HCL Digital Experience

HDX-DEV-200
Web Content Development

HCLSoftware U

Creating a new generation of experts

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Introduction

This hands-on lab introduces you to intermediate development topics of HCL Digital Experience (DX) Web Content Manager (WCM). It continues the beginner lab.

In this DX developer lab, you play the role of Gene, a developer for the fictitious Woodburn Studio company.

Gene Hayes, Developer, based in Chicago (USA)

As a DX Web Developer, you will experience how quick and easy it is to further develop Web Content. You will create a JSON Promotion Presentation Template to create and render DX Promotions in JSON format. You will also move the presentation of your Promotions menu component to a new List Presentation Component, allowing you to easily share it.

You will also create a new List content type that allows a business user to select what content and how to show it. And then you will add a JSON list presentation for the promotions.

Optionally, you may add a better styled list presentation.

Prerequisites

1. Completion of HDX-INTRO, HDX-BU-100, HDX-BU-200 and HDX-DEV-100 courses, including the labs and specially the HDX-DEV-100 Web Content Development lab, as this labs extends that work.
2. Access to download the Lab Resources. In the same place where you have found this lab, you will find corresponding resources which you may download and unzip in your Desktop. This helps you to run the lab more easily, and you may later replace them by your own ones.

You will be using the following user IDs and passwords:

Purpose	User	Password
SoFy Login	Your official email id	Your password
DX Login	ghayes (or wpsadmin)	HCL-Dem0 (or wpsadmin)

Lab Overview

In this lab there are several parts to get you started developing with the DX Web Content Manager. These are shortly introduced now.

Part 1: Use DX Promotion Content as Headless JSON Content

You will learn how to create a new JSON Presentation Template to show the DX content in JSON format and corresponding Promotion Presentation Template and change the MIME-type to JSON.
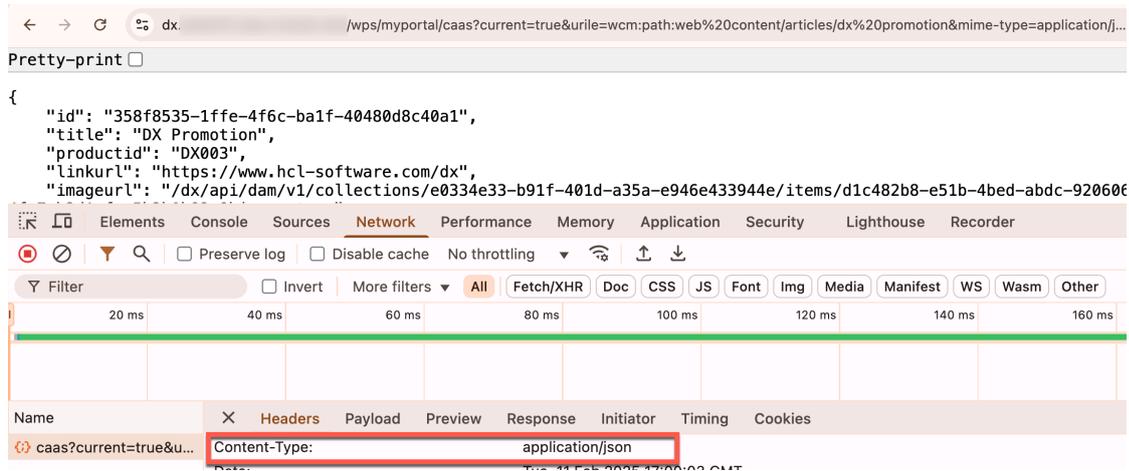
Part 2: Move Menu Component to List Presentation

Learn how you may turn an existing Menu Component formatting to a List Presentation Component to allow this to be used in different places.
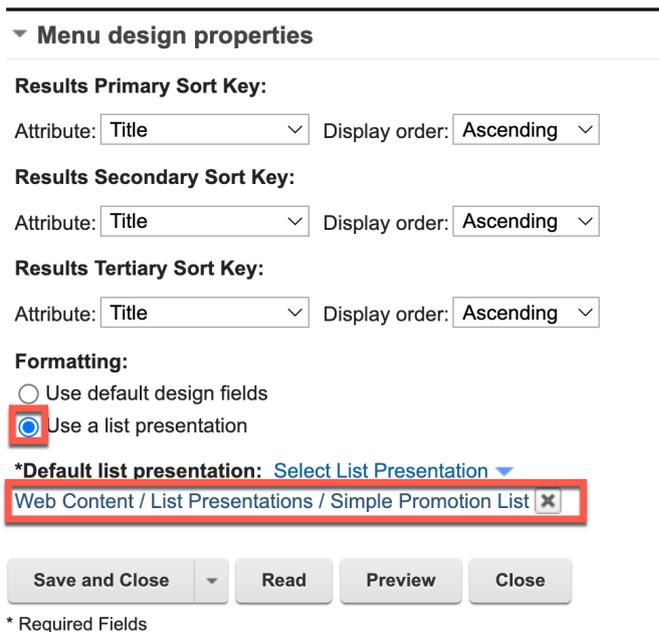
Part 3: Allow Business Users to Select and What and How to Display as a List

Learn how you may use a configure content to allow business users to select what contents and how to display them as a list. Create a new List Content Template and corresponding Presentation Template with elements to select what and how to display and test it.

▦▦▦▦ **Web Content Viewer (Contextual)**

Promotion: DX Promotion
Product ID: DX003
Link: HCL Digital Experience Home Page!

Promotion: Volt MX Promotion
Product ID: MX002
Link: HCL Volt MX Home Page

List Configuration

Title
Promotion List
Menu Component:
Promotions
List Presentation:
Simple Promotion List

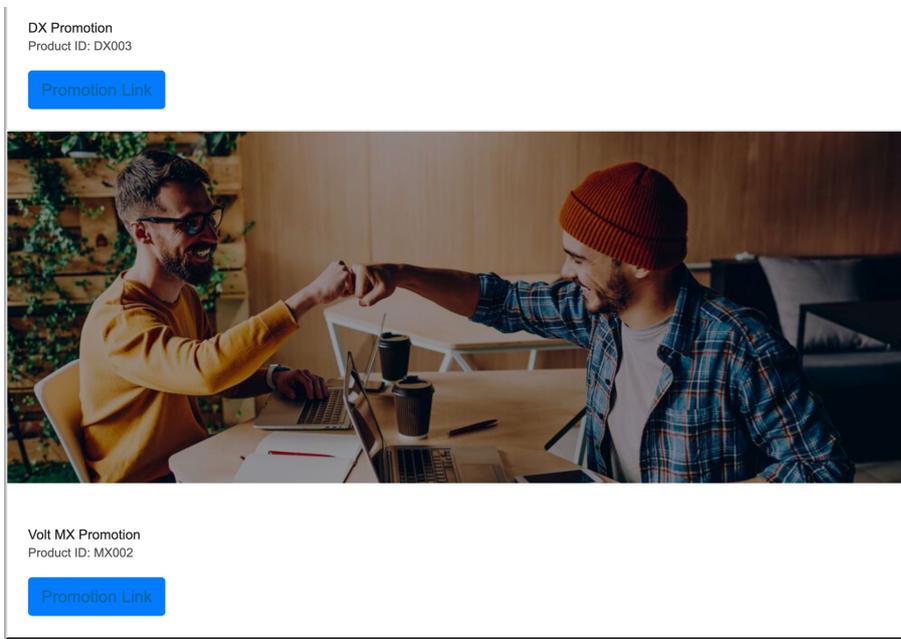**Part 4: Use DX Promotion Content List as Headless JSON Content**

And create a new JSON List Presentation Component with JSON format for your promotion content and use a new list content configured to show you promotions using the JSON format and change the MIME-type to JSON again.

← → C ⊙ dx.　　　　　　/wps/myportal/caas?current=true&urile=wcm:path:web%20content/articles/Promotion+List&mime-type=application/json

Pretty-print ☐

```
[{
    "id": "358f8535-1ffe-4f6c-ba1f-40480d8c40a1",
    "title": "DX Promotion",
    "productid": "DX003",
    "linkurl": "https://www.hcl-software.com/dx",
    "imageurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/d1c482b8-e51b-4bed-abdc-920606
4fe7-b3d1-fac5b3b0b82c?binary=true",
    "fileurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/6a212ce5-500d-4ab7-8505-dd80ac4
4d35-a720-fae70caed4ed?binary=true",
    "body": "<p style=\"margin: 0cm 0cm 8pt; line-height: 107%; font-size: 11pt; font-family: Calibri, sans-serif;\">
normal; margin: 0cm 0cm 8pt; font-size: 11pt; font-family: Calibri, sans-serif;\"><b><span style=\"font-size: 24.0pt;
Roman\u0027, serif;\">HCL Digital Experience</span></b></p>\n<p style=\"line-height: normal; margin: 0cm 0cm 8pt; fon
```

**Optional Part 5: Add a Styled List Presentation**

Optionally, you may learn how to use styling to build nicer UIs for your content. You will configure your theme to use Material Design for Bootstrap styling and create a new List Presentation to show your promotions using this styling.

Part 1: Use DX Promotion Content as Headless JSON Content

In this part, you will learn to create a new JSON Presentation Template to show the DX Promotion content in JSON format and change the MIME-type to JSON.
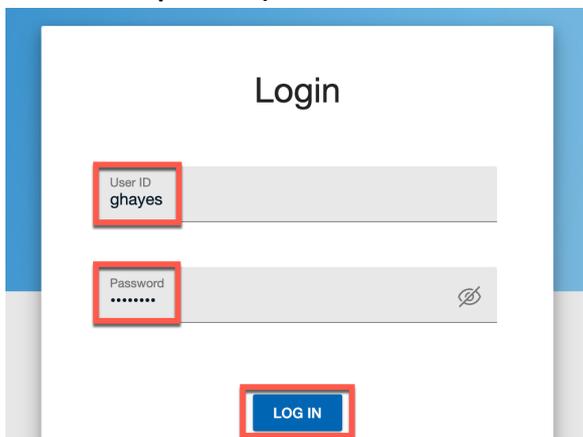
1. First create the new JSON presentation template. On the server where the DX Solution Modules has been installed, next to **Woodburn Studio Home Page**, click **Open**.
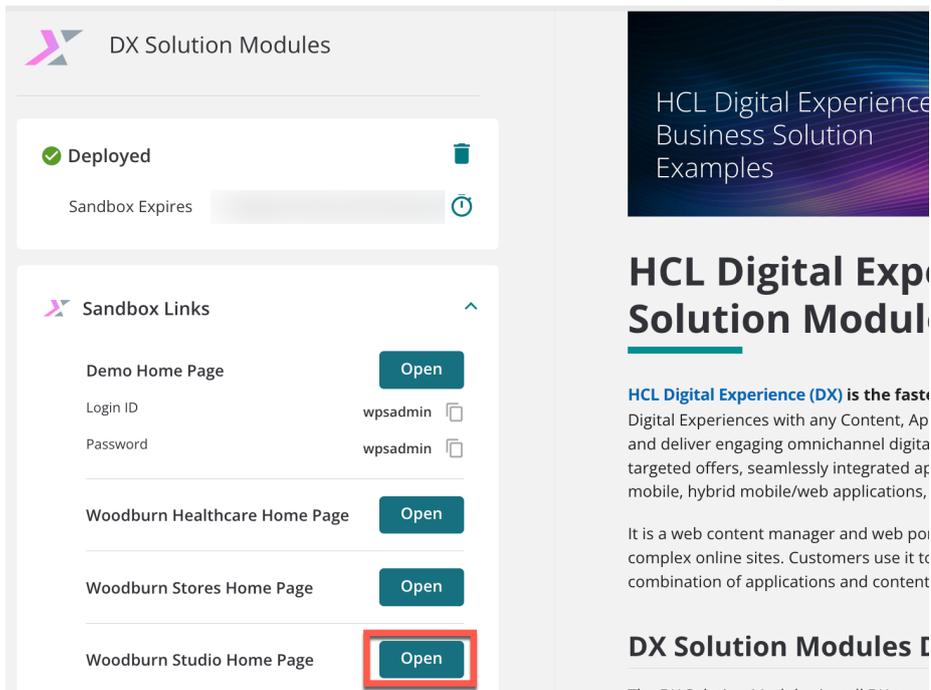

2. Log on to the DX server as Gene Hayes. Click **Log in**.

3. Then use the credentials of Gene (User ID: **ghayes**, Password: **HCL-Dem0** – if you do not have these, you may use the default administrator account with User ID: **wpsadmin,** Password: **wpsadmin)**

4. Then go the Web Content library in the Practitioner Studio. Open the applications menu and click **Web Content, Authoring, Library Explorer**, **Web Content** web content library and close the Sidebar.
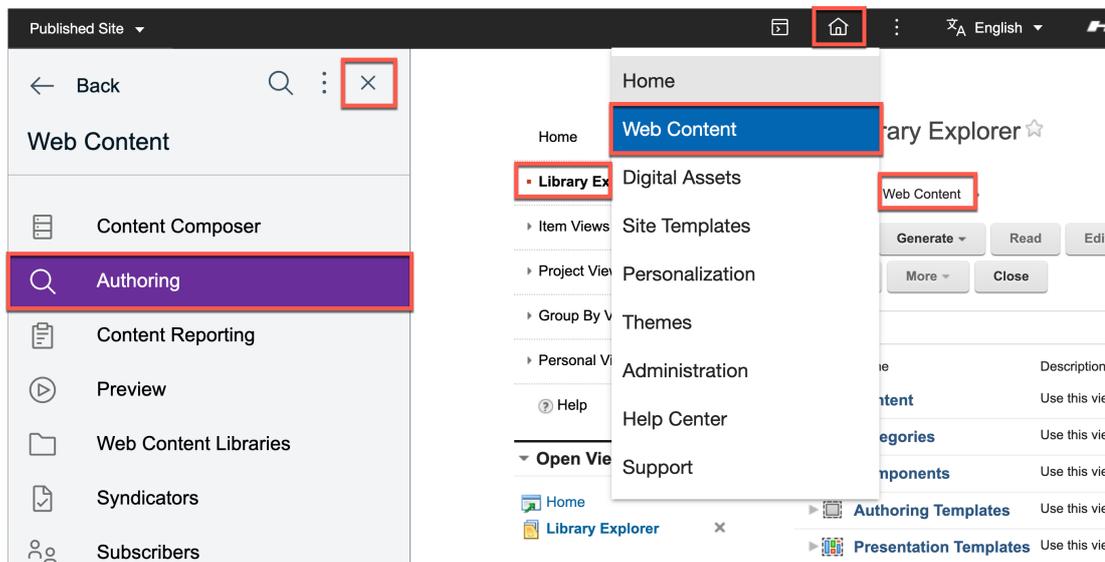

5. And create the new JSON Presentation Template for promotions. Click **New**, **Presentation Template**.
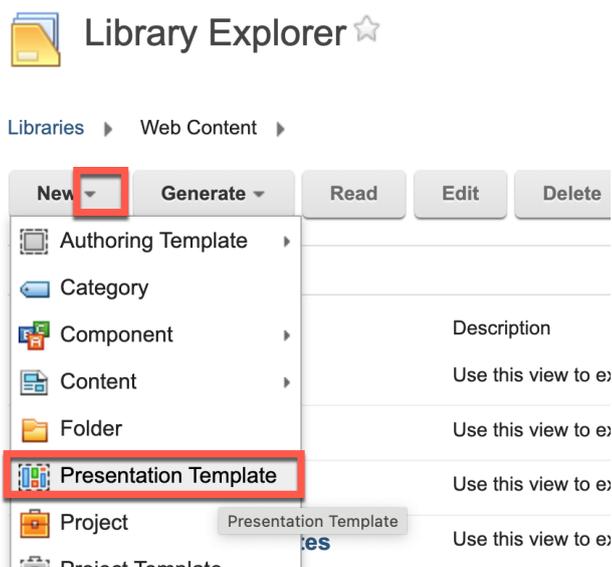
6. Name it **Promotion.json**, give it a description, like **JSON presentation of promotion content** and use the following Presentation Template Options that uses the Promotion content properties and elements in the right formats (using encoding and escaping) in a JSON object. Notice the **CopyText plugin** that removes the default HTML encoding of the title property and uses JSON escaping. You may import this from your downloaded resource promotion.json.html, copy from below or use the tag helpers to construct this:

```
{
    "id": "[Property field='id']",
    "title": "[Plugin:CopyText text='[Property field="title" htmlencode="false"]' escape='json']",
    "productid": "[Element key="Product ID"]",
    "linkurl": "[Element key="Promotion Link" format="url"]",
    "imageurl": "[Element key="Promotion Banner" format="url"]",
    "fileurl": "[Element key="Brochure"]",
    "body": "[Plugin:CopyText text='[Element key="Body"]' escape='json']"
}
```
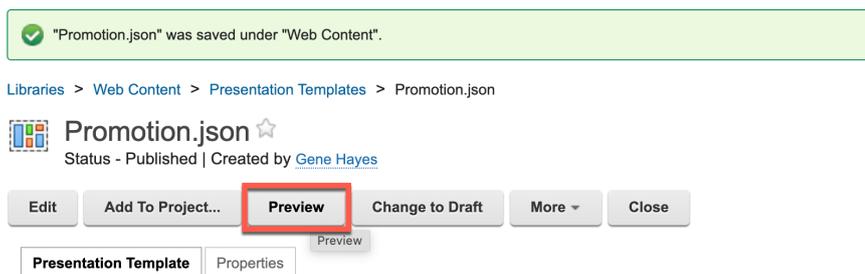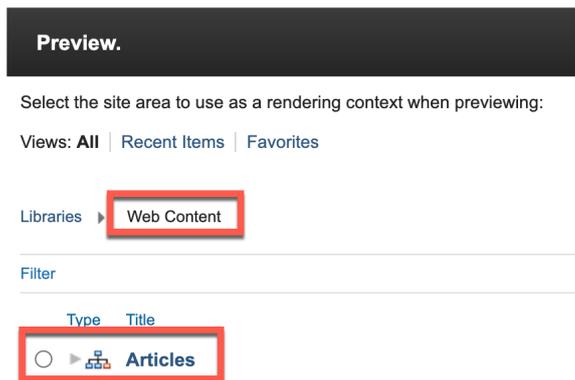
7. It should look like below.
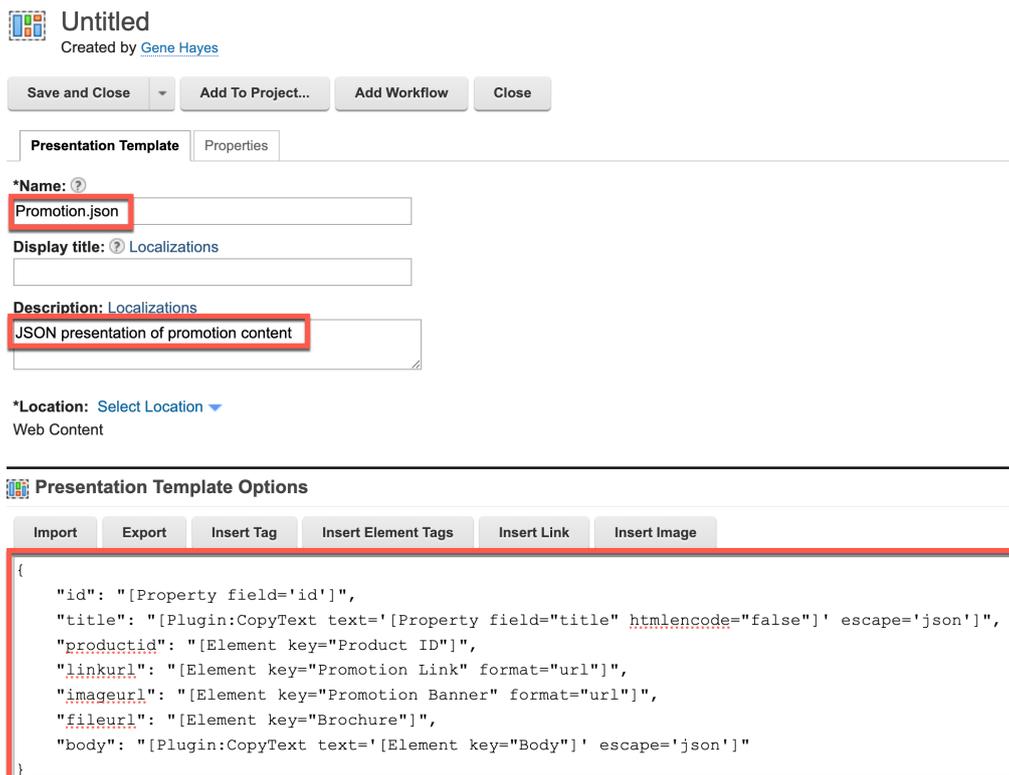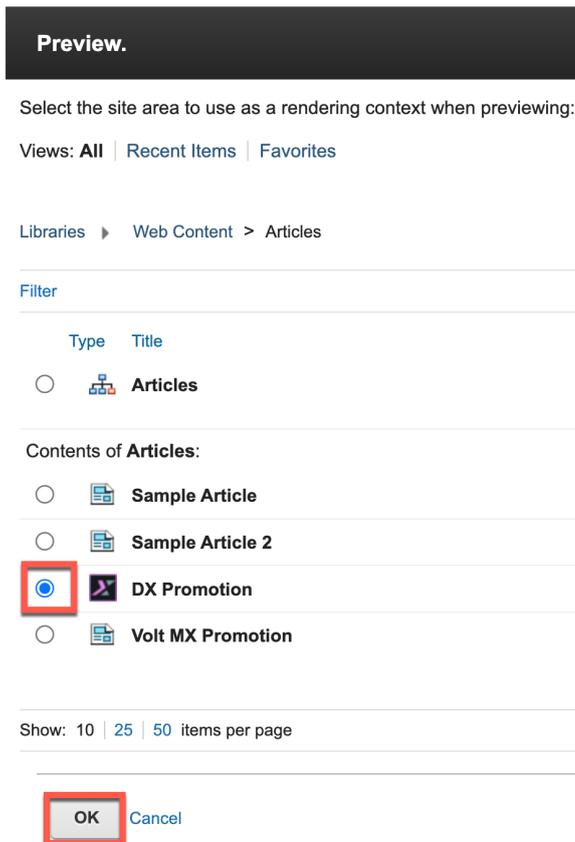

8. Then click **Save and Read**.

9. Then preview it with any of the promotion content, e.g. the DX Promotion. Click **Preview**.

> ✅ "Promotion.json" was saved under "Web Content".
>
> Libraries > Web Content > Presentation Templates > Promotion.json
>
> 📊 Promotion.json ☆
> Status - Published | Created by Gene Hayes
>
> | Edit | Add To Project... | Preview | Change to Draft | More ▾ | Close |
>
> Preview
>
> **Presentation Template** | Properties

10. Then select your DX Promotion content under Articles. Click **Articles**.

> **Preview.**
>
> Select the site area to use as a rendering context when previewing:
>
> Views: **All** | Recent Items | Favorites
>
> Libraries ▶ Web Content
>
> Filter
>
> Type Title
>
> ○ ▶ 🔲 **Articles**

11. And then **DX Promotion** and click **OK**.

> **Preview.**
>
> Select the site area to use as a rendering context when previewing:
>
> Views: **All** | Recent Items | Favorites
>
> Libraries ▶ Web Content > Articles
>
> Filter
>
> Type Title
>
> ○ 🔲 **Articles**
>
> Contents of **Articles**:
>
> ○ 📄 **Sample Article**
>
> ○ 📄 **Sample Article 2**
>
> ⦿ 📄 **DX Promotion**
>
> ○ 📄 **Volt MX Promotion**
>
> Show: 10 | 25 | 50 items per page
>
> **OK** Cancel

12. It should open a new page that looks like this. Check the URL that shows its current content (Web Content/Articles/DX Promotion) selection with the specific presentation template (Promotion.JSON):

https://dx.sbx0000.play.hclsofy.com/wps/wcm/myconnect/web%20content/articles/dx%20promotion?presentationtemplate=Promotion.json

{ "id": "358f8535-1ffe-4f6c-ba1f-40480d8c40a1", "title": "DX Promotion", "productid": "DX003", "linkurl": "https://www.hcl-software.com/ "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/d1c482b8-e51b-4bed-abdc-9206065d983b/renditions/3d8f9eb3-~ binary=true", "fileurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/6a212ce5-500d-4ab7-8505-dd80ac43475 fae70caed4ed?binary=true", "body": "

\n

HCL Digital Experience

13. Then use the View Page Source and you'll see it is a well-defined JSON object.


```
1  {
2      "id": "358f8535-1ffe-4f6c-ba1f-40480d8c40a1",
3      "title": "DX Promotion",
4      "productid": "DX003",
5      "linkurl": "https://www.hcl-software.com/dx",
6      "imageurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/d1c482b8-e5
7      "fileurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/6a212ce5-500
8      "body": "<p style=\"margin: 0cm 0cm 8pt; line-height: 107%; font-size: 11pt; font-family: Cali
9  }
```

14. You may use **Network** – **Headers** to discover that the MIME-type, or here Content-type, is currently HTML text.

15. To change the MIME-type, use the Content as a Service page. Load the same content using the CaaS page URL configured with the DX Promotion content, Application/JSON mime-type and Promotion.json presentation template:

https://dx.sbx0000.play.hclsofy.com/wps/myportal/caas?current=true&urile=wcm:path:**web%2 0content/articles/dx%20promotion&mime- type=application/json**&pagedesign=**Web+Content/Promotion.json**

You have successfully created a JSON presentation template for your promotions and used it to generate the promotion in JSON formats and MIME-type.

Part 2: Move Menu Component to List Presentation

Learn how you may turn an existing Menu Component formatting to a List Presentation Component to allow this to be used in different places.
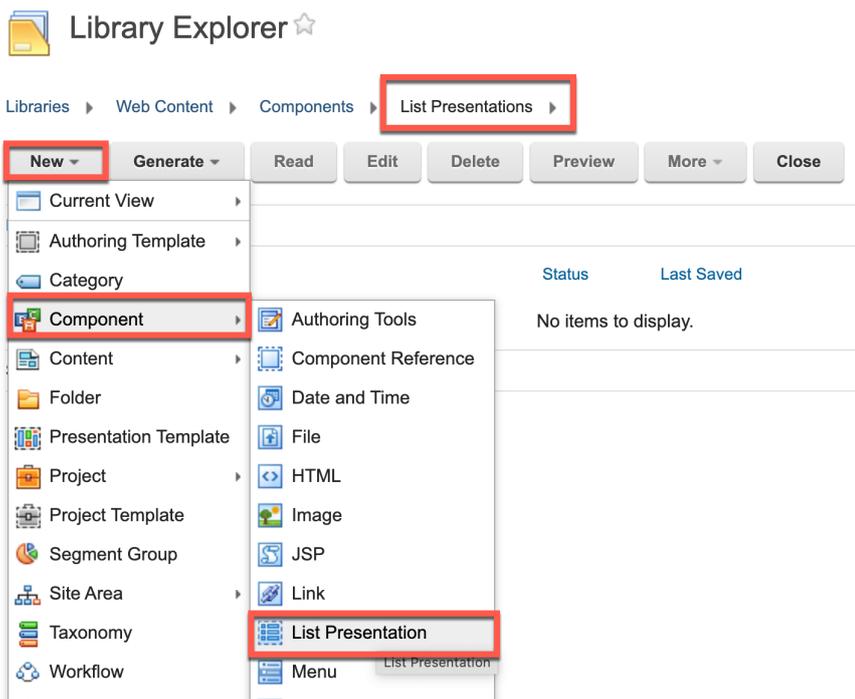
1. Go to the Web Content Authoring to first create the new folder to store this and other list presentations. Ensure you are in the **Components** view under the Web Content web content library, click **New** and **Folder**.
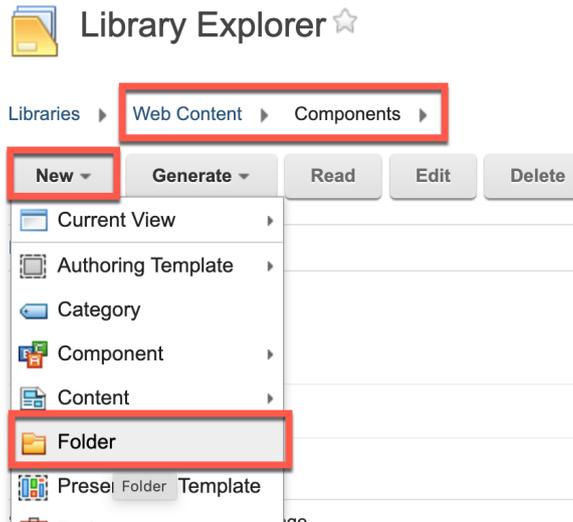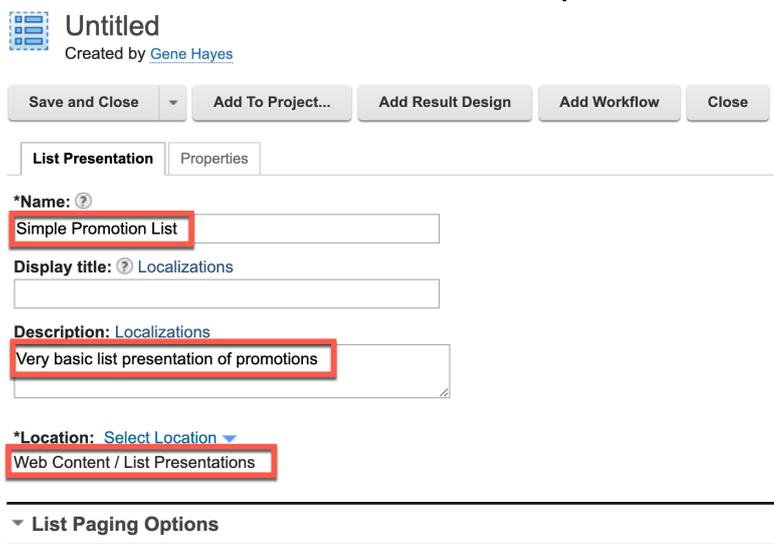

2. Name it **List Presentations** with description **Allows to easily select from available list presentations** and save it with **Save and Close**.
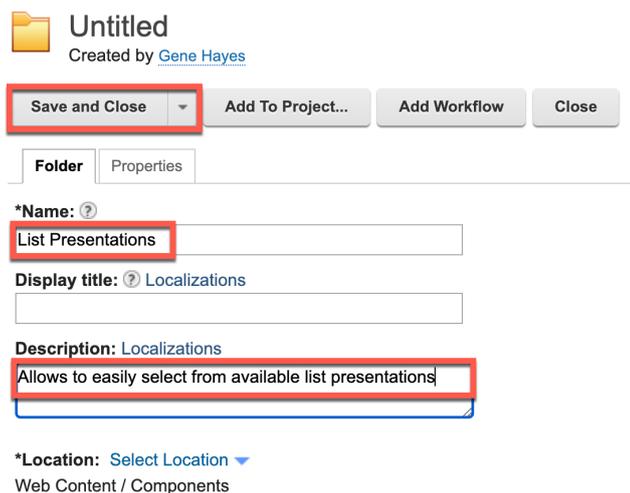
3. Then enter the **List Presentations** folder and click **New**, **Component** and **List Presentation.**

Library Explorer ☆

Libraries ▸ Web Content ▸ Components ▸ List Presentations ▸

| New ▾ | Generate ▾ | Read | Edit | Delete | Preview | More ▾ | Close |

Current View ▸
Authoring Template ▸
Category

Component ▸   Authoring Tools

Content ▸   Component Reference   No items to display.
Folder   Date and Time
Presentation Template   File
Project ▸   HTML
Project Template   Image
Segment Group   JSP
Site Area ▸   Link
Taxonomy   List Presentation
Workflow   Menu   List Presentation

Status   Last Saved

4. Name it **Simple Promotion List**, give description **Very basic list presentation of promotions** and ensure the location is set to **Web Content / List Presentations**.

Untitled
Created by Gene Hayes

| Save and Close | ▾ | Add To Project... | Add Result Design | Add Workflow | Close |

List Presentation | Properties

*Name: ⍰
Simple Promotion List

Display title: ⍰ Localizations

Description: Localizations
Very basic list presentation of promotions

*Location: Select Location ▾
Web Content / List Presentations

▾ List Paging Options

5. Then use the same List Presentation Markup that is currently set in your Promotions Menu Component. Open it to copy. Click **Web Content**, **Components**, select **Promotions** and click **Edit**.
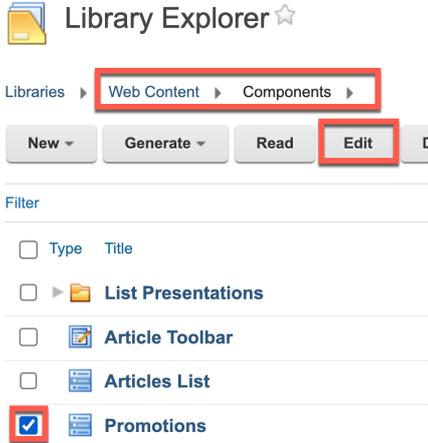
6. The **List Paging Options** are the same. Copy the **List Presentation Markup Result design**, **Separator** and **No result design** into your new List Presentation.
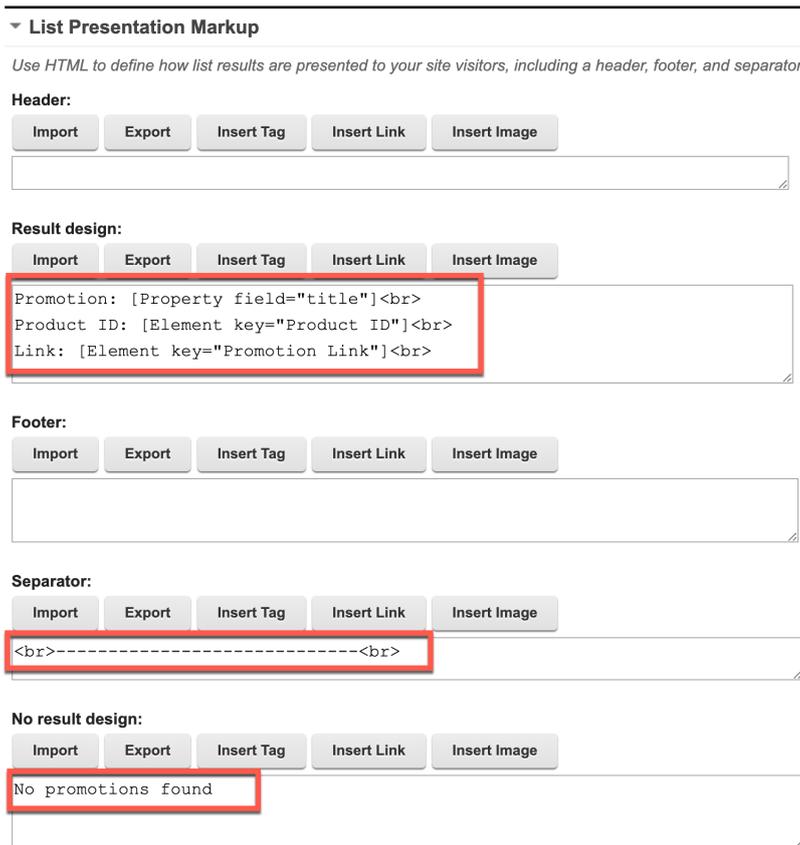
7. And save your new List Presentation Component. Click **Save and Close**.

8. And update your current **Promotions** Menu Component to use your new Simple Promotion List. Change the formatting to **Use a list presentation** and select your **Web Content / List Presentations / Simple Promotion List**. Then test it. Click **Preview**.

9. Select the **DX Promotion** and click **OK**.

Preview.

Select the site area to use as a rendering context when previewing:

Views: **All** | Recent Items | Favorites

Libraries ▶ **Web Content > Articles**

Filter

	Type	Title		Sta
○	🔲	**Articles**		Pub

Contents of **Articles**:

○	🔲	**Sample Article**		Pub
○	🔲	**Sample Article 2**		Pub
⦿	🔲	**DX Promotion**		Pub
○	🔲	**Volt MX Promotion**		Pub

Show: 10 | 25 | 50 items per page

OK Cancel
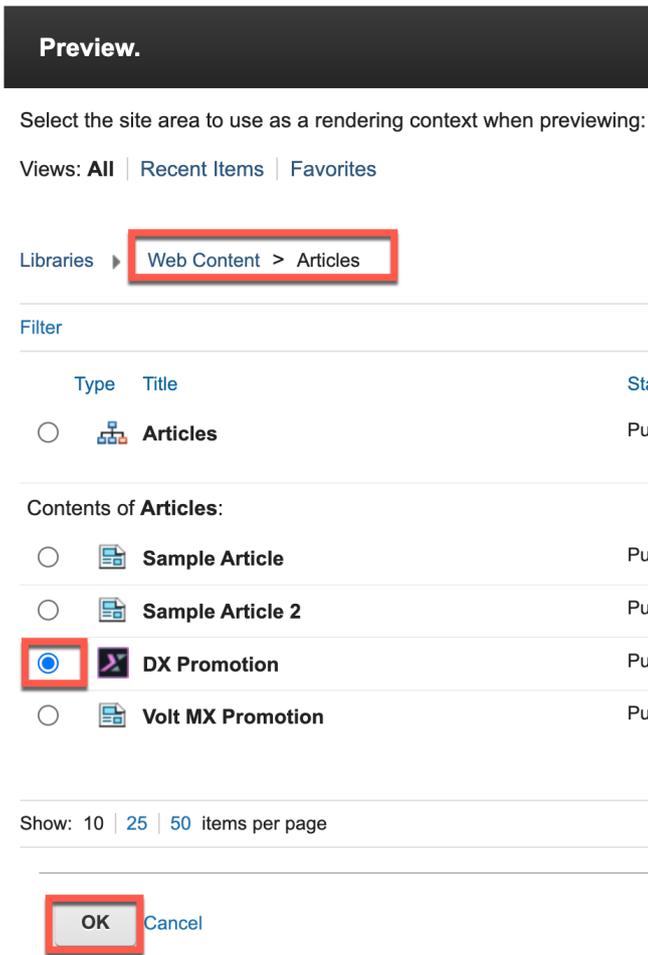
10. And you see the same list in the same format.

Promotion: DX Promotion
Product ID: DX003
Link: HCL Digital Experience Home Page!

Promotion: Volt MX Promotion
Product ID: MX002
Link: HCL Volt MX Home Page

11. Now save your updated Menu Component. Click **Save and Close**.

Save and Close ▼ Read Preview Close
* Required Fields

You have successfully moved the List Presentation Markup from your Menu Component to a List Presentation Component, allowing it to be reused in other places.

Part 3: Allow Business Users to Select and What and How to Display as a List

Learn how you may use a configure content to allow business users to select what contents and how to display them as a list. Create a new List Content Template and corresponding Presentation Template with elements to select what and how to display and test it.

1. Go to the Web Content Authoring to first create the new List Content Template. Click **New**, **Authoring Template** and **Content Template**.
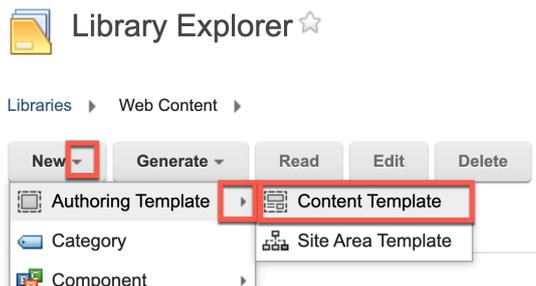
2. Enter the name of the template **List** and give it a clear description, like **Manage a list of content**. Select the **Web Content** web content library as location and click **Manage Elements** to manage the elements needed for this template.

3. You want your business users to select what (using a Menu Component selection) and how (using a List Presentation selection) to show. Add these elements and click **OK**.

Element Manager

To add a new element, select an element type and then enter a Name and a Display Title.
If a Display Title is not specified, then the Name field will be used instead.

Element type:
Component Reference ▾

*Name:

Display title:

Display Title Localization: ⍰
None ▾

Add

Element type	Name	Display title
Component Reference	Menu Component	Menu Component
Component Reference	List Presentation	List Presentation

OK   Cancel

4. Then remove the workflow. Click **Default Content Properties**, open the **Workflow** section and **uncheck** the **Enable workflow for items created with this authoring template**.

| Content Template | Properties | Default Content | **Default Content Properties** |

Type: 📄
Content

Location: 📄
Web Content

UUID: 📄
None

Authors: 📄 Add Authors ▾
None

Owners: 📄 Add Owners ▾
None

▸ 🖧 Content Properties

▸ 🔲 Profile

▾ 🔗 Workflow

Define the default workflow settings for items created using this authoring template.

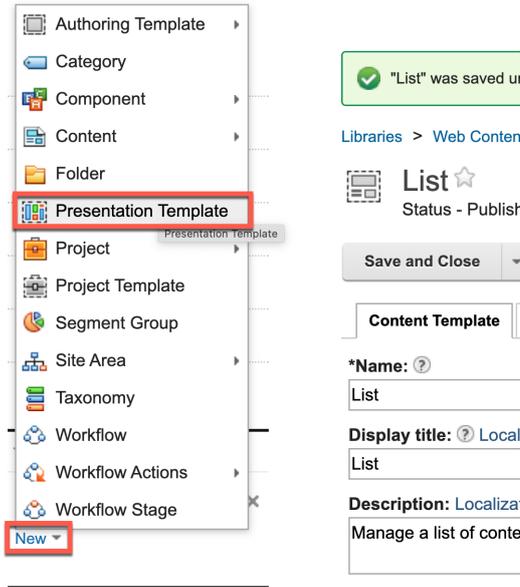☐ Enable workflow for items created with this authoring template

☐ Hide section

5. And save it. Click **Save**.

🔲 **Untitled**
   Created by Gene Hayes

Save and Close ▾   Add To Project...
   Save
   Save and Read
   Save as Draft

6. Then create the corresponding List Presentation Template. Click **New**, **Presentation Template**.

7. Name it **List** and give it a description, like **Show a configured list**. Then insert the tags to select and render the Menu Component and List Presentation elements, and to allow business users to edit it easily with inplace editing. Click **Insert Tag**.
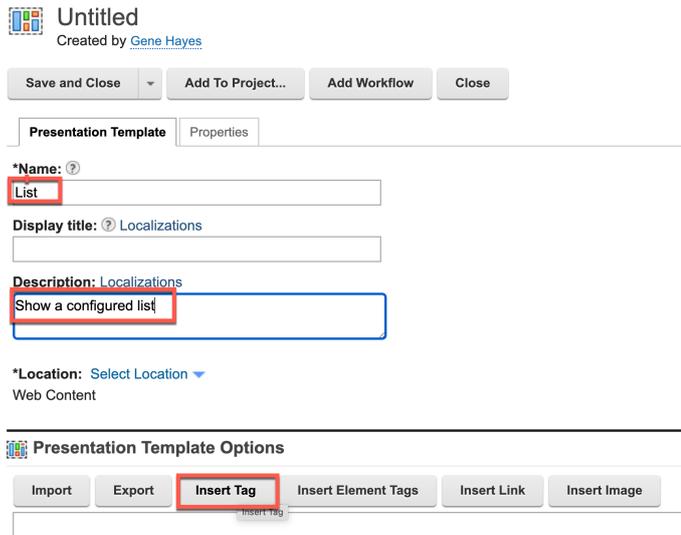
8. First, you want your Menu Component element to overwrite the context of your content. This is managed with the InContext tag. Select **In Context** tag type, **Autofill** as item context, to ensure works both in portlets and as standalone web content, and click **OK**.

Insert a Tag

Select the type of tag to create, and then define parameters for the selected tag. You can then either copy and paste the tag into insert the tag at the current cursor location.

Tag:

[InContext context="autofill"][/InContext]

Select a tag type:

In Context

Select item context:

Autofill

Tag Description:

The InContext tag renders the tag body within a specified context. The new context can be specified as a predefined contex

OK   Cancel

9. Now set the context to your selected Menu Component elements. Put your cursor between the InContext tags and click **Insert Tag**.

Presentation Template Options

Import   Export   Insert Tag   Insert Element Tags   Insert Link   Insert Image

[InContext context="autofill"][/InContext]

10. Select the tag that displays the Menu Component element to set the portlet context to the current list content. Select **Auto** as source item type to make it work with the selected component that will select other content, **Current** as item context, from the **Web Content - List** Content Template the **Menu Component** element and click **OK**.

Insert a Tag

Select the type of tag to create, and then define parameters for the selected tag. You can then either copy and insert the tag at the current cursor location.

Tag:

[Element key="Menu Component" type="auto" context="current"]

Select a tag type:
Element

Select source item type:
Auto

Select item context:
Current

Select the authoring template for elements to reference:
Web Content/List   Select authoring template...

Select the element to reference:
Menu Component

Tag Description:

The Element tag is used to reference an element within a presentation template or element design.

OK   Cancel

11. Then you need to override the list presentation that is used to render any list by setting the request attribute ListPresentationId to the ID of the List Presentation to use. Set the ID to the List Presentation element and at the end, delete it. Insert the following code that manages this:

```
[Plugin:RequestAttribute key="ListPresentationId" compute="once" value="[Element
context='current' type='content' key='List Presentation' format='id']"]

[Plugin:RequestAttribute key="ListPresentationId" mode="delete"]
```

12. Combined, it should look this.

Presentation Template Options

Import   Export   Insert Tag   Insert Element Tags   Insert Link   Insert Image

```
[Plugin:RequestAttribute key="ListPresentationId" compute="once" value="[Element context='current'
type='content' key='List Presentation' format='id']"]
[InContext context="autoFill"][Element context="current" type="auto" key="Menu Component"]
[/InContext]
[Plugin:RequestAttribute key="ListPresentationId" mode="delete"]
```

13. And you may add the option to allow your business user to select the menu and list presentation components when in edit mode using inplace editing, using the following code (you may also get it from the downloaded file **list.html**, and feel free to style it to make it look better):

[IfEditMode]

<h2>List Configuration</h2>

Title: [EditableProperty field="title" format="div" mode="inplace"][Property field="title"]

[/EditableProperty]

Menu Component: [EditableElement key="Menu Component" type="auto" mode="inplace" context="current"] [Element type="auto" context="current" format="title" key="Menu Component"][/EditableElement]

List Presentation: [EditableElement key="List Presentation" type="auto" mode="inplace" context="current"] [Element type="auto" context="current" format="title" key="List Presentation"] [/EditableElement]

[/IfEditMode]

14. Then save it.
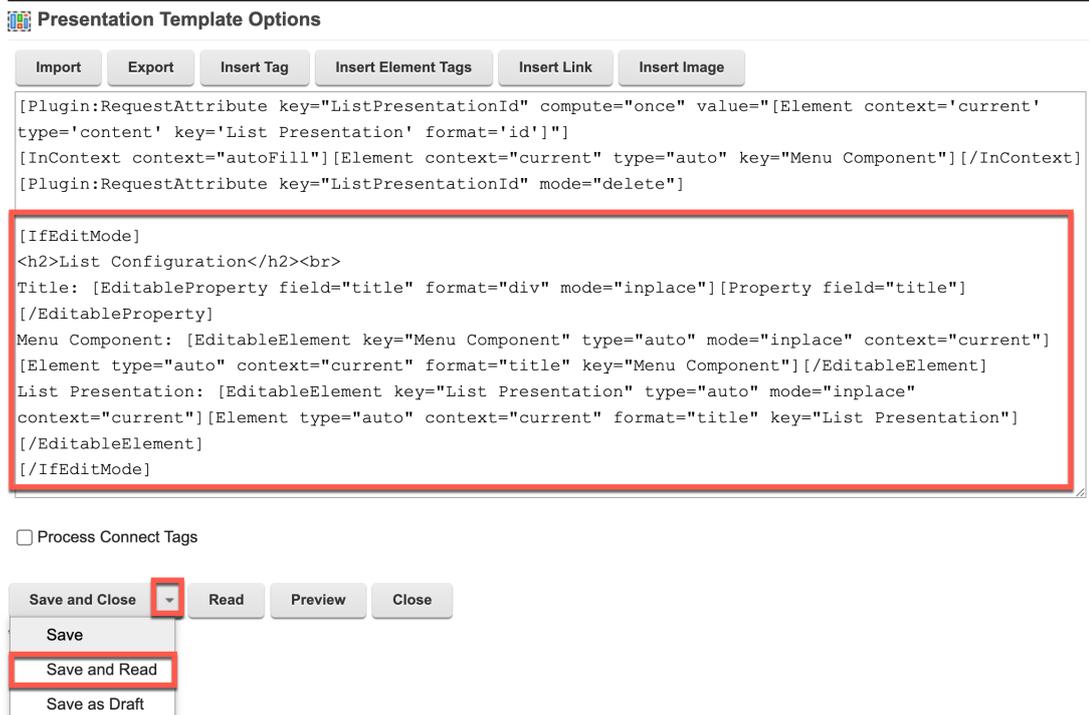
15. Then associate the List Content Template with the Presentation Template. Edit the **List Content Template** again, set the Default Presentation Template to **Web Content / List** and save it.
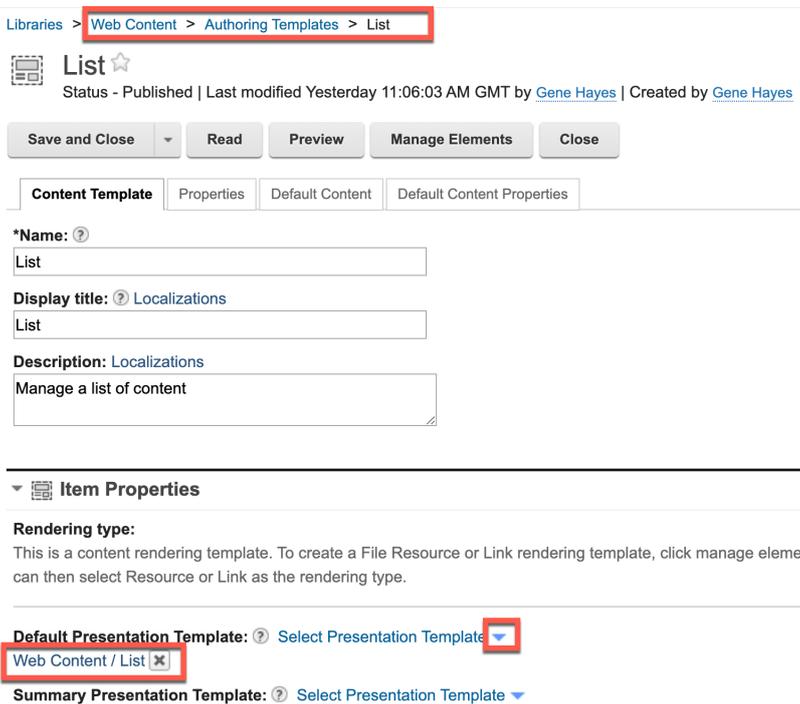
16. Then create your first list content to show the promotions, using this new List Content Template. Click **New, Content, Web Content / List.**
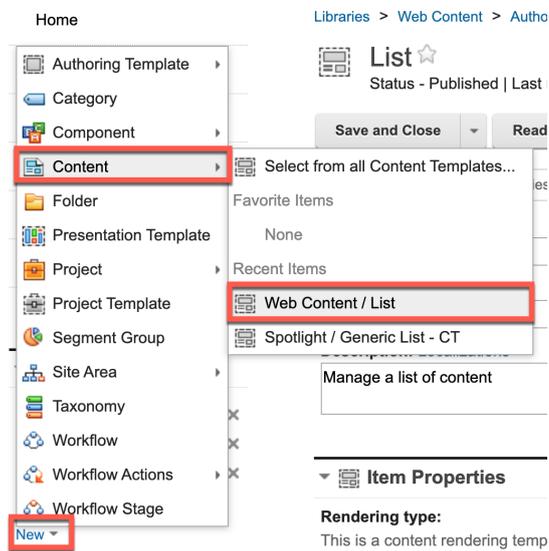
17. Name it **Promotion List**, description **List of promotions**, location **Web Content / Articles**, and use the existing **Promotions** menu component for both the Menu Component and **List Presentations / Simple Promotion List** for the List Presentation Component elements. Then click **Save and Read**.

18. Then test it. Click **Preview**.

19. And you see the same list again.

Promotion: DX Promotion
Product ID: DX003
Link: HCL Digital Experience Home Page!

Promotion: Volt MX Promotion
Product ID: MX002
Link: HCL Volt MX Home Page

20. You may also show this in a page. For example, add it to the **Woodburn Studio Contact** page. Go to that page, ensure you are in edit mode, click the **Add page components and applications** icon, **Applications** and search for **Web Content Viewer**, add that to the page and close the toolbar.
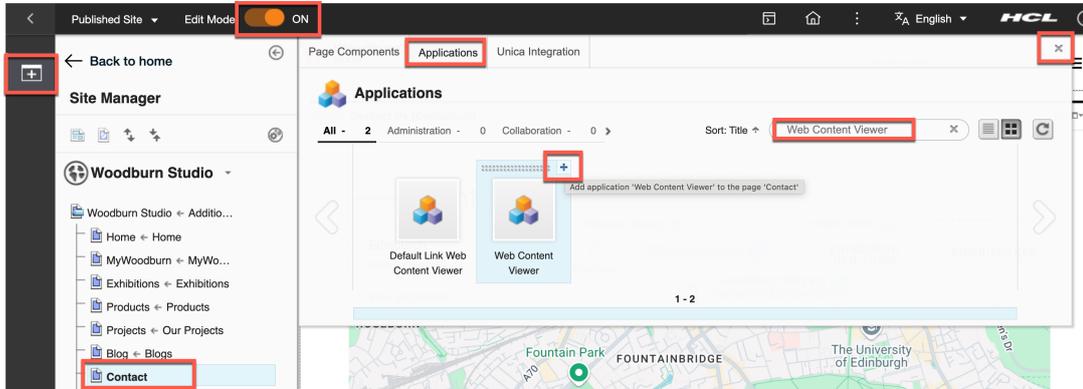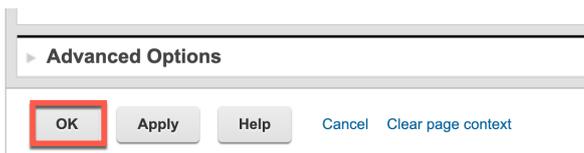

21. Then configure it to show your List Promotions content. Open the portlet menu and click **Edit Shared Settings**.

22. Click **Edit** to set the content to **Web Content / Articles / Promotion List**.
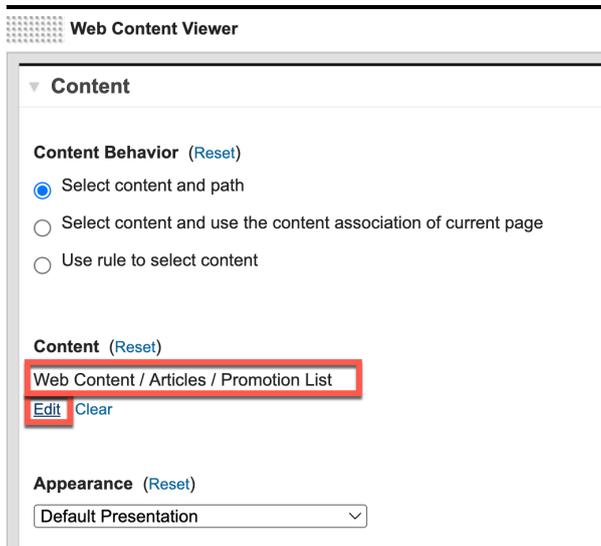
23. Scroll down and click **OK** to save.

24. You see the list on the top and the inplace edit options to set the title and select the menu component and list presentation.

25. And notice that if you disable the edit mode, it just shows the list again.
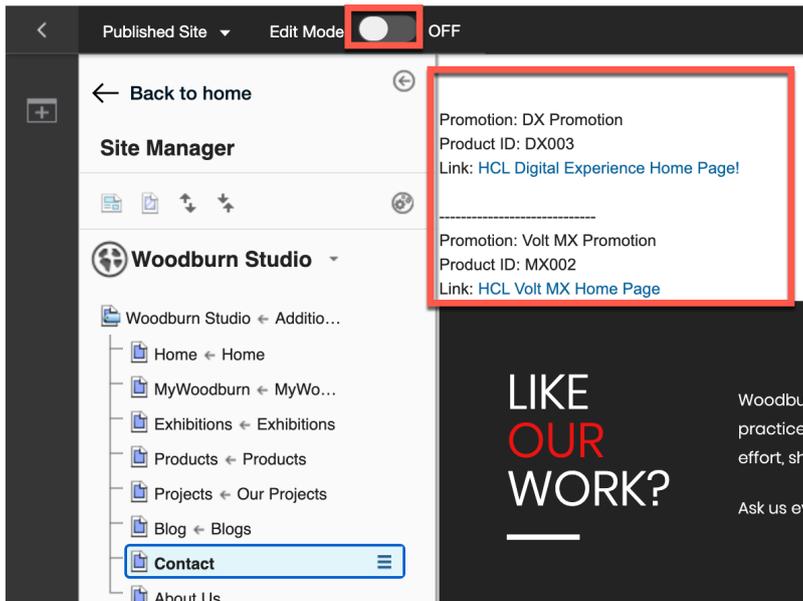
You have successfully created and tested a configurable list content.

Part 4: Use DX Promotion Content List as Headless JSON Content

In this part, you will create a new JSON List Presentation Component with JSON format for your promotion content and use a new list content configured to show you promotions using the JSON format and change the MIME-type to JSON again.

1. Go to your **List Presentations** folder under **Components** and click **New**, **Component** and **List Presentation Template**.
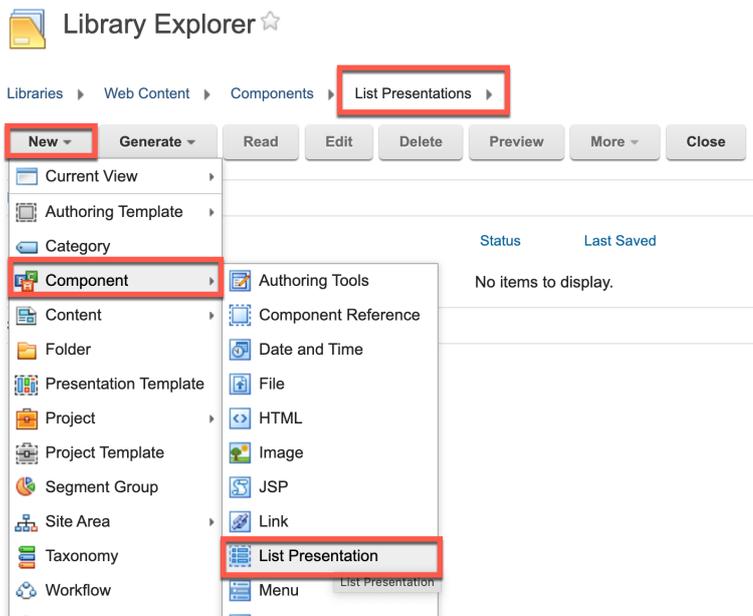
2. Name it **Promotion List.json**, give description **List presentation of promotions in JSON format** and ensure the location is set to **Web Content / List Presentations**.
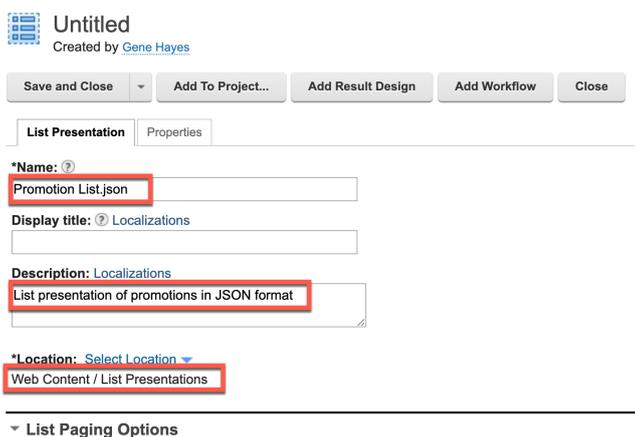
3. Then reuse the presentation design from the **Promotion.json** Presentation Template and configure the **Header** with a JSON list opener **[**, under **Result design 1** add **context="autofill"** to let the presentation template choose the right content, add the JSON **Footer]**, and **Separator ,** and use **[]** for **No result design**. Then save it and click **Save and Close**.

4. And test it on the Woodburn Studio Contacts page first to update the Promotion List to use your new List Presentation. Ensure it is in edit mode, click **Simple Promotion List**, select **Promotion List.json** and click **OK**.
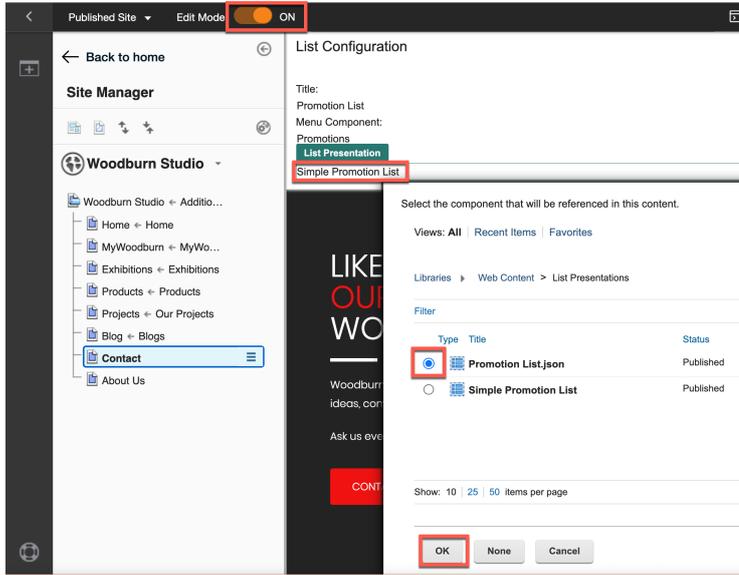
5. Click **Save**.
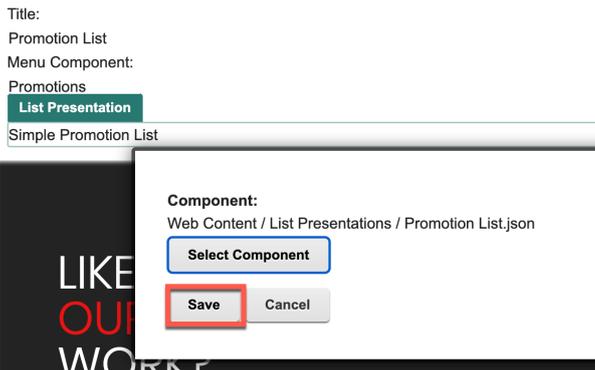
6. Then refresh the page and you see it as a JSON list of promotions.

[{ "id": "358f8535-1ffe-4f6c-ba1f-40480d8c40a1", "title": "DX Promotion", "productid": "DX003", "linkurl": "https://www.hcl-software.com/dx", "imageurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/d1c482b8-e51b-4bed-abdc-9206065d983b/renditions/3d8f9eb3-4916-4fe7-b3d1-fac5b3b0b82c?binary=true", "fileurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/6a212ce5-500d-4ab7-8505-dd80ac434756/renditions/9c0dcc81-1176-4d35-a720-fae70caed4ed?binary=true", "body": "

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7. Now check it out with the preview again. In Authoring, open the updated Promotion List content. Click **Web Content**, **Content**, **Articles**, **Promotion List**, check that is set to the **Promotion List.json** List Presentation and click **Preview**.

Libraries > Web Content > Content > Articles > Promotion List

Promotion List ☆

Status - Published | Last modified Today 2:10:47 PM GMT by Gene Hayes | Created by Gene Hayes

| Edit | Add To Project... | Preview | Link | More ▾ | Close |

Content | Properties

Name:
Promotion List

Display title:
Promotion List

Description:
List of promotions

▾ **Menu Component**

Component:
Web Content / Promotions

▾ **List Presentation**

Component:
Web Content / List Presentations / Promotion List.json

8. You see a JSON list.

← → C dx.   /wps/wcm/myconnect/web%20content/articles/promotion%20list?wcmitemid=721ab7ce-7975-4989-b4f6-f080f8fa03...

[{ "id": "358f8535-1ffe-4f6c-ba1f-40480d8c40a1", "title": "DX Promotion", "productid": "DX003", "linkurl": "https://www.hcl-software.com
"/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/d1c482b8-e51b-4bed-abdc-9206065d983b/renditions/3d8f9eb3-4
binary=true", "fileurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/6a212ce5-500d-4ab7-8505-dd80ac434756
fae70caed4ed?binary=true", "body": "
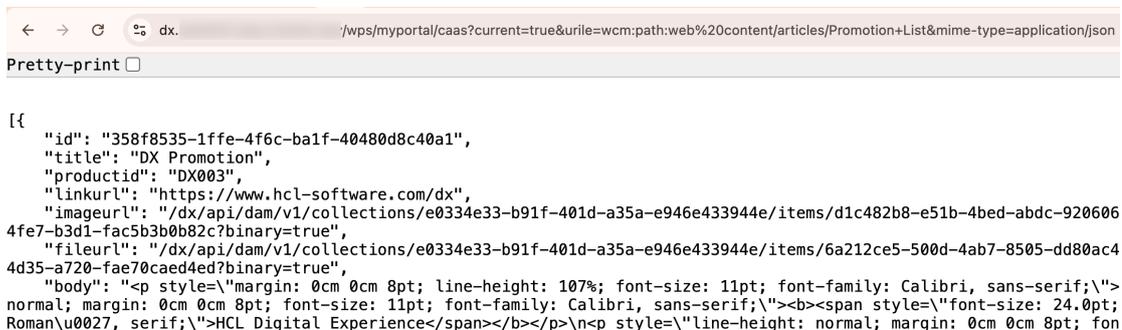
\n

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9. And you look at the View Page Source, you'll see it is a list of contents in JSON format.

```
Line wrap ☐
 1
 2  [{
 3      "id": "358f8535-1ffe-4f6c-ba1f-40480d8c40a1",
 4      "title": "DX Promotion",
 5      "productid": "DX003",
 6      "linkurl": "https://www.hcl-software.com/dx",
 7      "imageurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/d1c482b8-e51b-4bed-abdc-9206065d983b/renditions/3d8f9el
 8      "fileurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/6a212ce5-500d-4ab7-8505-dd80ac434756/renditions/9c0dcc8
 9      "body": "<p style=\"margin: 0cm 0cm 8pt; line-height: 107%; font-size: 11pt; font-family: Calibri, sans-serif;\"> </p>\n<p style=\"l
10  },{
11      "id": "112ff53b-f1d0-462e-9465-c2749a0113f2",
12      "title": "Volt MX Promotion",
13      "productid": "MX002",
14      "linkurl": "https://www.hcl-software.com/volt-mx",
15      "imageurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/87a86a7b-f2a2-4d60-a010-fa1a4b5afb70/renditions/4df367(
16      "fileurl": "/dx/api/dam/v1/collections/e0334e33-b91f-401d-a35a-e946e433944e/items/cdde2d3c-ac87-499d-9d99-11a917a02b43/renditions/f23ae75
17      "body": "<p style=\"line-height: 60pt; margin: 0cm; font-size: 12pt; font-family: Calibri, sans-serif;\"><b><span style=\"font-size: 18.0
18  }]
19
```

16. Again, this is in HTML text MIME-type. To change the MIME-type, use the Content as a Service page again. Load the same content using the CaaS page URL configured with the Promotion List content, Application/JSON mime-type:

https://dx.sbx0000.play.hclsofy.com/wps/myportal/caas?current=true&urile=wcm:path
:**web%20content/articles/Promotion+List**&mime-type=application/json

You have successfully created the new JSON Promotion List Presentation to show the list of promotions in JSON format and using the JSON application MIME-type.

Part 5: Add a Styled List Presentation

Optionally, you may learn how to use styling to build nicer UIs for your content. You will configure your theme to use Material Design for Bootstrap styling and create a new Presentation List to show your promotions using this styling.

1. To make this work, you need to use a WebDAV-based theme, like the one you created in HDX-DEV-100 Theme Development (Part 1 at least). Update this first with Material Design for Bootstrap (MDB) styling, see https://mdbootstrap.com/. You may use any styling of choice. Go to the Themes, edit your existing theme and use the CDN installation option https://mdbootstrap.com/docs/standard/getting-started/installation/#section-cdn for MDB. Open the applications menu, click **Themes** and the **edit** icon for your **HCL DX Theme**.
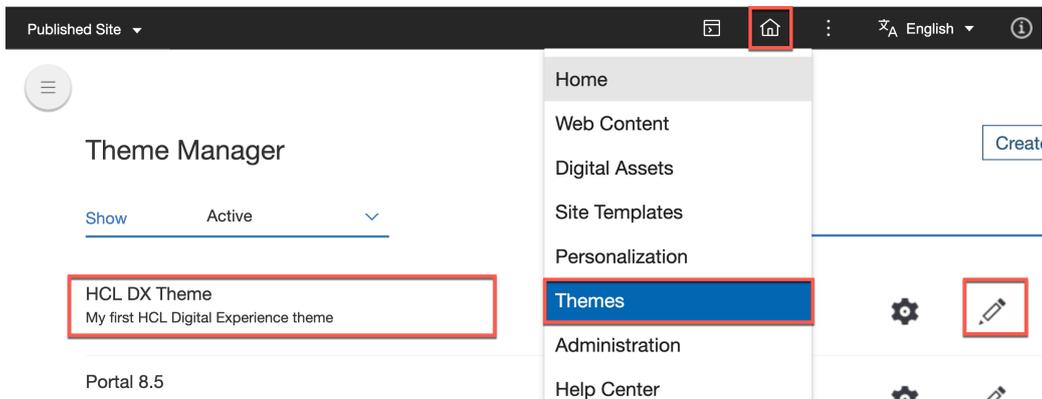
2. Open the **theme.html** and add this in the **<head>** section (you may copy this from your downloaded **Theme – Head.html** file):

```
<!-- Font Awesome -->
<link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0/css/all.min.css" rel="stylesheet"/>
<!-- Google Fonts -->
<link href="https://fonts.googleapis.com/css?family=Roboto:300,400,500,700&display=swap" rel="stylesheet" />
<!-- MDB -->
<link href="https://cdnjs.cloudflare.com/ajax/libs/mdb-ui-kit/7.3.2/mdb.min.css" rel="stylesheet" />
```
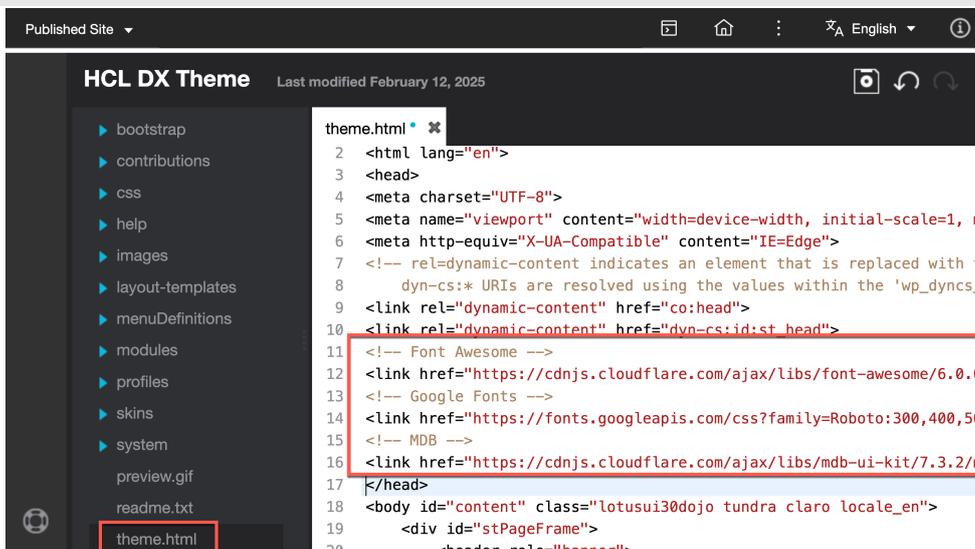
3. Add this at the end of the **<body>** in theme.html (you may copy this from your downloaded **Theme – Body.html** file) and save it:

```
<!-- MDB -->
<script type="text/javascript" src="https://cdnjs.cloudflare.com/ajax/libs/mdb-ui-kit/7.3.2/mdb.umd.min.js"></script>
```
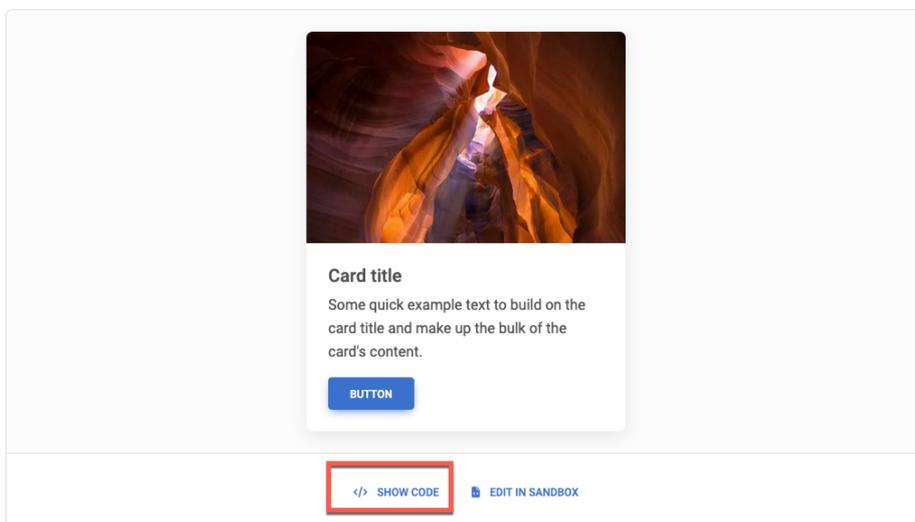
```
117         if (!("ontouchstart" in document)) {
118             document.body.className += ' stNoTouch';
119         }
120         </script>
121         <!-- MDB -->
122         <script type="text/javascript" src="https://cdnjs.cloudflare.com,
123
124     </body>
125     </html>
```

4. Then create a new List Presentation that uses the image card's code that looks at follows, see https://mdbootstrap.com/docs/standard/components/cards/#subsection-image.

Image

Use the following example of a card element with an image for blog posts, user cards, and many more:


```
1   <div class="card">
2     <img src="https://mdbcdn.b-cdn.net/img/new/standard/nature/184.webp" class="card-img-top" alt="Fissure in Sandst
3     <div class="card-body">
4       <h5 class="card-title">Card title</h5>
5       <p class="card-text">Some quick example text to build on the card title and make up the bulk of the card's con
6       <a href="#!" class="btn btn-primary" data-mdb-ripple-init>Button</a>
7     </div>
8   </div>
```
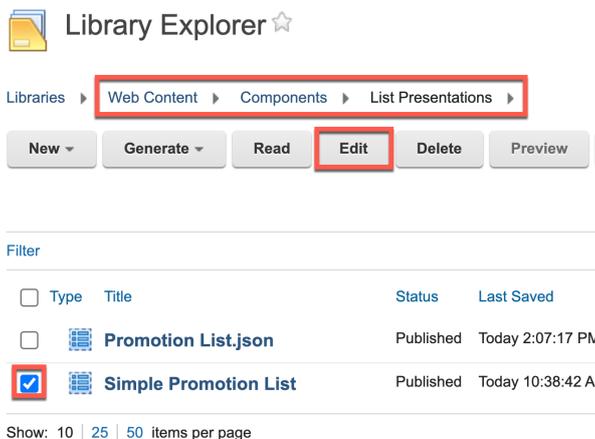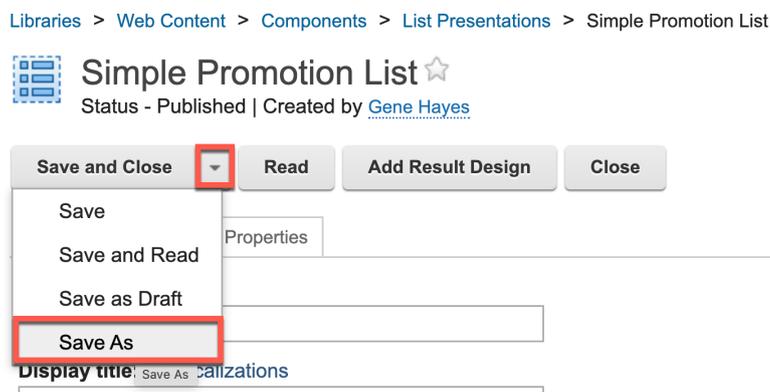
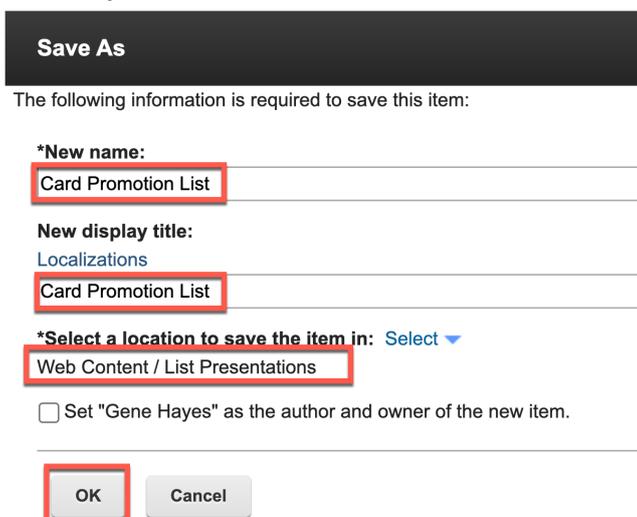5. You may copy the current Simple Promotion List and then update its design to use this code. Go to **Web Content**, **Components**, **List Presentation**, select **Simple Promotion List** and click **Edit**.

6. Save it as a new List Presentation. Click **Save As**.

7. Set the new name and display title to **Card Promotion List**, check it is also saved under **Web Content / List Presentations** and click **OK**.

8. Then copy the code from
https://mdbootstrap.com/docs/standard/components/cards/#subsection-image, update the
static text to point to the content profile and elements.

```
<div class="card">
  [Element key="Promotion Banner" rendition="auto"]
  <div class="card-body">
    <h5 class="card-title">[Property field="title"]</h5>
    <p class="card-text">Product ID: [Element key="Product ID"]</p>
    <a href="[Element key='Promotion Link' format='url']" class="btn btn-primary" data-mdb-ripple-init>Promotion Link</a>
  </div>
</div>
```

Result design 1:

Import	Export	Insert Tag	Insert Link	Insert Image

```
<div class="card">
  [Element key="Promotion Banner" rendition="auto"]
  <div class="card-body">
    <h5 class="card-title">[Property field="title"]</h5>
    <p class="card-text">Product ID: [Element key="Product ID"]</p>
    <a href="[Element key='Promotion Link' format='url']" class="btn btn-prima
data-mdb-ripple-init>Promotion Link</a>
  </div>
</div>
```

9. Remove the design for the **Separator**.

Separator:

Import	Export	Insert Tag	Insert Link	Insert Image

10. You may update the **Description** and then save it. Click **Save**.

✅ "Card Promotion List" was saved under "Web Content/List Presentations".

Libraries > Web Content > Components > List Presentations > Card Promotion Lis

Card Promotion List ☆
Status - Published | Created by Gene Hayes

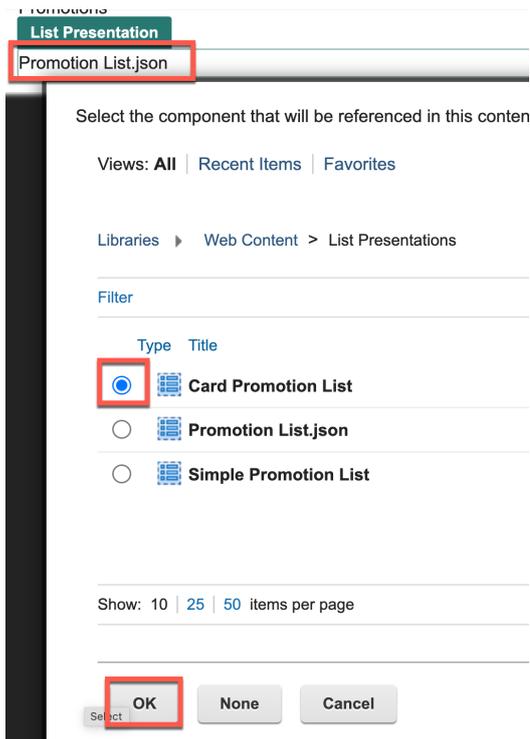| Save and Close ▼	Read	Add Result Design	Close

- Save
- Save and Read
- Save as Draft
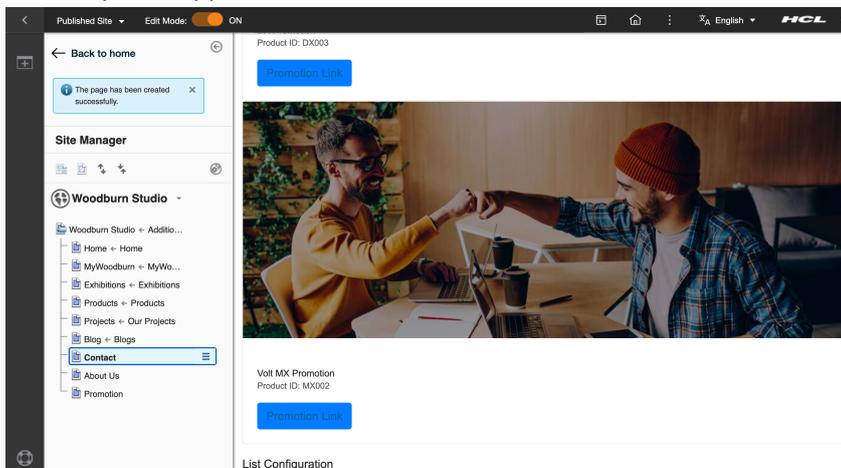- Save As

Properties

Display title: ⓘ Localizations

Card Promotion List

Description: Localizations

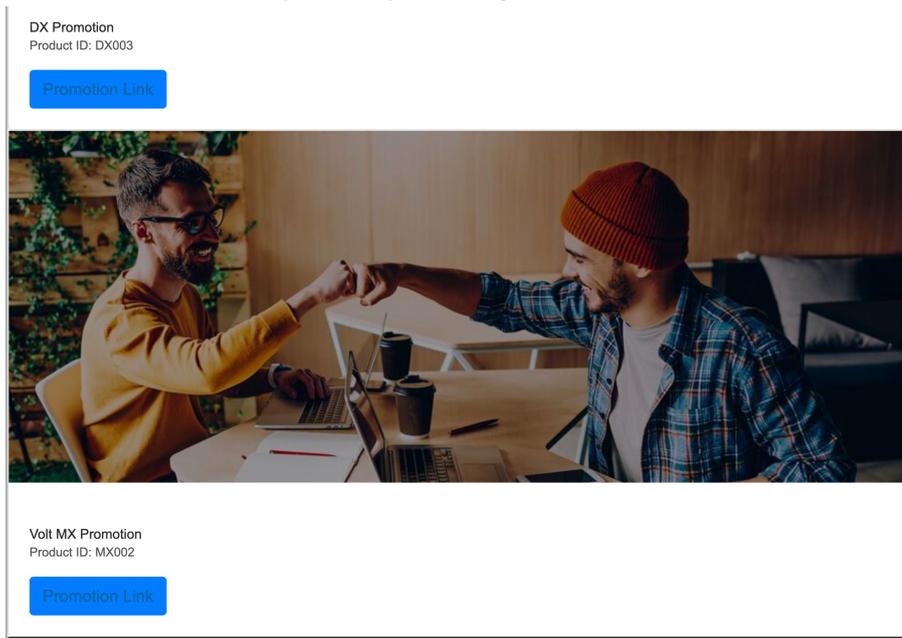Card list presentation of promotions

11. And test it out again on the **Contacts** page. Select your new **Card Promotion List**, click **OK** and **Save**.

12. And they now appear as cards:

13. Have a look at how they look in publishing mode. Disable the edit mode.

You have successfully added a new styled list presentation for your promotions using external styling.

Conclusion

Using this lab tutorial, you have learned how to use the Web Content Authoring interface to further develop your web content. You have learned how to reuse content in different formats, like JSON. You also learned how to use reusable designs with List Presentations and make this a reusable component, allowing business users to easily configure it. And you learned how to style it, to make it look better.

Resources

Refer to the following resources to learn more:

HCL Digital Experience Home - **https://hclsw.co/dx**

HCL Digital Experience Marketplace (SoFy) - **https://hclsofy.com/dx**

HCL Software - **https://hclsw.co/software**

HCL Product Support - **https://hclsw.co/product-support**

HCL DX Product Documentation - **https://hclsw.co/dx-product-documentation**

HCL DX Support Q&A Forum - **https://hclsw.co/dx-support-forum**

HCL DX Product Ideas - **https://hclsw.co/dx-ideas**

DXers User Group - **https://dxers.ug**

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