



Lab 2 - Customize User Experience with Dynamic Images

Overview

This solution applies to you if you have multiple clients using different SharePoint sites in your tenant, and you want to use the same form across multiple sites without having to change the logo. The form will query the logo dynamically from an XML file, and it will display the logo based on which client site the form is opened.

In this lab, we're going to use a sample Donation form that allows people to enter some items they want to donate to help our frontline health care workers fighting Covid19. In this example, a project called Friends for Frontline Heroes is being run by a team of volunteers. The project has its own Site Collection site (the parent site) and the subsites under it will be used by the restaurants who are volunteering to gather donations from people. Here are some participating restaurants that have subsites:

- Café Juanita, Belle Pastry, Blazing Bagels, and LeGrand Bistro

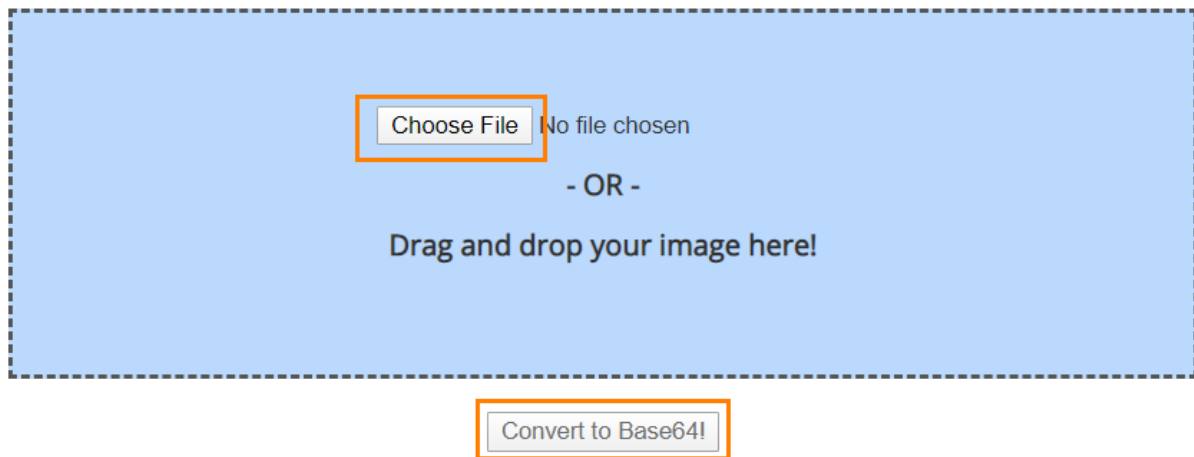
We're going to deploy one form for all these restaurants, and the form can be opened in their respective subsites with their own logo. If you would like to set up the same in your site, here are the pre-requisites:

- A new or existing site collection in your SharePoint site
- Subsites created under the site collection. (Where using 4 subsites in this demo, but for testing purpose, 2 subsites will be enough)
- FormsViewer installed in each subsites
- FormsViewer Extensions app installed in your SharePoint tenant that is set up to be available across all sites.

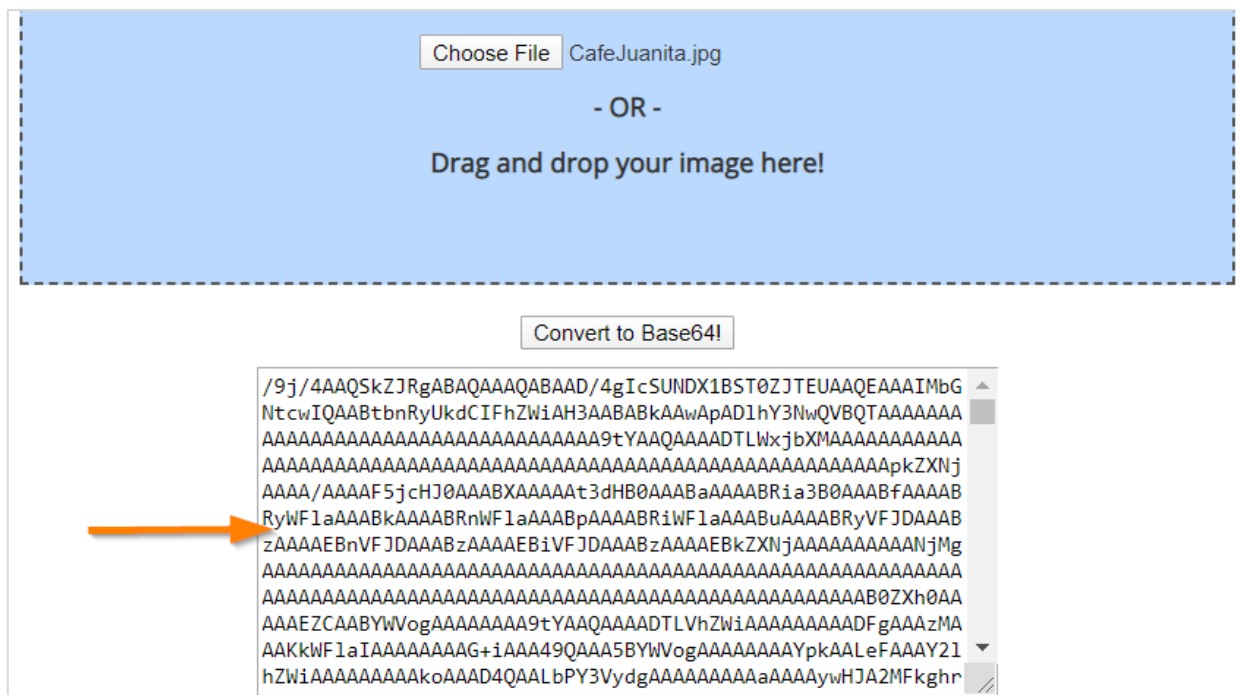
So, let's start!

Create XML file for Logo in Base64

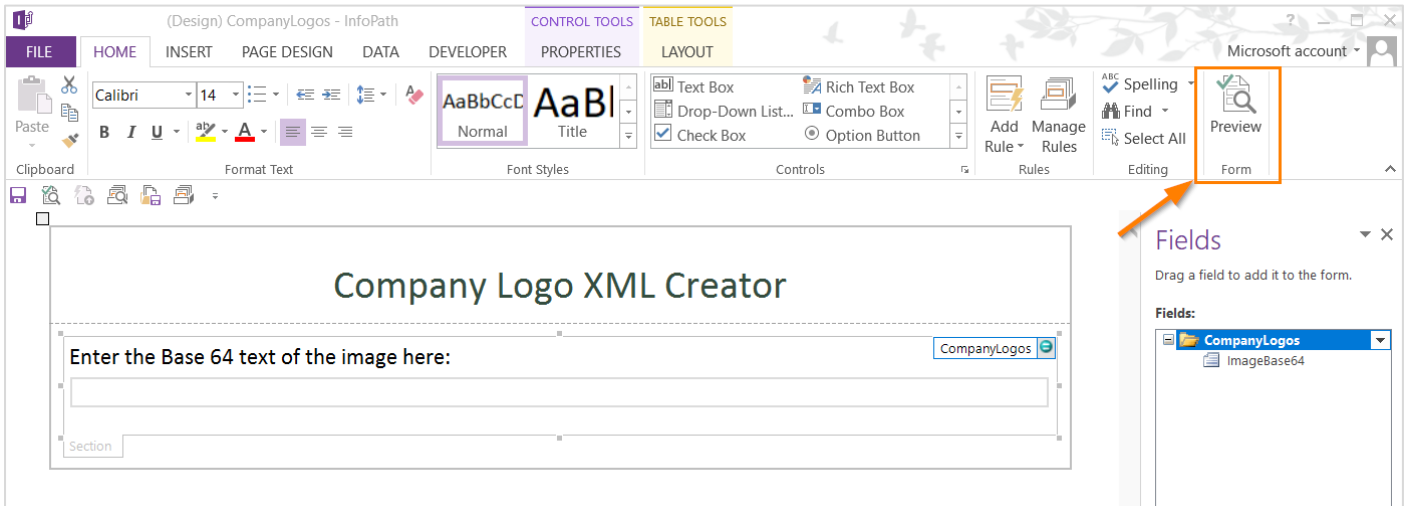
1. Go to a site that converts images to Base64 format, such as this site:
<https://www.browserling.com/tools/image-to-base64>
2. Select the file for the image and click **Convert to Base64**.



3. Copy the Base64 string that was generated. Copy everything inside the box – press CTRL A and copy.



4. Open *CompanyLogos.xsn* in InfoPath Design mode. Right-click and select Design.
5. Click Preview.



6. Paste the Base64 string of your image:

[illegible]

- Click File → Save. Name the file CompanyLogos.xml and save it to a local folder in your machine.

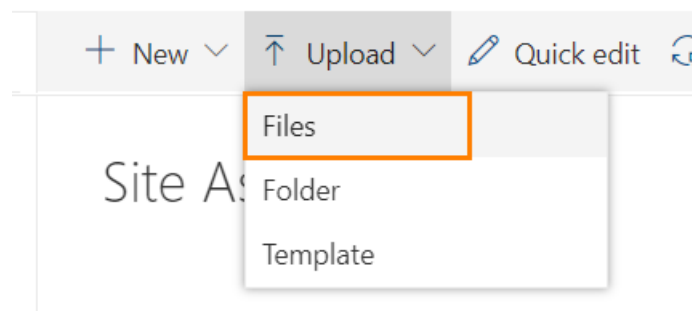
8. Repeat steps 1-7 for the other logos.

Upload the XML file to Site Assets

1. Go to the subsite of the client.
2. Open Site Contents and click on Site Assets.

Contents		Subsites
	Name	Type
	Documents	Document library
	Site Assets	Document library
	Donations Form	XML forms library
	Site Pages	Page library

3. Upload the XML file. Select Upload → Files and browse to the CompanyLogos.xml file in your machine.

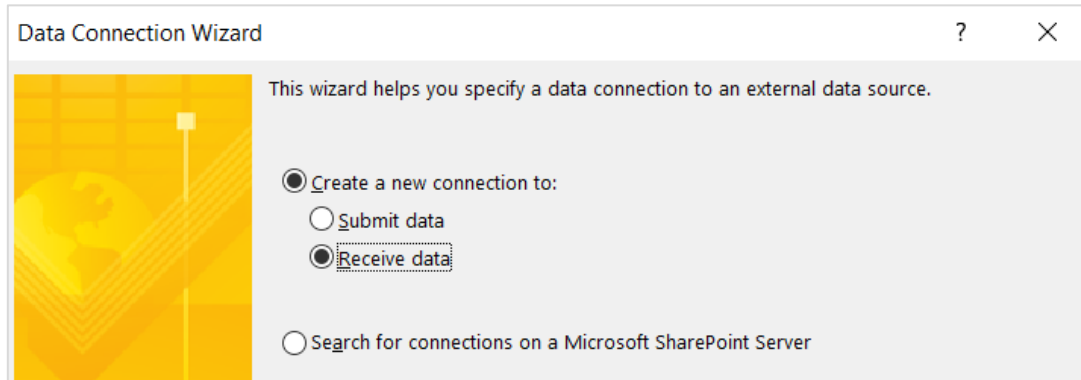


4. Once uploaded, it's now in Site Assets as a document.

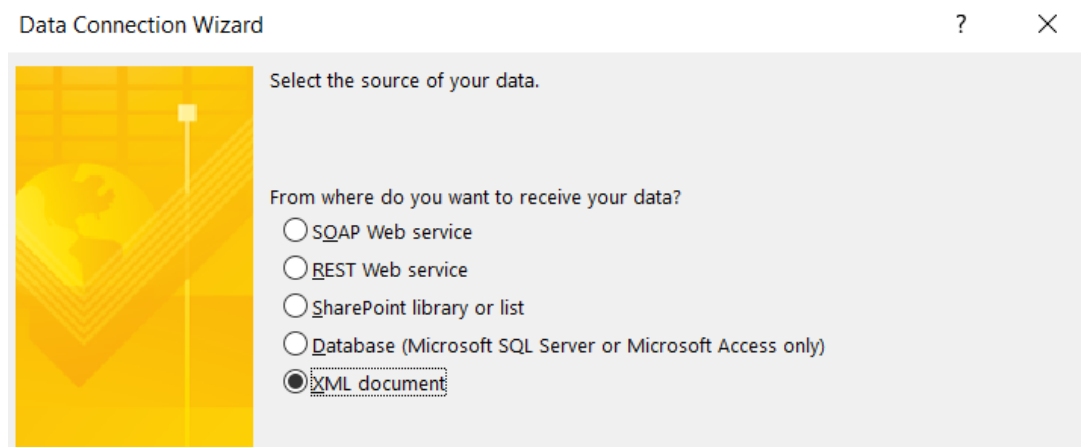
Site Assets	
	Name
	Cafe Juanita Notebook
	CompanyLogos.xml

Modify the form to query the XML in Site Assets

1. Open the sample *Donation Form.xsn* in InfoPath Design mode.
2. Go to Data → Data Connections.
3. Click Add. Select Receive data and click Next.

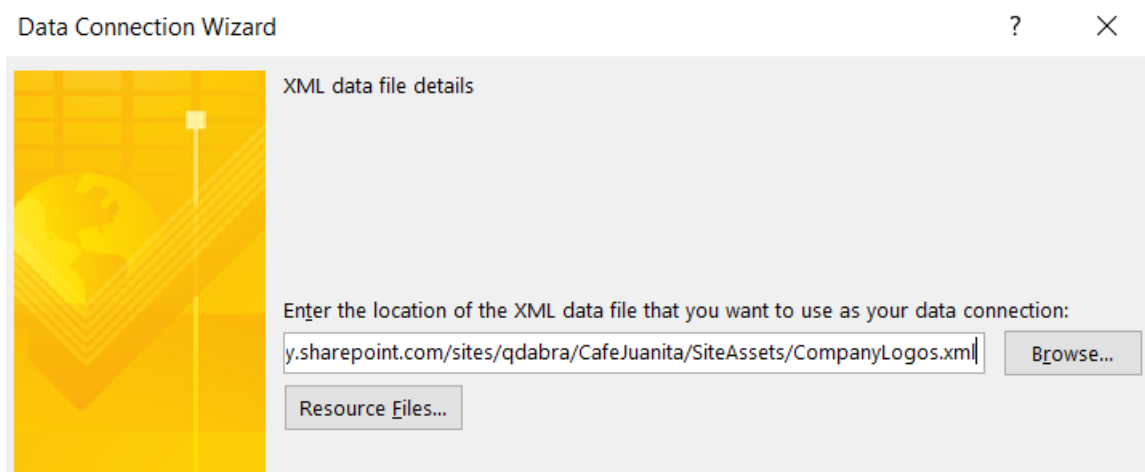


4. In the next window, select XML document. Click Next.

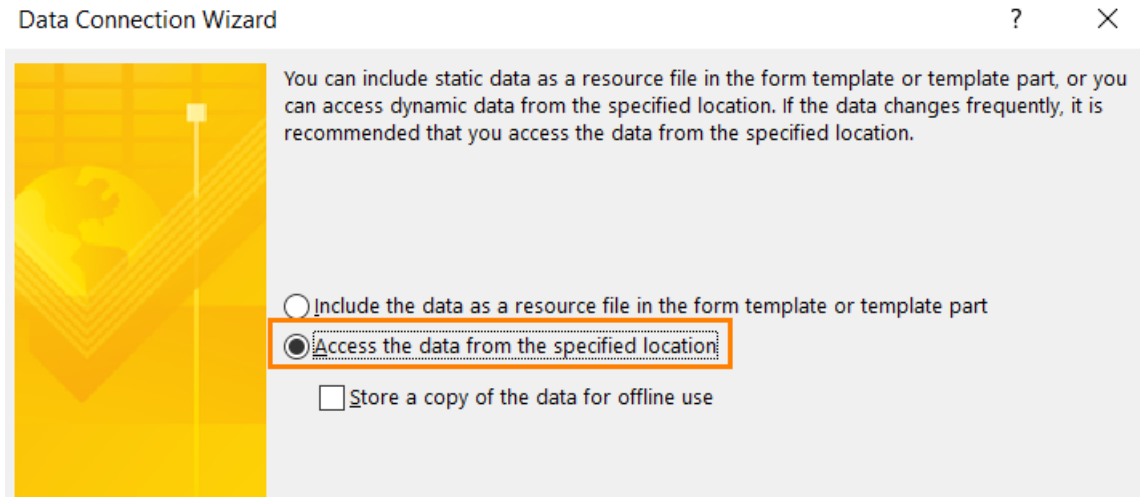


5. Enter the link to the XML file in Site Assets. To create the link, you may copy the Site Assets URL in your browser and append the XML at the end, for example:

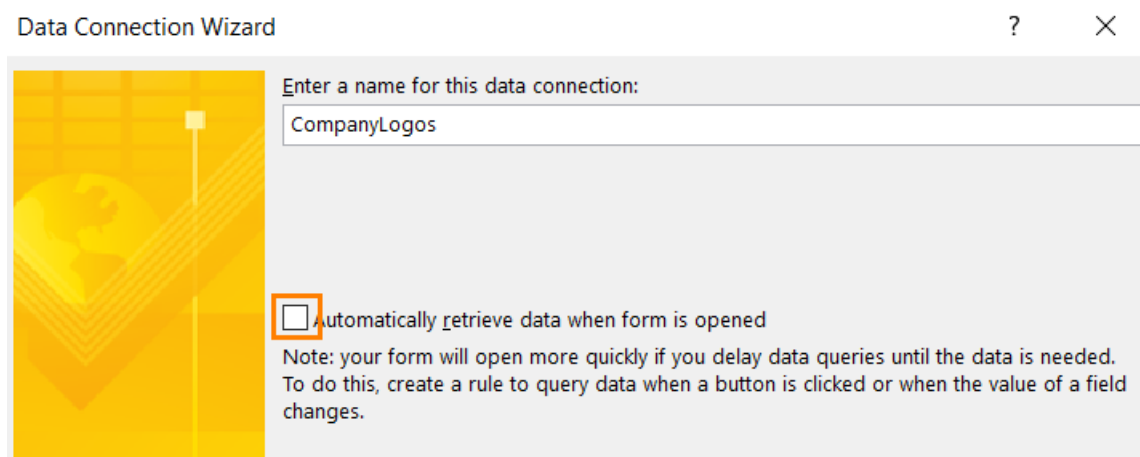
<https://my.sharepoint.com/sites/qdabra/CafeJuanita/SiteAssets/CompanyLogos.xml>



- Click Next. If the URL you entered is correct, InfoPath will proceed to the next window.
- Select the option to Access the data from the specified location as shown below and click Next.



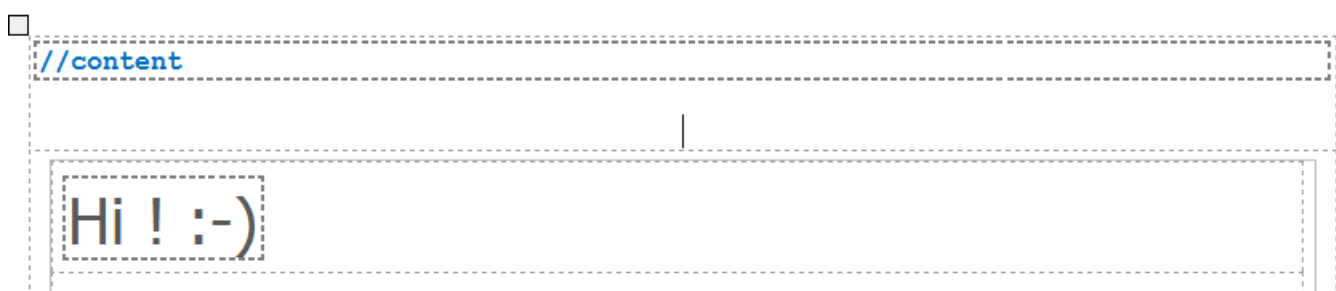
- In the next window, uncheck the box "Automatically retrieve data when form is opened".



- Click **Finish**.

Add the logo in form header

- In the form, place your cursor inside the Header:



- In the Fields task pane, switch to the newly created CompanyLogos XML data source.

Fields

Drag a field to add it to the form.

Fields:

CompanyLogos (Secondary) ▼

- CompanyLogos
 - ImageBase64

3. Select the ImageBase64 field in the XML data source and drag it in the Header table cell. You'll see that it will display a text box and not an image –

//content

Image Base 64:	ImageBase64 (CompanyLogos)
----------------	----------------------------

4. We want it to display an image, right? Getting the image to display is a little tricky because you need a way to have the form recognize the field as base64 in order to bind a picture control to it, but it is possible, by editing the XSD of the data source and changing the field's type.
5. To do that, let's extract the form's source files. Go to File → Publish → Export Source Files. Browse to a blank folder where you want to export the files, select and click OK.

Browse For Folder

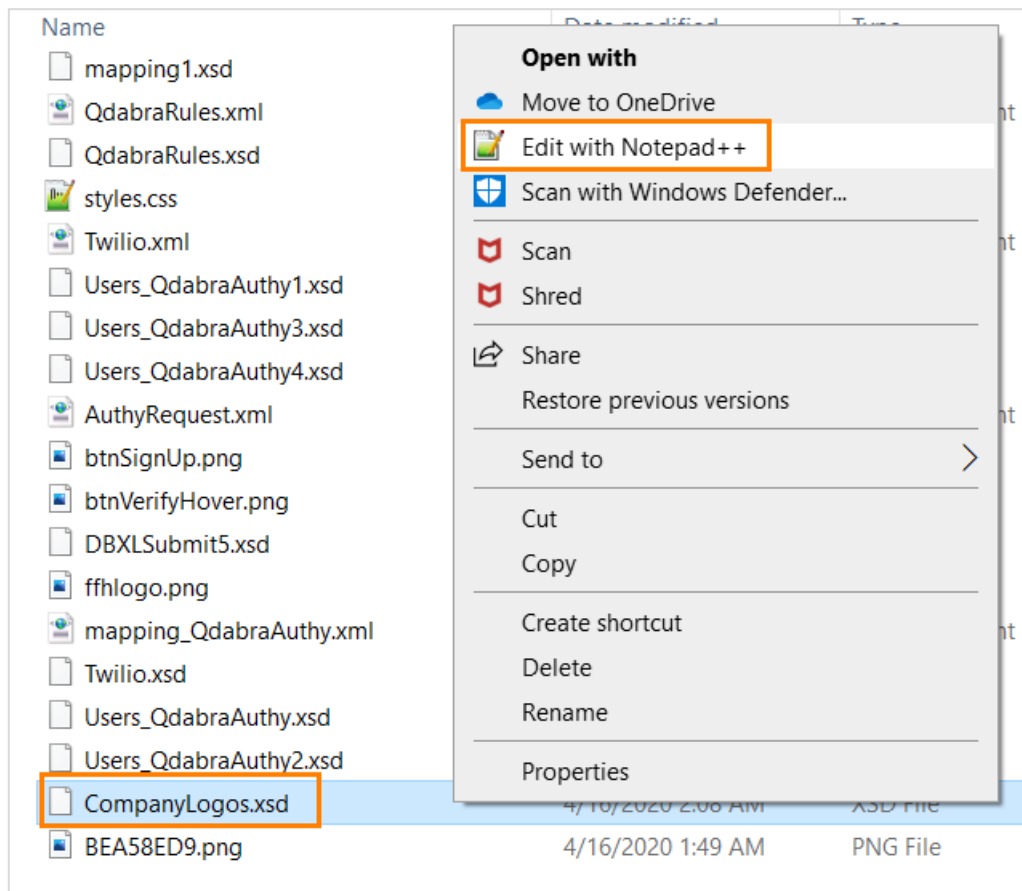
Choose a folder where you want to store forms and their associated files, such as the XSD schema and XSLT views.

- FormsViewer Training Day 3
- FormsViewer Training Day 4
 - Lab 1 - Customize User Experience with Dynamic Images
 - SRC
 - Lab 2 - Create a task pane in your form
 - Lab 3 - Sort and Filter data in a Dashboard

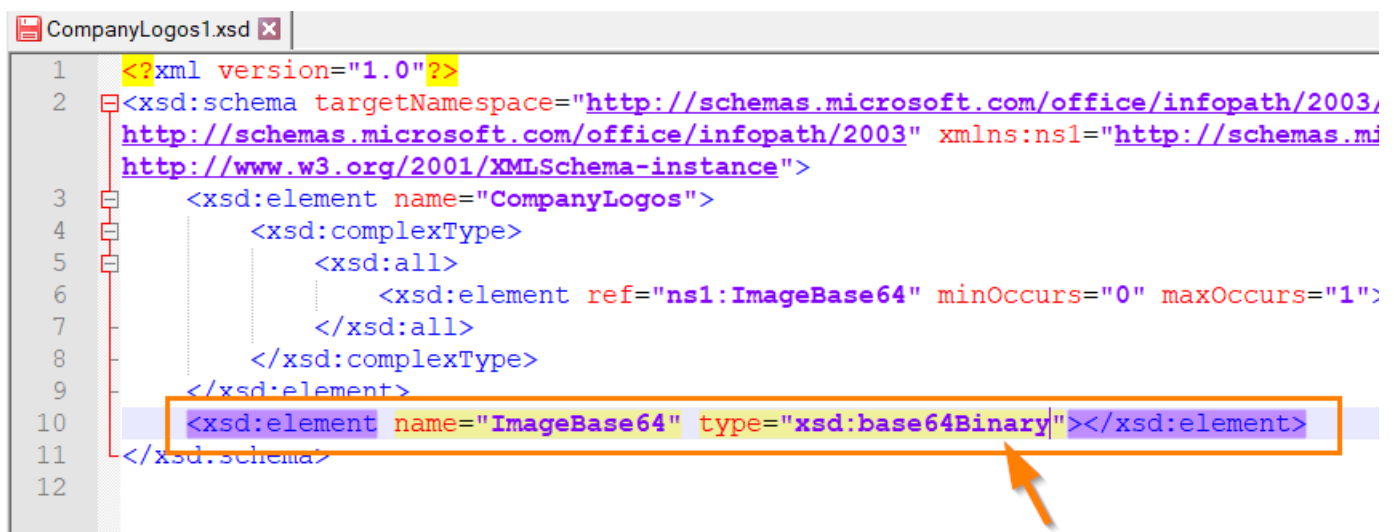
Folder: SRC

Make New Folder OK Cancel

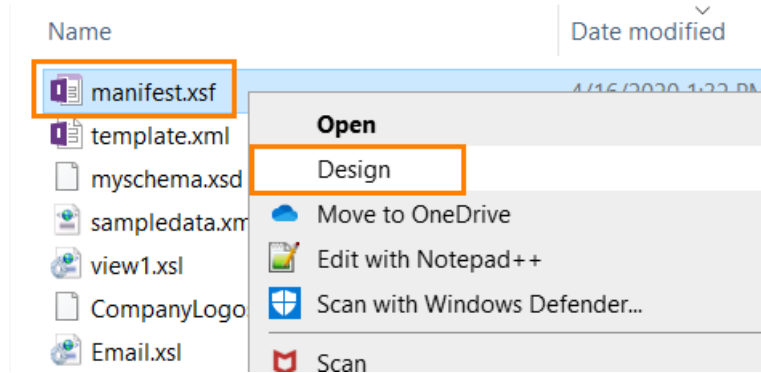
6. Open that folder and look for the CompanyLogos.xsd file.
7. Right-click and edit with notepad.



8. Look for the element ImageBase64 and replace the type to xsd:Base64Binary



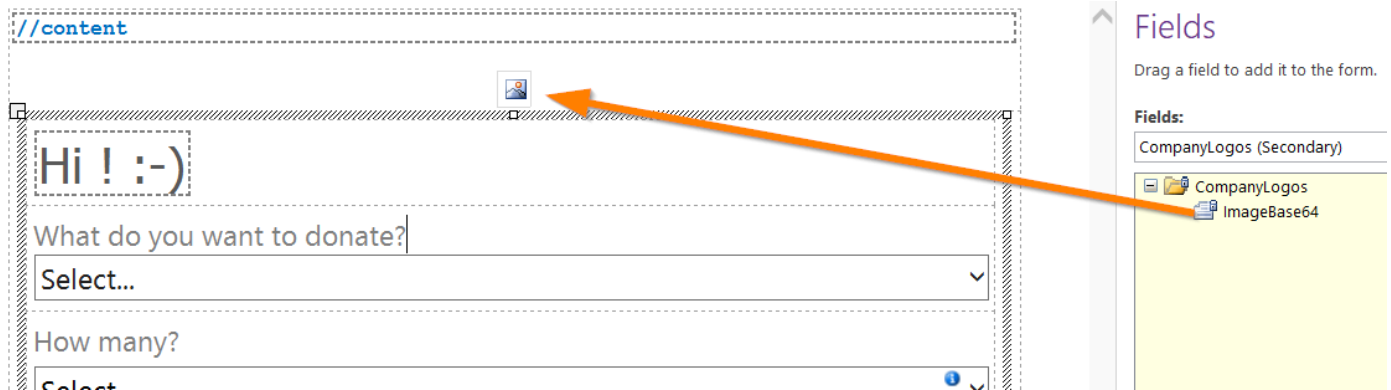
9. Save the changes to the XSD file.
10. In the source folder, find the manifest.xsf file, right-click and select Design.



11. Save and name as the End form for this lab.

12. In the form view, delete the Base 64 text box that was added in the Header. So the table cell is blank again.

13. Now, drag the ImageBase64 field in the table cell.



14. Notice that it's now recognized as a Picture file instead of a text field 😊

15. Next, add a rule in the QdabraRules finishedLoading node to run the SetLogo in /FormLogic/Actions/SetLogo to go.

Fields

Drag a field to add it to the form.

Fields:

QdabraRules (Secondary)

- QdabraRules
 - version*
 - finishedLoading***
 - isSwappingDom*
 - expires*
 - Command
 - Result
 - Success
 - Error
 - View
 - Context
 - Form
 - QueryDataError
 - DnsLookup
 - ExecutionHistory

☐ Show details

Rules

finishedLoading

- Stop
- Load CSS
- Get Form Property
- Switch to Mobile
- Run Authy Logic
- Set Twilio API values
- Retrieve Template Name
- Query Users List

Set Logo

New

Details for:

Set Logo

Condition:

None - Rule runs when field changes

Rule type:

Action

Run these actions:*

Set a field's value: SetLogo = "go"

Add

☐ Don't run remaining rules if the condition of this rule is met

16. Then, select the **SetLogo** field in the FormLogic data source.

17. Add a new rule in the field and call it "Change Connection for XML". For this rule, add an action to run the ChangeConnectionUrl command. So, click Add → Set a field's value. In the Field, select the qRules Command node. For Value, select the Fx button and enter the command below:

**concat("ChangeConnectionUrl /dsname=CompanyLogos /url=", SharePointSiteUrl,
"SiteAssets/CompanyLogos.xml")**

where: SharePointSiteUrl is from the Dynamic XTP logic → /XtpLogic/Environment/SharePointSiteUrl

Rules

SetLogo

Stop if blank

Reset self

Change Connection for XML

New

Details for:

Change Connection for XML

Condition:

None - Rule runs when field changes

Rule type:

Action

Run these actions: *

Set a field's value: Command = concat("ChangeConnectionUrl /dsname=CompanyLogos /url=", SharePointSiteUrl, "SiteAssets/CompanyLogos.xml")

Add

☐ Don't run remaining rules if the condition of this rule is met

18. Add a new rule and call it "Query Company Logos". Add an action to query the CompanyLogos data connection. Here's how it should look like:

Fields

Drag a field to add it to the form.

Fields:

FormLogic (Secondary)

FormLogic

Actions

stop

PopulateDateTimes

Submit

SetLogo

AlterImage

SendTextMessage

QueryUserList

Selections

Times

Minutes

Validation

GetErrors

GetErrorCount

ClearErrors

ErrorMessage

ErrorCount

Rules

SetLogo

Stop if blank

Reset self

Change Connection for XML

Query Company Logos

New

Details for:

Query Company Logos

Condition:

None - Rule runs when field changes

Rule type:

Action

Run these actions: *

Query using a data connection: CompanyLogos

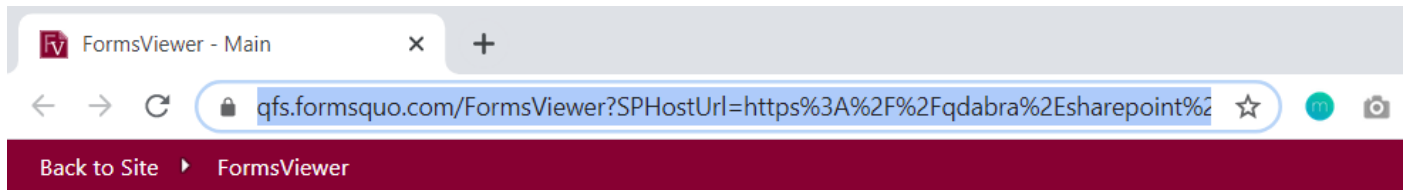
Add

☐ Don't run remaining rules if the condition of this rule is met

19. Save the changes to the form.

Upload the template in the subsite

1. Open FormsViewer in a subsite site.
2. Go to **Manage Templates**, click **Upload a New Template**.
3. Enter a template name, browse to the form template and click Upload.
NOTE: Remember the template name that you used here.
4. After upload is successful, go back to the FormsViewer landing page, and copy the URL in the browser, then paste it in a Notepad.



FormsViewer

Yes, your forms have a future! FormsViewer is the only in-place upgrade path for your InfoPath forms. No lift and shift. Just click **M**. upload your form templates. FormsViewer also gives you new features for today's forms. Add a custom stylesheet to make forms look like the advantage of more than 60 qRules commands to extend your forms. Print them as PDFs. Map repeating data to lists. Add glass skin the latest web services, and much more.

Best of all, Qdabra staff is ready and waiting to take you on a test drive. Just email: support@qdabra.com

Manage Templates

Start here. Upload your existing XSNs and FormsViewer will render them in the browser. No more InfoPath needed. You can also click **D** form to inject qRules commands and get help with building qRules commands.

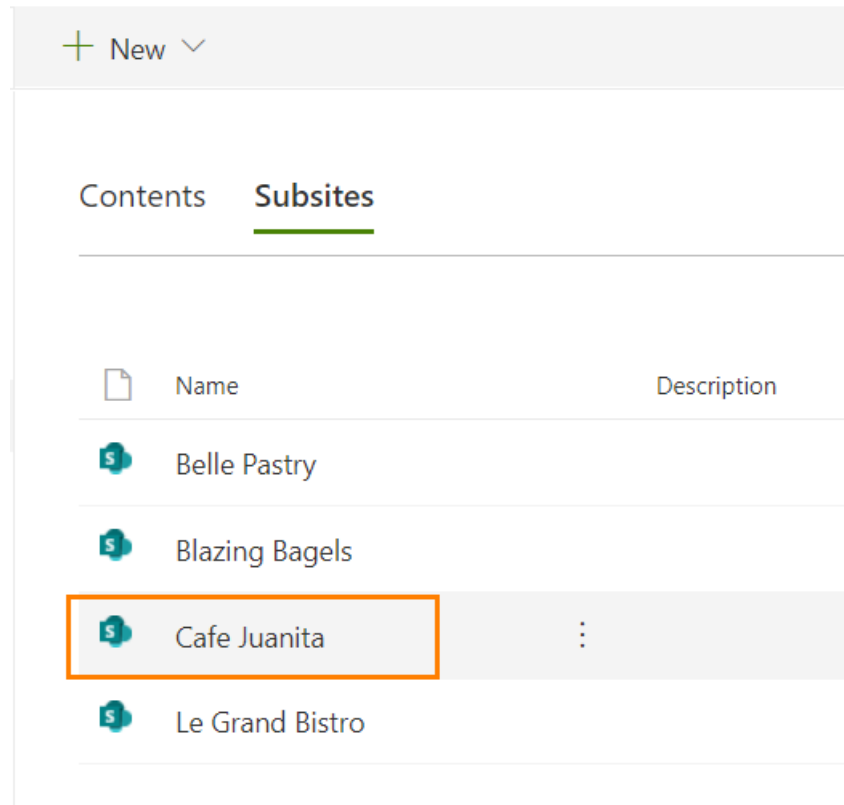
Manage Credentials

Connecting to third party web services outside of SharePoint? You can add custom passwords here. For example, if you want to have you Twilio, you can add your account here

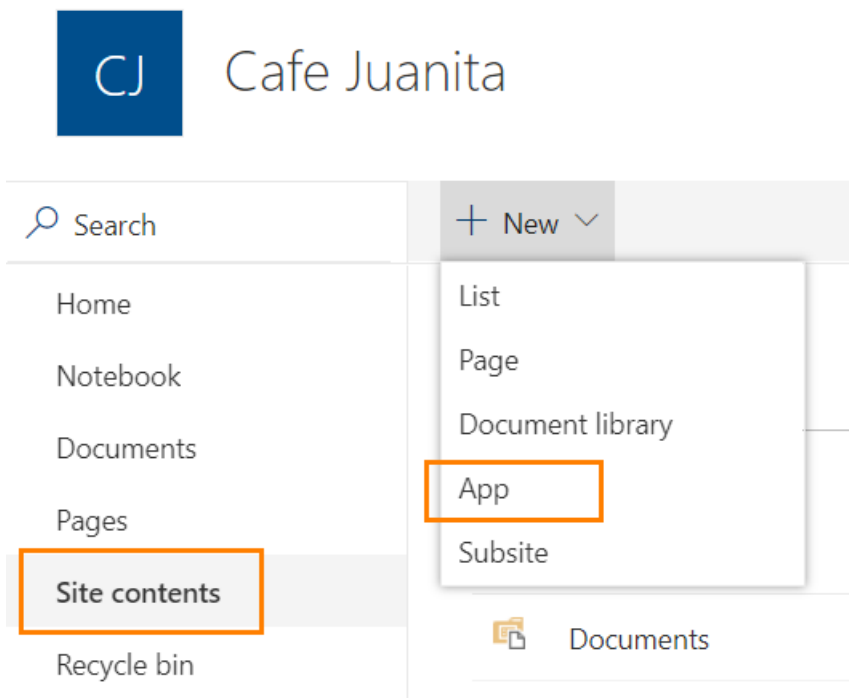
Configure Form Library in Subsite to open form

In the next steps, we're going to open the subsite of one restaurant and configure the Donations form library to open the form template.

1. I'll go to one of the subsites:



2. Go to Site Contents and click +New → App.



3. Search for form library.

 EDIT LINKS

Site contents ▸ Your Apps

form library 

1 app matches your search [Newest](#) [Name](#)



Form Library
[App Details](#)

- Click the Form Library app. Then, we'll create a new form library called "Donation Forms". Click Create.

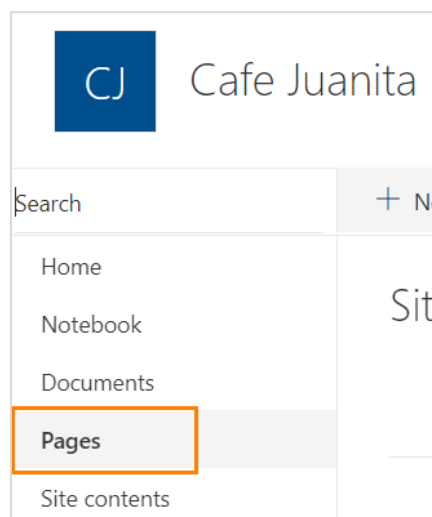
Adding Form Library

Pick a name
You can add this app multiple times to your site. Give it a unique name.

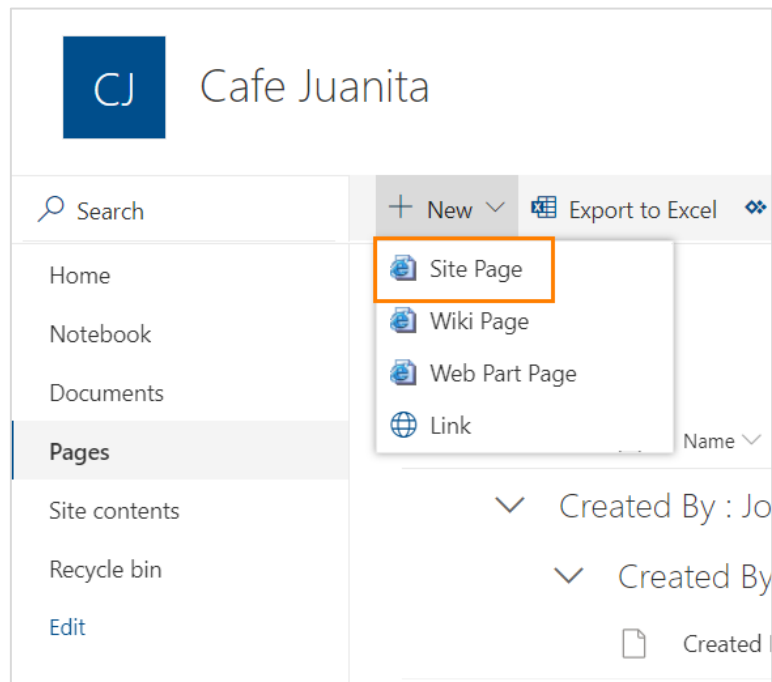
Name:

[Advanced Options](#)

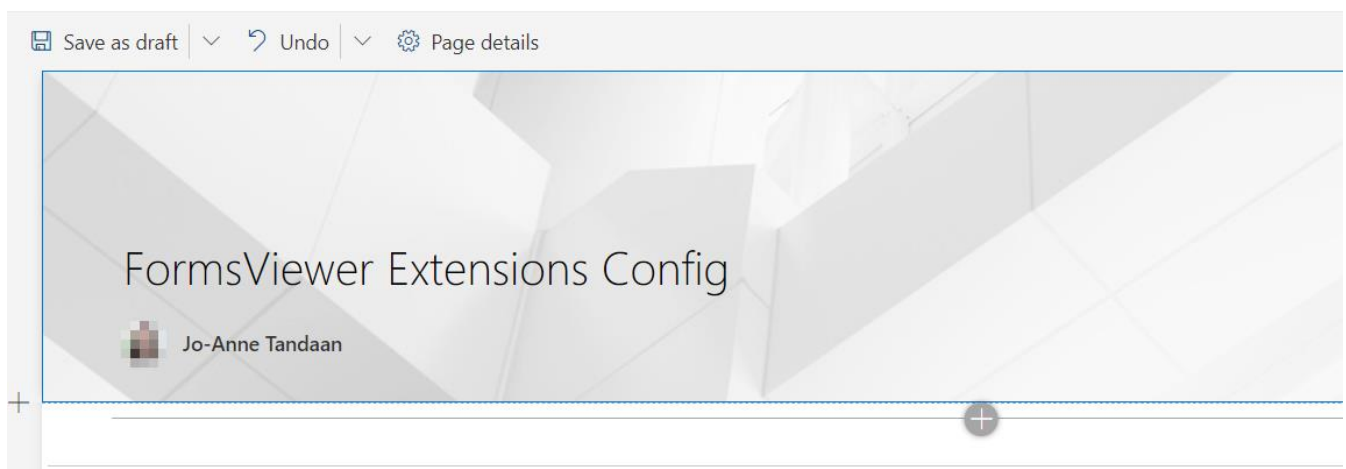
- Next, in the site's left navigation page, click Pages.



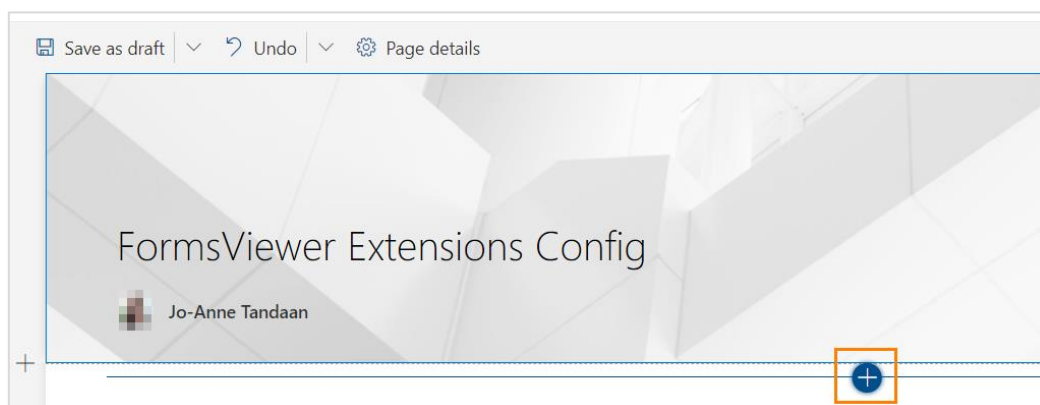
6. Click +New and select Site Page.



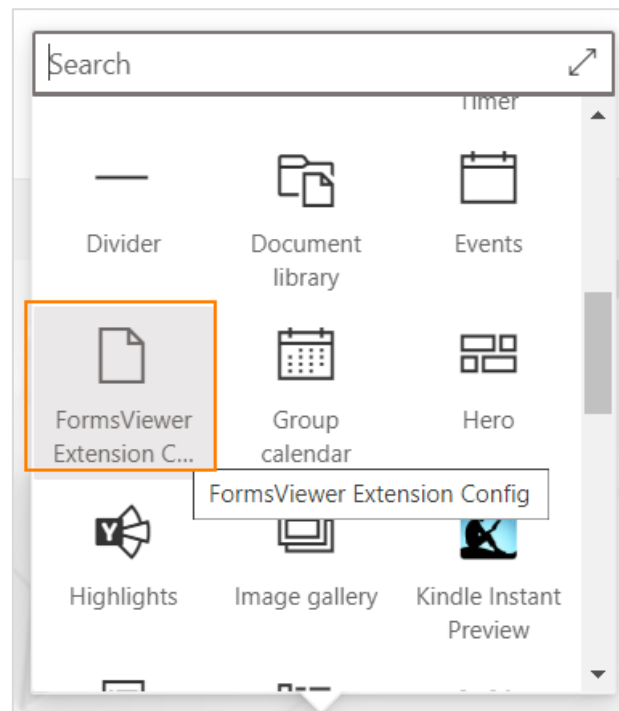
7. In the Name your page area, enter the page title **FormsViewer Extensions Config**.



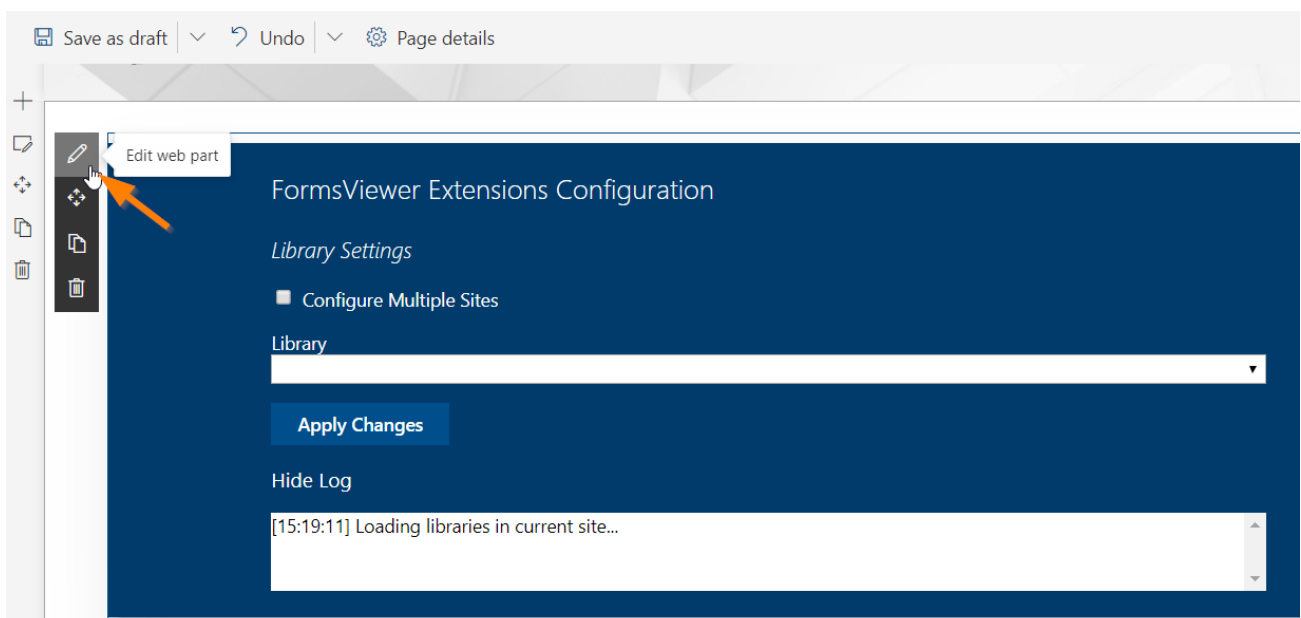
8. Click the + icon in the center of the page to add a new web part.



9. Use the search box or scrollbar to find the **FormsViewer Extension Config** web part and click it to add it to the page.



10. Click the pencil icon next to the web part that you just added to the page. A pane should open on the right of the page with a FormsViewer URL field.



11. Paste the FormsViewer URL that you copied in the previous section and then click Publish:

☆ Not following Share

as draft Undo Page details ✓ Your page has been **Publish**

FormsViewer Extensions Configuration

Library Settings

☐ Configure Multiple Sites

Library

Apply Changes

Hide Log

[15:19:11] Loading libraries in current site...

FormsViewer Extension Co... ✕

Description

Group Name

FormsViewer URL

☆ Not following Share

as draft Undo Page details ✓ Your page has been **Publish**

FormsViewer Extensions Configuration

Library Settings

☐ Configure Multiple Sites

Library

Apply Changes

Hide Log

[15:19:11] Loading libraries in current site...

FormsViewer Extension Co... ✕

Description

Group Name

FormsViewer URL

<https://qfs.formsquo.com/FormsViewer?SPH>

12. In the Extensions Config, select the Donation Forms library in the Library dropdown:

FormsViewer Extensions Configuration

Library Settings

☐ Configure Multiple Sites

Library

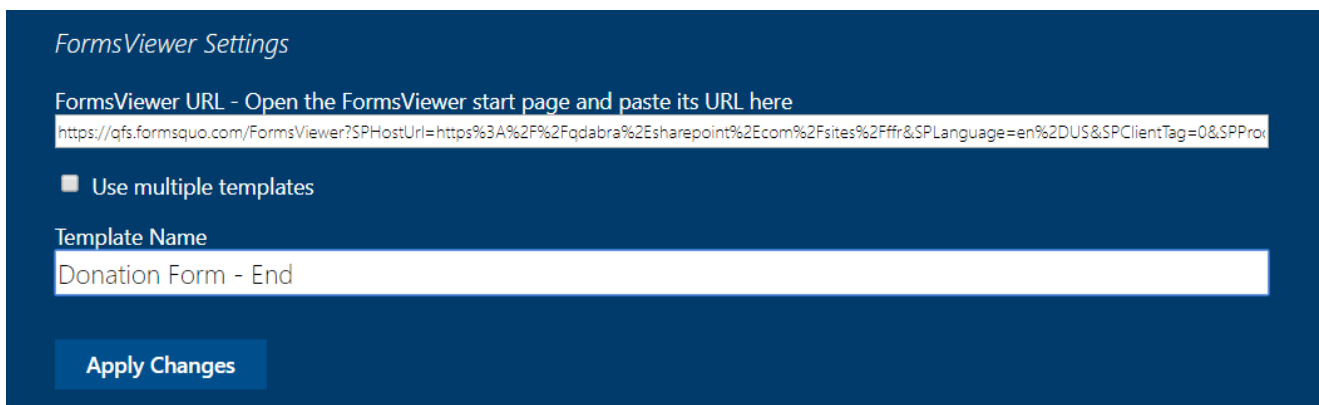
Donation Forms

Fields - Check the fields that should open in FormsViewer

13. For fields that should open in FormsViewer, check the Select All check box.

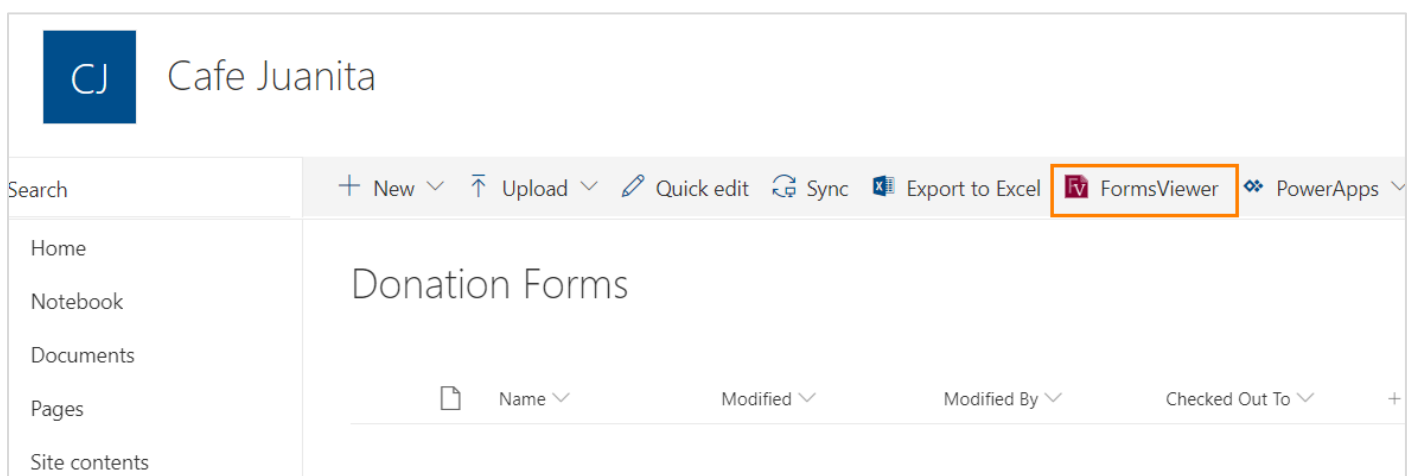


14. Enter the template name that you saved in the Parent site. Click **Apply Changes**.



Test the Form

1. Go to the form library in the subsite and refresh the page. You'll see that a FormsViewer button is displayed in the menu:



2. Click on the FormsViewer button. You'll see the form displayed with the logo of the restaurant who will be using the subsite:



CAFE JUANITA

Hi ! :-)

What do you want to donate?

Select...

How many?

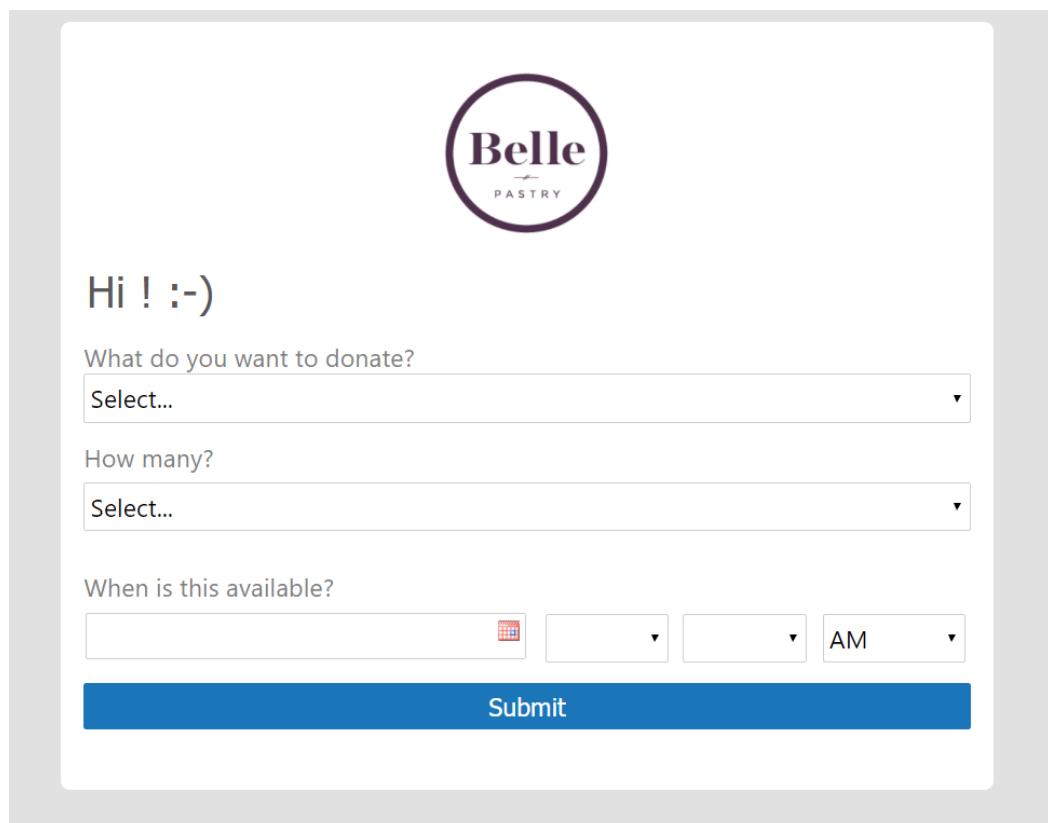
Select...

When is this available?

 AM

Submit

- If you have repeated the same steps for the other client logos (created the XML files with the Base64 logo and uploaded in the subsite's Site Assets), and uploaded the form template in each subsites, the form will dynamically open the logos:



Belle
PASTRY

Hi ! :-)

What do you want to donate?

Select...

How many?

Select...

When is this available?

 AM

Submit

Congratulations! You have learned how to dynamically open images in FormsViewer.

Contact Information

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