window and various toolbars.

The main window displays the results of a SQL query:

```
Id Slot
1 14:30:00
2 17:45:00
3 09:10:00
4 20:40:00
5 11:50:00
6 18:30:00
NULL NULL
```

The Server Explorer pane shows the connection to the "Cinema.mdf" database, specifically the "Timings" table:

- Azure
- Data Connections
- Cinema.mdf
  - Tables
    - Movie
      - MId
      - Releas...
      - Name
      - Sld
    - Timings
      - Id
      - Slot
  - Views
  - Stored Procedures
  - Functions
  - Synonyms
  - Types
  - Assemblies

The Solution Explorer, Toolbars, and Status Bar are also visible at the bottom.

Submit this project as zip/ rar file.

Screenshot of Microsoft Visual Studio IDE showing a disconnected ADO.NET application.

**Server Explorer:** Shows the database structure for the "Cinema.mdf" file, specifically the "Timings" table.

Column0	Column1	Column2
abc	abc	abc

**Solution Explorer:** Displays the project structure for "ADO\_DisConnected".

- Properties
- References
- App\_Data
  - Students.mdf
    - Students\_log.ldf
  - packages.config
- student\_crud.aspx
- Web.config
- WebForm1.aspx
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
    - packages.config
  - Web.config
  - WebForm1.aspx

**Properties:** Project Properties for "ADO\_DisConnected.csproj".

- Always Start When Debug: False
- Anonymous Authentication: Enabled
- Managed Pipeline Mode: Integrated
- Project File: ADO\_DisConnected.csproj
- Project Folder: C:\Users\user1.DESKTOP-IH...
- SSPI Enabled: False
- Always Start When Debugging: Start the local Web server even when not the startup project

**Output:** Shows the message: "The program '[1684] iisexpress.exe' has exited with code -1 (0xffffffff)".

**Bottom Bar:**

- This item does not support previewing
- Type here to search
- File Explorer icon
- Task View icon
- Power icon
- Start button icon
- VS Code icon
- Google Chrome icon
- File Explorer icon
- File Tools icon
- File Help icon
- 10:25 AM 12-Aug-22

Screenshot of Microsoft Visual Studio IDE showing a web application project.

The Solution Explorer shows the project structure:

- Properties
- References
- App\_Data
  - Students.mdf
    - Students\_log.ldf
    - packages.config
  - student\_crud.aspx
  - Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
    - packages.config
  - Web.config
  - WebForm1.aspx
  - WebForm2.aspx

The Properties window displays the properties for the selected **SqlDataSourceCinema** control:

(ID)	SqlDataSourceCinema
CacheDuration	Infinite
CacheExpirationPolicy	Absolute
CacheKeyDependency	
CancelSelectOnNullParam	True
(ID)	Programmatic name of the control.

The Output window shows the following message:

```
Show output from: Debug
The program '[1684] iisexpress.exe' has exited with code -1 (0xffffffff).
```

The Design view shows a **SqlDataSource** control named **SqlDataSourceCinema** connected to a **SqlDataSource** provider named **SqlDataSource1**. The provider is configured to select data from the **dbo.Timings** table.

The Data grid displays the following data:

Column0	Column1	Column2
abc	abc	abc

Screenshot Added  
A screenshot was added to your  
Dropbox.  
Dropbox

10:26 AM  
12-Aug-22

File Edit View Project Build Debug Format Table Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO  

Debug Any CPU IIS Express (Google Chrome) Automatic (None) (Default) B / u A Live Share

Toolbox

sql Data sqldatasource

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config

Column0 Column1 Column2

Column0	Column1	Column2
abc	abc	abc

Sqldatasource - SqldatasourceCinema

Design Split Source

Output

Show output from: Debug  
The program '[1684] iisexpress.exe' has exited with code -1 (0xffffffff).

Server E... Toolbox SQL Ser... Package Manager Console Error List ... Output Data Tools Operations

Drag margin handles to resize margins. Press SHIFT or CTRL for more options.

Type here to search

Diagnostic Tools

Solution Explorer

Properties References App\_Data Students.mdf Students\_log.ldf packages.config student\_crud.aspx Web.config ADO\_DisConnected Connected Services Properties References App\_Data packages.config Web.config WebForm1.aspx WebForm2.aspx

GridViewMV System.Web.UI.WebControls.GridView

(Expressions)

ID GridViewMV AccessKey AllowCustomPaging False

Screenshot of Microsoft Visual Studio IDE showing a web application project.

The Solution Explorer shows the following structure:

- Properties
- References
- App\_Data
  - Students.mdf
    - Students\_log.ldf
    - packages.config
  - student\_crud.aspx
  - Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
    - packages.config
  - Web.config
  - WebForm1.aspx
  - WebForm2.aspx

The Properties window shows the configuration for the **SqlDataSourceCinema** control:

(Expressions)	SqlDataSourceCinema
(ID)	SqlDataSourceCinema
CacheDuration	Infinite
CacheExpirationPolicy	Absolute
CacheKeyDependency	
CancelSelectOnNullParam	True
(ID)	Programmatic name of the control.

The Design view displays a **SqlDataSource** control named **SqlDataSourceCinema**. A tooltip indicates: "Configure your data source's settings." Below the control, the Output window shows the message: "The program '[1684] iisexpress.exe' has exited with code -1 (0xffffffff)."

The status bar at the bottom right shows the date and time: 10:26 AM 12-Aug-22.

Screenshot of Microsoft Visual Studio 2022 showing the configuration of a SqlDataSource control.

The interface includes:

- Toolbox**: Shows the **Data** category with **SqlDataSource** selected.
- WebForm2.aspx**: Design view showing a **SqlDataSource** control and a **GridView** control.
- SqlDataSource Tasks**: A context menu for the **SqlDataSource** control, with **Configure Data Source...** highlighted.
- Configure Data Source - SqlDataSourceCinema**: A modal dialog titled "Choose Your Data Connection".
- Connection string**: Set to "Cinema.mdf".
- Connection string definition**:

```
Data Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=|DataDirectory|\Cinema.mdf;Integrated Security=True
```
- Solution Explorer**: Shows the project structure with files like **Students.mdf**, **Students\_log.ldf**, **packages.config**, **student\_crud.aspx**, **Web.config**, and **ADO\_DisConnected**.
- Properties**: A context menu for the **ADO\_DisConnected** item.
- Diagnostic Tools**: A context menu for the **ADO\_DisConnected** item.
- Task List**: Shows items like **System.Web.UI.WebControls.SqlDataSource** and **SqlDataSourceCinema**.
- Output**: Shows output from the **Debug** build.
- Server Explorer**, **Toolbox**, **SQL Server Object Explorer**, **Package Manager Console**, and **Error List** tabs at the bottom.
- System tray**: Shows icons for File Explorer, Task View, Start, Taskbar settings, and system status.
- System bar**: Shows the date and time (10:26 AM, 12-Aug-22).

Screenshot of Microsoft Visual Studio 2022 showing the configuration of a SqlDataSource control.

The main window displays the "Configure Data Source - SqlDataSourceCinema" dialog. The dialog title is "Save the Connection String to the Application Configuration File". It contains a note about storing connection strings in the application configuration file for maintenance and deployment, and a checkbox for saving the connection string there. The checkbox is checked, and the text "ConnectionString" is entered in the associated input field.

The "SqlDataSource - SqlDataSourceCinema" properties window is visible on the right side of the interface, showing the following settings:

- ConnectionString: Cinema
- Infinite: Infinite
- Policy: Absolute
- Priority: 100
- Reconnect: True

The "Toolbox" on the left shows the "Data" category selected, with "SqlDataSource" listed. The "Output" window at the bottom shows the message: "Show output from: Debug The program '[1684] iisexpress' has exited with code 0 (0x0)." The status bar at the bottom indicates: "Drag margin handles to resize margins. Press SHIFT or CTRL for more options." and "Add to Source Control".

Screenshot of Microsoft Visual Studio 2022 showing the configuration of a SqlDataSource control.

The application window title is "Configure Data Source - SqlDataSourceCinema".

**Configure the Select Statement**

How would you like to retrieve data from your database?

Specify a custom SQL statement or stored procedure  
 Specify columns from a table or view

Name: Movie

Columns:

- \*
- MId
- Released
- Name
- SId

Advanced SQL Generation Options

Additional INSERT, UPDATE, and DELETE statements can be generated to update the data source.

Generate INSERT, UPDATE, and DELETE statements

Generates INSERT, UPDATE, and DELETE statements based on your SELECT statement. You must have all primary key fields selected for this option to be enabled.

Use optimistic concurrency

Modifies UPDATE and DELETE statements to detect whether the database has changed since the record was loaded into the DataSet. This helps prevent concurrency conflicts.

Buttons: OK, Cancel, Advanced...

Toolbox: Shows "sql" and "Data" categories, with "SqlDataSource" selected.

WebForm2.aspx: Shows a table with three columns (Column0, Column1, Column2) and five rows, all containing "abc".

Output: Shows output from "Debug" and "IIS Express".

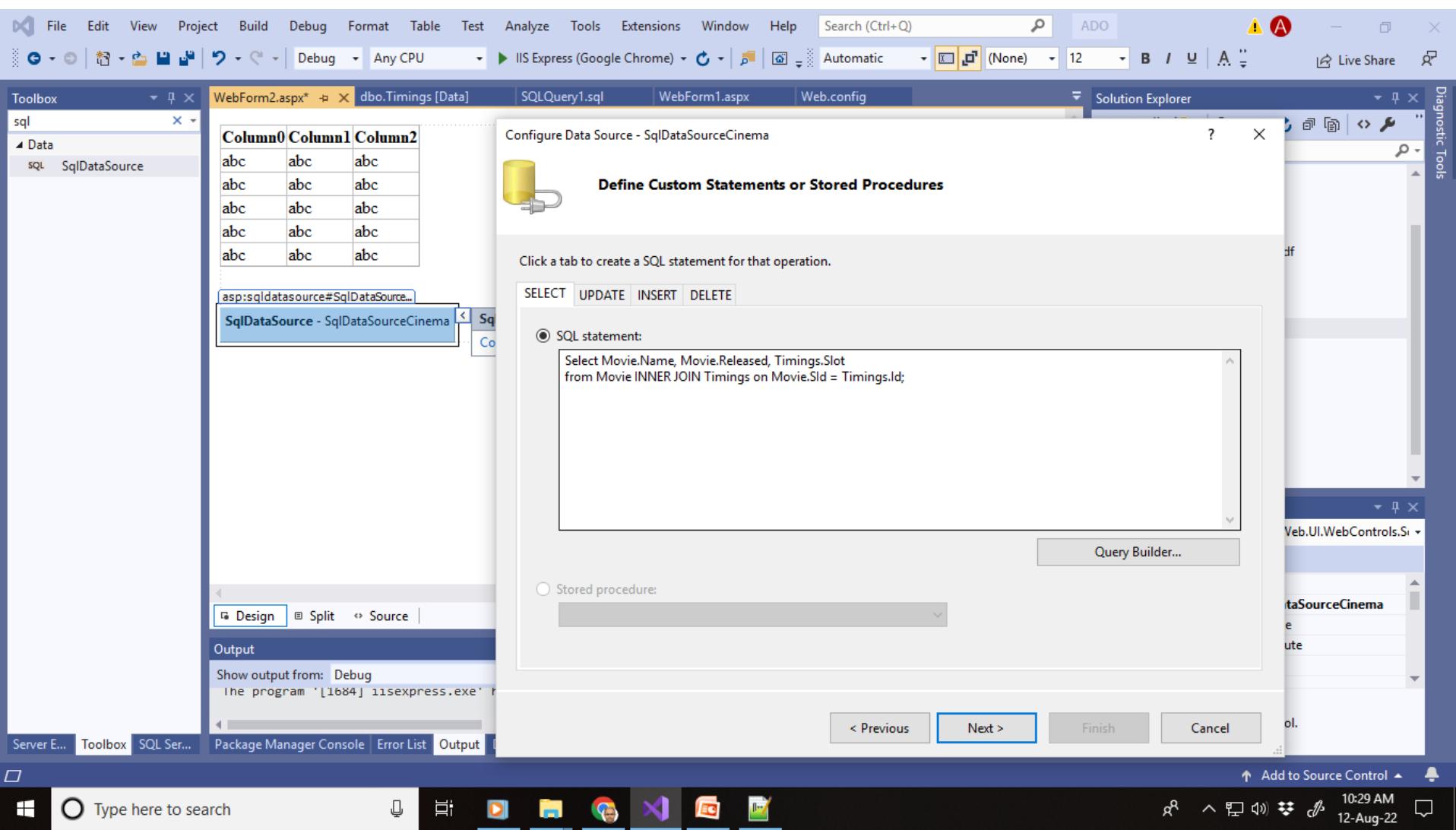
Taskbar: Shows various pinned icons including File Explorer, Task View, Start, Taskbar settings, and a search bar.

System tray: Shows the date and time as "10:27 AM 12-Aug-22".

Screenshot of Microsoft Visual Studio 2022 showing the configuration of a SqlDataSource control.

The interface includes:

- Toolbox**: Shows categories like Data, SQL, and SqlDataSource.
- WebForm2.aspx**: Design view showing a grid with columns Column0, Column1, and Column2, each containing the value "abc".
- SqlDataSource - SqlDataSourceCinema**: Configuration dialog for the selected data source.
- Configure the Select Statement**: Section title.
- How would you like to retrieve data from your database?**: Radio button options:
  - Specify a custom SQL statement or stored procedure
  - Specify columns from a table or view
- Name:** dropdown set to "Movie".
- Columns:** list of checkboxes:
  - \*
  - MId
  - Released
  - Name
  - SId
- SELECT statement:** text area containing `SELECT * FROM [Movie]`.
- Buttons:** Previous, Next, Finish, Cancel.
- Output Window**: Shows output from "Debug" mode.
- Taskbar**: Includes icons for File Explorer, Task View, Start, Taskbar settings, and system notifications.
- System Tray**: Shows the date and time (10:29 AM, 12-Aug-22).



Screenshot of Microsoft Visual Studio 2019 showing the configuration of a SqlDataSource control.

The interface includes:

- Toolbox**: Shows the **sql** category with **Data** expanded, displaying **SqlDataSource**.
- WebForm2.aspx**: Shows a table with columns **Column0**, **Column1**, and **Column2**, containing data: abc, abc, abc; abc, abc, abc; abc, abc, abc; abc, abc, abc; abc, abc, abc.
- Configure Data Source - SqlDataSourceCinema**: Wizard window for testing the data source.
- Test Query**: Preview of the data returned by the data source.
- SELECT statement:**

```
Select Movie.Name, Movie.Released, Timings.Slot  
from Movie INNER JOIN Timings on Movie.SId = Timings.Id;
```
- Buttons:** < Previous, Next >, Finish, Cancel, Test Query.
- Output Window**: Shows output from the **Debug** console.
- Taskbar**: Includes the Start button, a search bar, pinned icons for File Explorer, File Manager, Google Chrome, and VS Code, and system status icons.

Screenshot of Microsoft Visual Studio 2022 showing a web application project in design mode.

The main window displays a `GridView` control on a page named `WebForm2.aspx`. The `GridView` has three columns: `Name`, `Released`, and `Slot`. The data source is set to `SqlDataSourceCinema`. A context menu titled `GridView Tasks` is open over the grid, listing options like Auto Format..., Choose Data Source, Refresh Schema, Edit Columns..., Add New Column..., Enable Paging, Enable Sorting, Enable Selection, and Edit Templates.

The Solution Explorer shows the project structure, including files like `Properties`, `References`, `App_Data` (containing `Students.mdf` and `Students_log.ldf`), `packages.config`, `student_crud.aspx`, `Web.config`, and `ADO_DisConnected` (which contains `Connected Services`, `Properties`, `References`, `App_Data`, `packages.config`, `Web.config`, `WebForm1.aspx`, and `WebForm2.aspx`).

The Properties window shows the `GridViewMV` control is of type `System.Web.UI.WebControls.GridView`. The `DataSourceID` property is set to `SqlDataSourceCinema`.

The Output window shows the message: "The program '[1684] iisexpress.exe' has exited with code -1 (0xffffffff)".

The Taskbar at the bottom includes icons for File Explorer, Task View, Start, Taskbar settings, and the current application.

Screenshot of Microsoft Visual Studio IDE showing a web application project.

The main window displays the code editor for `WebForm2.aspx`. The code is an ASPX page with a `GridView` control.

```
1 <%@Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs" Inherits="ADO_DisConnected.WebForm2" %>
2 
3 <html>
4   <head>
5     <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6     <title>Untitled Page</title>
7   </head>
8   <body>
9     <form id="form1" runat="server">
10    </form>
11    <asp:GridView ID="GridViewMV" runat="server" AutoGenerateColumns="False" DataSourceID="SqlDataSource1">
12      <Columns>
13        <asp:BoundField DataField="Name" HeaderText="Name" SortExpression="Name" />
14        <asp:BoundField DataField="Released" HeaderText="Released" SortExpression="Released" DataFormatString="{0:D}"/>
15        <asp:BoundField DataField="Slot" HeaderText="Slot" SortExpression="Slot"/>
16      </Columns>
17    </asp:GridView>
18    <br />
19  </body>
20</html>
```

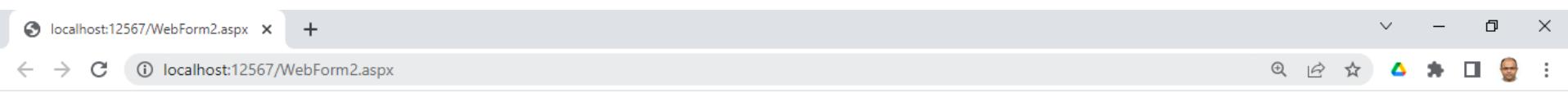
The Solution Explorer shows the project structure:

- References
- App\_Data
- Student
- packages.config
- student\_crud
- Web.config
- ADO\_DisConnected
- Connected
- Properties
- References
- App\_Data
- packages.config
- Web.config
- WebForm1
- WebForm2

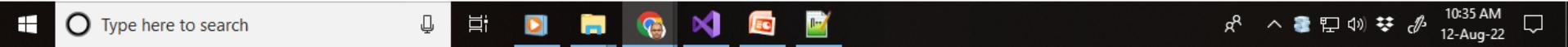
The Properties window is open, showing the `id` and `aria-*` properties for the current selected item.

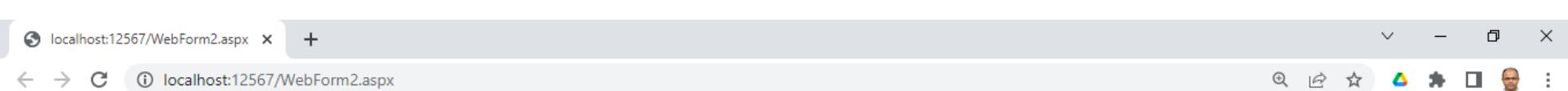
The Output window shows the message: "The program '[17140] iisexpress.exe' has exited with code -1 (0xffffffff)."

The status bar at the bottom right shows the time as 10:35 AM and the date as 12-Aug-22.



Name	Released	Slot
Udaan	Saturday, August 18, 2012	14:30:00
D Day	Friday, July 19, 2013	17:45:00
No Smoking	Friday, October 26, 2007	09:10:00
The Straight Story	Friday, May 21, 1999	20:40:00





	Name	Released	Slot
<a href="#">Edit</a>	Udaan	Saturday, August 18, 2012	14:30:00
<a href="#">Delete</a>	D Day	Friday, July 19, 2013	17:45:00
<a href="#">Edit</a>	No Smoking	Friday, October 26, 2007	09:10:00
<a href="#">Edit</a>	The Straight Story	Friday, May 21, 1999	20:40:00



Screenshot of Microsoft Visual Studio 2022 showing the configuration of a SqlDataSource control.

The main window displays a grid of data from the "dbo.Timings" table. The columns are "Name", "Released", and "Slot". Each row contains five entries, each with "Edit", "Delete", "Select", and "Databound" links.

The "SqlDataSource - SqlDataSourceCinema" configuration dialog is open, titled "Configure Data Source - SqlDataSourceCinema". It asks "Choose Your Data Connection".

The "ConnectionString" dropdown menu is open, showing "ConnectionString" and "New Connection...".

The "Output" window shows the message: "Show output from: Debug  
The program '[14184] iisexpress.exe' has exited with code 0.".

The status bar at the bottom right shows the time as "10:50 AM" and the date as "12-Aug-22".



Type here to search



10:50 AM  
12-Aug-22

Screenshot of Microsoft Visual Studio 2022 showing the configuration of a SqlDataSource control.

The interface includes:

- Toolbox**: Standard items like Pointer, AdRotator, BulletedList, Button, Calendar, CheckBox, CheckBoxList, DropDownList, FileUpload, HiddenField, HyperLink, Image, ImageButton, ImageMap, Label, LinkButton, ListBox, Literal, Localize, MultiView, Panel, PlaceHolder, RadioButton, RadioButtonList, Substitution, Table.
- Search Toolbox**: Search bar.
- File**, **Edit**, **View**, **Project**, **Build**, **Debug**, **Format**, **Table**, **Test**, **Analyze**, **Tools**, **Extensions**, **Window**, **Help**.
- Search (Ctrl+Q)**, **ADO**, **Automatic**, **(None)**, **12**, **B**, **I**, **u**, **A**.
- Live Share**.
- WebForm2.aspx\***, **dbo.Timings [Data]**, **SQLQuery1.sql**, **WebForm1.aspx**, **Web.config**.
- Solution Explorer**: Search bar.
- Configure Data Source - SqlDataSourceCinema**: **Configure the Select Statement**.
- How would you like to retrieve data from your database?**
  - Specify a custom SQL statement or stored procedure
  - Specify columns from a table or view
- Name:** Movie
- Columns:**
  - \*
  - Mid
  - Released
  - Name
  - SId
- Return only unique rows**, **WHERE...**, **ORDER BY...**, **Advanced...**.
- SELECT statement:** SELECT \* FROM [Movie]
- Design**, **Split**, **Source**.
- Output**: Show output from: Debug  
The program '[14184] iisexpress.exe' has exited with code 0.
- Previous**, **Next >**, **Finish**, **Cancel**.

Screenshot of Microsoft Visual Studio 2022 showing the configuration of a SqlDataSource control.

The **SqlDataSource - SqlDataSourceCinema** configuration dialog is open, titled "Configure Data Source - SqlDataSourceCinema". It displays the "Configure the Select Statement" section.

**How would you like to retrieve data?**

- Specify a custom SQL statement
- Specify columns from a table or view

Name: **Movie**

**Columns:**

- \*
- Mid
- Released
- Name
- SId

**Advanced SQL Generation Options**

- Generate INSERT, UPDATE, and DELETE statements

Generates INSERT, UPDATE, and DELETE statements based on your SELECT statement. You must have all primary key fields selected for this option to be enabled.
- Use optimistic concurrency

Modifies UPDATE and DELETE statements to detect whether the database has changed since the record was loaded into the DataSet. This helps prevent concurrency conflicts.

**SELECT statement:**

```
SELECT * FROM [Movie]
```

Buttons at the bottom right: OK, Cancel, Previous, Next, Finish, Cancel.

The **Toolbox** on the left shows various ASP.NET controls like Pointer, AdRotator, BulletedList, Button, Calendar, CheckBox, CheckBoxList, DropDownList, FileUpload, HiddenField, HyperLink, Image, ImageButton, ImageMap, Label, LinkButton, ListBox, Literal, Localize, MultiView, Panel, PlaceHolder, RadioButton, RadioButtonList, Substitution, Table.

The **Output** window at the bottom shows: Show output from: Debug  
The program '[14184] iisexpress.exe' has exited with code 0 (0x0).

Screenshot of Microsoft Visual Studio 2012 IDE showing the configuration of a SqlDataSource component.

The interface includes:

- Toolbar:** File, Edit, View, Project, Build, Debug, Format, Table, Test, Analyze, Tools, Extensions, Window, Help, Search (Ctrl+Q), ADO, Live Share.
- Solution Explorer:** Shows files like WebForm2.aspx\*, dbo.Timings [Data], SQLQuery1.sql, WebForm1.aspx, Web.config.
- Toolbox:** Standard category selected, listing controls like Pointer, AdRotator, BulletedList, Button, Calendar, CheckBox, CheckBoxList, DropDownList, FileUpload, HiddenField, HyperLink, Image, ImageButton, ImageMap, Label, LinkButton, ListBox, Literal, Localize, MultiView, Panel, PlaceHolder, RadioButton, RadioButtonList, Substitution, Table.
- Design View:** Shows a table control with columns Name, Released, Slot. A SqlDataSource control is selected.
- Configure Data Source - SqlDataSourceCinema:** Wizard step "Test Query".
  - Test Query:** Preview data from the Movie table.
  - Output:** SELECT statement: `SELECT \* FROM [Movie]`
- Status Bar:** Ready, Type here to search, 10:51 AM, 12-Aug-22.

MId	Released	Name	SlId
1	18-Aug-12	Udaan	1
2	19-Jul-13	D Day	2
3	26-Oct-07	No Smoking	3
4	21-May-99	The Straight Story	4

Screenshot of Microsoft Visual Studio 2022 showing a GridView control in design mode.

The **Toolbox** on the left contains various web controls like Pointer, AdRotator, BulletedList, Button, Calendar, CheckBox, CheckBoxList, DropDownList, FileUpload, HiddenField, HyperLink, Image, ImageButton, ImageMap, Label, LinkButton, ListBox, Literal, Localize, MultiView, Panel, PlaceHolder, RadioButton, RadioButtonList, Substitution, Table, and Server E... (disabled).

The **Solution Explorer** on the right shows the project structure:

- References
- App\_Data
  - Students.mdf
    - Students\_log.ldf
  - packages.config
- student\_crud.aspx
- Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
    - packages.config
  - Web.config
  - WebForm1.aspx
  - WebForm2.aspx

The **Properties** window shows the configuration for the **SqlDataSourceCinema** control:

- InsertQuery: (Query)
- OldValuesParameterFormat: {0}
- ProviderName
- SelectCommandType: Text
- SelectQuery: (Query)
- SrcParameterName
- SelectQuery**: Select Query

The **Output** window displays the message: "The program '[14184] iisexpress.exe' has exited with code -1 (0xffffffff)".

A modal dialog box titled "SqlDataSource - SqlDataSourceCinema" asks: "Would you like to regenerate the GridView column fields and data keys using the selected data source schema? Warning: this will delete all existing column fields." with Yes and No buttons.

Screenshot of Microsoft Visual Studio 2022 showing the design view of a web application.

The main window displays a `GridView` control on a page named `WebForm2.aspx`. The `GridView` has columns: `MId`, `Released`, `Name`, and `SId`. The data source is `SqlDataSourceCinema`.

The `GridView Tasks` context menu is open, showing options like `Auto Format...`, `Choose Data Source:` (set to `SqlDataSourceCinema`), `Configure Data Source...`, `Refresh Schema`, `Edit Columns...`, `Add New Column...`, `Move Column Left`, `Remove Column`, and checkboxes for `Enable Paging`, `Enable Sorting`, `Enable Editing` (checked), `Enable Deleting` (checked), and `Enable Selection`.

The `Properties` window shows the `GridViewMV` properties:

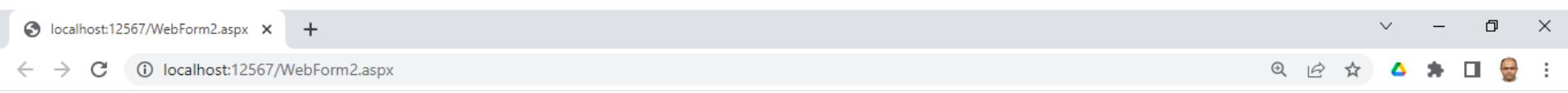
- `Columns`: (Collection)
- `CssClass`
- `DataKeyNames`: `MId`
- `DataMember`
- `DataSourceID`: `SqlDataSourceCinema`
- `DeleteMethod`

The `DataSourceID` property is described as: "The control ID of an `IDataSource` that will be used as the data source." The value is `SqlDataSourceCinema`.

The `Solution Explorer` pane shows the project structure with files like `Students.mdf`, `student_crud.aspx`, and `WebForm1.aspx`.

The `Output` window shows the message: "The program '[14184] iisexpress.exe' has exited with code -1 (0xffffffff)."

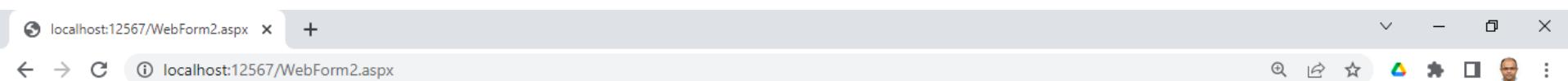
The bottom navigation bar includes links for `Server E...`, `Toolbox`, `SQL Ser...`, `Package Manager Console`, `Error List`, `Output` (selected), and `Data Tools Operations`.



	MId	Released	Name	SId
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	1	18-Aug-12 12:00:00 AM	Udaan	1
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	2	19-Jul-13 12:00:00 AM	D Day	2
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	3	26-Oct-07 12:00:00 AM	No Smoking	3
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	4	21-May-99 12:00:00 AM	The Straight Story	4

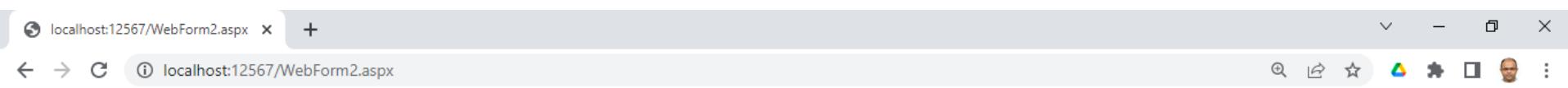


	<b>MId</b>	<b>Released</b>	<b>Name</b>	<b>SId</b>
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	1	18-Aug-12 12:00:00 AM	UdaanToFly	1
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	2	19-Jul-13 12:00:00 AM	D Day	2
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	3	26-Oct-07 12:00:00 AM	No Smoking	3
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	4	21-May-99 12:00:00 AM	The Straight Story	4



	MId	Released	Name	SId
<a href="#">Edit</a>	1	18-Aug-12 12:00:00 AM	UdaanToFly	1
<a href="#">Delete</a>	2	19-Jul-13 12:00:00 AM	D Day	5
<a href="#">Edit</a>	3	26-Oct-07 12:00:00 AM	No Smoking	3
<a href="#">Edit</a>	4	21-May-99 12:00:00 AM	The Straight Story	4





	MId	Released	Name	SId
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	1	18-Aug-12 12:00:00 AM	Udaan	1
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	2	19-Jul-13 12:00:00 AM	D Day	5
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	3	26-Oct-07 12:00:00 AM	No Smoking	3
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	4	21-May-99 12:00:00 AM	The Straight Story	4



	MId	Released	Name	SID
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	2	19-Jul-13 12:00:00 AM	D Day	5
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	3	26-Oct-07 12:00:00 AM	No Smoking	3
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	4	21-May-99 12:00:00 AM	The Straight Story	4

SQ

File Edit View Project Build Debug Format Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

sq Data sql SqlDataSource

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config

MId Released Name SId

Edit Delete Select 0 12-Aug-22 12:00:00 AM abc 0

Edit Delete Select 1 12-Aug-22 12:00:00 AM abc 1

Edit Delete Select 2 12-Aug-22 12:00:00 AM abc 2

Edit Delete Select 3 12-Aug-22 12:00:00 AM abc 3

Edit Delete Select 4 12-Aug-22 12:00:00 AM abc 4

SqlDataSource - SqlDataSourceCinema

asp:sqldatasource#SqlDataSourceSel

SqlDataSource - SqlDataSourceSel >

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code -1 (0xffffffff).

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Add to Source Control

10:59 AM 12-Aug-22

Diagnostic Tools

Solution Explorer

Search Solution Explorer (Ctrl+;)

References App\_Data Students.mdf Students\_log.ldf packages.config student\_crud.aspx Web.config ADO\_DisConnected Connected Services Properties References App\_Data packages.config Web.config WebForm1.aspx WebForm2.aspx

Properties

SqlDataSourceSel System.Web.UI.WebControls.SqlDataSource

(Expressions)  
(ID) SqlDataSourceTime  
CacheDuration Infinite  
CacheExpirationPolicy Absolute  
CacheKeyDependency  
CancelSelectOnNullParam True  
(ID)  
Programmatic name of the control.

Type here to search

SQ

File Edit View Project Build Debug Format Table Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config Solution Explorer Diagnostic Tools

Configure Data Source - SqlDataSourceTime

Choose Your Data Connection

Which data connection should your application use to connect to the database?

New Connection...

Connection string

SqlDataSource - SqlDataSourceCinema

asp:sqldatasource#SqlDataSource...

SqlDataSource - SqlDataSourceTime

SqlDataSource Tasks Configure Data Source...

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code 0.

< Previous Next > Finish Cancel

Add to Source Control

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Type here to search

10:59 AM 12-Aug-22

SQ

File Edit View Project Build Debug Format Table Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config Solution Explorer Diagnostic Tools

Configure Data Source - SqlDataSourceTime

Choose Your Data Connection

Which data connection should your application use to connect to the database?

ConnectionString New Connection...

Connection string

Data Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=|DataDirectory|\Cinema.mdf;Integrated Security=True

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code 0.

< Previous Next > Finish Cancel

Add to Source Control

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Type here to search

11:00 AM 12-Aug-22

SQ

File Edit View Project Build Debug Format Table Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config Solution Explorer

Configure Data Source - SqlDataSourceTime

Configure the Select Statement

How would you like to retrieve data from your database?

Specify a custom SQL statement or stored procedure  
 Specify columns from a table or view

Name: Timings

Columns:

\*  
 Id  
 Slot

Return only unique rows  
WHERE...  
ORDER BY...  
Advanced...

SELECT statement:  
SELECT \* FROM [Timings]

< Previous Next > Finish Cancel

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code 0.

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Type here to search

SQ

File Edit View Project Build Debug Format Table Test Analyze Tools Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config Solution Explorer Diagnostic Tools

Configure Data Source - SqlDataSourceTime

Configure the Select Statement Add WHERE Clause

Add one or more conditions to the WHERE clause for the statement. For each condition you can specify either a literal value a parameterized value. Parameterized values get their values at runtime based on their properties.

How would you like to specify the WHERE clause?

Specify a custom WHERE clause

Specify column-based WHERE clause

Name: Id

Columns: Timings

Operator: =

Source: Control

SQL Expression: [Id] = @Id Value: GridViewMV.SelectedValue

Parameter properties Control ID: GridViewMV Default value:

WHERE clause:

SQL Expression Value

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code 0 (0x0).

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Type here to search

11:01 AM 12-Aug-22

SQ

File Edit View Project Build Debug Format Table Test Analyze Tools Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config Solution Explorer Diagnostic Tools

Configure Data Source - SqlDataSourceTime

Configure the Select Statement Add WHERE Clause

Add one or more conditions to the WHERE clause for the statement. For each condition you can specify either a literal value or a parameterized value. Parameterized values get their values at runtime based on their properties.

How would you like to select data?

Specify a custom query

Specify column names

Name: Timings

Columns:

\*

Id

Slot

Column:

Operator:

Source:

Parameter properties

SQL Expression:  Value:  Add

WHERE clause:

SQL Expression	Value
[Id] = @Id	GridViewMV.SelectedValue

OK Cancel

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code 0.

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Type here to search

11:01 AM 12-Aug-22

SQ

File Edit View Project Build Debug Format Table Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config Solution Explorer Diagnostic Tools

Configure Data Source - SqlDataSourceTime

Configure the Select Statement

How would you like to retrieve data from your database?

Specify a custom SQL statement or stored procedure  
 Specify columns from a table or view

Name: Timings

Columns:

\*  
 Id  
 Slot

Return only unique rows WHERE... ORDER BY... Advanced...

SELECT statement:  
SELECT \* FROM [Timings] WHERE ([Id] = @Id)

< Previous Next > Finish Cancel

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code 0.

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Type here to search

11:01 AM 12-Aug-22

SQ

File Edit View Project Build Debug Format Table Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config Solution Explorer Diagnostic Tools

Configure Data Source - SqlDataSourceTime

Test Query

Parameter Values Editor

For each parameter defined in the select statement, specify a type and value.

Parameter	Type	DbType	Value
Id	Int32	Object	2

OK Cancel

SqlDataSource - SqlDataSourceCinema

asp:sqlDataSource#SqlDataSource... SqlDataSource - SqlDataSourceTime SqlDataSource Tasks Configure Data Source...

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code 0.

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Add to Source Control

Type here to search

11:02 AM 12-Aug-22

SQ A

File Edit View Project Build Debug Format Table Test Analyze Tools Extensions Window Help Search (Ctrl+Q) ADO

Debug Any CPU IIS Express (Google Chrome) Automatic (None) 12 B / u A Live Share

Toolbox

WebForm2.aspx\* dbo.Timings [Data] SQLQuery1.sql WebForm1.aspx Web.config Solution Explorer Diagnostic Tools

Configure Data Source - SqlDataSourceTime ? X

Test Query

To preview the data returned by this data source, click Test Query. To complete this wizard, click Finish.

Id	Slot
2	17:45:00

Test Query

SELECT statement:

```
SELECT * FROM [Timings] WHERE ([Id] = @Id)
```

< Previous Next > Finish Cancel

Design Split Source

Output

Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code 0.

Server E... Toolbox SQL Ser... Package Manager Console Error List Output Data Tools Operations

Type here to search

11:02 AM 12-Aug-22

Screenshot of Microsoft Visual Studio IDE showing a web application project.

**Toolbox:** Data - DetailsView

**Content Area:**

- SqlDataSource - SqlDataSourceCinema**: Associated with the **WebForm2.aspx** page.
- SqlDataSource - SqlDataSourceTime**: Associated with the **WebForm2.aspx** page.
- asp:detailsview#DetailsViewTime**: A DetailsView control with three columns labeled Column0, Column1, and Column2, each containing the value "abc".

**Output Window:**

```
Show output from: Debug  
The program '[13496] iisexpress.exe' has exited with code -1 (0xffffffff).
```

**Solution Explorer:**

- References
- App\_Data
- Students.mdf
  - Students\_log.ldf
  - packages.config
- student\_crud.aspx
- Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
  - packages.config
  - Web.config
  - WebForm1.aspx
  - WebForm2.aspx

**Properties Window:**

**DetailsViewTime** (**System.Web.UI.WebControls.DetailsView**)

(Expressions)	DetailsViewTime
(ID)	DetailsViewTime
AccessKey	
AllowPaging	False
AlternatingRowStyle	
AutoGenerateDeleteButton	False
(ID)	Programmatic name of the control.

**Bottom Bar:**

- Server E...
- Toolbox
- SQL Ser...
- Package Manager Console
- Error List ...
- Output
- Data Tools Operations
- Add to Source Control
- Type here to search
- File Explorer
- Task List
- Activity Stream
- VS Code
- File Explorer
- Task List
- Activity Stream
- VS Code

11:05 AM 12-Aug-22

Screenshot of Microsoft Visual Studio IDE showing a web application project.

The Solution Explorer shows the project structure:

- References
- App\_Data
- Students.mdf
  - Students\_log.ldf
  - packages.config
- student\_crud.aspx
- Web.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
  - packages.config
  - Web.config
  - WebForm1.aspx
  - WebForm2.aspx

The Properties window shows the configuration for the DetailsView control:

(Expressions)	DetailsViewTime
(ID)	DetailsViewTime
AccessKey	
AllowPaging	False
AlternatingRowStyle	
AutoGenerateDeleteButton	False
(ID)	
Programmatic name of the control.	

The main workspace displays the ASPX page design:

```
<asp:detailsview#DetailsViewTime>
```

The DetailsView Tasks pane is open, showing the following options:

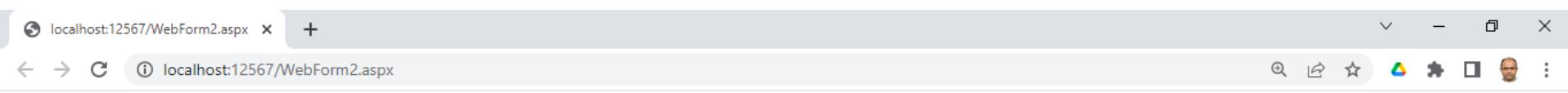
- Auto Format...
- Choose Data Source: SqlDataSourceTime
- Configure Data Source...
- Refresh Schema
- Edit Fields...
- Add New Field...
- Enable Paging
- Edit Templates

The Data View shows the following data:

MId	Released	Name	SIId
0	12-Aug-22 12:00:00 AM	abc	0
1	12-Aug-22 12:00:00 AM	abc	1
2	12-Aug-22 12:00:00 AM	abc	2
3	12-Aug-22 12:00:00 AM	abc	3
4	12-Aug-22 12:00:00 AM	abc	4

The status bar at the bottom indicates:

- Show output from: Debug
- The program '[13496] iisexpress.exe' has exited with code -1 (0xffffffff).



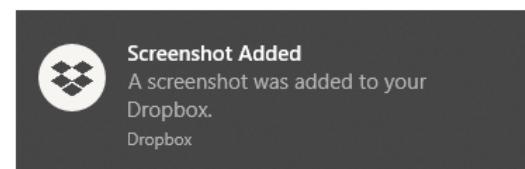
	MId	Released	Name	SId
<a href="#">Edit</a>	<a href="#">Delete</a>	<a href="#">Select</a>	2 19-Jul-13 12:00:00 AM	D Day 5
<a href="#">Edit</a>	<a href="#">Delete</a>	<a href="#">Select</a>	3 26-Oct-07 12:00:00 AM	No Smoking 3
<a href="#">Edit</a>	<a href="#">Delete</a>	<a href="#">Select</a>	4 21-May-99 12:00:00 AM	The Straight Story 4

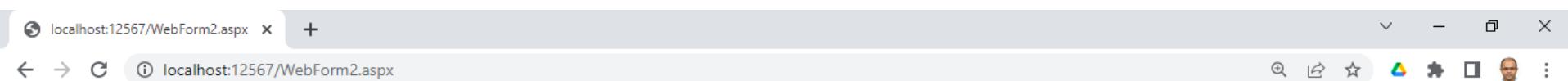


	MId	Released	Name	SId
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	2	19-Jul-13 12:00:00 AM	D Day	5
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	3	26-Oct-07 12:00:00 AM	No Smoking	3
<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Select</a>	4	21-May-99 12:00:00 AM	The Straight Story	4

Id	2
Slot	17:45:00

The output is incorrect. Why? When the output is incorrect and when it is correct?





Id	4
Slot	20:40:00



# Let's solve the problem. Hope you know the problem.

The screenshot shows the Microsoft Visual Studio IDE interface with the following details:

- Top Bar:** File, Edit, View, Project, Build, Debug, Format, Test, Analyze, Tools, Extensions, Window, Help, Search (Ctrl+Q), ADO, Live Share.
- Solution Explorer:** Shows the project structure with files like App\_Data\Students.mdf, App\_Data\Students\_log.ldf, packages.config, student\_crud.aspx, Web.config, ADO\_DisConnected, Connected Services, Properties, References, App\_Data, packages.config, Web.config, WebForm1.aspx, and WebForm2.aspx.
- Toolbox:** Contains items like grid, Data (GridView), WebParts (PropertyGridEditorPart).
- Design View:** Displays two GridView controls. The top one is bound to a SqlDataSource named "SqlDataSource - SqlDataSourceTime" and has columns "Id" and "Slot", both labeled "Databound". The bottom one is bound to a SqlDataSource named "GridViewTime1" and has columns "Column0", "Column1", and "Column2", all labeled "abc".
- Properties View:** Shows the properties for the bottom GridView control, including (ID) GridView1, AccessKey, AllowCustomPaging, AllowPaging, AllowSorting, and Programmatic name of the control.
- Output View:** Shows the message: "The program '[12200] iisexpress.exe' has exited with code -1 (0xffffffff)."
- Taskbar:** Includes icons for Server Explorer, Toolbox, SQL Server Object Explorer, Package Manager Console, Error List, Output, Data Tools Operations, and a search bar.
- System Tray:** Shows the date and time as 12:17 PM, 12-Aug-22.

Screenshot of Microsoft Visual Studio IDE showing a C# web application project.

The Solution Explorer shows the project structure:

- Connected Services
- Properties
- References
- App\_Data
  - Students.mdf
    - Students\_log.ldf
  - packages.config
- ADO\_DisConnected
  - Connected Services
  - Properties
  - References
  - App\_Data
    - packages.config
  - Web.config
  - WebForm1.aspx
    - WebForm1.aspx
    - WebForm1.aspx.designer.cs
    - WebForm2.aspx

The code editor displays the file `WebForm2.aspx.cs` with the following content:

```
namespace ADO_DisConnected
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        private SqlConnection conn;
        private SqlDataAdapter daTime;
        private DataSet dsTime;
        private const string tableName = "Timings";
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void GridViewMV_SelectedIndexChanged(object sender, EventArgs e)
        {
            string sId = GridViewMV.SelectedRow.Cells[4].Text;
            //Response.Write(sId);
            // instantiate the connection
            conn = new SqlConnection();
            conn.ConnectionString = WebConfigurationManager.ConnectionStrings["c
        }
    }
}
```

The Output window shows the message: "The program '[612] iisexpress.exe' has exited with code -1 (0xffffffff)".

System tray icons include: microphone, play/pause, file, browser, VS Code, and file.

Screenshot of Microsoft Visual Studio IDE showing a web application project.

The Solution Explorer shows the project structure:

- Connected Services
- Properties
- References
- App\_Data
  - Students.mdf
  - Students\_log.ldf
  - packages.config
  - student\_crud.aspx

The Properties window for the GridView control (GridViewMV) lists the following events:

- RowCancelingEdit
- RowCommand
- RowCreated
- RowDataBound
- RowDeleted
- RowDeleting
- RowEditing
- RowUpdated
- RowUpdating
- SelectedIndexChanged (selected)
- SelectedIndexChanging
- Sorted
- Sorting
- Unload

The SelectedIndexChanged event is currently set to "GridViewMV\_SelectedIndexChanged".

The Output window shows the message: "The program '[612] iisexpress.exe' has exited with code -1 (0xffffffff)".

The Server Explorer displays the following data:

- Tables:
  - Movie
    - MId
    - Released
    - Name
    - SlId
  - Timings
    - Id
    - Slot
- Views
- Stored Procedure
- Functions
- Synonyms
- Types
- Assemblies

The Solution Explorer pane shows the project files:

- WebForm2.aspx.cs
- WebForm2.aspx
- dbo.Timings [Data]
- SQLQuery1.sql

The Status Bar at the bottom right shows the time as 1:10 PM and the date as 12-Aug-22.

The screenshot shows the Microsoft Visual Studio IDE interface with the following details:

- File Bar:** File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help.
- Search Bar:** Search (Ctrl+Q).
- Toolbars:** Standard toolbar with icons for New, Open, Save, Print, etc.
- Task List:** A list of open files including WebForm2.aspx.cs, WebForm2.aspx, dbo.Timings [Data], SQLQuery1.sql, WebForm1.aspx, WebForm1.aspx.cs, and dbo.Movie [Data].
- Server Explorer:** Shows Data Connections, ConnectionString (All), Tables (Movie, Timings), Views, Stored Procedure, Functions, Synonyms, Types, Assemblies, and Servers.
- Solution Explorer:** Shows the project structure with files like ADO\_DisConnected, ADO\_DisConnected.WebForm2, and GridViewMV\_SelectedIndexChanged(object sender, EventArgs e).
- Properties Window:** Shows settings for the selected item.
- Diagnostic Tools:** Shows various monitoring tools.
- Code Editor:** Displays C# code for the GridViewMV\_SelectedIndexChanged event handler. The code uses a SqlConnection to query the Timings table based on the selected row's ID.
- Output Window:** Shows the message: "The program '[612] iisexpress.exe' has exited with code -1 (0xffffffff)."
- Task List:** Shows the status "No issues found".
- Bottom Navigation:** Server E..., Toolbox, SQL Ser..., Package Manager Console, Error List ..., Output, Data Tools Operations.
- System Tray:** Shows the Windows Start button, a search bar, pinned icons for File Explorer, File History, Task View, and VS Code, and system status including the date and time (11:11 PM, 12-Aug-22).

```
protected void GridViewMV_SelectedIndexChanged(object sender, EventArgs e)
{
    string sId = GridViewMV.SelectedRow.Cells[4].Text;
    //Response.Write(sId);
    // instantiate the connection
    conn = new SqlConnection();
    conn.ConnectionString =
        WebConfigurationManager.ConnectionStrings["cinemaConnection"].ConnectionString;

    // 1. instantiate a new DataSet
    dsTime = new DataSet();

    // 2. init SqlDataAdapter with select command and connection
    daTime = new SqlDataAdapter()
    {
        "select * from Timings where Id = '" + sId + "'", conn);

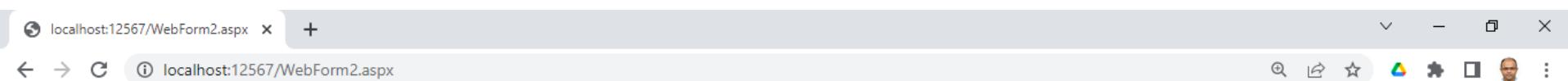
    // 3. fill in insert, update, and delete commands
    SqlCommandBuilder cmdBldr = new SqlCommandBuilder(daTime);

    // 4. fill the dataset
}
```

The screenshot shows the Microsoft Visual Studio IDE interface. The main window displays a C# code file named `ADO_DisConnected.cs` with the following content:

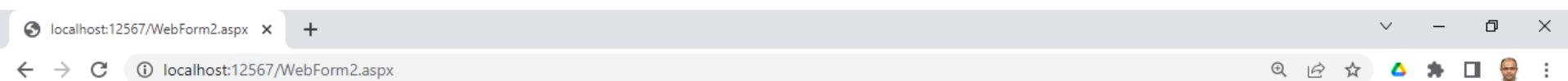
```
// 1. instantiate a new DataSet  
dsTime = new DataSet();  
  
// 2. init SqlDataAdapter with select command and connection  
daTime = new SqlDataAdapter()  
    "select * from Timings where Id = '" + sId + "'", conn);  
  
// 3. fill in insert, update, and delete commands  
SqlCommandBuilder cmdBldr = new SqlCommandBuilder(daTime);  
  
// 4. fill the dataset  
daTime.Fill(dsTime, tableName);  
  
GridViewTime1.DataSource = dsTime;  
GridViewTime1.DataBind();
```

The code editor has line numbers from 32 to 51. The `Server Explorer` window on the left shows database connections and tables, including `Timings`. The `Output` window at the bottom shows the message: `The program '[612] iisexpress.exe' has exited with code -1 (0xffffffff).`



	MId	Released	Name	SId
<a href="#">Edit</a>	2	19-Jul-13 12:00:00 AM	D Day	5
<a href="#">Delete</a>	3	26-Oct-07 12:00:00 AM	No Smoking	3
<a href="#">Edit</a>	4	21-May-99 12:00:00 AM	The Straight Story	4
<a href="#">Delete</a>	5	18-Jun-04 12:00:00 AM	The Terminal	1





	MId	Released	Name	SId
<a href="#">Edit</a>	<a href="#">Delete</a>	<a href="#">Select</a>	2	19-Jul-13 12:00:00 AM
<a href="#">Edit</a>	<a href="#">Delete</a>	<a href="#">Select</a>	3	26-Oct-07 12:00:00 AM
<a href="#">Edit</a>	<a href="#">Delete</a>	<a href="#">Select</a>	4	21-May-99 12:00:00 AM
<a href="#">Edit</a>	<a href="#">Delete</a>	<a href="#">Select</a>	5	18-Jun-04 12:00:00 AM

Id	2
Slot	17:45:00

Incorrect output, through datasource.

Id	Slot
5	11:50:00

Correct output, through server code.



Thank you for your efforts.

Submit this project as zip/ rar file (optional).