

Lab 3 – Add Smart Phone Authentication using Qdabra's Authy XTP

Overview

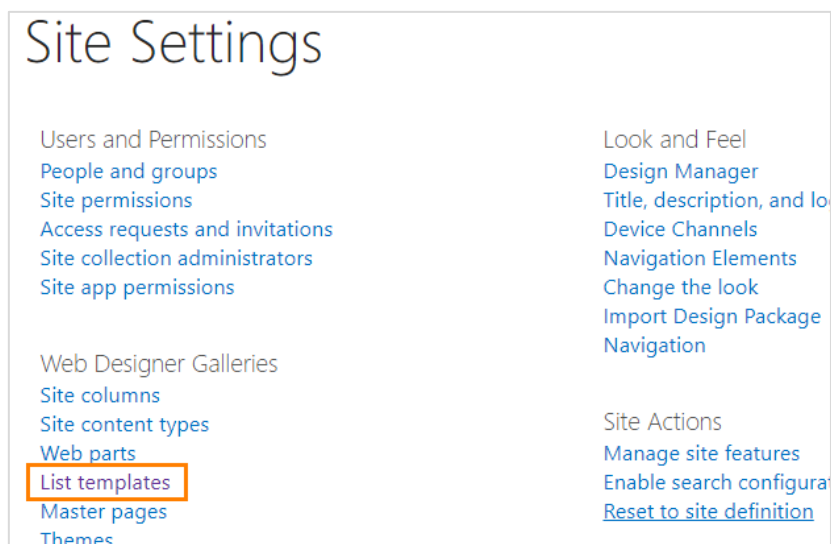
This guide will show you how to integrate Authy with FormsViewer Forms. Twilio's Authy lets you easily build an additional measure of security into your login or verification process with two-factor authentication. Using Twilio's Authy Authenticator App on your mobile device, you can increase your confidence in the user logging in and help your users protect their accounts with easy-to-implement Two-Factor Authentication.

Before you start

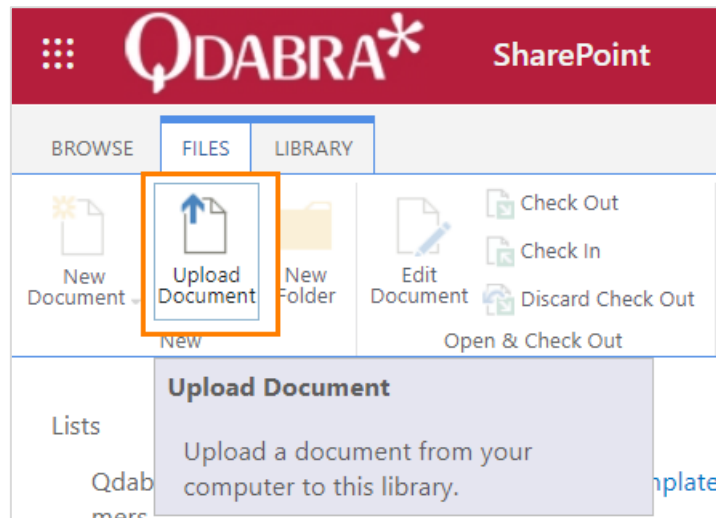
- This lab assumes that you already have a Twilio account and have created an Authy API application. For more information about Authy and how to generate Authy API keys, please read [this](#).
- Install the Authy app in your mobile phone or tablet.

Add the Users list as Custom List

1. Upload the Users.stp file as a list template to your site.
 - Go to your SharePoint's root site.
 - Click the gear icon in the menu and click Site settings.
 - Under Web Designer Galleries, click List templates.

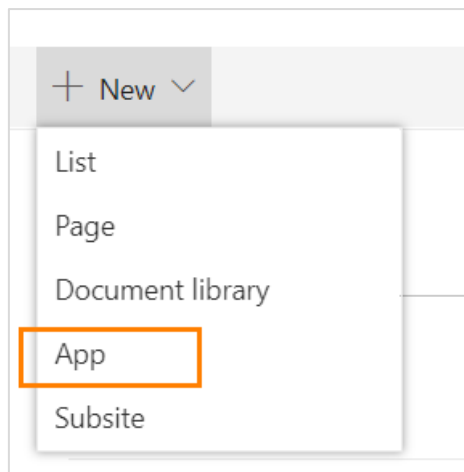


- Go to the Files tab, and upload the Users.stp file as document.

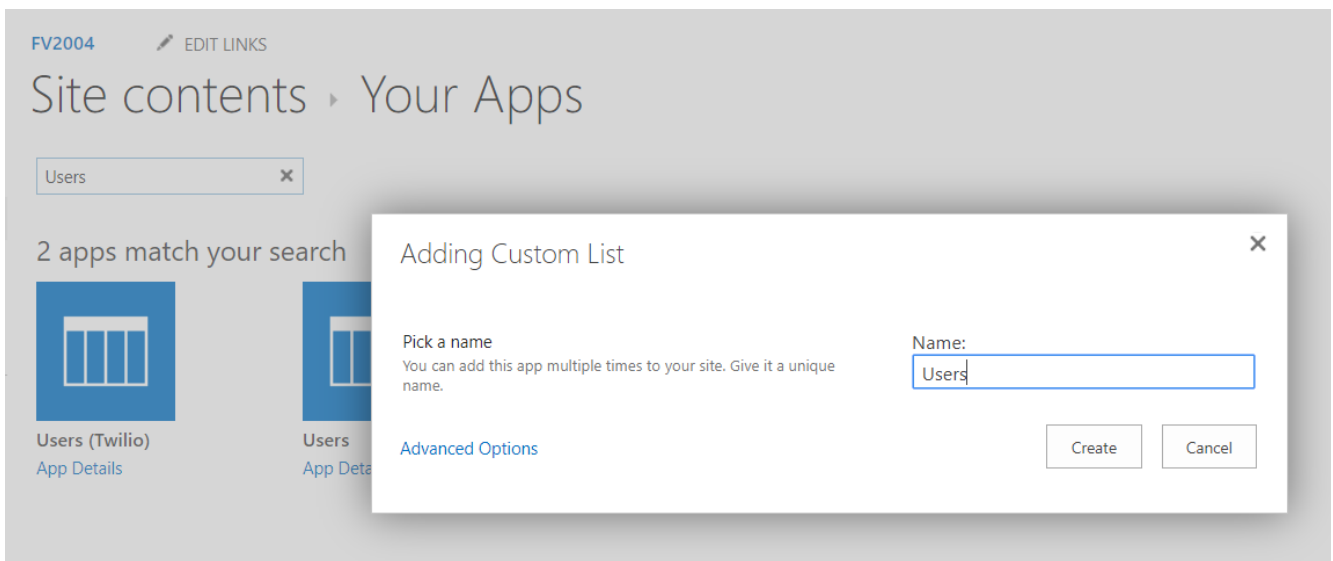


- Once uploaded, it will be available to your sites as a custom list.

2. In your SharePoint site, go to **Site Contents** → **New** → **App**.



3. Search for the Users list. Click on it and add as a Custom List. Name it exactly as shown in the screenshot:

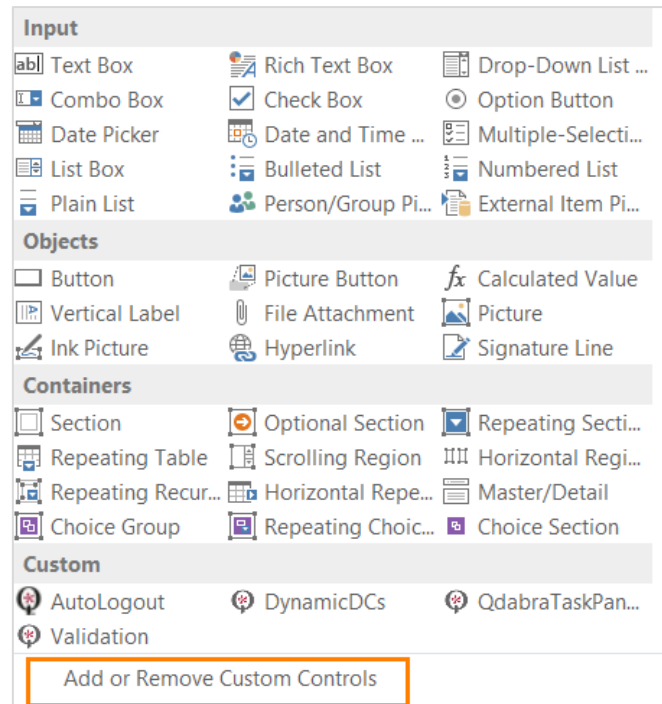


4. Once added, you will have this **Users** list with the following columns –

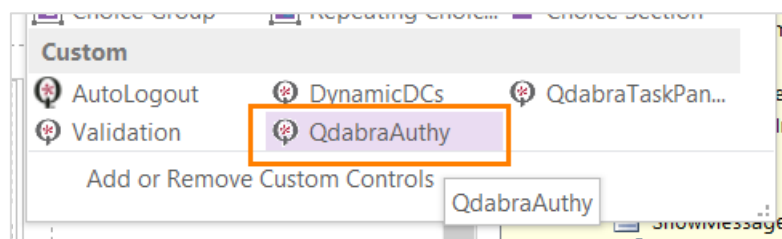
Users				
Email ▾	Phone ▾	First Name ▾	Last Name ▾	AuthyID ▾

Add the QdabraAuthy XTP in the Starter form

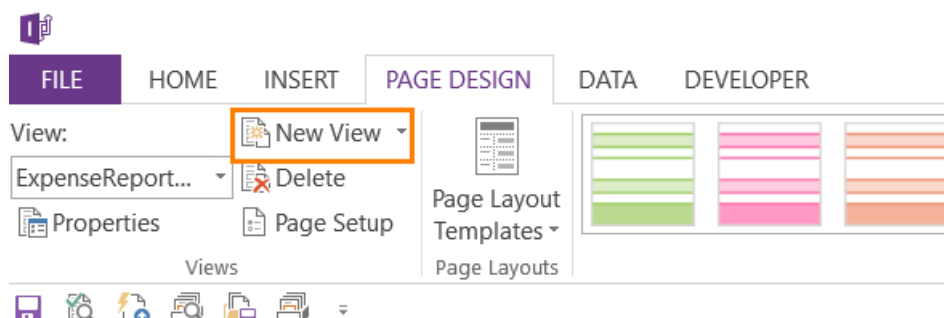
1. Open the starter form for this lab *Lab 3 – Authy Start.xsn* in InfoPath Designer.
2. In **HOME** tab under **Controls** section, click **Add or Remove Custom Controls**.



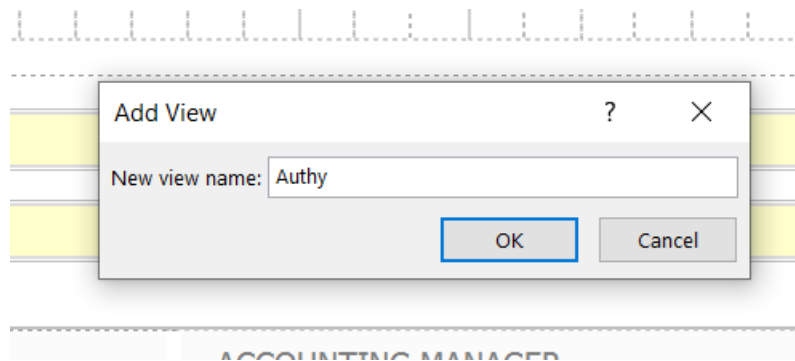
3. Go through the Add Custom Control Wizard and add the QdabraAuthy.xtp2 included in this lab package.



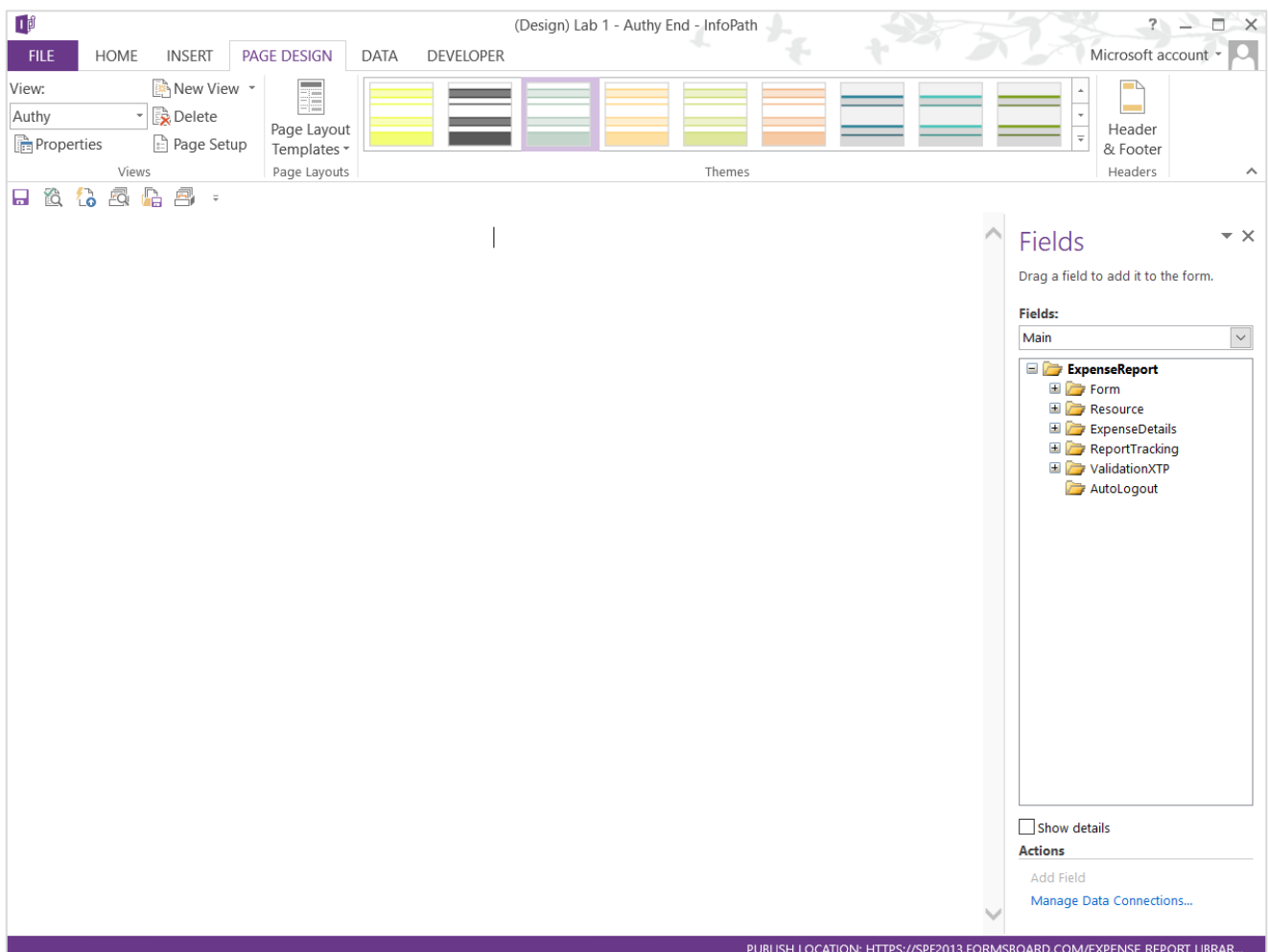
4. Create a new view. Go to PAGE DESIGN and click New View.



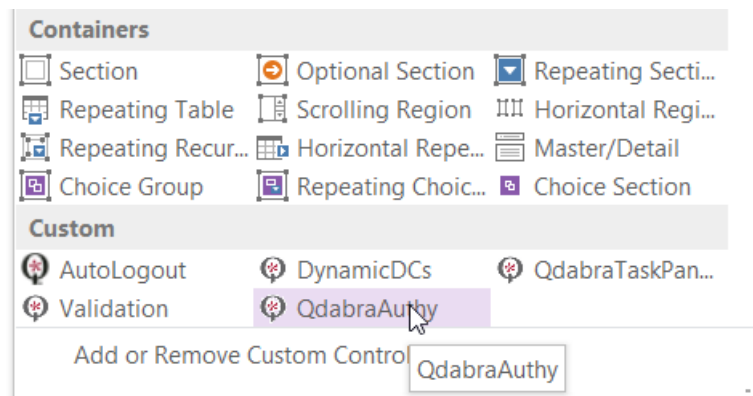
5. Name the new view Authy. Click **OK**.



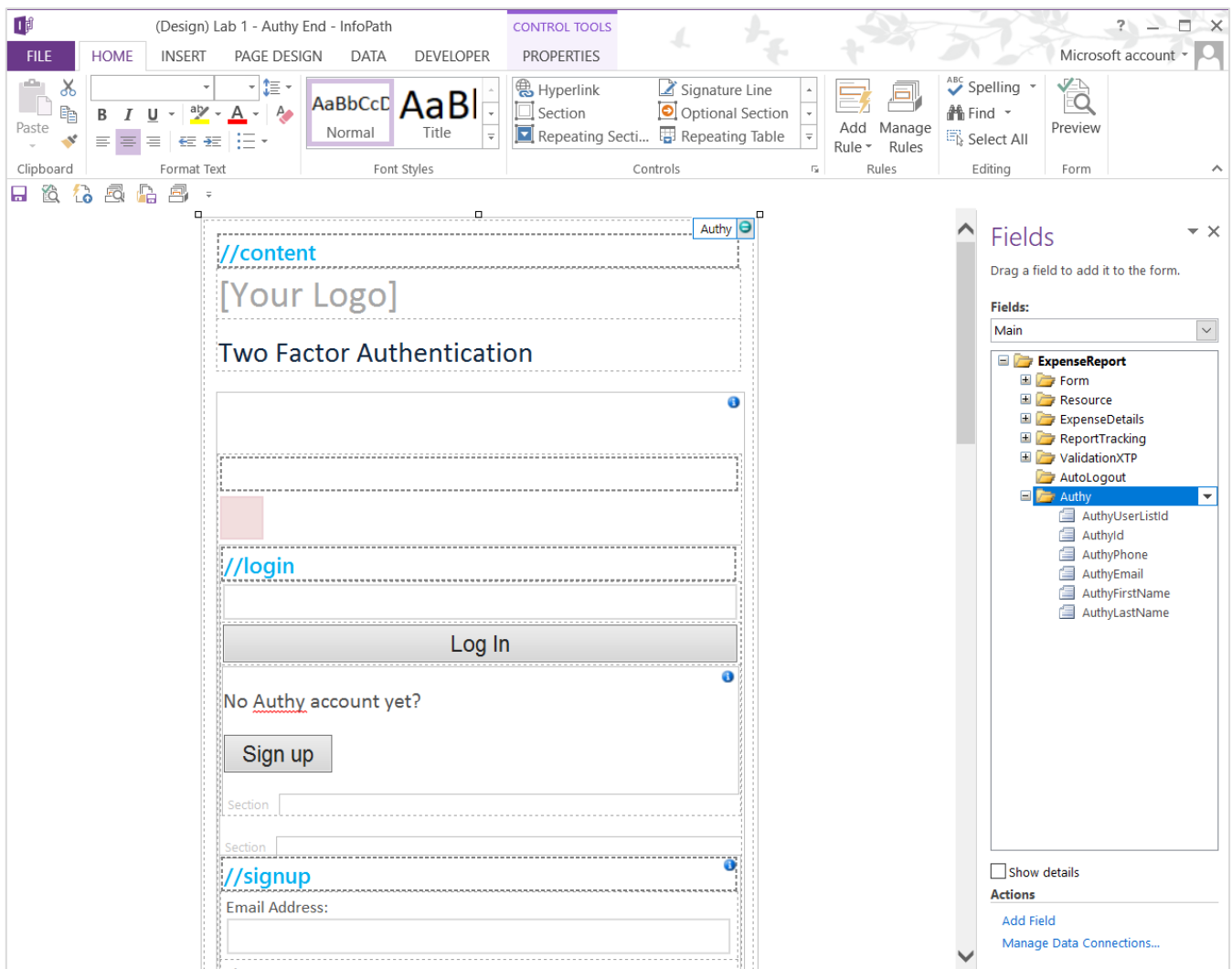
6. Delete the default table that is added in the view, so that your canvas is blank, and then place your cursor in top-center.



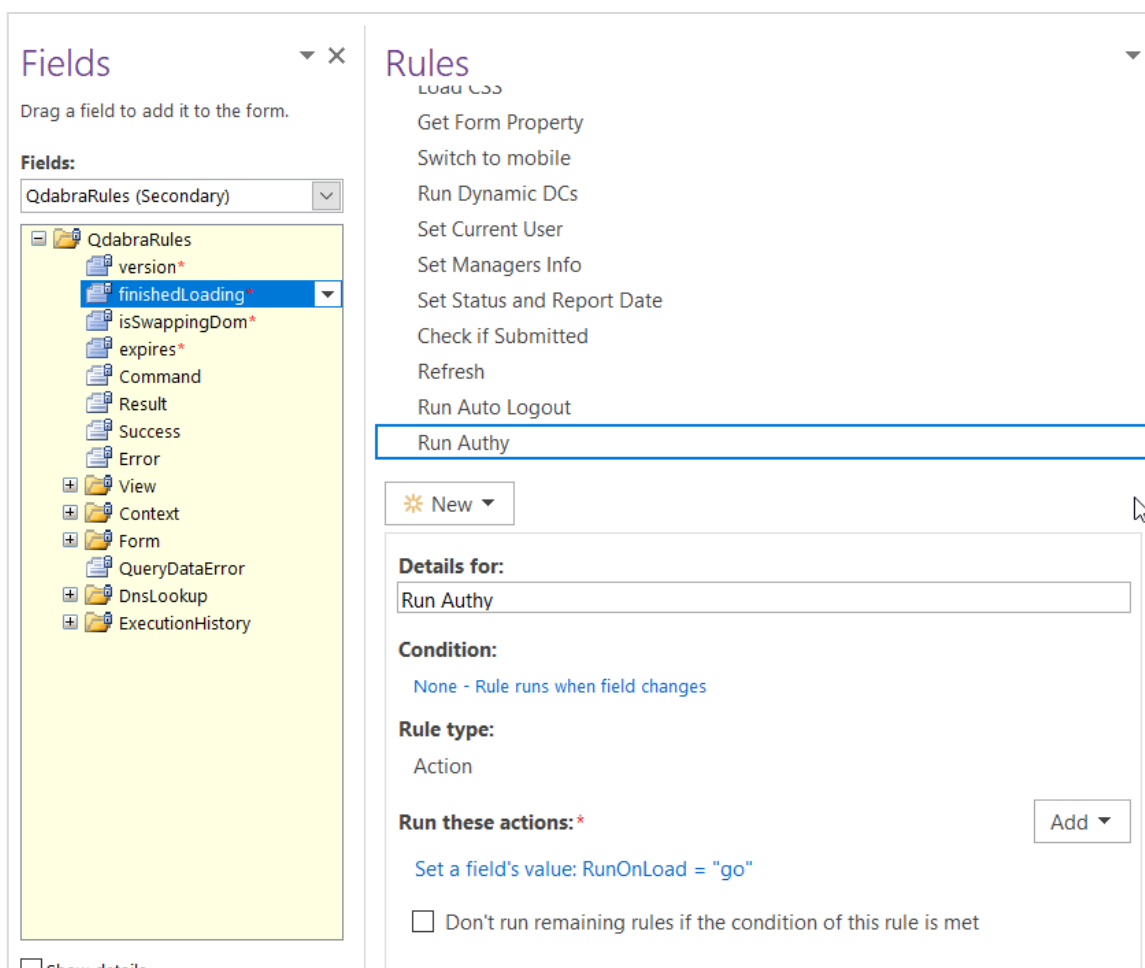
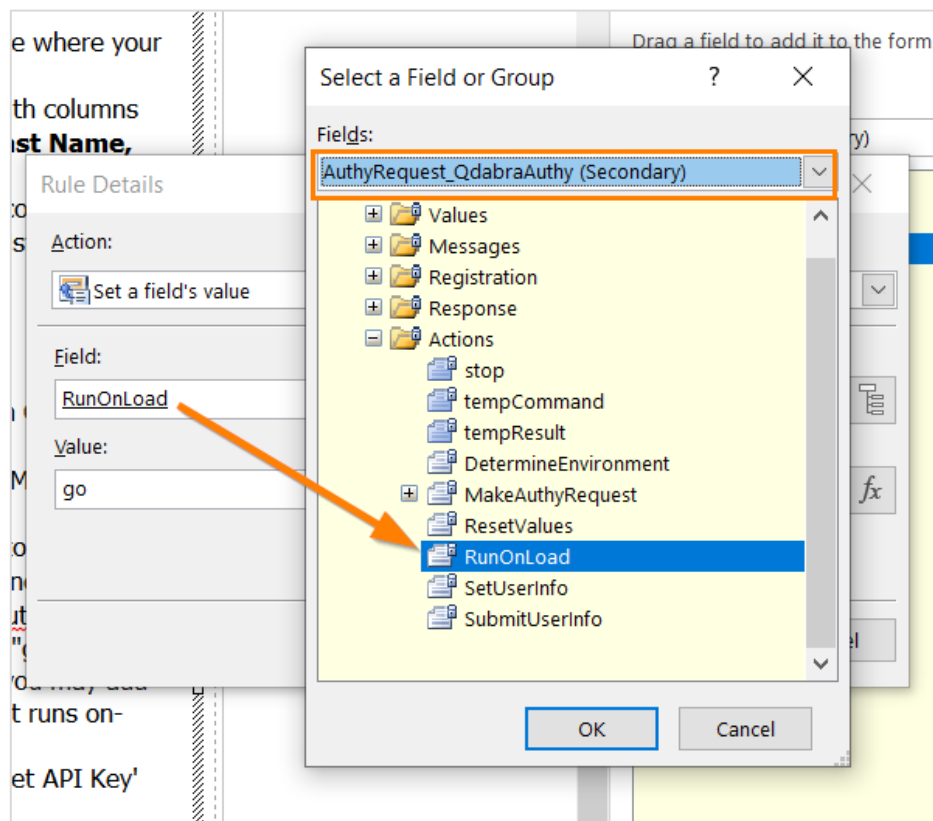
7. Add the Authy XTP in the form view by clicking the QdabraAuthy XTP in the Controls section.



Once the XTP is added in the canvas, this is what your form will look like:



8. Add a rule in the QdabraRules/@finishedLoading node and call it **Run Authy**.
9. Set the field /Authy/Actions/RunOnLoad in the AuthyRequest_QdabraAuthy data source to the value "go".



10. Enter your Authy App API key in the rule named 'Set API Key' located in AuthyRequest_QdabraAuthy → /Authy/Actions/RunOnLoad.

Fields

Drag a field to add it to the form.

Fields:

AuthyRequest_QdabraAuthy (Secondary)

- Authy
 - Values
 - Messages
 - Registration
 - Response
 - Actions
 - stop
 - tempCommand
 - tempResult
 - DetermineEnvironment
 - MakeAuthyRequest
 - ResetValues
 - RunOnLoad**
 - SetUserInfo
 - SubmitUserInfo

Rules

RunOnLoad

- Stop if blank
- Reset self
- Determine Environment
- Set API Key**
- Set User Info

New

Details for:

Set API Key

Condition:

APIKey is blank

Rule type:

Action

Run these actions:

Set a field's value: APIKey = "[Your Authy API Key here]"

Add

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

11. Modify the rule named 'Set qRules Fields' located in the AuthyRequest_QdabraAuthy data source /Authy/Actions/@tempCommand node.

- First action: change the @stop field being set to point to your QdabraRules/Command node instead
- Second action: change the value to point to your QdabraRules Result node

Fields

Drag a field to add it to the form.

Fields:

AuthyRequest_QdabraAuthy (Secondary) ▼

- [-] Authy
 - + Values
 - + Messages
 - + Registration
 - + Response
 - [-] Actions
 - stop
 - tempCommand
 - tempResult
 - DetermineEnvironment
 - + MakeAuthyRequest
 - ResetValues
 - RunOnLoad
 - SetUserInfo
 - SubmitUserInfo

Rules

tempCommand



Set qRules Fields

New ▼

Details for:

Set qRules Fields

Condition:

tempCommand is not blank

Rule type:

Action

Run these actions: *

Add ▼

Set a field's value: Command = .

Set a field's value: @tempResult = Result

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

12. In the Authy XTP code section, select the VERIFY button. Open Manage Rules and select the Switch rule.

The screenshot shows a form with several sections. The 'Verification code' section is highlighted with an orange border, and the 'Verify' button within it is also highlighted with an orange border. Other sections include 'Sign up', 'Don't have the Authy App?', 'Text me a code', 'Or, change authentication method', 'Use Authy App', and a footer 'Powered by Authy'.

The screenshot shows the 'Rules' panel with the 'Button: Verify' rule selected. The 'Details for:' section shows 'Switch'. The 'Condition:' section shows 'method is blank'. The 'Rule type:' section shows 'Action'. The 'Run these actions: *' section shows 'Set a field's value: @stop = ""'. There is an 'Add' button next to the actions list.

13. In the Switch rule, add a new action. Select **Switch views**.

The screenshot displays the QDABRA software interface with two main panels: 'Fields' and 'Rules'.

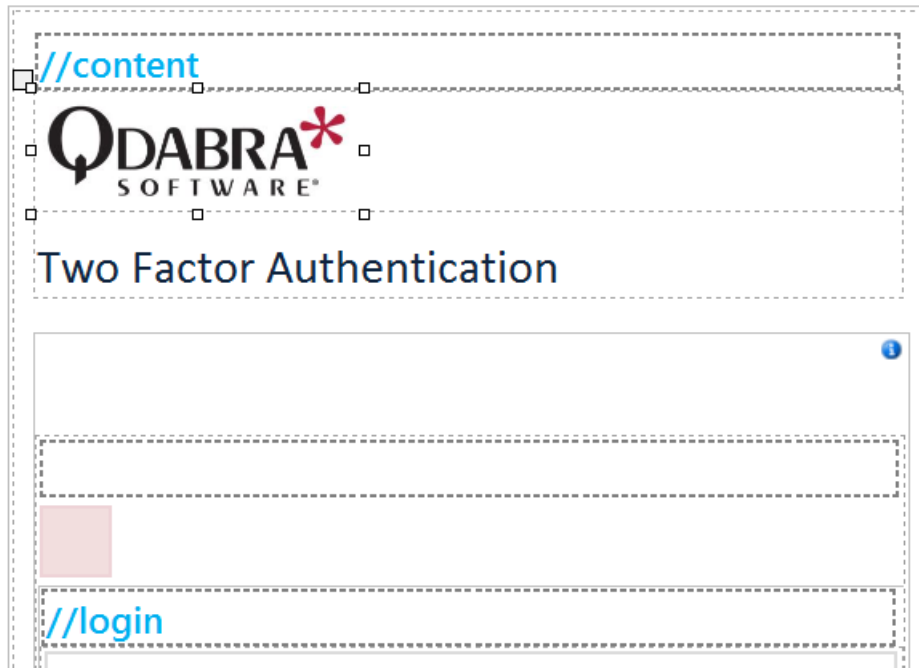
Fields Panel: This panel is on the left and contains a tree view of fields. The 'Authy' folder is expanded, showing sub-folders: 'Values', 'Messages', 'Registration', 'Response', and 'Actions'. Under 'Actions', several actions are listed: 'stop', 'tempCommand', 'tempResult', 'DetermineEnvironment', 'MakeAuthyRequest', 'ResetValues', 'RunOnLoad', 'SetUserInfo', and 'SubmitUserInfo'. Below the tree, there is a checkbox for 'Show details' and a section for 'Actions' with buttons for 'Add Field' and 'Manage Data Connections...'.

Rules Panel: This panel is on the right and shows a rule named 'Button: Verify'. The rule has a 'Switch' action selected. Below the rule name, there is a 'Details for:' section with a text box containing 'Switch'. The 'Condition:' section shows 'method is blank'. The 'Rule type:' section shows 'Action'. The 'Run these actions: *' section has an 'Add' button. A dropdown menu is open from the 'Add' button, showing a list of actions: 'Show a message', 'Show the value of a field or formula', 'Switch views' (highlighted with an orange border), 'Set a field's value', 'Query for data', 'Submit data', 'Open a new form to fill out', and 'Close the form'. At the bottom of the 'Rules' panel, there is a 'Help with Rules' link.

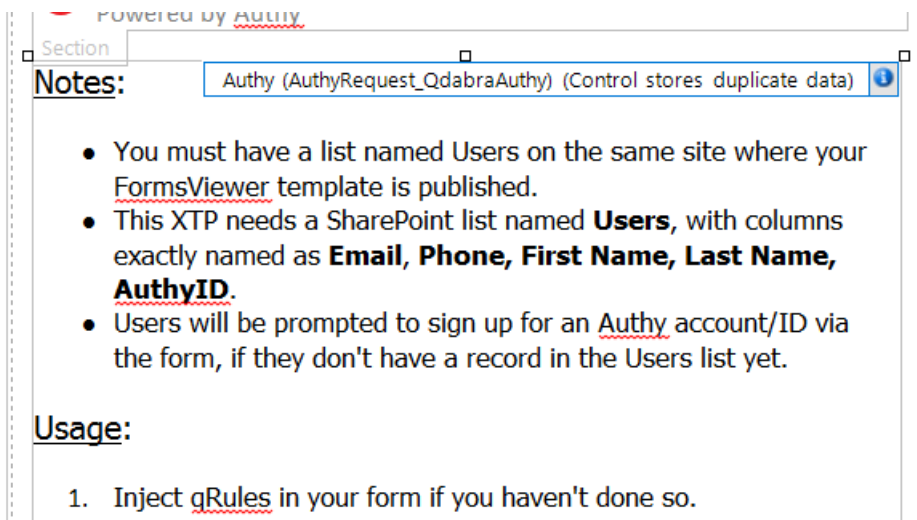
14. Select the Expense Report view.

The screenshot shows the 'Rule Details' dialog box. It has a title bar with a question mark and a close button. The 'Action:' section has a dropdown menu with 'Switch views' selected. The 'View:' section has a dropdown menu with 'ExpenseReport' selected. At the bottom, there are 'OK' and 'Cancel' buttons.

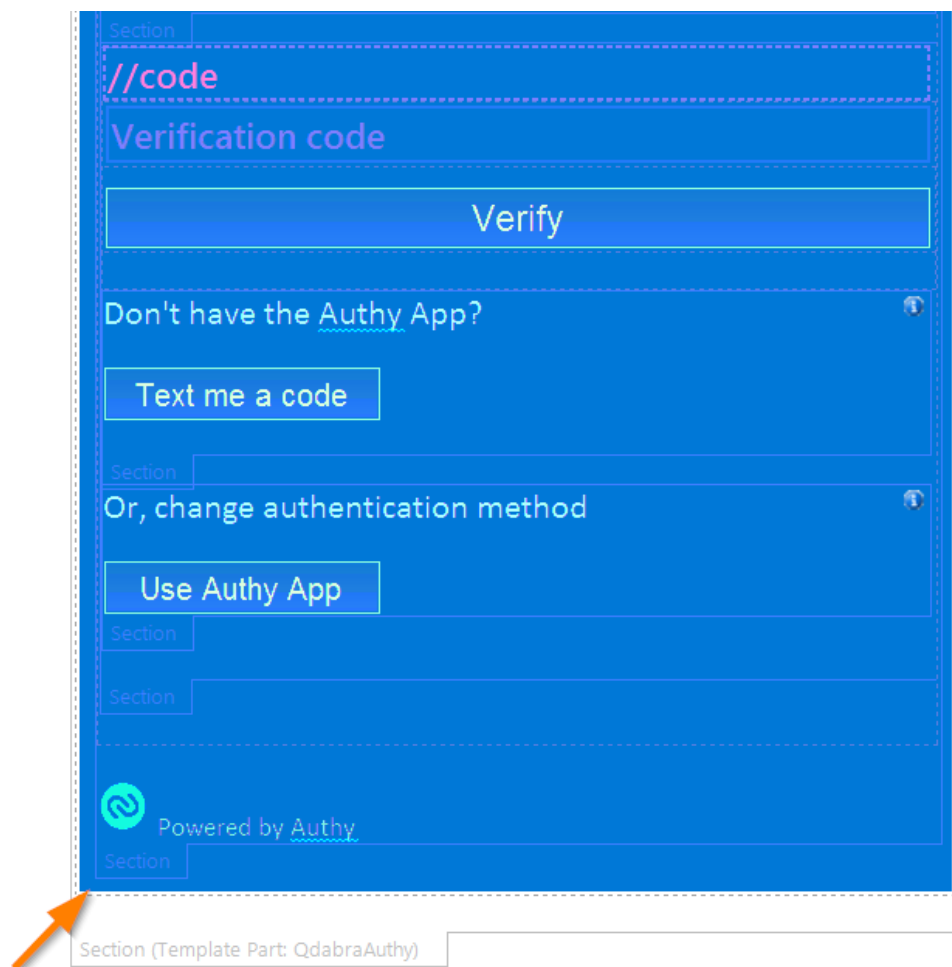
15. Next, we'll customize it a bit more. Add a company logo in the XTP. You can insert an image in the location that says [Your Logo] and then delete that text.



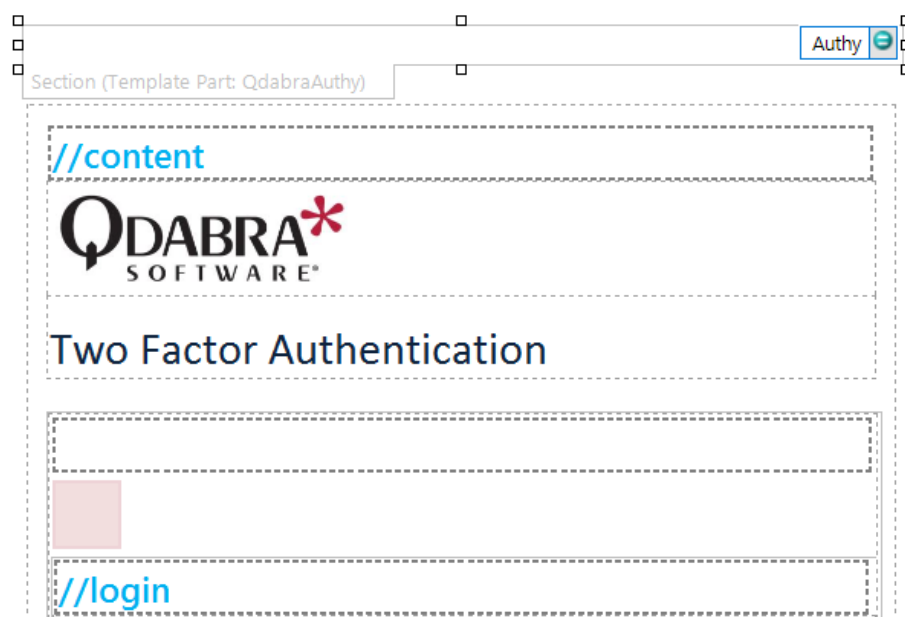
16. Remove the section for the instructions, simply click on the section and press Delete.



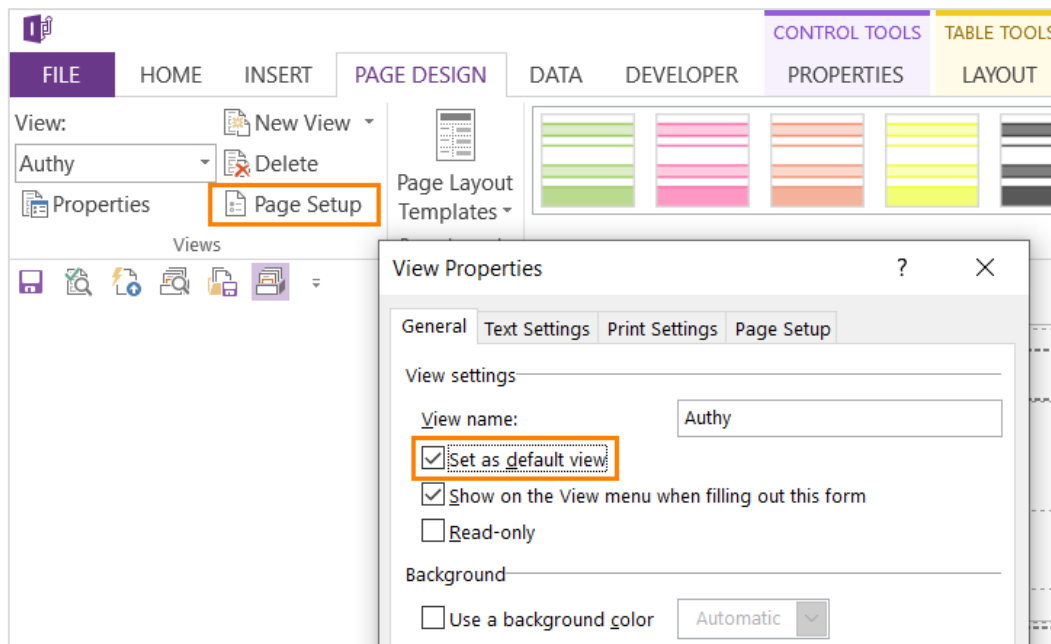
17. Select the entire table inside the Authy XTP.



18. Click CTRL X to cut the table and then paste it outside of the XTP section (When pasting, right-click and select Keep Source Formatting). And then remove the template part section by pressing delete.



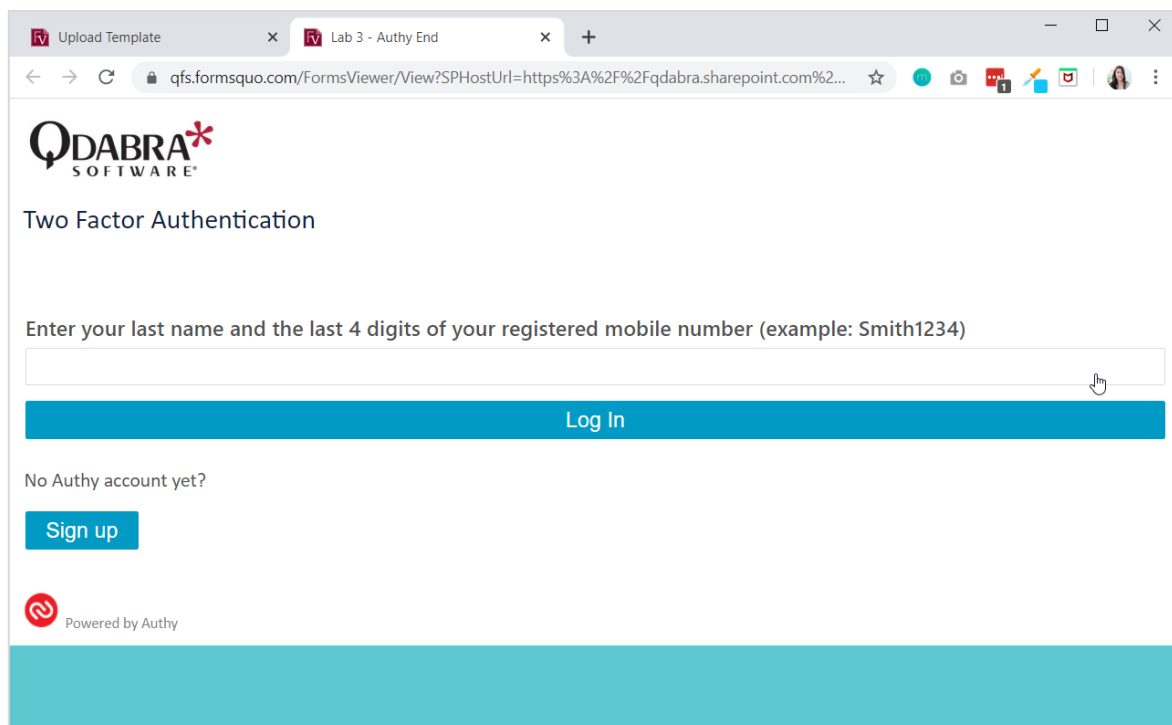
- Go to **PAGE DESIGN** tab, click **Page Setup**. In the **General** tab of the View Properties, check **Set as default view**.



- Save the changes to the form and upload it as an End for for Lab 3.

Test Your Form!

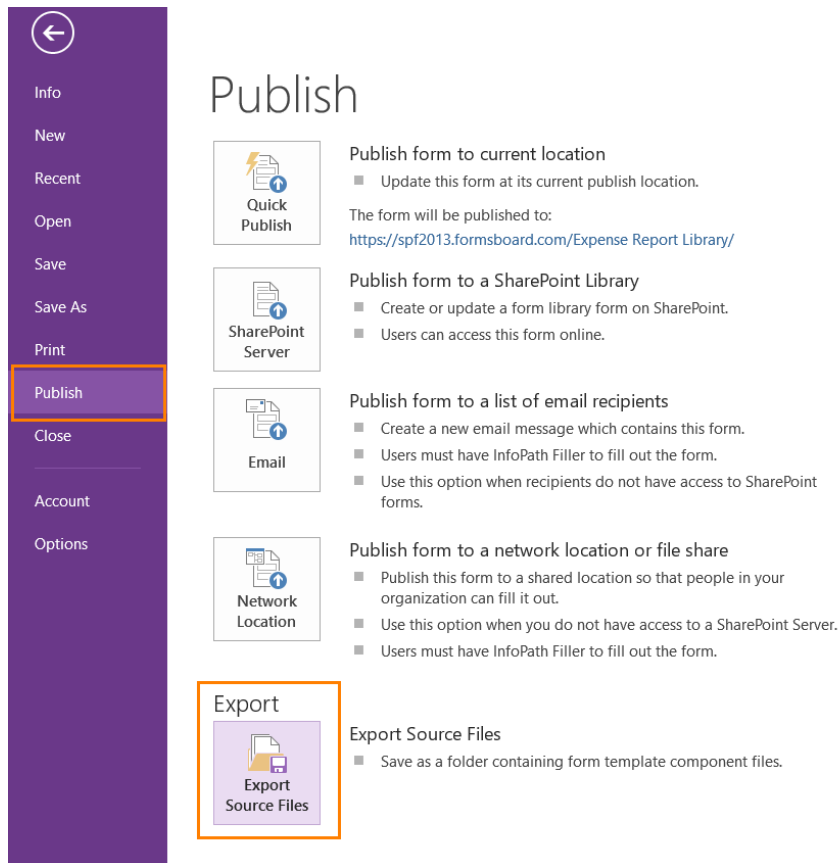
- Click Open Form in FormsViewer. You'll see that the Authy section is stretching across the view like this:



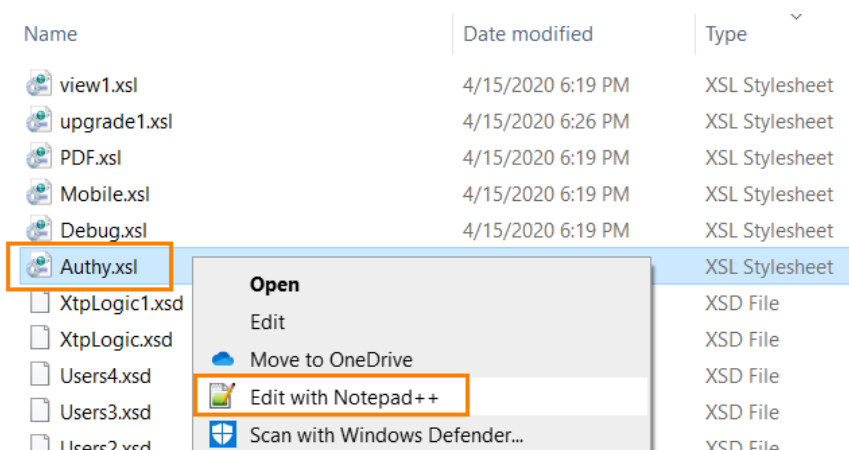
2. This means that the div id in the Authy XTP XSL that we're referencing in the CSS file got removed when you added it in the form. Proceed to the troubleshooting section to fix.

Troubleshoot view errors

1. Export the form to source files by going to File → Publish → Export Source Files. Export the file into a folder in your machine.



2. In the folder, find the Authy.xml file and open it in a text editor such as Notepad or Notepad++.



3. Look for the first <div> tag just below the body tag:

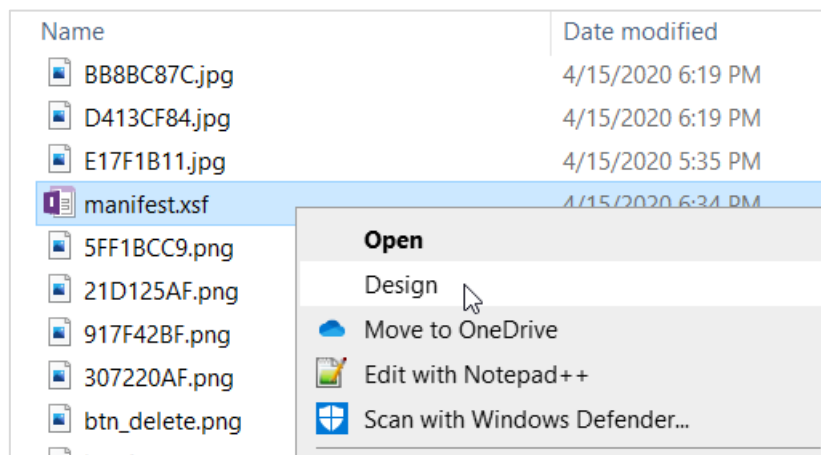
```
Authy.xsl
230 }
231 BODY {
232     COLOR: black
233 }
234 </style>
235 </head>
236 <body>
237     <div align="center">
238         <table class="xdLayout" style="WORD-WRAP: break-word; BORDER-
fixed; BORDER-BOTTOM: medium none; BORDER-LEFT: medium none"
239         <colgroup>
240             <col style="WIDTH: 569px"></col>
241         </colgroup>
242         <tbody vAlign="top">
243             <tr>
244                 <td style="PADDING-BOTTOM: 12px; PADDING-TOP: 12px;
245                 <font face="Calibri">
246                     <div><span title="" class="xdExpressionBox
247                     "&quot; //content&quot;" xd:disableEditing="
248                     <xsl:attribute name="style">FONT-
249                     <xsl:choose>
250                         <xsl:when test="1">DISPL
251                     </xsl:choose>
252                     </td>
253             </tr>
254         </tbody>
255     </table>
256 </div>
257 </body>
258 </html>
```

4. Add an id, type in **id="authyContent"** inside the div tag:

```
Authy.xsl
230 }
231 BODY {
232     COLOR: black
233 }
234 </style>
235 </head>
236 <body>
237     <div id="authyContent" align="center">
238         <table class="xdLayout" style="WORD-WRAP: break-word; BORDER-TO
fixed; BORDER-BOTTOM: medium none; BORDER-LEFT: medium none" bo
239         <colgroup>
240             <col style="WIDTH: 569px"></col>
241         </colgroup>
242         <tbody vAlign="top">
243             <tr>
244                 <td style="PADDING-BOTTOM: 12px; PADDING-TOP: 12px;
245                 <font face="Calibri">
246                     <div><span title="" class="xdExpressionBox
247                     "&quot; //content&quot;" xd:disableEditing="
248                     <xsl:attribute name="style">FONT-SI
249                     <xsl:choose>
250                         <xsl:when test="1">DISPLAY:
251                     </xsl:choose>
252                     </td>
253             </tr>
254         </tbody>
255     </table>
256 </div>
257 </body>
258 </html>
```

5. Save the changes to Authy.xsl. Make sure that the form is closed to allow you to save.

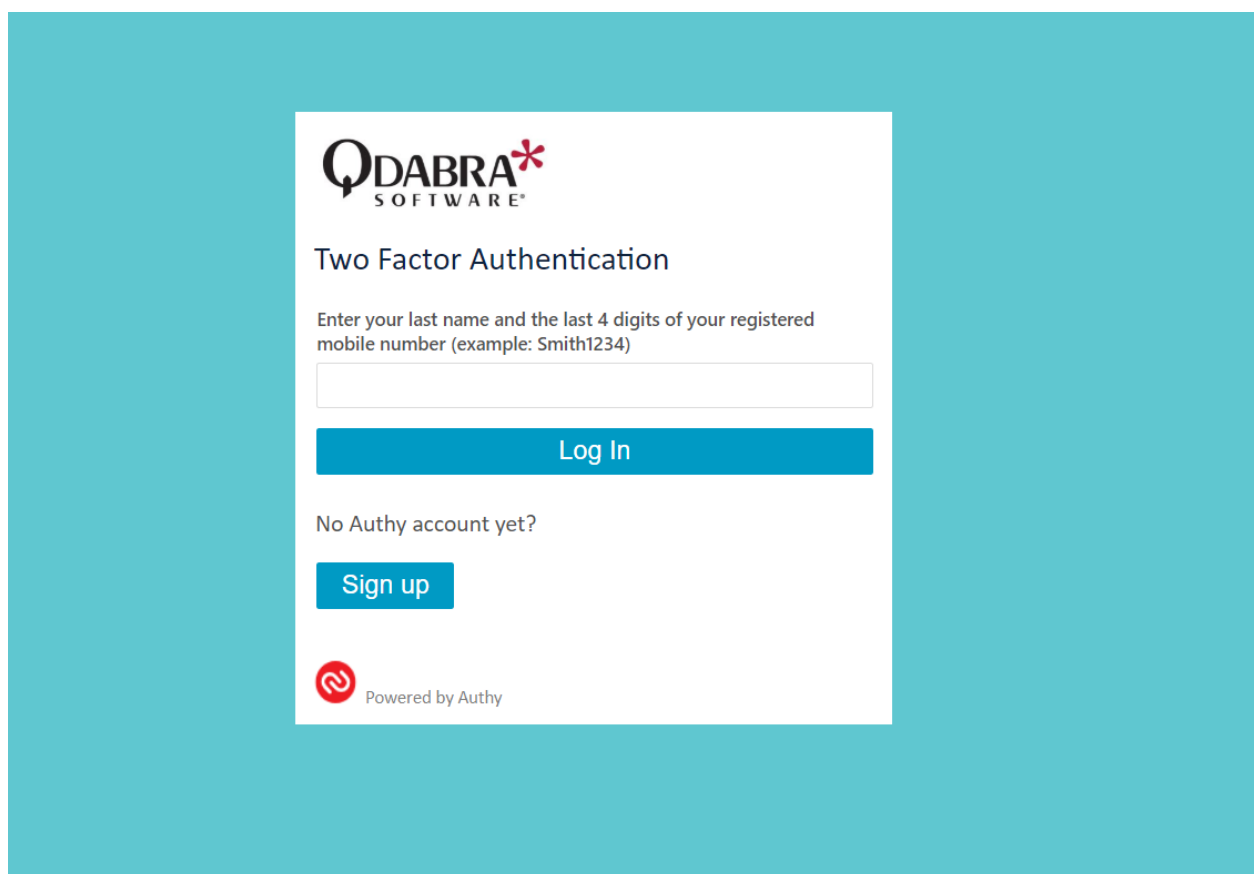
6. In the source files, look for the manifest.xsf file, right-click on it and select Design.



7. It will open in InfoPath Designer. Save it as your Lab 3 Authy End form.
8. Re-upload the template to FormsViewer.

Test Authy!

1. Click Open form. You'll see the Authy section displaying nicely in the center:



2. For first time users, click Sign up.
3. Fill out the details and click Sign up.



Two Factor Authentication

Enter your information to sign up with Authy

Email Address:

First Name:

Last Name:

Country Code:

Select... ▼

Mobile Number *(omit any leading 0s or 1s):*

Sign up

 Powered by Authy

- Authy will confirm that your account is successfully created. You should receive a code from Authy in your mobile phone.



Two Factor Authentication

Enter the verification code shown in your Authy App

Account created. Your Authy ID is
[REDACTED]

Verification code

Verify

Don't have the Authy App?

Text me a code

 Powered by Authy

5. Enter the verification code and click **Verify**.



Two Factor Authentication

Enter the verification code shown in your Authy App

Account created. Your Authy ID is
[REDACTED]

6630520

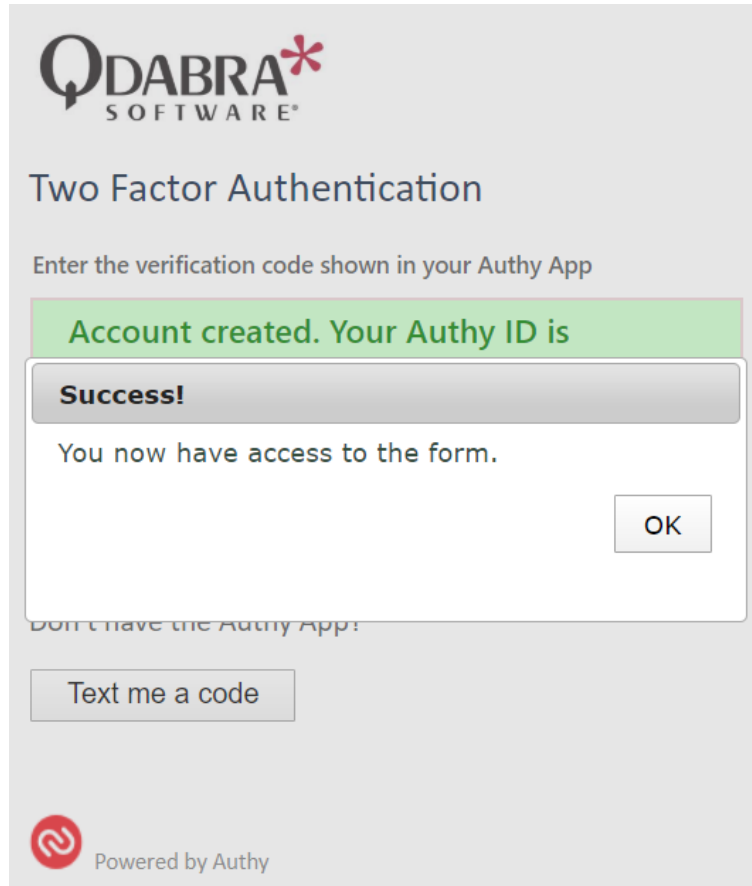
Verify

Don't have the Authy App?

Text me a code

 Powered by Authy

6. You'll get a confirmation message. Click OK.



QDABRA SOFTWARE

Two Factor Authentication

Enter the verification code shown in your Authy App

Account created. Your Authy ID is

Success!

You now have access to the form.

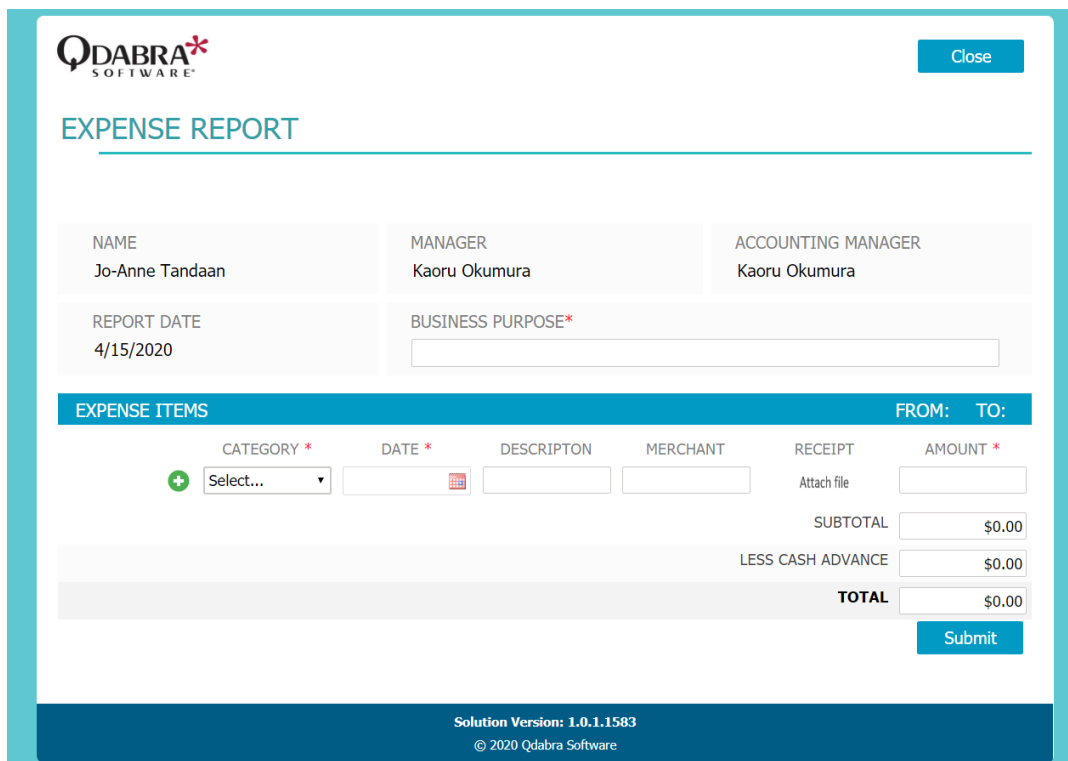
[OK](#)

Don't have the Authy App?

[Text me a code](#)

 Powered by Authy

7. You can now access the form:



QDABRA SOFTWARE [Close](#)

EXPENSE REPORT

NAME Jo-Anne Tandan	MANAGER Kaoru Okumura	ACCOUNTING MANAGER Kaoru Okumura
REPORT DATE 4/15/2020	BUSINESS PURPOSE* 	

EXPENSE ITEMS						FROM:	TO:
CATEGORY *	DATE *	DESCRIPTION	MERCHANT	RECEIPT	AMOUNT *		
+ Select...							
					SUBTOTAL		\$0.00
					LESS CASH ADVANCE		\$0.00
					TOTAL		\$0.00

[Submit](#)

Solution Version: 1.0.1.1583
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This means that you now have an entry in the Users list.

Users			
Email ▾	Phone ▾	First Name ▾	Last Name ▾
Jo-Anne.Tandaan@Qdabra.com	+63#####2	Jo-Anne	Tandaan

When you're already registered in the Users list, the next time you open the form, just enter your last name + last 4 digits of your phone number to log in:



Two Factor Authentication

Enter your last name and the last 4 digits of your registered mobile number (example: Smith1234)

Log In

No Authy account yet?

Sign up

 Powered by Authy

If you have installed the Authy app in your phone, you can simply copy the verification code and paste it in the form.

But if you don't have the Authy app yet, you can click the **Text me a code** button so Authy can send you the verification code via SMS

Congrats! 😊 You have finished the exercises for Day 3!

You may check out the End form for this lab (*Lab 3 - Authy End.xsn*).

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