B2C UI Customization

Hands-on Lab

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“About the Authors” is an important item as it establishes the credibility of the text by explaining how much experience the author team has in the field. Add as many “About the Authors” as needed from the Quick Parts Gallery. Change “Author” to a different title, such as “Subject Matter Expert” if that is more appropriate. Include SMEs who assisted with the development of the course. Add this to every Module.

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# Lab Overview

Several paragraphs – or longer – describing an overview of the lab including a description of the lab and why certain topics are covered. This is also called the ‘LAB ABSTRACT’ that will be used for hand-off to conferences as part of the content hand-off process

###### Abstract

During this lab, you will run several exercises that will help you achieve a better understanding of the capabilities of the UX customization features available in Azure AD B2C.

###### Learning Objectives

After completing the exercises in this lab, you will be able to:

* Understand how B2C loads custom HTML resources and merges the content into the page
* Add a link to your custom HTML to your journey via the B2C admin portal and by editing a policy directly
* Add custom HTML and CSS styling to your page

**Estimated time to complete this lab: *70* minutes**

# Exercise 0: Setup

Each exercise consists of a scenario and learning objectives, the scenario describes the purpose of the exercices, while the objectives are listed and have bullet points.

#### Scenario

In this exercise, we will set up some basic storage accounts and policies for use in the remaining exercises

As part of this setup, we will:

* Set up a storage account host your custom HTML and CSS resources
* Download a tool that will help upload our content to Azure storage and enable CORS

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| --- | --- |
| Task | Detailed Steps |
| Describe the task.  *Product information or explanation about a certain feature goes here.* | Steps need to have BOLD when you indicate a certain path or a step to click and execute, always use numbering for each of the steps that need to be executed. .   1. Follow the steps at <https://azure.microsoft.com/en-us/documentation/articles/active-directory-b2c-reference-ui-customization-helper-tool/>    1. You should only need to perform the “Create a storage account” and “Download the helper tool” sections to complete the setup for this lab. You may skip the steps involving sample resources for this article (we will only be using the storage client executable itself in this lab) 2. Take note of the storage account name you are using – this is the unique URL |

# Exercise 1: Add a blank custom UX page

Each exercise consists of a scenario and learning objectives, the scenario describes the purpose of the exercices, while the objectives are listed and have bullet points.

#### Scenario

In this exercise, you will take your existing policy and modify the first page to use a blank HTML template.

After completing this exercise, you will understand:

* How to specify a custom URI for a page via the B2C portal
* How to ensure the site you are hosting your custom content from has CORS enabled
* How to author your custom HTML to integrate with B2C’s framework via the addition of a div with id=”api”

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| Task | Detailed Steps |
| Upload a blank HTML page to your storage account  *The B2C UI customization framework requires a div to exist with a specific ID label. The B2C related content will be injected into this div, while the rest of the page is yours to control* | 1. Use the below template as a basis for creating a new HTML file on your local machine. In this exercise, we will name this file “IdpSelection.html” 2. Edit the template to include your own personalized title in the <title> tag, and save the file 3. Note the required <div id=”api”> element in the HTML we have specified for this page. B2C requires that all pages have this specific div – the B2C-related content for the page will be injected here 4. Upload your “IdpSelection.html” to your storage account. Note that the storage account must serve the page over an HTTPS connection.   <!DOCTYPE html>  <html>  <head>  <title>!!!!!Add your title here!!!!!</title>  </head>  <body >  <div id="api"></div>  </body>  </html> |
| Verify that the site you are hosting your content on has CORS enabled  *CORS (Cross-Origin Resource Sharing) must be enabled on your endpoint for B2C to load your content. This is because your content is hosted on a different domain than the domain B2C will be serving the page from. Product information or explanation about a certain feature goes here.* | 1. In a browser of your choice, load the “IdpSelection.html” page using the full URL of its location in your storage account. Verify that the browser title matches the one you’ve previously entered 2. Browse to <http://test-cors.org>. This site allows you to verify that the page you are using has CORS enabled 3. On <http://test-cors.org>, enter the full URL for your “IdpSelection.html” content, and click “Send Request” 4. Verify that the output in the “Results” section contains “XHR status: 200”. This indicates that CORS is enabled |
| Modify your policy to load this new page  *Each individual user-visible page must be given a reference to the custom UI link you create for that pageProduct information or explanation about a certain feature goes here.* | 1. Navigate to the B2C admin portal    1. Go to <https://portal.azure.com>    2. Under “Browse”, select “Azure AD B2C” 2. Open the “Page UI Customization” blade for your “Sign-up or sign-in” policy    1. Select your B2C tenant    2. In the “Settings” blade, select “Sign-up or sign-in policies”    3. Select the policy you have created earlier    4. Click the “Edit” button on the policy blade    5. Select “Page UI customization” 3. Note that each page that the user may see (including an error page) is represented here. Each page can be customized individually. For this exercise, select the “Unified sign-up or sign-in page”. This is the first page the user will see when running this policy 4. In the following blade, toggle the “Use custom page” slider to “Yes” 5. In the “Custom page URI” box, enter the full URI to the “IdpSelections.html” page you uploaded earlier. 6. Select “OK” on the UI customization blades, and click “Save” on the policy blade to save your changes. |
| Verify the B2C content loads successfully | 1. Use the “Run Now” link to run your “sign-up or sign-in” policy.    1. Note that, depending on your browser cache settings, you may need to clear your local cache to get the new content 2. Verify that the very basic, non-stylized buttons for this page should now be displayed and functional. We will add true styling to this page in the next exercise. |
| [Note] | 1. The completed version of the HTML for this exercise is also available at: <https://fabrikamb2c.blob.core.windows.net/b2cpartnerconference/IdpSelection_exercise1.html> |

# Exercise 2: Add a custom body to your HTML page

Each exercise consists of a scenario and learning objectives, the scenario describes the purpose of the exercices, while the objectives are listed and have bullet points.

#### Scenario

In B2C, all HTML content outside the <div id=”api”> element is yours to customize and style as you wish. In this exercise, you will take the page you have added in the previous exercise, and alter it to add some basic UX changes.

After completing this exercise, you will understand:

* How to edit your custom UX HTML to include your own content
* How to add a CSS file to your custom UX HTML

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| Task | Detailed Steps |
| Add a basic text div to your HTML | 1. Open up your local copy of “IdpSelection.html” from the previous exercise 2. In the <body> element (but outside the <div id=”api”> element), add any additional divs you would like. In the example below, two simple paragraph divs are added with some text.   <!DOCTYPE html>  <html>  <head>  <title>!!!!!Add your title here!!!!!</title>  </head>  <body >  <div id=”myCustomIntro”>  <p>B2C rocks!</p>  </div>  <div id="api"></div>  <div id=”myCustomOutro”>  <p>I can put my own content here too!</p>  </div>  </body>  </html> |
| Modify where the B2C content appears on your page  *The B2C UI customization framework will look for the <div id=”api”> anywhere on the page, allowing you to customize where the B2C content will appear* | 1. Create a table with a border, and move the <div id=”api”> section into a section of the table. You can use the example below:   <!DOCTYPE html>  <html>  <head>  <title>!!!!!Add your title here!!!!!</title>  </head>  <body >  <div id=”myCustomIntro”>  <p>B2C rocks!</p>  </div>  <table border=”5” style=”width:100%”>  <tr>  <td>  <div id="api"></div>  </td>  </tr>  </table>  <div id=”myCustomOutro”>  <p>I can put my own content here too!</p>  </div>  </body>  </html> |
| Upload and verify your content | 1. Save and upload your edited “IdpSelections.html” page and upload it to your storage account 2. Use the “Run Now” button on the B2C admin portal to run your policy. Note that the B2C content should now appear within your table, inside the border, along with the additional text you’ve added to the page |
| Add a logo to your content  *The B2C UI customization framework will also load other resources linked off of your custom UX HTML, so long as absolute paths are given to the resources.* | 1. Create or acquire a .PNG file and upload it to your storage account. For this exercise, we will assume it is named “myLogo.png”. 2. Add the \*absolute\* URL to the logo to your custom HTML. Note that an absolute URL is required – relative paths are not supported. You may use the example below, replacing the URL with the full URL to your resource   <!DOCTYPE html>  <html>  <head>  <title>!!!!!Add your title here!!!!!</title>  </head>  <body >  <div id=”myLogo”>  <p>  <img src=”!!!! Insert your full URL here.png!!!!” />  My logo  </p>  </div>  <div id=”myCustomIntro”>  <p>B2C rocks!</p>  </div>  <table border=”5” style=”width:100%”>  <tr>  <td>  <div id="api"></div>  </td>  </tr>  </table>  <div id=”myCustomOutro”>  <p>I can put my own content here too!</p>  </div>  </body>  </html> |
| Upload and verify your content | 1. Save and upload your edited “IdpSelections.html” page and upload it to your storage account 2. Use the “Run Now” button on the B2C admin portal to run your policy. Verify your logo appears as expected. |
| [Note] | 1. The completed version of the HTML for this exercise is also available at: <https://fabrikamb2c.blob.core.windows.net/b2cpartnerconference/IdpSelection_exercise2.html> |

# Exercise 3: Add custom CSS to your HTML page

Each exercise consists of a scenario and learning objectives, the scenario describes the purpose of the exercices, while the objectives are listed and have bullet points.

#### Scenario

In B2C, you control all the styling that appears on the page, including the styling that applies to the B2C content. In this exercise, you will apply custom styling to the page via CSS.

After completing this exercise, you will understand:

* How to add a link to a CSS page from inside your HTML page
* How to view the finalized page structure that appears in a B2C page
* How to add styling based on HTML classes or individual IDs

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| Task | Detailed Steps |
| Download the sample customization templates | 1. Access the B2C sample project on GitHub at <https://github.com/beejones/B2CDemoTools> (you may either clone the repository locally, or download and extract the zip). This project contains several materials that you can use for experimentation 2. Navigate to the B2CTemplates/wingtiptoys directory. We will be using these HTML and CSS resources in this exercise. 3. Open up the “unified.html”. Replace all instances of the URL path “b2cauthstore.blob.core.windows.net/b2cdemotools” with your own path from your storage account, ie “{storageAccount}.blob.core.windows.net/{blobName}”. Save this local file 4. Note that the links to the CSS files, like the other links, must be absolute, rather than relative, URLs 5. You may also wish to repeat this process for the remaining HTML pages in this directory. 6. Use the upload tool to add these files to your storage account |
| Edit your policy to include these new resources | 1. On the B2C portal, navigate to your “sign-up or sign-in” policy, then select “Edit”->”Page UI Customization”->”Unified sign-up or sign-in page” 2. For the “Unified sign-up or sign-in page”, add the full URL for the “unified.html” page you have just uploaded to your storage account, then save. 3. You may also want to perform this step for the “Local account sign-up page” and “Social account sign-up page” with the “selfasserted.html” page in your storage account. |
| Execute the policy, and examine the merged HTML and CSS | 1. After saving your changes to the policy, execute the policy via the “Run Now”. Note that this is the same core page we’ve been working on, but with a considerably customized experience. 2. Examine the merged content of the page. Note that on most browsers, selecting “View source” will display the pre-merged template for the page, which may not be useful to you. However, selecting “Inspect element” will show the “live” merged page content. |
| Explore the CSS and make your own updates  *CSS can be used in a variety of fashions to customize the experience on the page* | 1. Edit your copies of the HTML and CSS to further customize the experience to your liking. Note the HTML of the B2C content has predictable IDs and class names, which you can use to stylize groups of elements, or individual elements. |
| [Note] | 1. The completed version of the HTML for this exercise is also available at: <https://fabrikamb2c.blob.core.windows.net/b2cpartnerconference/unified.html> and <https://fabrikamb2c.blob.core.windows.net/b2cpartnerconference/selfasserted.html> |

# Appendix

This Appendix provides information about the actual lab manual and labcode, as well as the virtual machine requirements needed for this lab. Use this page to keep information about lab updates / modifications and corrections to the manual, as well as the uniquely defined labcode.

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| --- | --- | --- |
| Labcode | Manual Version | Last Update |
|  | Version 7 | 12/8/2010 6:38:00 PM |

**Lab Notes**

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| --- | --- |
| Description | Details |
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**Virtual Machine Requirements**

|  |  |
| --- | --- |
| Virtual Machine Name | Details |
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