When displaying data from custom tables on your website, use [transformations](#) to define the format of the output.

The scenario below shows examples of transformations applied to custom table data.

> ⚠️ **Example prerequisites**
>
> To follow the example, you need to:
>
> - Create the **People** custom table according to the instructions in [Creating custom tables](#)
> - Add data to the table as described in [Managing custom table data](#)

Setting up the custom table web part

Start by preparing a page that loads and renders data from the custom table:

1. Open the **Pages** application.
2. Select the page where you want to display the custom table data.
3. Open the **Design** tab.
4. [Add](#) the **Custom table repeater** web part onto the page.
5. Set the following properties for the web part:

    - **Custom table**: People
    - **Selected item querystring key**: itemid
    - **Selected item database column name**: ItemID
    - **Selected item validation type**: Validation by number
    - **HTML envelope -> Content before**:

      ```
      <table border="1" cellpadding="4" style="border-collapse:collapse">
      ```

    - **HTML envelope -> Content after**:

      ```
      </table>
      ```

6. Click **OK**.

The web part does not display any data for now, because you have not assigned transformations. The **HTML envelope** properties add a table element around the web part. The transformations created in the next sections will fill the content of the table.

> ℹ️ To learn more about setting up custom table web parts, see [Displaying data from custom tables](#).

Writing the list transformation

The purpose of list transformations is to display multiple items on the same page. The Custom table repeater applies the list transformation to every record loaded from the specified custom table. In this example, the "list" is composed of table rows.

1. In the **Pages** application, configure (double-click) the *Custom table repeater* web part (on the **Design** tab).
2. Click **New** next to the **Transformation** property. The **New transformation** dialog opens.
3. Change the **Class type** to *Custom table* and select *People* as the **Custom table** value.
4. Type *ListItem* as the **Transformation name**.
5. Change the **Transformation type** to *Text / XML*.
6. Copy the following code into the transformation editor:

```
<tr>
        <td>{% ItemID %}</td>
        <td>{% FirstName %} {% LastName %}</td>
        <td><a href="?itemid={% ItemID %}">View information</a></td>
</tr>
```

7. Click **Save** and close the dialog.
8. Click **OK** to confirm and close the **Web part properties** dialog.

The transformation defines a table row, which the repeater renders for every record in the **People** custom table. If you view the page on the live site, you can see the custom table's data.

1	Ben Harmon	View information
2	Constance Langdon	View information
3	Travis Wanderlay	View information

Writing the detail transformation

To allow users to view more information about individual people from the custom table, you need to create a second transformation for the detail view:

1. In the **Pages** application, configure (double-click) the *Custom table repeater* web part again.
2. Click **New** next to the **Selected item transformation** property. The **New transformation** dialog opens.
3. Change the **Class type** to *Custom table* and select *People* as the **Custom table** value.
4. Type *ItemDetails* as the **Transformation name**.
5. Change the **Transformation type** to *Text / XML*.
6. Copy the following code into the transformation editor:

```
<tr>
        <td><strong>First name</strong></td>
        <td style="width:250px;">{% FirstName %}</td>
</tr>
<tr>
        <td><strong>Last name</strong></td>
        <td>{% LastName %}</td>
</tr>
<tr>
        <td><strong>Date of birth</strong></td>
        <td>{% DateOfBirth.ToShortDateString() %}</td>
</tr>
<tr>
        <td><strong>ID</strong></td>
        <td>{% ItemID %}</td>
</tr>
<tr>
        <td><strong>Last modified</strong></td>
        <td>{% ItemModifiedWhen %}</td>
</tr>
<tr>
        <td><strong>Personal GUID</strong></td>
        <td>{% ItemGUID %}</td>
</tr>
<tr>
        <td colspan="2" style="text-align:center;">
                <a href="{% CurrentDocument.RelativeURL %}">Back to list</a>
        </td>
</tr>
```

7. **Save** the transformation and close the dialog.
8. Click **OK** to confirm and close the **Web part properties** dialog.

The Custom table repeater applies the detail transformations when a single record is selected via a URL parameter.

On the live site, you can now click the <u>View information</u> link next to individual people in the list. The table changes and displays the data of the selected person.

First name	Travis
Last name	Wanderlay
Date of birth	9/22/1975
ID	3
Last modified	11/22/2013 11:55:32 AM
Personal GUID	9a4387eb-30c5-45fe-b7cf-aa79836237ec
Back to list	

✅ **Tip - previewing transformations**

When editing the code of transformations that are already assigned to a web part, you can preview the output directly.
Click **Preview** in the dialog header. The editor opens a split view, where you can see how the content displayed by the
web part changes when you save the transformation code.