

Getting Started with a New Power Apps Portal

Lab Time: 60 minutes

Lab Folder: C:\Student\Modules\01_GettingStarted\Lab

Lab Overview: This lab covers how to get up and running with the Power Platform by creating a new Power Apps portal. The act of creating and configuring this new Microsoft 365 tenant will yield an isolated testing and development environment for building and testing apps and portals. One valuable aspect of creating your own new Microsoft 365 tenant is that you will have Global tenant administrative permissions allowing you to create multiple Microsoft 365 user accounts for testing your apps and flows in isolation from any other existing Microsoft 365 tenant.

Exercise 1: Download the Student Lab Materials

In this exercise, you will download a local copy of the student files from a GitHub repository named **DOPRTL**

1. Launch a browser and navigate to the GitHub repository for this course at the following URL.

<https://github.com/CriticalPathTraining/DOPRTL>

2. You should see the home page for the repository as shown in the following screenshot.

The screenshot shows the GitHub repository page for 'DOPRTL'. At the top, it displays the repository name 'CriticalPathTraining / DOPRTL', a 'Watch' button with a count of 1, a 'Star' button with a count of 1, and a 'Fork' button with a count of 0. Below this, there are tabs for 'Code', 'Issues (0)', 'Pull requests (0)', 'Projects (0)', 'Security', and 'Insights'. The main area shows the file structure under 'Branch: master'. It lists several files and folders:

- 'DevelopingPowerAppsPortals.pdf': Updated 27 seconds ago
- 'DevelopingPowerAppsPortalsLabs.pdf': Updated 27 seconds ago
- 'Modules': Updated 27 seconds ago
- 'Extras': Updated 27 seconds ago

Note that you can examine the folders and the contents of individual files of this repository using the browser. However, it will be easier for you to download a local copy of the files from this repository as you work on these lab exercises.

3. Download the ZIP archive with the student files using the following URL:

<https://github.com/CriticalPathTraining/DOPRTL/archive/master.zip>

4. Extract the **Students** folder from the master.zip archive into a local folder on your hard drive at **C:\Student**.

The screenshot shows the Windows File Explorer interface. The path 'This PC > Local Disk (C:) > Student > Modules > 01_GettingStarted' is highlighted in blue, indicating the target location for extracting the ZIP file. The 'File' tab is selected in the ribbon. The 'Quick access' section is visible at the bottom left.

There is a child folder in **C:\Student\Modules** for each course modules containing PDF files named **Lab.pdf** and **Slides.pdf**. These files provide you with all the slides and lab exercise writeups for this training course.

Exercise 2: Sign Up for an Office 365 E5 Trial

In this task you will create a new Office 365 trial tenant. As you work through the sign up process for this free trial, you will be asked to provide a user name and a password for an Azure AD user account that will be configured as the tenant Global administrator. You will log in with this account when developing and testing applications that use Power BI embedding. However, it's a good practice that you also test your applications with standard user Azure AD accounts that have no administrative permissions. The trial tenant that you are going to create will allow you to create up to 25 user accounts with Office 365 E5 subscriptions. Remember that any user with an Office 365 E5 subscription is automatically assigned a Power BI Pro license as well.

1. Navigate to the Office 365 trial sign up web page.

- a) Launch the Chrome browser.
- b) Copy and paste the following URL into the address bar of the incognito window to navigate to the signup page.

<https://go.microsoft.com/fwlink/?LinkId=698279&culture=en-US&country=US>

- c) You should now see the form you need to fill out to create your new **Office 365 E5** trial.
- d) Enter your email address and click **Next**.

The screenshot shows the first step of the Microsoft Office 365 E5 trial sign-up process. The title is "Thank you for choosing Office 365 E5". Step 1, "Let's set up your account", is selected. A text input field contains the email address "tedp@sharepointconfessions.onmicrosoft.com". Below the input field is a blue "Next" button with a right-pointing arrow. To the left of the input field is a small "Sign in" link. To the right of the "Next" button is a "Create a new account instead" link. Other steps listed are "Tell us about yourself", "Create your business identity", and "Get Office".

If you enter an email address for an organization account, the form provides the option to sign in. Do not click the **Sign in** button because you don't want to sign with an existing organization account. The purpose of this exercise is to create a new organizational account in a new Microsoft 365 tenant.

- e) Click the **Create a new account instead** link.

The screenshot shows the Microsoft Office 365 E5 trial sign-up process after clicking the "Create a new account instead" link. It displays a message: "Looks like you're already using TedP@sharepointconfessions.onmicrosoft.com with another Microsoft service. Sign in to use this account with this trial, or create a new account." Below the message are two buttons: "Sign in" (disabled) and "Create a new account instead".

- f) Enter your **First name** and **Last name**.
- g) Enter your mobile phone number as the **Business phone number**.
- h) Provides values for **Company size** and **Country or region** and click **Next**.

The screenshot shows the second step of the Microsoft Office 365 E5 trial sign-up process, titled "Tell us about yourself". It includes fields for "First name" (Stu), "Last name" (Dent), "Business phone number" (1234567890), "Company name" (My New Tenant), "Company size" (10-24 people), and "Country or region" (United States). Below these fields is a blue "Next" button with a right-pointing arrow.

Whatever **Company name** you enter will be used as the name of the Azure AD tenant that will be created during the sign up process.

- i) When prompted to prove you're not a robot, select the **Text me** option and ensure Phone number of for your mobile phone.
- j) Click **Send Verification Code**.

(2) Tell us about yourself

Prove. You're. Not. A. Robot.

Enter a number that isn't VoIP or toll free.

Text me Call me

Code (+1) Phone number 1234567890

We don't save this phone number or use it for any other purpose.

Send Verification Code

- k) Retrieve the access code from your mobile device and use it to complete the validation process.

Verification code
951424

Didn't get it or need a new code? [Try again](#)

Verify Change my phone number

- l) In the **Create your business identity** step, locate the textbox into which you will enter a domain name.

What is a domain?' and 'You'll probably want a custom domain name for your business at some point. For now, choose a name for your domain using onmicrosoft.com'. A text input field contains 'yourcompany.onmicrosoft.com' with a red border. A large blue arrow points to this input field. At the bottom are two buttons: 'Check availability' and 'Next'."/>

(3) Create your business identity

To set up your account, you'll need a domain name. [What is a domain?](#)

You'll probably want a custom domain name for your business at some point. For now, choose a name for your domain using onmicrosoft.com

yourcompany.onmicrosoft.com

Check availability Next

Note that the company name you enter in this textbox will be used to create an Internet domain name for a new Microsoft 365 tenant. For example, if you were to enter a company name of **cptstudent**, it would result in the creation of a new Office 365 tenant within a domain of **cptstudent.onMicrosoft.com**. The user name you enter will be used to create the first user account which will be given global admin permissions throughout the Azure AD tenant. If you enter a user name of **Student**, then the email address as well as user principal name for this account will be **student@cptstudent.onMicrosoft.com**

- m) Enter a domain name for your new Microsoft 365 tenant.

yourbusiness.labs4summit.onmicrosoft.com

Check availability Next

- n) If the domain name you enter is not available, modify the domain name until you can verify that it is available.
- o) Once you have created a domain name that is available, click **Next**.

yourbusiness
labs4summit .onmicrosoft.com

labs4summit.onmicrosoft.com is available.

Check availability

Next

- p) Enter a **Name** for your user account, a **Password** that you will remember and then click **Sign up**.

Now create your user ID and password to sign in to your account.

Name: Student @labs4summit.onmicrosoft.com

Password:

Confirm password:

By clicking Sign up, I agree to the [privacy statement](#), [default communication preferences](#) and the [trial agreement](#).

Microsoft Partners may contact me with information about their products, services, and events

Sign up

At this point, the Sign up process should begin to provision your new Microsoft 365 tenant and your new organizational account.

- q) Once the provision process completes, take note of your new **user ID** and click the **Go To Setup** button.

④ Get Office

Save this info. You'll need it later.

Sign-in page
<https://www.office.com/>

Your user ID
Student@labs4summit.onmicrosoft.com

Go to Setup

You have just created a new Microsoft 365 tenant with a 30-day trial for 25 Office 365 E5 licenses. Note that some Microsoft cloud services within your new tenant such as the Microsoft 365 admin center, Power BI, Power Apps and Flow can be accessed immediately. Other Office 365 services such as SharePoint Online, OneDrive for Business and your Outlook mailbox will not be ready immediately and can take some time to provision.

- r) If you see the **Personalize your sign-in and email** setup page, click **Exit and continue later**.

Office 365 LS Setup

Step 1 Personalize sign-in Step 2 Add Users Step 3 Get apps Step 4 Connect domains

Personalize your sign-in and email

The domain you choose will become the part of your email address that comes after the @ symbol. You and your staff will use it to sign in and it's how customers will send you email.

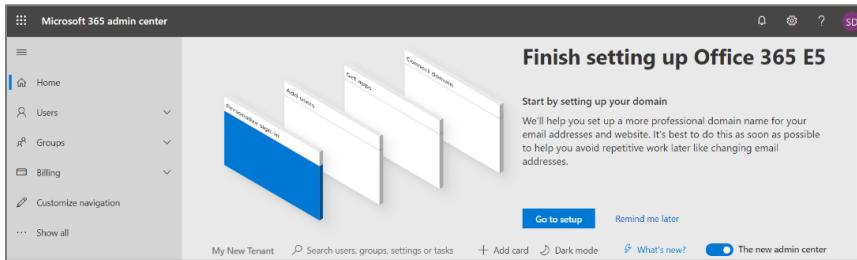
Connect a domain you already own:
Domain name you use. For example www.company.com

What's a domain and why do you need one?

Continue using getstart.onmicrosoft.com for email and signing in.
Why would you use this domain?

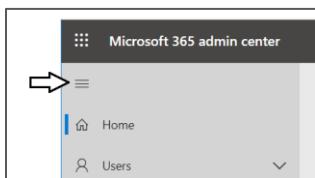
Next Exit and continue later

- s) You should now be located at the home page of the **Microsoft 365 admin center**.

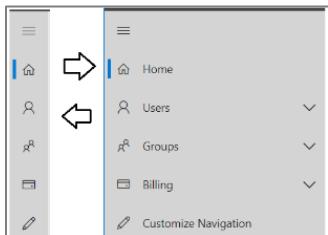


If you don't see the home page of the **Microsoft 365 admin center**, navigate to <https://admin.microsoft.com/Adminportal>.

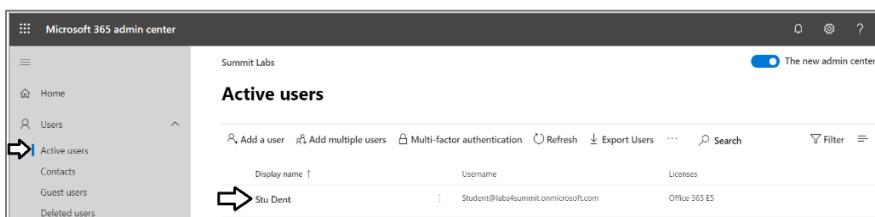
2. Inspect the set of active users in the current Azure AD tenant.
- Locate the top **Collapse navigation menu** with the hamburger icon just under the Microsoft 365 App Launcher menu.



- Toggle the **Collapse navigation menu** button to see how it collapses and expands the left navigation menu.

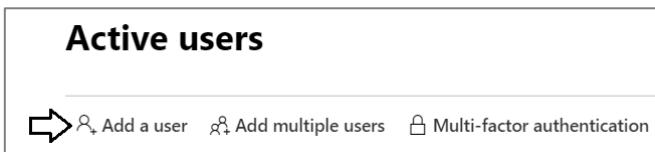


- Navigate to the **Active users** view where you should be able to verify that the user account you are currently logged in as is the only user account that exists in the current tenant.



Remember that your account is global tenant administrator. You have permissions to configure any settings throughout the tenant.

- Create a second Azure AD user account in your new Azure AD tenant.
- On the **Active Users** page, click the button **Add a user** button to create a new user account



- b) Fill in the **Set up the basics** form with information for a new user account. When creating this account, you can use any name you would like. These lab instructions will demonstrate this by creating a user account for a person named **James Bond** with a user name and email of **JamesB@labs4summit.onmicrosoft.com**.

The screenshot shows the 'Add user' wizard with the 'Set up the basics' step selected. On the left, there's a navigation pane with 'Basics' (selected), 'Product licenses', 'Optional settings', and 'Finish'. The main area has a title 'Set up the basics' and a sub-instruction: 'To get started, fill out some basic information about who you're adding as a user.' It contains four input fields: 'First name' (James), 'Last name' (Bond), 'Display name' (James Bond), and 'Username' (JamesB@labs4summit.onmicrosoft.com).

- c) Move below to the **Password settings** section.
d) Select the option for **Let me create the password**.
e) Enter a password of **pass@word1** into the textbox labeled **Password**.
f) Uncheck the checkbox for the **Require this user change their password when they first sign in** option.
g) Click **Next**.

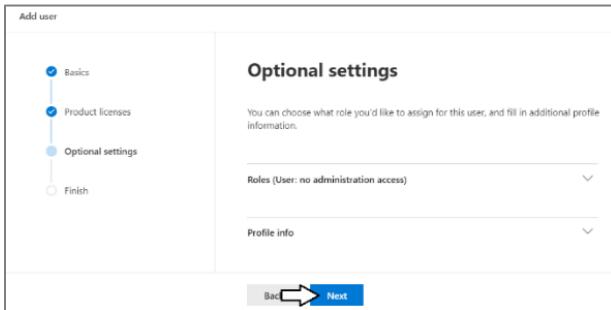
The screenshot shows the 'Password settings' step of the wizard. It includes two radio buttons: 'Auto-generate password' (unchecked) and 'Let me create the password' (checked). Below is a password input field containing '*****' with a 'Strong' rating. There are two checkboxes at the bottom: 'Require this user to change their password when they first sign in' (unchecked) and 'Send password in email upon completion' (unchecked). A large blue 'Next' button is at the bottom.

- h) In the **Product licenses** section, make sure the **Office 365 E5** license is set to **On**.

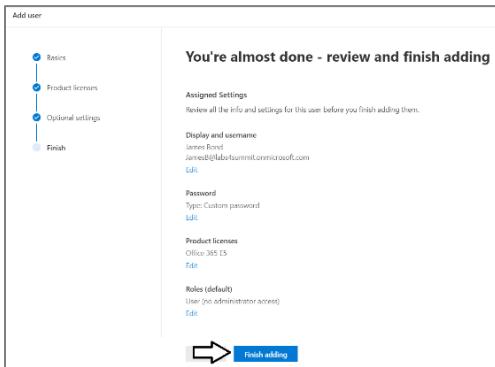
The screenshot shows the 'Assign product licenses' step. On the left, 'Product licenses' is selected in the navigation pane. The main area has a title 'Assign product licenses' and a sub-instruction: 'Assign the licenses you'd like this user to have.' It shows a dropdown for 'Select location' set to 'United States'. Under 'Licenses (1)', there's a radio button for 'Assign user a product license' (selected) and another for 'Create user without product license (not recommended)' (unchecked). A note below says: 'They may have limited or no access to Office 365 until you assign a product license.'

Note that the new account is usually assigned a trial license for **Office 365 E5** plan. However, it's a good practice to check and make sure the new user has been assigned a license for **Office 365 E5**.

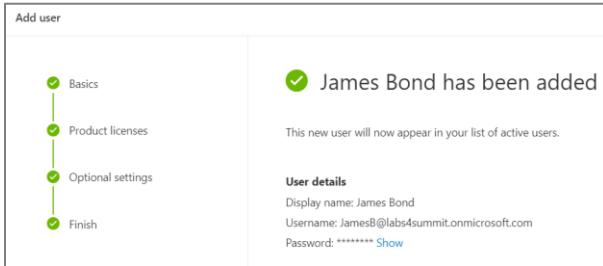
- i) Click the **Next** button down below.
- j) On the **Optional settings** view, click **Next**.



- k) On the **Finish** view, Click the **Finish adding** button at the bottom to create the new user account.



- l) You should see the **Finish** view with a message indicating that the new user account has been created.



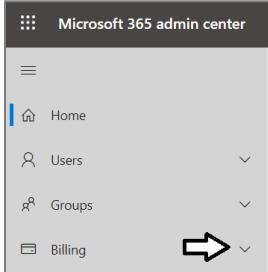
- m) Click the **Close** button at the bottom of the **Finish** view to close the **Add User** pane on the right.
- n) Verify that the new user account has been created and is displayed along with your primary Office 365 user account.

Summit Labs		
Active users		
Add a user Add multiple users Multi-factor authentication Refresh Export Users ...		
Display name ↑	Username	Licenses
James Bond	: JamesB@labs4summit.onmicrosoft.com	Office 365 E5
Stu Dent	: Student@labs4summit.onmicrosoft.com	Office 365 E5

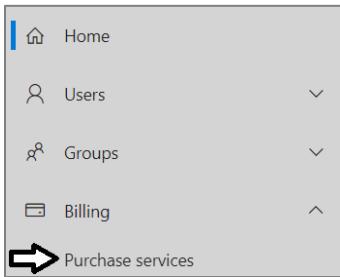
Now you have a secondary user account that does not have any administrative permissions. It's important that you test applications which use first-party embedding with standard user accounts to ensure your application doesn't require users with special permissions.

In the following steps, you will configure your new Microsoft 365 tenant by creating a new subscription based on Power Apps Plan 2. This will provide extra licensing for Power Apps platform which goes beyond what is provided by the Office 365 E5 licensing to give you the ability to fully administrate and develop on the Power Platform.

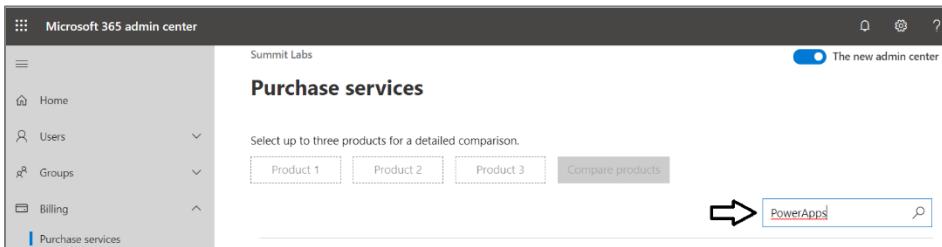
4. Navigate to the home page of the Microsoft 365 Admin center.
5. Create a new subscription for Power Apps Plan 2.
 - a) Click on **Billing** in the left navigation to expand the menu items underneath.



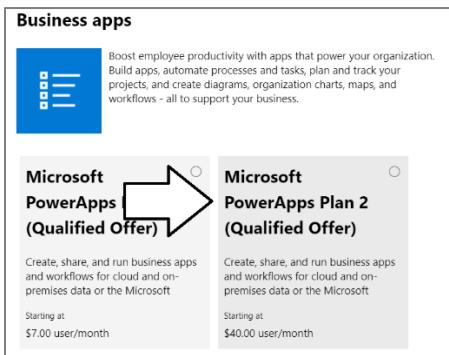
- b) Click on the **Purchase services** navigation link.



- c) Type "PowerApps" into the search box to search for PowerApps subscription plans.



- d) Find the subscription with the name **Microsoft Power Apps Plan 2**.and click on it to select it.



- e) Click the **Start free trial** button

The screenshot shows a promotional offer for Microsoft PowerApps Plan 2. It includes a brief description of the plan, pricing information starting at \$40.00 user/month with two subscription options (\$40.00 user/month or \$480.00 user/year), and a large blue "Buy" button with a white arrow pointing to a "Get free trial" button.

- f) When prompted to confirm your order, click **Try now**.

The screenshot shows a confirmation dialog box. It displays the plan name ("Microsoft PowerApps Plan 2 Trial | 3 month term"), the number of users (25 users), and two buttons: "Try now" (highlighted with a red arrow) and "Cancel".

- g) You should see an order receipt to confirm you have created the new trial subscription.

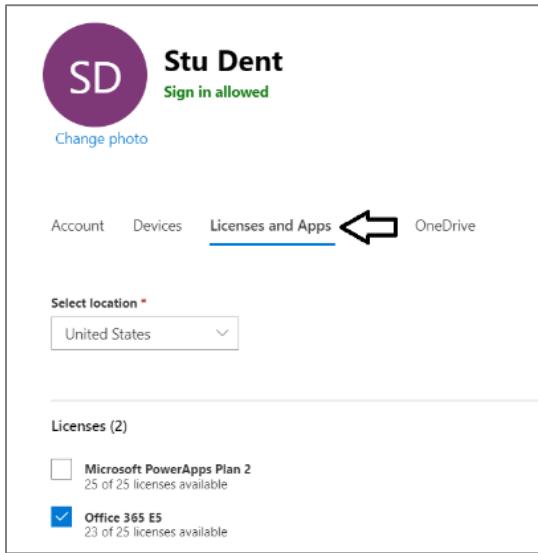
The screenshot shows an order receipt page. It includes a confirmation number (68be57e2-fa2b-4902-a055-706d9501f2b5), a note to assign licenses to users, and a "Continue" button. Below this, it shows the "Order details" section with the same plan information as the previous screen.

6. Configure your user account by assigning a Power Apps Plan 2 license.

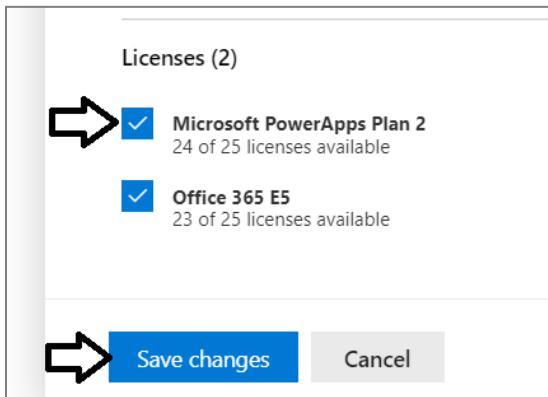
- a) Navigate back to the **Active Users** page in the Office 365 Admin center.
b) Click on your user account to edit it.

The screenshot shows the "Active users" page in the Office 365 Admin center. It lists users with columns for Display name, Username, and Licenses. A user named "Stu Dent" is highlighted with a red arrow and has a checkmark next to their name. The "Licenses" column shows "Office 365 E5" for both users listed.

- c) Click the **Licenses and Apps** link.



- d) Enable the **Microsoft Power Apps Plan 2** subscription and then click **Save changes** below.



After creating a new subscription for Power Apps Plan 2, it might take a minute before it shows up in the Product licenses dialog.

- e) You should be able to confirm your user account has been configured with a **Microsoft Power Apps Plan 2** subscription.

Active users		
Add a user Refresh Reset password Assign to group Manage product licenses ... 1 selected Search		
Display name ↑	Username	Licenses
James Bond	: JamesB@labs4summit.onmicrosoft.com	Office 365 E5
Stu Dent	: Student@labs4summit.onmicrosoft.com	Office 365 E5, Microsoft PowerApps Plan 2

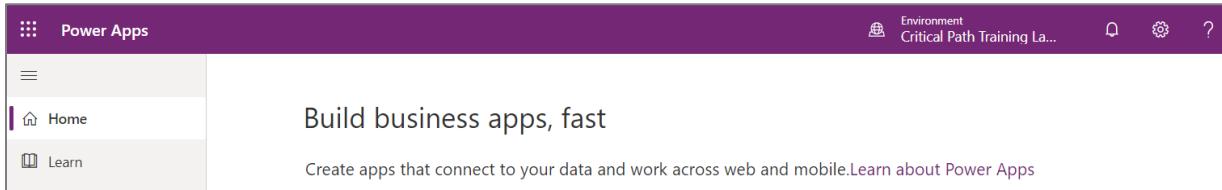
You will need the Microsoft Power Apps Plan 2 subscription to create a new Power Apps environment with a Common Data Service database. The Power Apps Plan 2 provides the licensing beyond the Office 365 license such as the ability to use premium connectors and custom connectors.

Exercise 3: Create a PowerApps Environment with a CDS Database

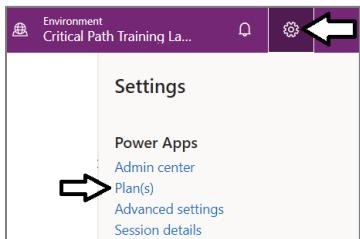
In this exercise, you will create a new PowerApps environment with a new CDS database. After that, you will begin the provisioning process to create a Power Apps portal.

1. Make sure you have a **PowerApps Plan 2** license.

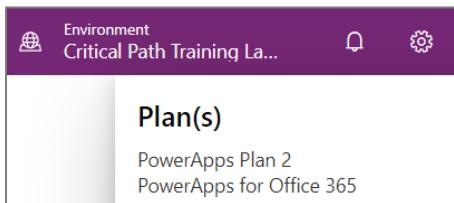
- a) In the browser, navigate the PowerApps Maker portal at <https://make.powerapps.com>.



- b) Drop down the menu with the gear icon in the upper right of the page and select the **Plan(s)** command.

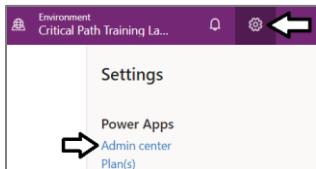


- c) You should be able to verify that you have Plan 2.



2. Create a new PowerApps environment with a Common data Service database.

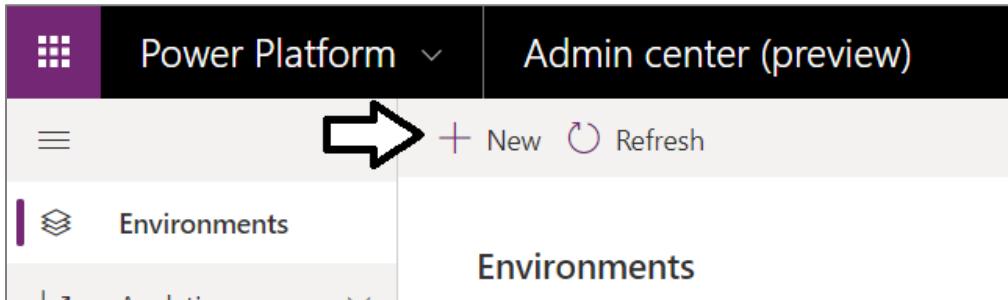
- a) Drop down the menu with the gear icon in the upper right of the page and select the **Admin center** command.



- b) In the **Power Platform Admin center**, click the **Environments** link in the left navigation.



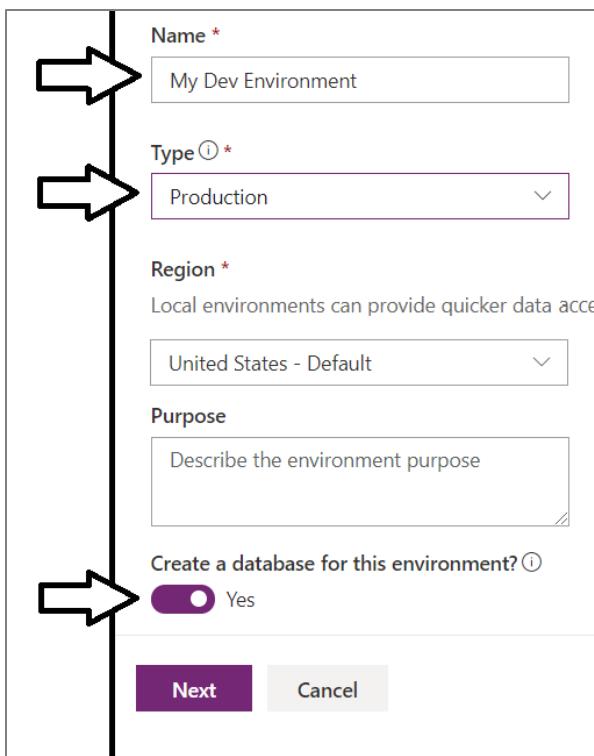
- c) Click the **+ New** button to create a new environment.



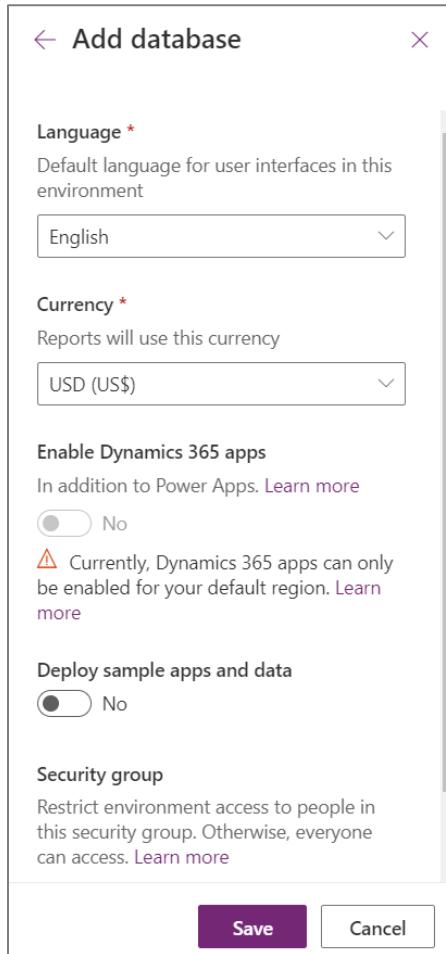
- d) In the **New environment** pane on the right, enter a Name of **My Dev Environment**.



- e) Leave the environment **Type** setting with its default value of **Production**.
f) Make sure you enable the option **Create a database for this environment**.
g) Once you have filled out the **New environment** pane, click **Next**.



- h) Leave all the default settings on the **Add database** pane as shown in the following screenshot and click **Save**.



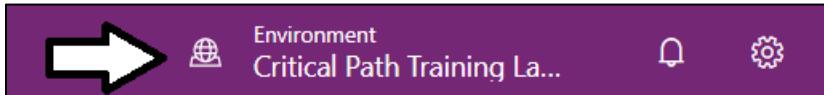
- i) You should now see the new environment in the tenant **Environments** list with a **State of PreparingInstance**.

Environments					
Environment	Type	State	Region	Created on ↓	
My Dev Environment	Production	PreparingInstance	United States	11/30/2019 4:02 PM	
Critical Path Training Labs (default)	...	Ready	United States	11/23/2019 10:47 PM	

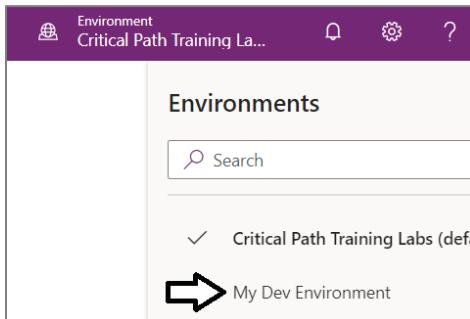
- j) Refresh the **Environments** list every 30 seconds or so until you see that the **State** has turned to **Ready**.

Environments					
Environment	Type	State	Region		
My Dev Environment	...	Production	United States	Ready	
Critical Path Training Labs (default)	...	Default	United States	Ready	

3. Move the Power Apps maker portal over to work with your new PowerApps environment.
 - a) Return to the PowerApps Maker portal at <https://make.powerapps.com>.
 - b) Refresh the page at <https://make.powerapps.com> by pressing {F5}.
 - c) Click the **Environment** menu at the top right of the page to drop down the environment selector menu.



- d) Switch over to the new environment you just created named **My Dev Environment**.



- e) You should be able to confirm that the current environment has been switched over to **My Dev Environment**.

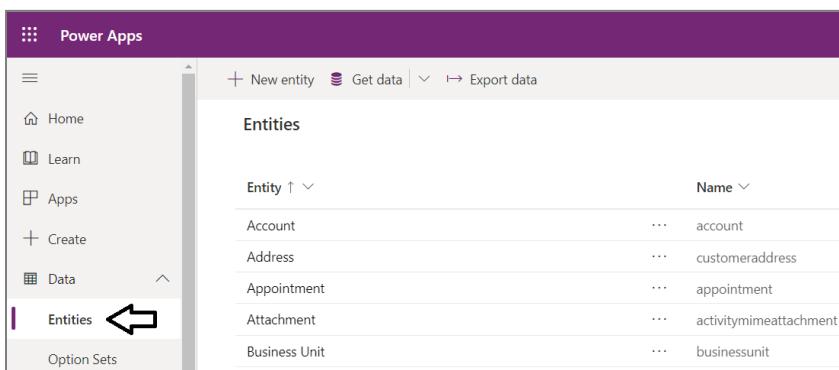


It is not yet time for you to begin work with a Power Apps portal. However, it takes a long time to create a Power Apps portal. Therefore, you are going to begin the process to create a Power Apps portal now so it will be ready later on in a future lab exercise.

4. Inspect the standard entities in the Common data Service.
 - a) Navigate to the PowerApps home page at <https://make.PowerApps.com>.
 - b) Make sure the current environment is the environment named **My Dev Environment** that you created in exercise 3.



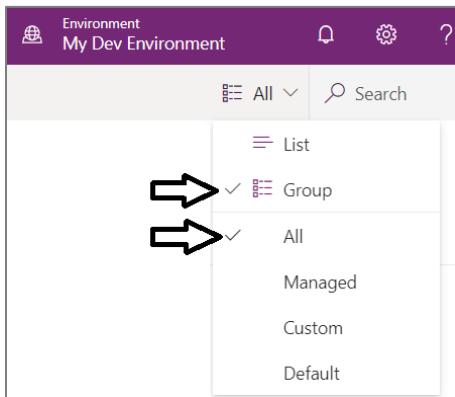
- c) Click on the **Entities** link in the **Data** section of the left navigation and examine the entities that are displayed.



- d) Locate the view menu for the **Entities** page in the upper, right corner which should initially be set to **Default**.



- e) Drop down the view menu and select **Group** and **All** to display all entities separated into groups.



- f) You should now see all the standard entities are organized in groups.

Entities		
Entity ↑ ↓		
> Configuration (1)		
> KB (1)		
> Managed (21)		
> Master (2)		
> Productivity (6)		
> Standard (51)		
> System (7)		

- g) Expand the **Master** group and you should see this group contains two important entities named **Account** and **Contact**.

Master (2)			
Account	...	Standard	Master
Contact	...	Standard	Master

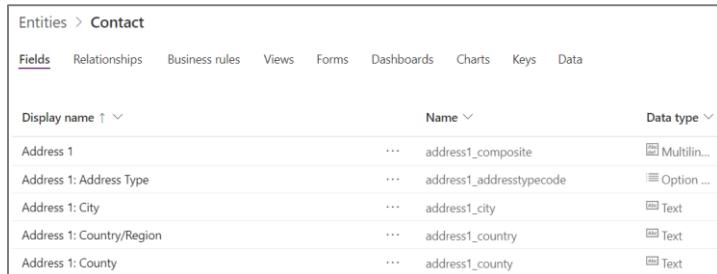
5. Take a closer look at the **Contact** entity.

- a) Click on the link for the **Contact** entity.

Master (2)			
Account	...	Standard	Master
Contact	...	Standard	Master



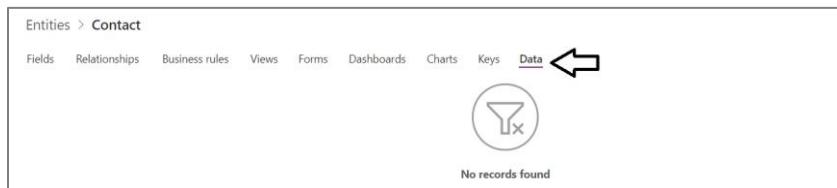
- b) Examine the Fields list to see what fields are included with the **Contact** entity.



The screenshot shows the 'Contact' entity's fields list. The columns are 'Display name', 'Name', and 'Data type'. The fields listed are:

Display name	Name	Data type
Address 1	address1_composite	Multiline...
Address 1: Address Type	address1_addresstypecode	Option ...
Address 1: City	address1_city	Text
Address 1: Country/Region	address1_country	Text
Address 1: County	address1_county	Text

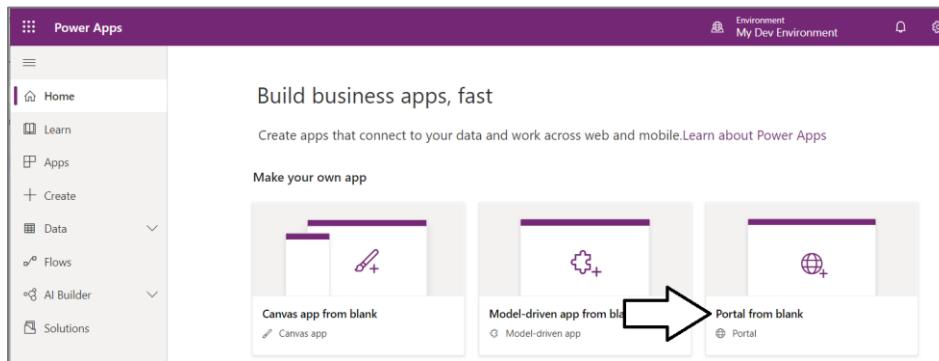
- c) Click the **Data** tab to verify that the **Contact** entity currently contains no data.



Exercise 4: Provision a New PowerApps Portal

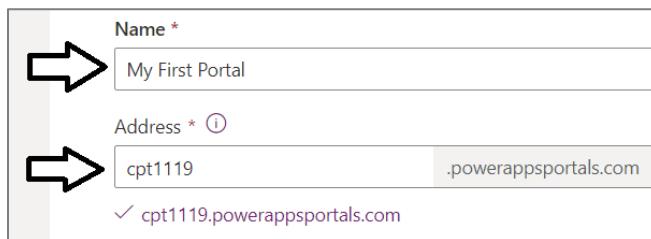
In this exercise, you will create a new PowerApps portal..

1. Create a PowerApps portal in your new PowerApps environment.
- a) Click on the **Portal from blank (preview)** tile to create a new PowerApps portal.



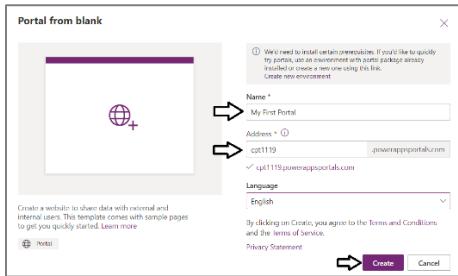
You can only create one Power Apps portal per environment. If you want to create multiple portals, you will have to create a separate Power Apps environment for each one.

- b) In the **Portal from blank (preview)** dialog, enter a portal tile such as **My Portal Lab**.
- c) Enter a value for the portal **Address**. You might need to try several times if you pick an address that is already taken.

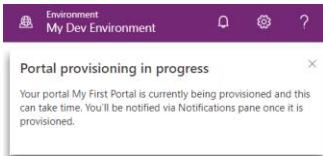


The screenshot shows the 'Portal from blank' dialog. The 'Name' field is set to 'My First Portal' and the 'Address' field is set to 'cpt1119.powerappspportals.com'.

- d) Once you have entered a **Name** and **Address** for your portal, click **Create** to begin the portal provisioning process.



- e) You should now see a notification indicating that portal provisioning is now in process.



2. Inspect the apps in **My Dev Environment**.

- Click the **Apps** link in the left navigation to see the list of apps for **My Dev Environment**.
- You should see the portal app in a greyed-out site which indicates that the portal is being provisioned.
- Provisioning a Power Apps portal will also eventually create another model-driven app named **Portal Management**.

Apps in My Dev Environment				
Name	Modified	Owner	Type	
My First Portal	...		Portal	
Portal Management	7 min ago	Ted Pattison	Model-driven	

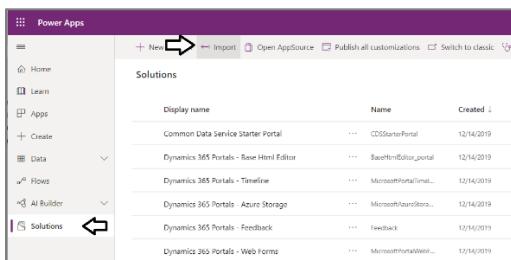
It will take quite a bit of time before your portal is ready to use and edit. The entire provisioning process for a new Power Apps portal can take from 30 to 60 minutes or even longer. You will now create a canvas app and model-driven app that are not related to this portal. However, you have started the Power Apps portal provisioning process so the portal will be later when it's time to work on it.

Exercise 5: Import the Product Management Solution

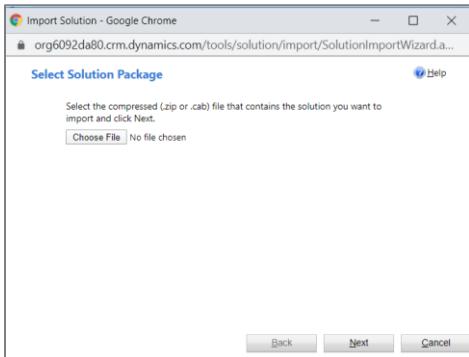
In this exercise, you will import the **Product Management** solution as an unmanaged solution. The **Product Management** solution contains a custom **Product** entity and a model-driven app named **Product Management**. which will make it possible to create an mange product data which will be displayed in your Power Apps portal.

1. Import the **Product Management** solution into **My Dev Environment**.

- Make sure the current environment is the environment named **My Dev Environment** that you created in exercise 3.
- Click the **Solutions** link in the left navigation and then click the **Import** button on the toolbar.

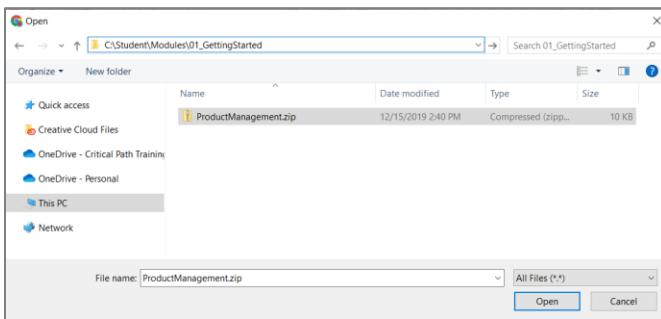


- c) You should now see the **Select Solution Package** dialog. Click the **Choose File** button.

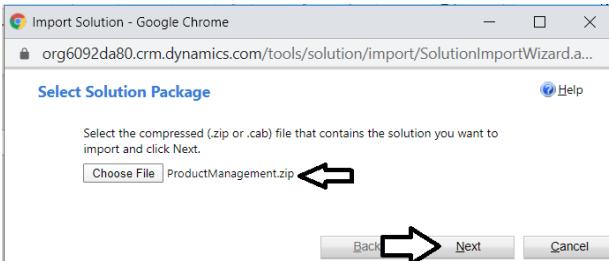


- d) Select the file from inside your **Student** folder at the following path and then click **Open**.

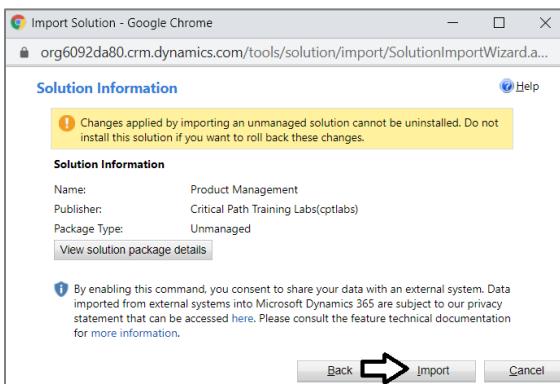
C:\Student\Modules\01_GettingStarted\ProductManagement.zip



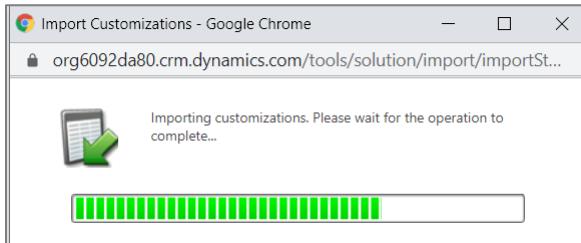
- e) Once the file name of **ProductManagement.zip** appears next to the **Choose File** button, click **Next**.



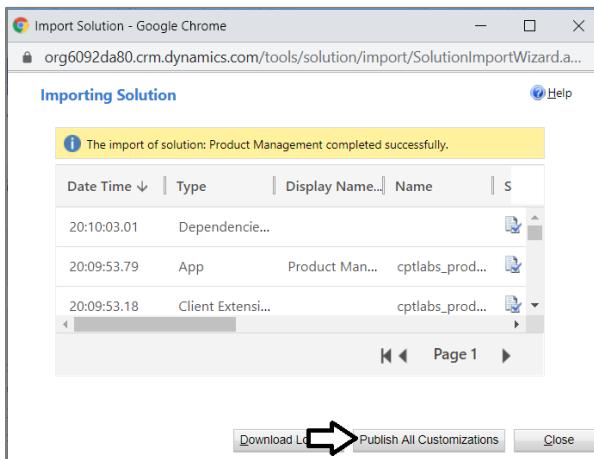
- f) Review the information on the **Solution Information** dialog and then click **Import** to import the solution.



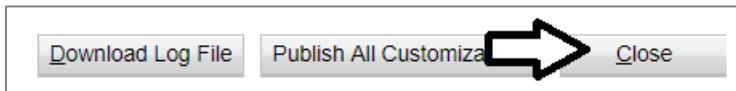
- g) Wait while the solution package is imported.



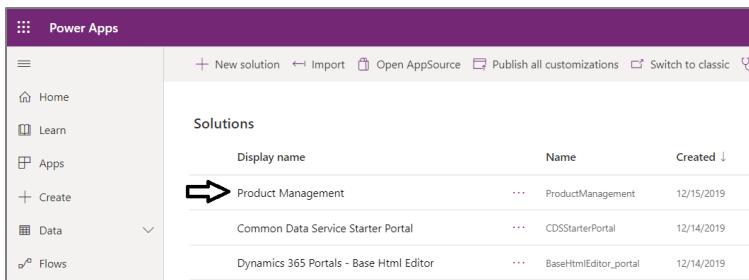
- h) After the solution has been imported, click **Publish All Customizations**.



- i) After you have published all customization, click **Close** to close the **Importing Solution** dialog.



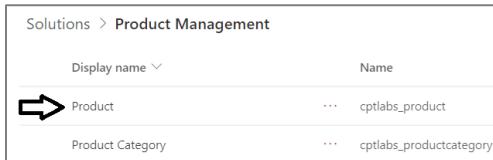
- j) After import the **Product Management** solution, locate it in the **Solutions** list for your environment and click on it.



- k) You should be able to see that the **Product Management** solution contains the **Product** entity and three other components.

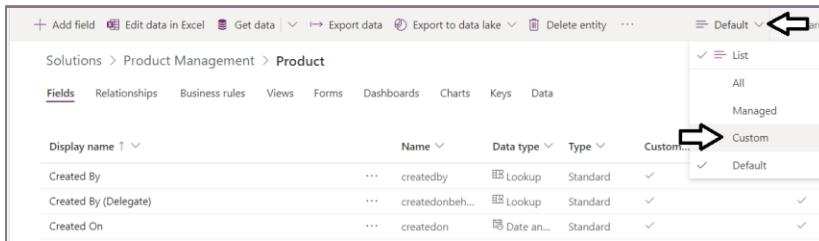
Solutions > Product Management			
Display name	Name	Type	Managed externally?
Product	cplabs_product	Entity	✗
Product Category	cplabs_productcategory	Option Set	✗
Product Manager	cplabs_ProductManager	Client Extension	✗
Product Manager	cplabs_ProductManager	Model-driven App	✗

- i) Double click on the **Product** entity to see its definition.



Solutions > Product Management	
Display name	Name
Product	... cptlabs_product
Product Category	... cptlabs_productcategory

- m) You should see the **Fields** for the **Product** entity.
 n) Drop down the filter menu on the right and set the filter to **Custom** to only display fields that are custom fields.

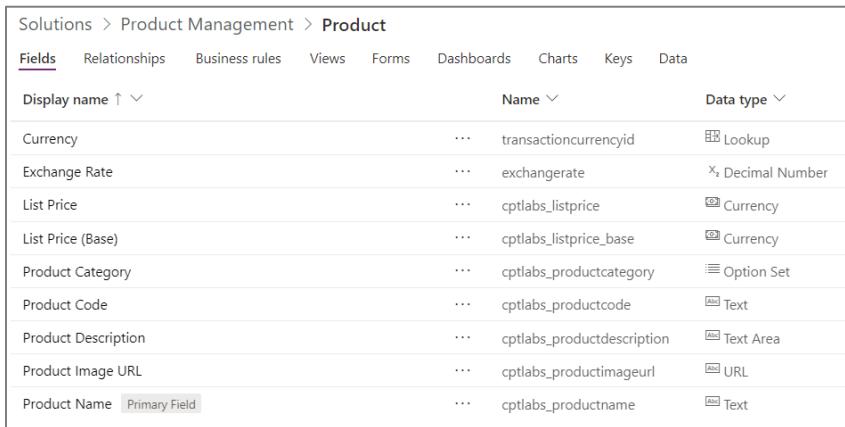


Solutions > Product Management > Product

Fields Relationships Business rules Views Forms Dashboards Charts Keys Data

Display name	Name	Data type	Type	Custom
Created By	... createdby	Lookup	Standard	✓
Created By (Delegate)	... createdonbeh...	Lookup	Standard	✓
Created On	... createdon	Date an...	Standard	✓

- o) You should now see the custom fields that make up the **Product** entity.

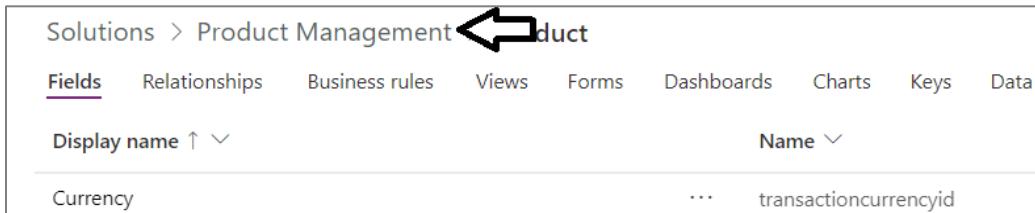


Solutions > Product Management > Product

Fields Relationships Business rules Views Forms Dashboards Charts Keys Data

Display name	Name	Data type
Currency	... transactioncurrencyid	Lookup
Exchange Rate	... exchangerate	Decimal Number
List Price	... cptlabs_listprice	Currency
List Price (Base)	... cptlabs_listprice_base	Currency
Product Category	... cptlabs_productcategory	Option Set
Product Code	... cptlabs_productcode	Text
Product Description	... cptlabs_productdescription	Text Area
Product Image URL	... cptlabs_productimageurl	URL
Product Name	... cptlabs_productname	Text

- p) On the breadcrumb menu, select **Product Management** to move back to the **Product Management** solution.



Solutions > Product Management

Fields Relationships Business rules Views Forms Dashboards Charts Keys Data

Display name	Name
Currency	... transactioncurrencyid

- q) Click on the **Product Category** option set to see the possible values for the **Product Category** column.



Solutions > Product Management

Display name	Name	Type
Product	... cptlabs_product	Entity
Product Category	... cptlabs_productcategory	Option Set

- r) You should see the **Product Category** option set values are **Action Figures**, **Arts and Crafts** and **Remote Control**.

Display name	Name	Type
Product	cptlabs_product	Entry
Product Category	cptlabs_productcategory	Option Set
Product Manager	cptlabs_ProductManager	Client Extension
Product Manager	cptlabs_ProductManager	Model-driven

2. Create a dataflow named **Import Products** to import product data into the Product entity recordset.

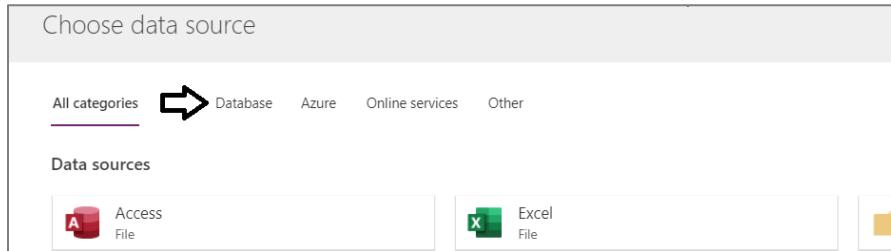
- a) Expand the **Data** node in the left navigation.

- b) Inside the **Data** node, click **Dataflows**.

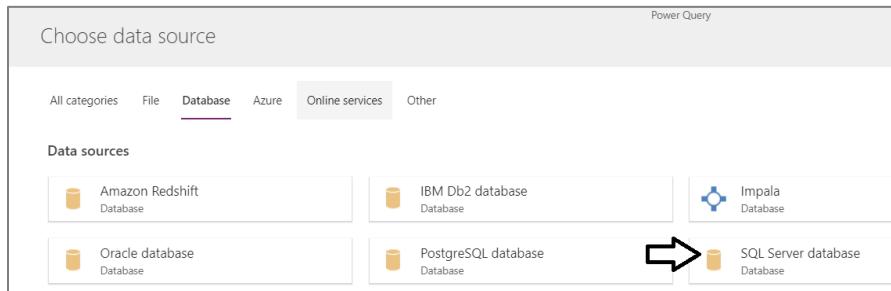
- c) Click **+ New Dataflow**.

- d) In the **New Dataflow** dialog, enter a name of **Import Products** and then click **Create**.

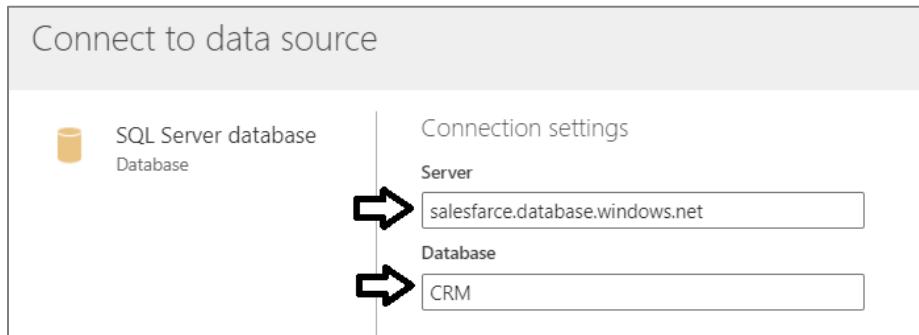
- e) On the **Choose data source** page, click the **Database** tab.



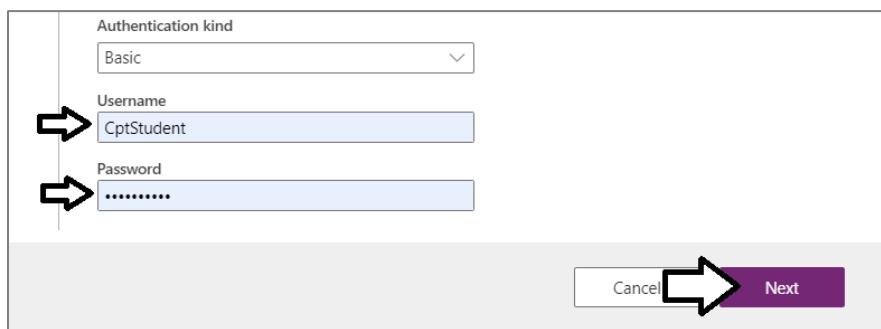
- f) Click on **SQL Server database**.



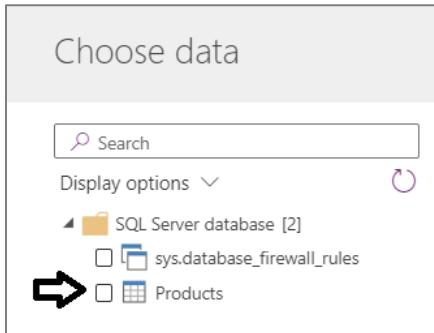
- g) Enter **salesfarcie.database.windows.net** for the **Server** setting.
h) Enter **CRM** for the **Database** setting.



- i) Leave the **Authentication kind** setting with the default value of **Basic**.
j) Enter a **Username** of **CptStudent**.
k) Enter a **Password** of **pass@word1**.
l) Click **Next**.



- m) When prompted to **Choose data**, select the **Products** table.



- n) Click the **Transform data** button in the lower right corner of the screen.

- o) Click **Next**.

- p) On the **Map entities** screen, select **Load to existing entity** and drop down the **Destination entity** menu.

- q) Select a **Destination entity** setting of **cptlabs_Product**.

Map entities

Queries

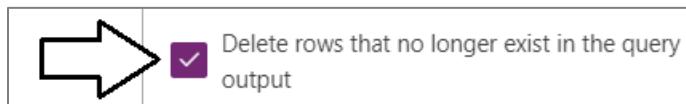
Load settings

cptlabs_Product

Field mapping

Source column	Destination field
(none)	cptlabs_ListPrice
(none)	cptlabs_Listprice_Base
(none)	cptlabs_ProductCategory
(none)	cptlabs_ProductCode
(none)	cptlabs_ProductDescription

- r) Select the setting **Delete rows that no longer exist in the query output**.



- s) In the **Field mapping** pane, map all fields as shown in the following screenshot and then click **Next**.

Field mapping

Source column	Destination field
ListPrice	cptlabs_ListPrice
(none)	cptlabs_Listprice_Base
ProductCategory	cptlabs_ProductCategory
ProductCode	cptlabs_ProductCode
Description	cptlabs_ProductDescription
ProductImageUrl	cptlabs_ProductImageURL
ProductName	cptlabs_ProductName
(none)	EntityImage
(none)	ExchangeRate

Next

- t) In the **Refresh setting** dialog, select **Refresh manually** and then click **Create**.

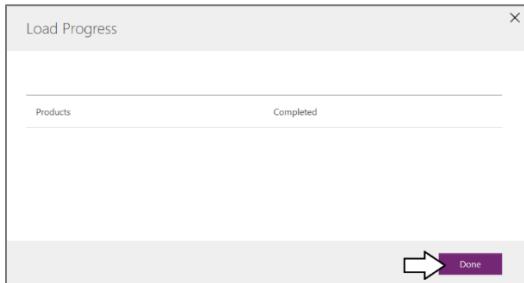
Power Query

Refresh settings

Refresh manually

Create

- u) You should see a Load Progress dialog that indicates the load has completed.



- v) You should now see the **Import Products** dataflow in the **Dataflows** list.

A screenshot of a 'Dataflows' list. It shows one entry: 'Import Products' which is a 'Standard' type dataflow. The 'Last Refresh' and 'Next Refresh' columns both show 'N/A'. There is a '+' icon at the top left for creating new dataflows.

- w) Note that you can drop down the ellipse menu and run the **Refresh** command to run the dataflow and refresh the data.



3. Run the model-driven app named Product Manager to view and enter product data.

- a) Click the **Apps** link in the left navigation.
b) Click **Product Manager** to launch this model-driven app.

A screenshot of the Power Apps navigation bar. On the left, there is a vertical sidebar with links: Home, Learn, Apps (which is highlighted with a blue arrow), Create, Data, Flows, and AI Builder. The main area shows 'Apps in Scratch Pad' with three entries: 'Product Manager', 'Portal Management', and 'Wingtip Toys'. Each entry has a small thumbnail icon, a name, a modified date, and an owner name.

- c) You should now see a view which displays all products.

A screenshot of a 'Product Manager' view. The top navigation bar shows 'PowerApps', 'Product Manager', 'Product Management', and 'Products'. The main area is titled 'Active Products' and lists five products in a table format:

Product Code	Product Name	Category
WP0001	Batman Action Figure	Action Figures
WP0002	Captain America Action Figure	Action Figures
WP0003	GI Joe Action Figure	Action Figures
WP0004	Green Hulk Action Figure	Action Figures

- d) Double click on the top product named Batman Action Figure to display the form for this record.

Active Products	
Product Code	Product Name
WP0001	Batman Action Figure
WP0002	Captain America Action Figure

- e) You can now see the values for each field in this **Product** record

Batman Action Figure
Product

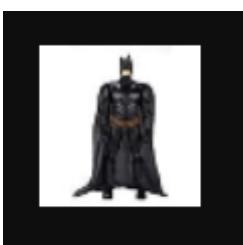
General Related

Product Name	* Batman Action Figure
Product Category	Action Figures
List Price	\$14.950
Product Description	A super hero who sometimes plays the role of a dark knight.
Product Image URL	http://classresources.blob.core.windows.net/images/WP0001.jpg
Owner	* Stu Dent

- f) Click the globe icon to the right of the **Product Image URL** to display that URL in browser tab.

Product Image URL <http://classresources.blob.core.windows.net/images/WP0001.jpg> 

- g) You should see the image for this product in a new browser tab. Close this browser tab once you have seen the picture.



4. Create a new Product record.

- a) Click the **+ New** button to display the **New Product** form.

PowerApps > Product Manager > Product Management > Products > Batman Action Figure

 + New  Deactivate  Delete  Refresh  Assign

Home Recent

Batman Action Figure
Product

- b) The **New Product** form should match the following screenshot.

The screenshot shows the 'New Product' form with the 'General' tab selected. The fields are as follows:

Product Code	WP0032
Product Name	Personal Commuter Chopper
Product Category	Remote Control
List Price	\$99.95
Product Description	A partially-tested remote control device that can actually carry real people.
Product Image URL	http://classresources.blob.core.windows.net/images/WP0032.jpg
Owner	Stu Dent

- c) Fill in the **New Product** form with the following data.

- i) **Product Code:** WP0032
- ii) **Product Name:** Personal Commuter Chopper
- iii) **Product Category:** Remote Control
- iv) **List Price:** \$99.95
- v) **Product Description:** A partially-tested remote control device that can actually carry real people.
- vi) **Product Image URL:** <http://classresources.blob.core.windows.net/images/WP0032.jpg>

- d) When your form matches the following screenshot, click the **Save** button to save your changes.

The screenshot shows the 'New Product' form with the 'General' tab selected, matching the requirements from part c). The 'Save' button at the bottom right is highlighted.

- e) Return to the Active Products list and verify you can see the new record.

The screenshot shows the 'Active Products' list in the Power Apps portal. The new product record is visible at the bottom of the list:

Product Code	Product Name	Product Category	List Price
WP0028	Red Baron von Richthofen	Remote Control	\$32.950
WP0029	Flying Squirrel	Remote Control	\$69.950
WP0030	FOX News Chopper	Remote Control	\$29.950
WP0031	Seal Team 6 Helicopter	Remote Control	\$59.950
WP0032	Personal Commuter Chopper	Remote Control	\$99.950

Exercise 6: Add Content to the Portal using Power Apps Portal Studio

In this exercise, you will use **Portal App Portal Studio** to add and modify content in the portal.

1. Open your Power Apps portal in Power Apps Portal Studio.
 - a) Click the **Apps** link in the left navigation to see the list of apps for **My Dev Environment**.
 - b) Drop down the ellipse menu for your portal.

Name	Modified	Owner	Type
Product Manager	1 min ago	Ted Pattison	Model-driven
Portal Management	1 h ago	Ted Pattison	Model-driven
My First Portal	31 min ago	Ted Pattison	Portal

- c) Select the **Edit** command on the portal ellipse menu.

My First Portal ... 33 min ago

Edit Browse

- d) The portal should open up in Power Apps Portal Studio and display the portal **Home** page in edit mode.

Power Apps | Portal Environment My Dev Environment

Component Webpage

Display

Name: Home

Partial URL: /

Formatting

Template: Default studio template

2. Replace the logo image in the portal site header

- a) Using the mouse, select the **Contoso Ltd** logo image in the page header.

New page Delete

- b) With the logo image selected, inspect the image file name **Logo.png** on the right in the **Component Image** properties pane.

Power Apps | Portal Environment My Dev Environment

Component Image

Basic

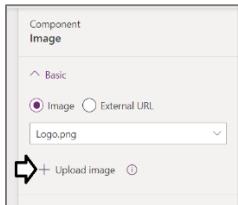
Image (radio button selected)

External URL

Logo.png

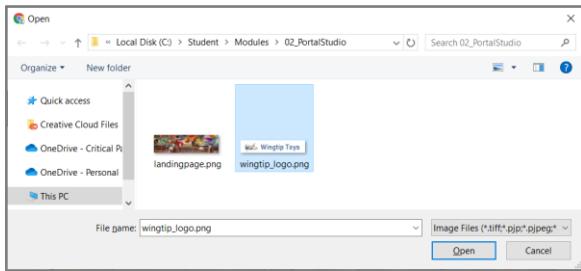
Upload image

- c) Click the **Upload image** link in the **Component Image** properties pane.

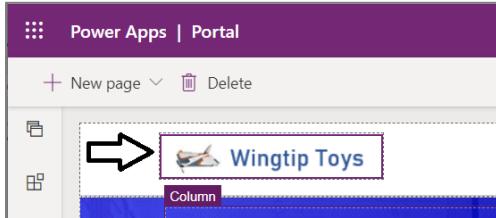


- d) Upload the image file named **wingtip_logo.png** from inside the **Student** folder at the following path.

C:\student\Modules\02_PortalStudio\wingtip_logo.png



- e) You should see that the logo image in the page header has been updated with the **Wingtip Toys** logo.



3. Modify the text on the portal home page.

- a) Select the **Build your website!** text on the Home page.



- b) Replace the text the **Build your website!** text with something different such as **Awaken Your Inner Child**.



- c) Delete the second line of text underneath the text you updated in the previous step.



- d) Select the text you added and then drop down the font size editor control.



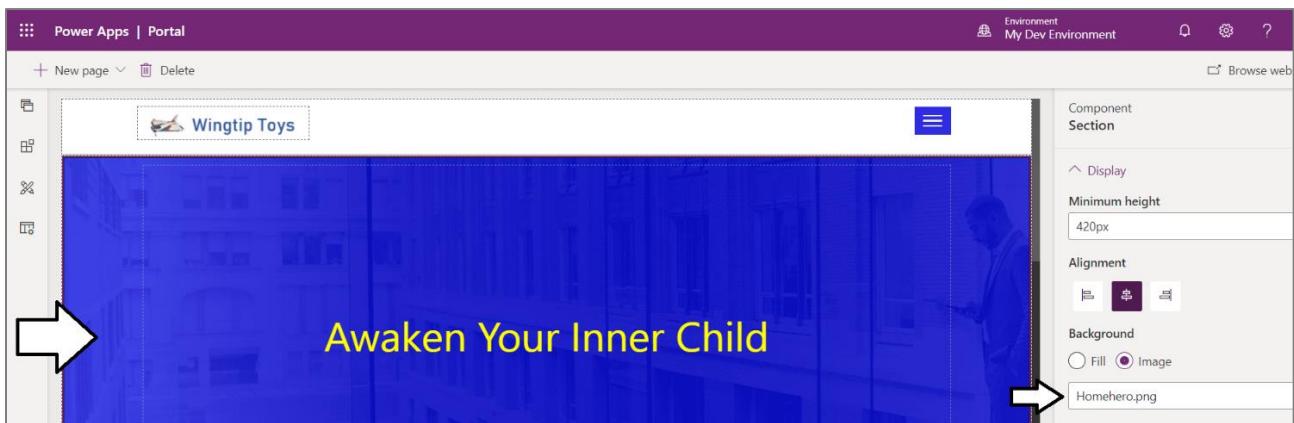
- e) Set the font size to **48**.



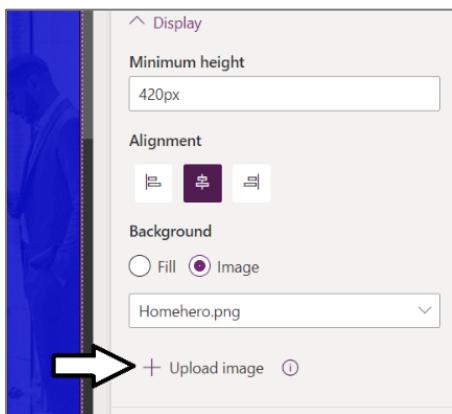
- f) Change the **Font color** to #ffff00 which is the hex code for the color yellow.



- g) On the left, click the image with blue background and inspect the image file name in the **Component Section** properties pane.

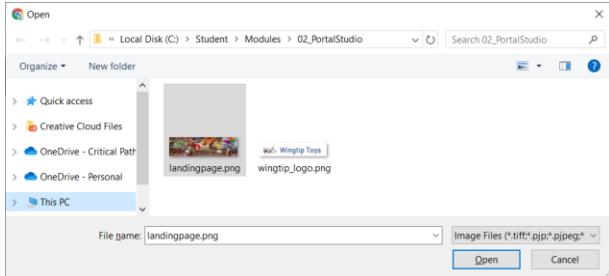


- h) Click the **Upload image** link to replace **Homehero.png**.

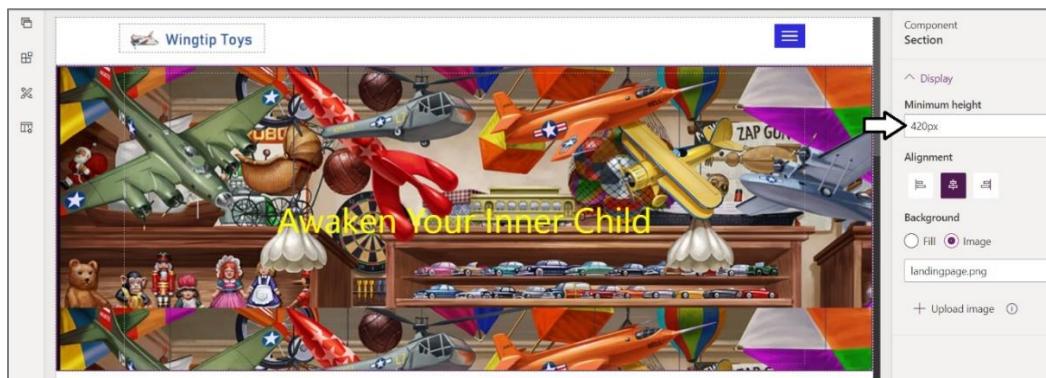


- i) Select the image file named **landingpage.png** from inside the **Student** folder at the following location.

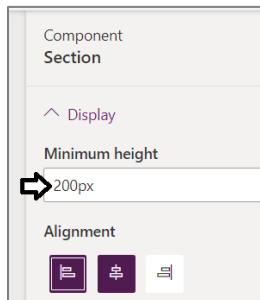
C:\Student\Modules\02_PortalStudio\landingpage.png



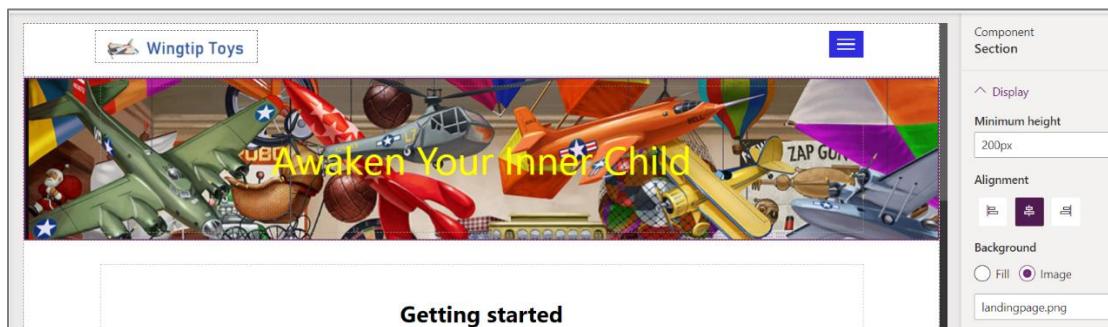
- j) You should now see the image background shown in the following screenshot.
k) You should be able to see in the **Minimum height** property of **420px** displayed in the **Component Section** properties pane.



- l) Update the **Minimum height** property for the section to **200px**



- m) The section with the background image should now be half the height as it was before.

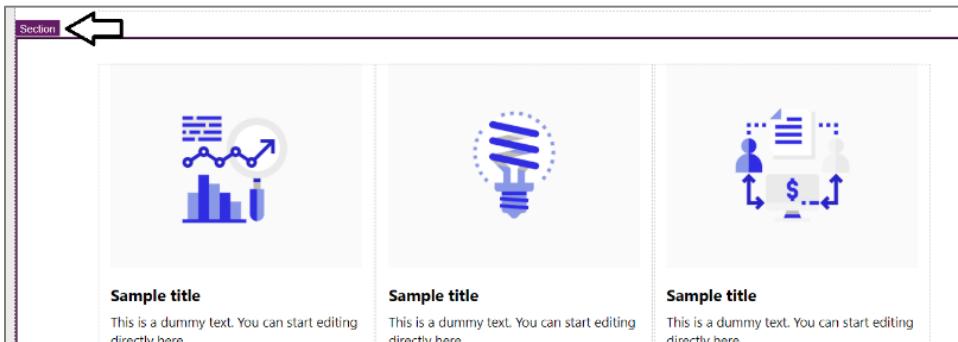


4. Modify the remaining Home page content.

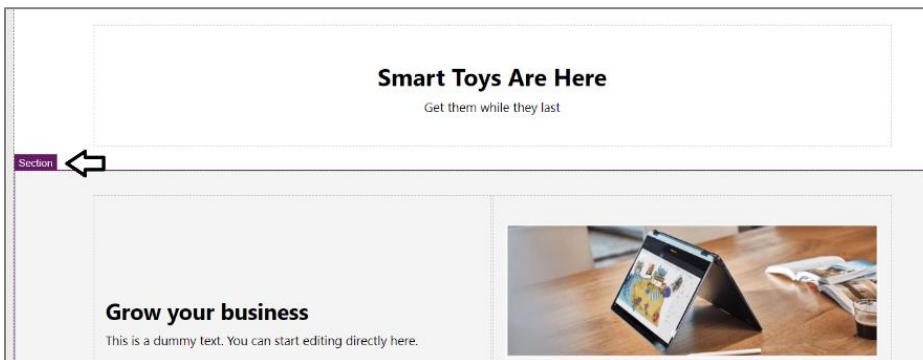
- a) Move down to the next section and change the **Getting started** text the text shown in the following screenshot.



- b) Move down the Home page. Select and delete the next section with the three columns.



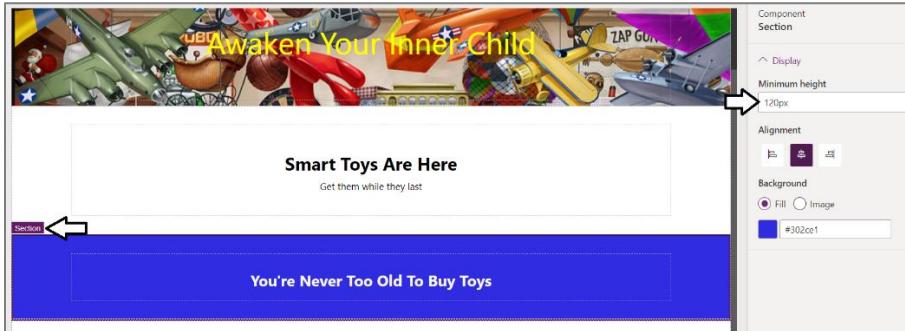
- c) Move down the Home page and delete the next section with the **Grow your business** text as well.



- d) Move down in the Home page to the blue section and modify the text as shown in the following screenshot.



- e) Set the **Minimum height** of the blue section to **120px**.



5. Launch the portal to test what your changes look like to a website visitor.

- a) Click the **Browse website** button to clear the cache and launch the portal in a new browser tab.



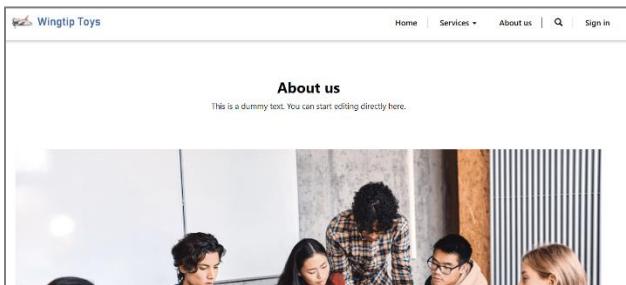
- b) The portal should launch and display the **Home** page in a new browser tab.



- c) Click the **About us** link on the top navigation menu to navigate to the **About us** page.



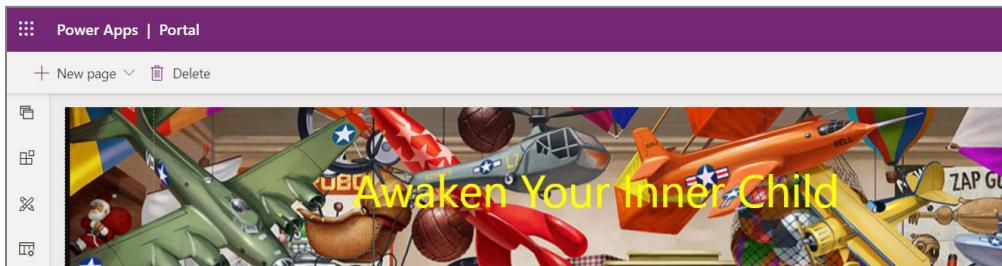
- d) The portal should display the **About us** page as shown in the following screenshot.



- e) Close the current browser tab and move back to the tab with Power Apps Portal Studio.

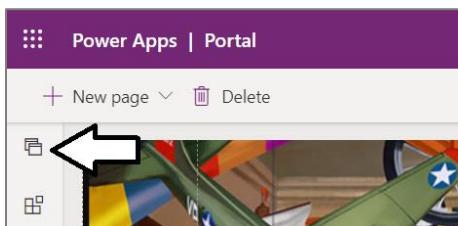


- f) You should now be back at the **Home** page of the portal in Power Apps Portal Studio.

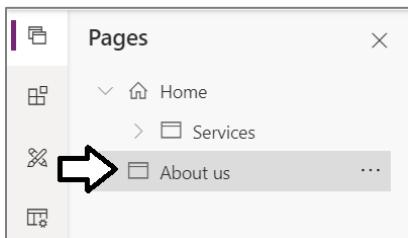


6. Modify the content in the **About us** page.

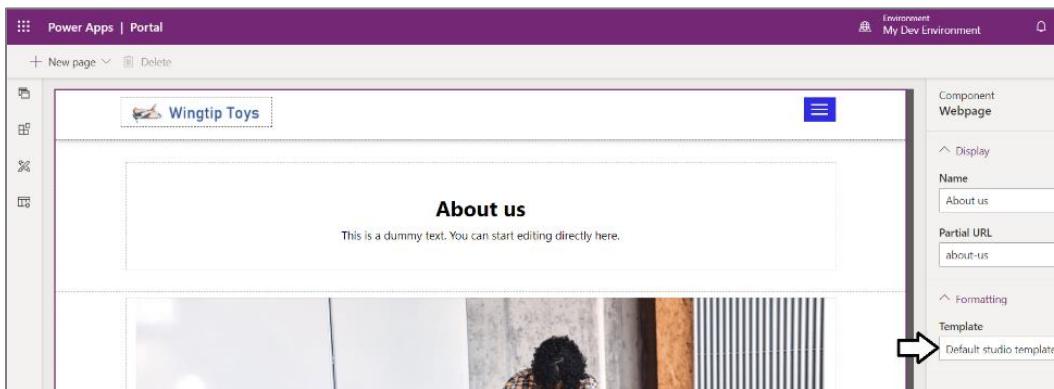
- a) Click the **Pages** icon button to expand the **Pages** flyout menu.



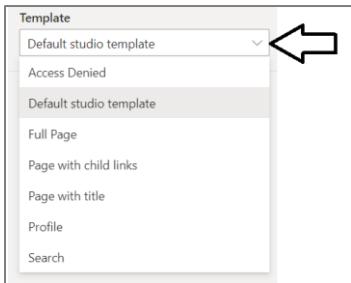
- b) Click the **About us** link to navigate to the **About us** page.



- c) You should now see the **About us** page which is configured to use the page template named **Default studio template**.



7. Change the page template for the **About us** page.
- Drop down to **Template** menu to see the available set of templates.



- Select the **Full Page** template and then wait a few seconds while the page refreshes and renders using the new template.

8. Modify the text on the **About us** page.
- Modify the text in the top section to match the following screenshot.



- Modify the **Minimum height** of this section to **64px**.

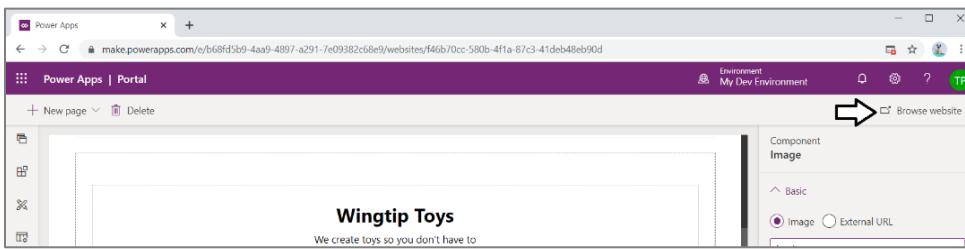
- Select the image and inspect the name of the image (**AboutUs.png**) in the **Component Image** properties pane.

- d) Update the image to use the image file uploaded in an earlier step named **landingpage.png**.

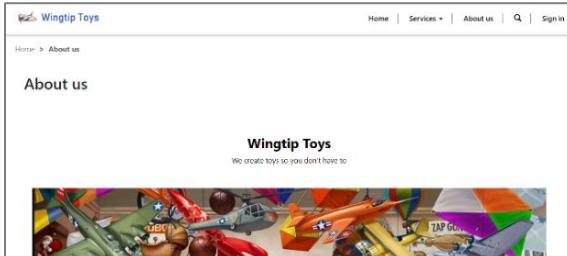


9. Browse the website to test the changes you have made to the **About us** page.

- a) Click the **Browse website** button to clear the cache and launch the portal in a new browser tab.



- b) Your **About us** page should match the following screenshot.



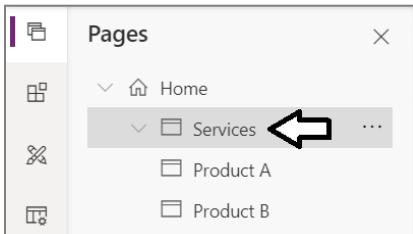
- c) Drop down the **Services** menu to see the menu commands inside.



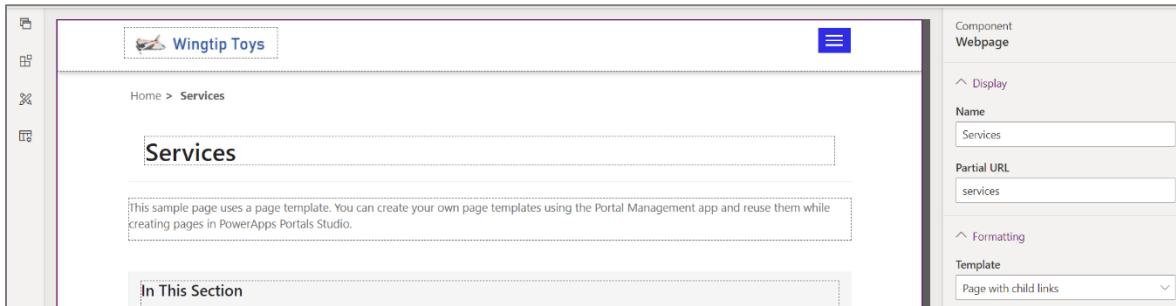
- d) Close the current browser tab and move back to the browser tab with the portal in Power Apps Portal Studio.

10. Modify the **Services** page.

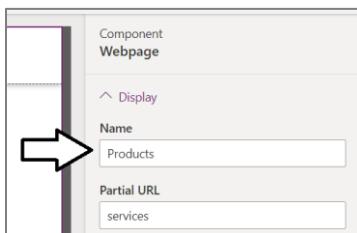
- a) Click the **Pages** icon button to expand the **Pages** flyout menu.
b) Click the **Services** link to navigate to the **Services** page.



- c) You should now see the **Services** page in Power Apps Portal Studio as shown in the following screenshot.



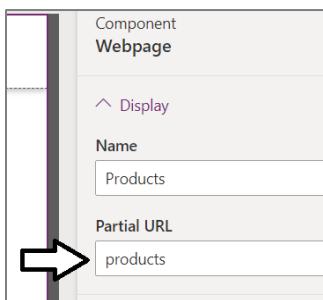
- d) In the **Components Webpage** properties pane, update the **Name** property to **Products**. and press Tab to exit the textbox.



- e) Once the change to the **Name** property has been saved, the page should display the new name of **Products**.



- f) Update the **Partial URL** property to products and press Tab to exit the textbox.

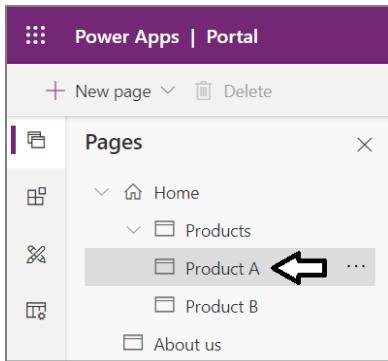


- g) Update the two section of text on the **Products** page as shown in the following screenshot.

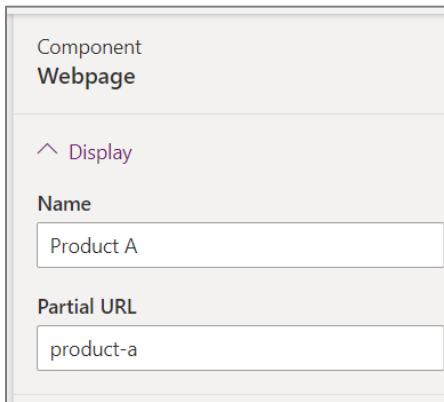


11. Update the child pages of the **Products** page.

- a) Navigate to the page named **Product A**.



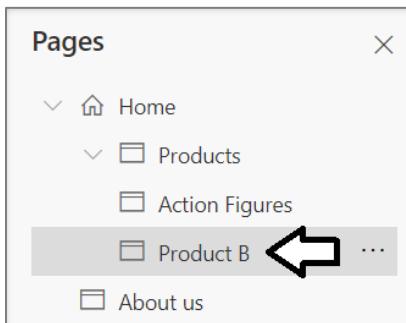
- b) Inspect the Component Webpage properties pane to see the page **Name** and **Partial URL**.



- c) Update the **Name** to **Action Figures** and the **Partial URL** to **action-figures**.



- d) Navigate to the page named **Product B**.

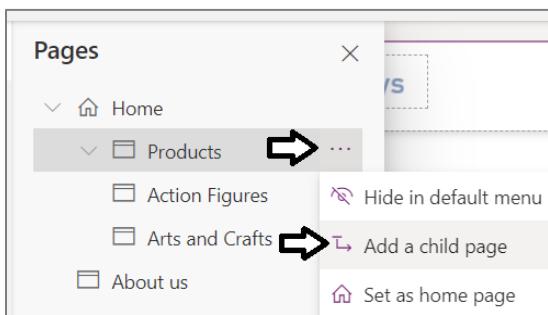


- e) Update the webpage **Name** to **Arts and Crafts**
- f) Update the **Partial URL** to **arts-and-crafts**.

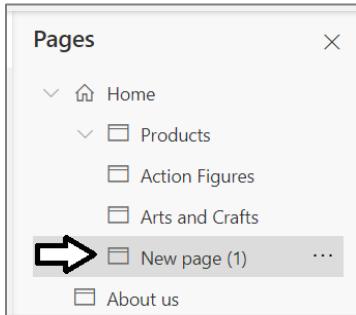


12. Add a new child page underneath the **Products** page.

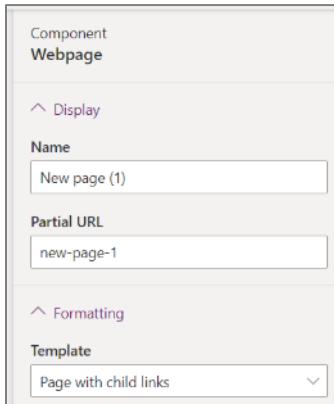
- a) From the **Pages flyout** menu, select the **Add a child page** command using the ellipse menu of the **Products** page.



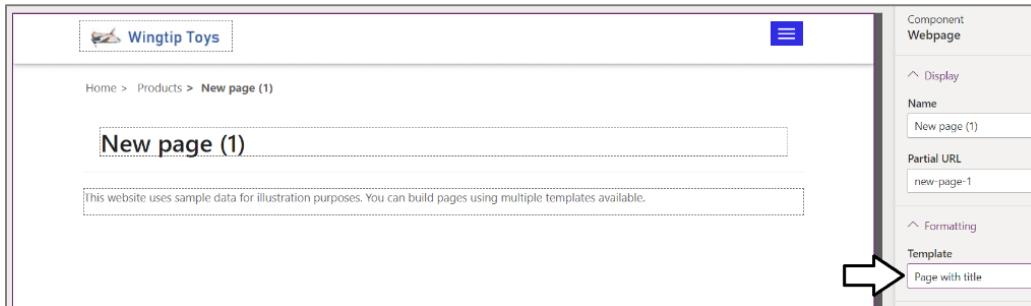
- b) You should now see a new page with a default name of **New page (1)**.



- c) The **Component Webpage** properties pane should initially appear with the settings shown in the following screenshot.



- d) Change the **Template** setting for the new page to the template named **Page with title**.



- e) Update the webpage **Name** to **Remote Control**.
f) Update the **Partial URL** to **remote-control**.

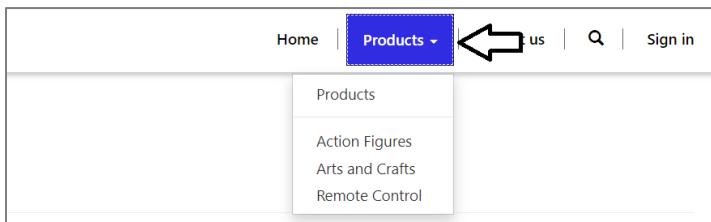


13. Browse the website to test the changes you have made to the **Product** page and its children.

- a) Click the **Browse website** button to clear the cache and launch the portal in a new browser tab.



- b) Once the portal launches, use the **Products** drop down menu to navigate to its child pages.



- c) You should observe that each child page displays a breadcrumb menu with **Home > Products > Remote Control**.



You're now done working with Power Apps Portal Studio. In the next exercise, you will begin working with the Portal Management app.

Exercise 7: Configuring a Power Apps Portal using the Portal Management App

In this exercise, you will use **Portal App Portal Studio** to add and modify content in the portal.

1. Make sure you leave Power Apps Portal Studio running in its own separate browser tab.
 - a) In later steps, you will be asked to return to Power Apps Portal Studio so you can click the **Browse website** button for testing.



2. Launch the model-driven app named **Portal Management**.
 - a) Open a new browser tab and navigate to **My Dev Environment** in the Power Apps make portal.
 - b) Click the **Apps** link in the left navigation to see the list of apps for **My Dev Environment**.
 - c) Click on **Portal Management** to launch this model-driven app.

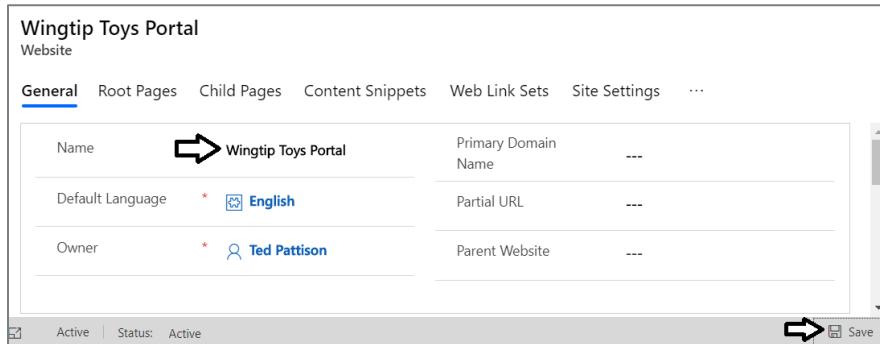
Apps in My Dev Environment				
	Name	Modified	Owner	Type
	Product Manager	... 4 h ago	Ted Pattison	Model-driven
	My First Portal	... 5 h ago	Ted Pattison	Portal
✓	Portal Management	... 6 ago	Ted Pattison	Model-driven

- d) When the app starts, you should see the Websites list which contains a single website named **Starter Portal**.
- e) Click on **Starter Portal** to display the record for this website.

- f) The website name has a default value of **Starter Portal**.

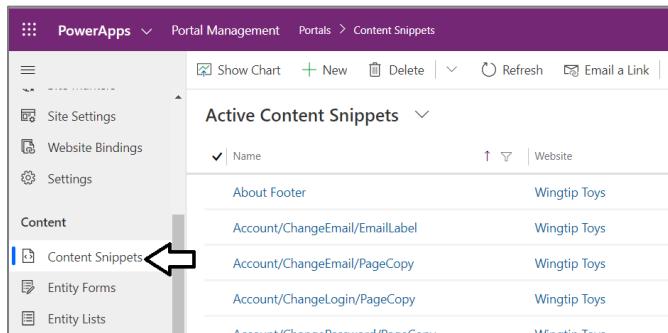
Name	Starter Portal	Primary Domain Name	---
Default Language	* English	Partial URL	---
Owner	* Ted Pattison	Parent Website	---

- g) Update the website name to **Wingtip Toys Portal** and then click the **Save** button in the lower right corner.

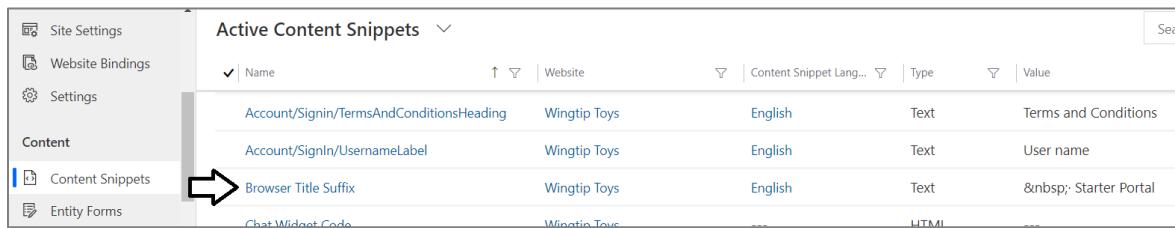


3. Update the snippet named **Browser Title Suffix**.

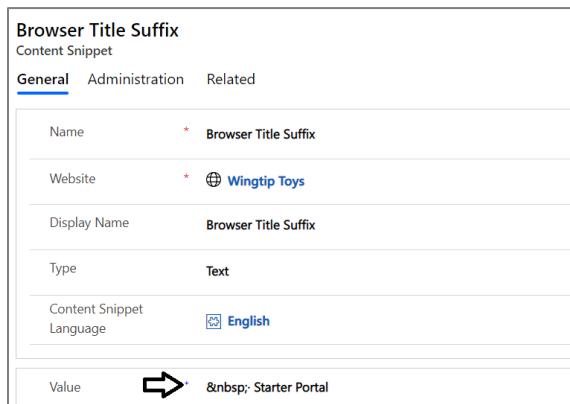
- a) Select **Content Snippets** from the left navigation.



- b) Scroll down the Active Content Snippets list and locate the **Browser Title Suffix**.
c) Click on the **Browser Title Suffix** snippet to open its record.



- d) Locate the textbox with the snippet **Value** property.



- e) Replace the text "Starter Portal" with "Wingtip Toys" and then click **Save**.

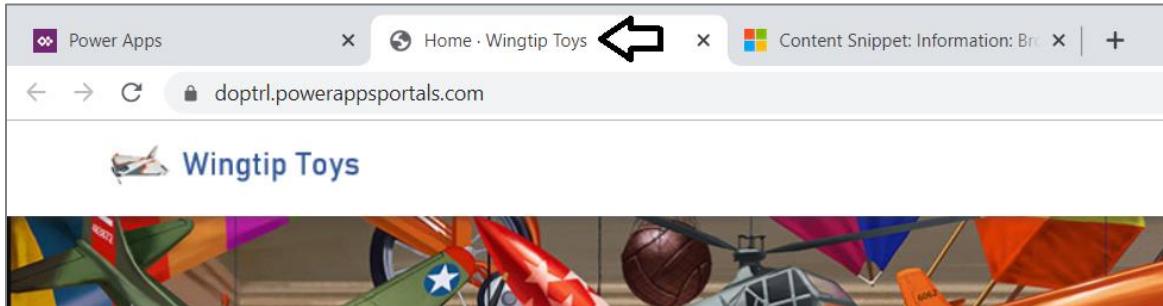


4. Test your changes to the browser title.

- Return to the browser tab running Power Apps Portal Studio.
- Click the **Browse website** button to clear the cache and launch the portal in a new browser tab.



- Once the portal launches with a cleared cache, you should see the title **Wingtip Toys** in the browser tab.



You are now finished with this lab.