



# Power Platform

# App in a Day

Module 1: Power Apps Canvas App

Hands-on Lab Step-by-Step

October 2022

# Contents

<b>Power Apps Canvas App.....</b>	<b>1</b>
<i>Lab Prerequisites .....</i>	1
<i>Power Apps Canvas Studio Layout .....</i>	1
<i>Goals for this lab .....</i>	2
<i>Introduction: Coffee Machine Ordering Scenario .....</i>	2
<i>Solution overview.....</i>	2
<i>Locale-specific difference in formulas.....</i>	3
<i>Exercise 1: Create the app in Power Apps .....</i>	4
<i>Exercise 2: Add Machine Gallery and Connect to Data Source.....</i>	19
<i>Exercise 3: Add Compare Screen.....</i>	51
<i>References.....</i>	81
<b>Copyright .....</b>	<b>82</b>

# Power Apps Canvas App

## Lab Prerequisites

Follow the pre-requisite steps described in the document: **00-AppInADay Lab Overview.pdf**, that is included in the lab package. Before beginning this lab, confirm that you have provisioned an environment where you will save your apps, flows and database tables.

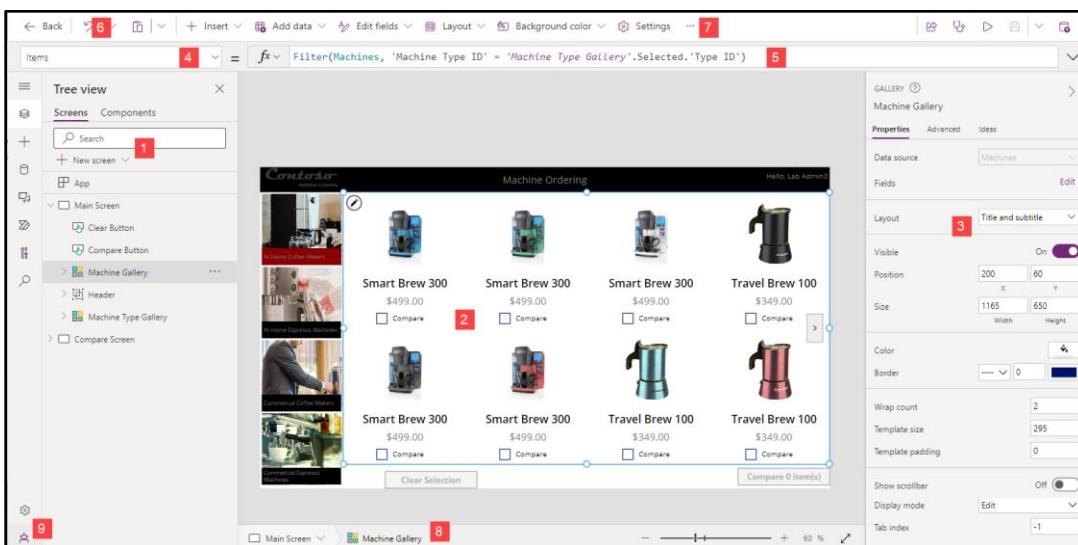
**IMPORTANT:** Do not proceed before going through the lab pre-requisite steps

## Power Apps Canvas Studio Layout

**Power Apps Canvas Studio** is available as a web application ([Make Power Apps](#)) that you can use in any modern browser.

Power Apps Studio is designed to have a user interface familiar to users of the Office suite. It has three panes and a ribbon that make app creation feel **like building a slide deck in PowerPoint**. Formulas are entered within a function  bar that is like Excel. Studio components:

1. **Left navigation pane**, which shows all the screens, data sources, and controls in your app
2. **Middle pane**, which contains the app screen you are working on
3. **Right-hand pane**, where you configure properties for controls, bind to data, create rules, and set additional advanced settings
4. **Property drop-down list**, where you select the property for the selected control that you want to configure
5. **Formula bar**, where you add formulas (like in Excel) that define the behavior of a selected control
6. **Ribbon**, where you perform common actions including customizing design elements
7. **Additional items**, here you will find collections, variables, and app version history.
8. **Breadcrumbs**, you can navigate up the tree view.
9. **Virtual assistant**, you can ask the virtual agent for Power Platform related help.



## Goals for this lab

After this lesson you will be able to:



- Create a Canvas App
- Add screens to your app
- Use formulas in your app
- Navigate between screens
- Customize galleries on your screens
- Capture a collection from your app



The time to complete this lab is [60] minutes.

## Introduction: Coffee Machine Ordering Scenario

Imagine an organization where every few years the employees request an updated coffee machine for their employee break room. The organization would like to build a customized app that runs on the web and mobile devices, which will help streamline the machine order and approval process. Moreover, they do not have traditional development resources available, such as a .NET, Xamarin or custom website developer, to create this application.

### Solution overview

The Microsoft Power Platform technologies enable tech-savvy business users (aka "citizen developers") to build a customized machine ordering solution. The application user interface and interaction logic are built in Power Apps, the approval workflow is automated using Power Automate, and the machine order data is stored in Microsoft Dataverse.

#### Key features of the solution:

- a. Ability to browse through a selection of coffee machines.
- b. Select machines to compare
- c. View detailed specs for the selected machines on a second comparison screen
- d. Select a machine to order
- e. Enter order details into a customized form, including an image
- f. By default, have the approver set to the logged in user's manager
- g. Capture additional default properties, such as the date of the request
- h. Store machine orders in a secure and scalable Cloud database
- i. Enable an admin to view all machine orders
- j. Follow a customized procurement process to place purchase orders for machines
- k. Send an automated approval request email when the order is placed
- l. Allow the approver to approve or reject an order and add comments without leaving their email inbox
- m. View all sent and received approval requests on the web and mobile
- n. Notify the user via email when their order is approved or rejected

This document will walk through creating a Power Apps Canvas Studio basics to enable features (a) thru (d).

When you are done with this first portion of the lab, your app will look like this:

The screenshot shows two views of a Power Apps Canvas app. The left view is a grid of coffee machine models: Smart Brew 300, Smart Brew 300, Smart Brew 300, Travel Brew 100, Smart Brew 300, Smart Brew 300, Travel Brew 100, and Travel Brew 100. Each item has a price (\$499.00 or \$349.00), a 'Compare' button, and a 'Clear Selection' button at the bottom. The right view is a detailed card for the 'Smart Brew 300' machine, showing its price (\$499.00), model (Auto-Brew), performance metrics (Avg. Cups/Week 50-100), and a descriptive text block. It also includes fields for 'Machine Name' (At Home Coffee Makers - Smart Brew 300), 'Price' (\$499.00), 'Approver' (labadmin17@fusionenviro.onmicrosoft.com), 'Comments' (Enter justification), 'Requested By' (labadmin17@fusionenviro.onmicrosoft.com), and a 'Submit device request' button.

## Locale-specific difference in formulas



Before you begin, please note that if your computer has its regional settings set to use the comma ',' for its decimal separator (like in much of Europe) your formulas will need to use a semicolon ';' instead of a comma in your formulas. For example:

En-US      `Filter(Machines, 'Machine Type Gallery'.Selected.MFR=MFR)`

de-DE      `Filter(Machines; 'Machine Type Gallery'.Selected.MFR=MFR)`

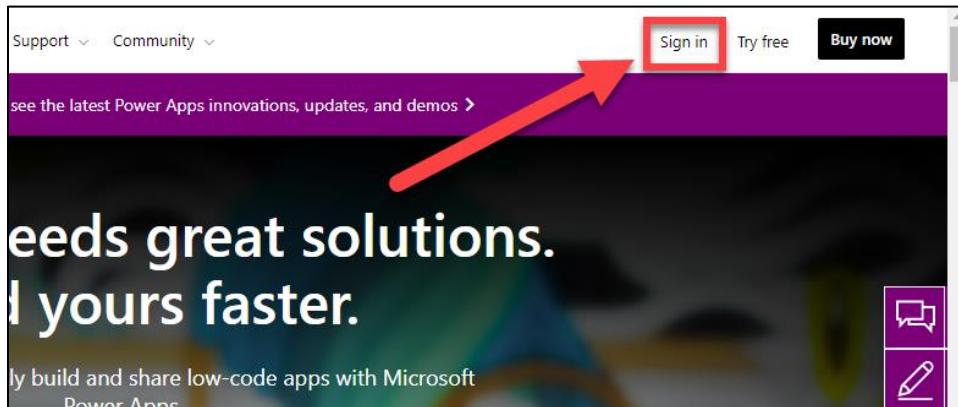
These localized formats are indicated with the symbol throughout the document. If you are in the en-us locale, you can ignore any of the formulas indicated by the locale symbol.

## Exercise 1: Create the app in Power Apps

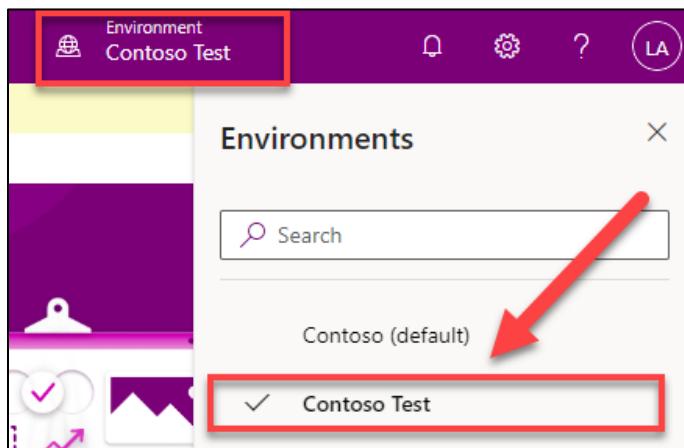
**IMPORTANT:** Do not proceed before going through the lab pre-requisite steps

### Task 1: Sign-in to Power Apps web studio

1. Go to [Power Apps](#) and select **Sign in**. You may also directly navigate to [Make Power Apps](https://make.powerapps.com/) (<https://make.powerapps.com/>).



2. Login with your training account.
3. Before creating an app, let's switch to the correct environment. Select the **Environment drop-down** by selecting the Environment title in the top right of the screen to switch to the new environment. From the Environments dialog pane, select the new and correct environment. (If your environment doesn't show up, try logging out and logging in again)



## Task 2: Create a new solution

In this task, you will create a new solution and a publisher. The solution will contain and track all your work.

1. From the navigation pane to the left, select **Solutions** and then choose **+ New solution** from the ribbon.

The screenshot shows the 'Solutions' section of the Power Apps interface. On the left is a navigation pane with options like Home, Learn, Apps, Create, Dataverse, Flows, Chatbots, AI Builder, and Solutions. The 'Solutions' option is highlighted with a red box. At the top right, there's a ribbon with a search bar and buttons for 'Import solution', 'Open AppSource', 'Publish all customizations', and more. A prominent red arrow points from the 'Solutions' button in the navigation pane to the '+ New solution' button in the ribbon.

2. In the New solution dialog pane, enter **Contoso Coffee** for the Display name and select the **+ New publisher** button.

The screenshot shows the 'New solution' dialog. It has fields for 'Display name' (containing 'Contoso Coffee'), 'Name' (containing 'ContosoCoffee'), 'Publisher' (a dropdown menu with 'Select a Publisher' and a '+ New publisher' button), and 'Version' (containing '1.0.0.0'). A red arrow points from the 'New publisher' button in the publisher section to the 'More options' link at the bottom.

3. In the New publisher dialog pane, enter **Contoso** for Display name, **Contoso** for Name, **contoso** for Prefix, and then select **Save**.

New publisher

Publishers indicate who developed associated solutions. [Learn more](#)

Properties Contact

Display name \*  
Contoso

Name \*  
Contoso

Description

Prefix \*  
contoso

Choice value prefix \*  
33065

Preview of new object name

Save Cancel

This screenshot shows the 'New publisher' dialog box. It includes fields for 'Display name' (Contoso), 'Name' (Contoso), 'Prefix' (contoso), and 'Choice value prefix' (33065). A red box highlights the 'Prefix' field, and a red arrow points from it to the 'Save' button at the bottom.

4. From the **Select a Publisher** drop-down in the **New solution** dialog pane, select the **Contoso** publisher you created and then select **Create**.

New solution

Display name \*  
Contoso Coffee

Name \*  
ContosoCoffee

Publisher \*  
Contoso (Contoso)

+ New publisher

Version \*  
1.0.0.0

More options ▾

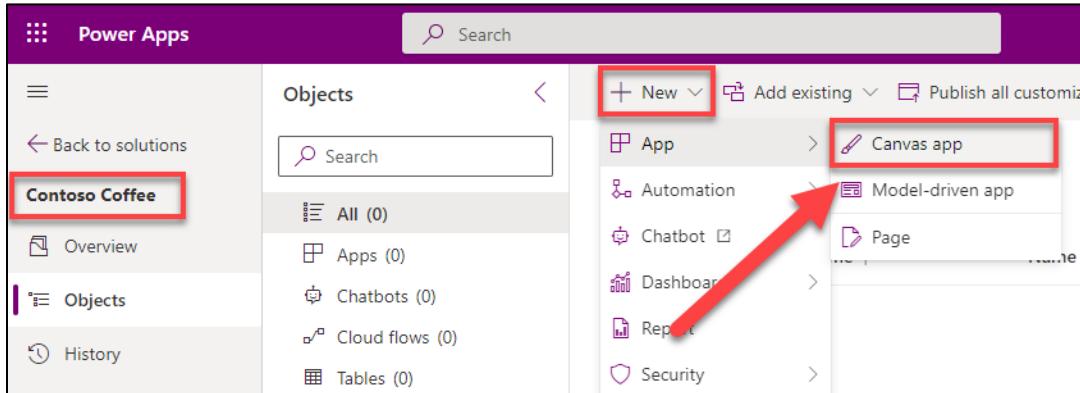
Create Cancel

This screenshot shows the 'New solution' dialog box. It includes fields for 'Display name' (Contoso Coffee), 'Name' (ContosoCoffee), 'Publisher' (Contoso (Contoso)), and 'Version' (1.0.0.0). A red box highlights the 'Publisher' dropdown, and a red arrow points from it to the 'Create' button at the bottom.

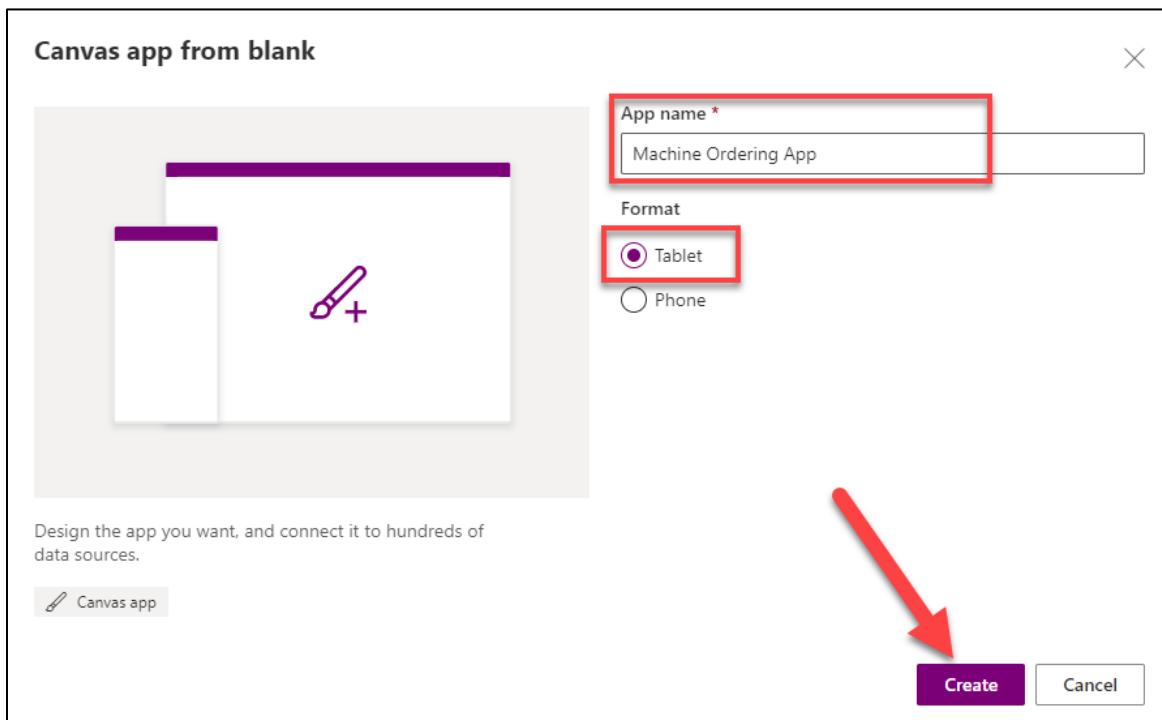
5. Select the **Contoso Coffee** solution you just created.
6. Do not navigate away from this page.

## Task 3: Create a new application

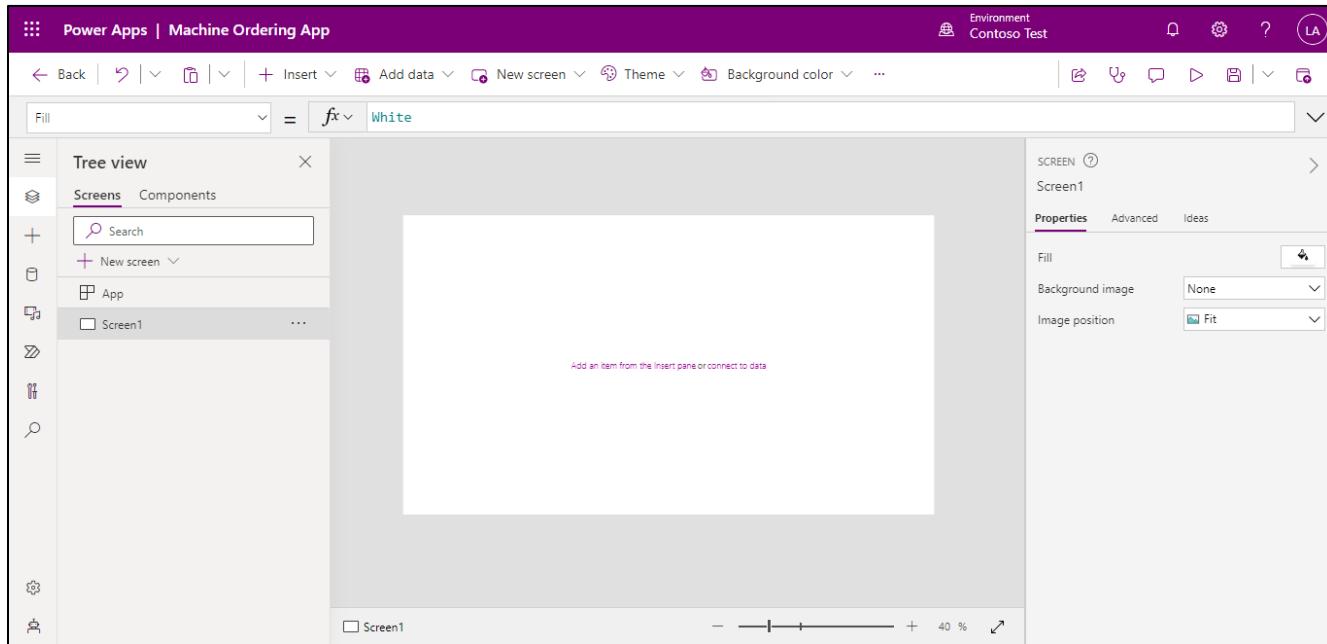
1. Make sure you are in the **Contoso Coffee** solution.
2. Select **+ New** and then select **App > Canvas app**.



3. In the **Canvas app from blank** dialog box, enter **Machine Ordering App** for App name, and select **Tablet** for Format. Then, select **Create**.



4. If prompted, select your region, then select **Get started**.
5. Select **Skip** if you receive the **Welcome to Power Apps Studio** prompt.
6. You should now see a screen similar to the one in the figure below:

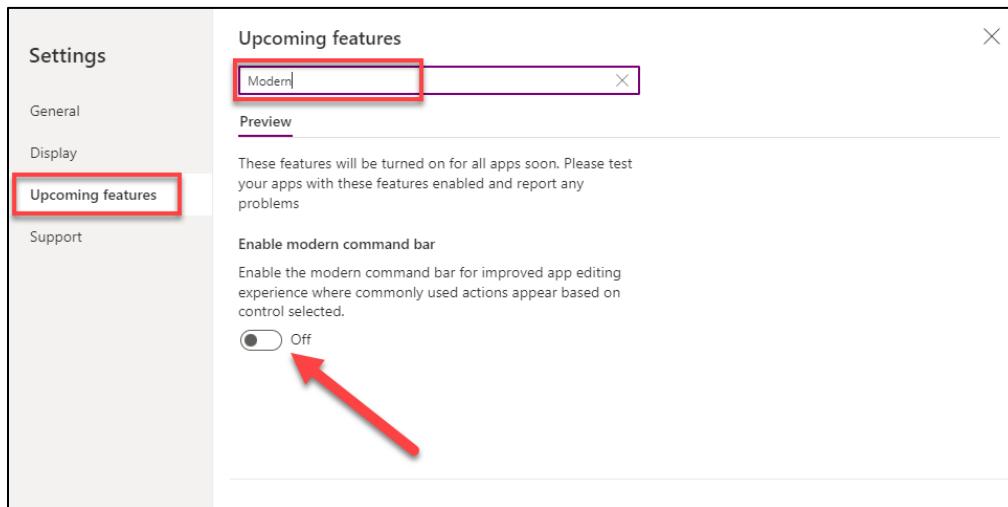


## Task 4: Rename the screen

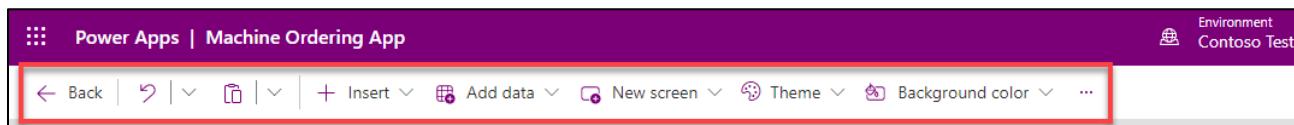
In this task, you will rename Screen1 to Main Screen.

Before beginning this task, ensure that you have the **modern command bar** enabled.

If you do not have this enabled, select the **Settings** tab from the ribbon at the top of your screen. A dialog box will appear. Select **Upcoming features** in the Settings pane to the left. In the search text box, type **Modern**, and then turn the control **on**.

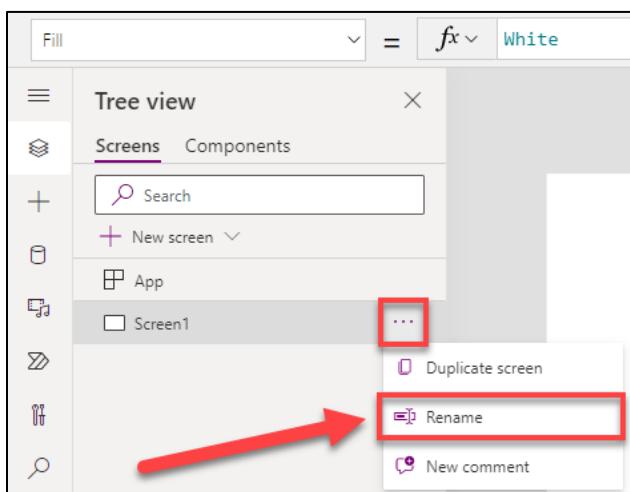


Your command bar should now be set with the modern features as shown in the figure below:

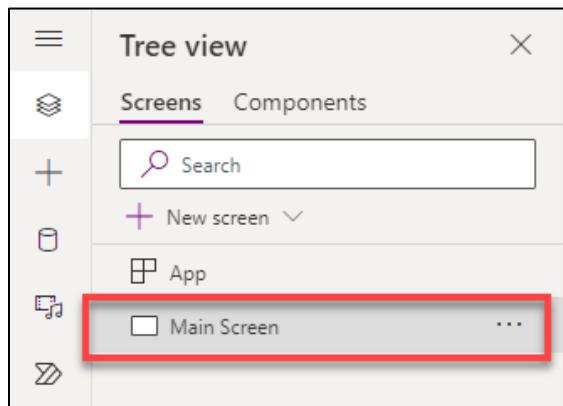


Now that we have everything set and ready to go, we can begin this task.

1. Select the **Screen1** tile in the **Tree view** pane.
2. Select the **ellipses (...)** next to **Screen1** (or right-click on **Screen1**) and select the **Rename** option.



3. Change the name to **Main Screen**.

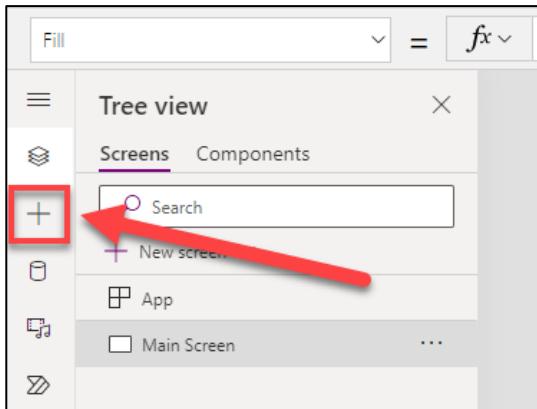


**Note:** You can also rename the screen by clicking on the screen name in the right pane and selecting the edit icon, or double clicking on it.

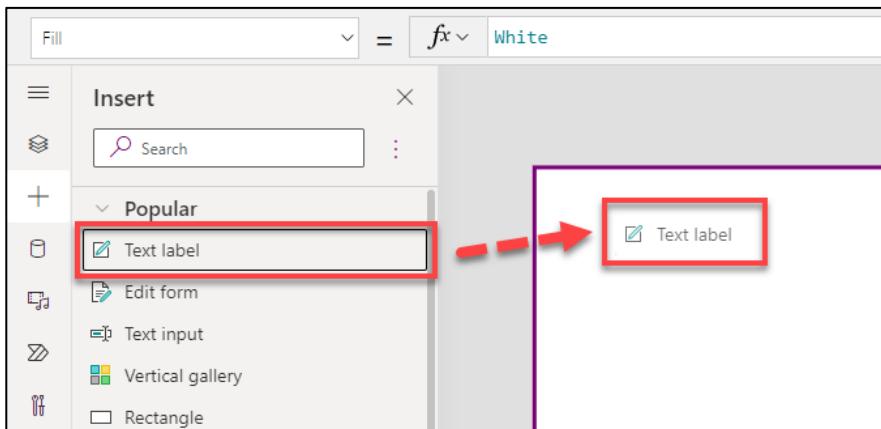
**Tip:** It is a good practice to rename screens and controls as you create them, so they are easier to locate as you work with formulas that reference different controls. In this lab, you will be prompted to rename screens and some of the controls. For the others, you may rename them as you please on your own. It is important that you rename screens as prompted in this lab as future steps may rely on specific screen names.

## Task 5: Add a header containing the app name and logged in user's name

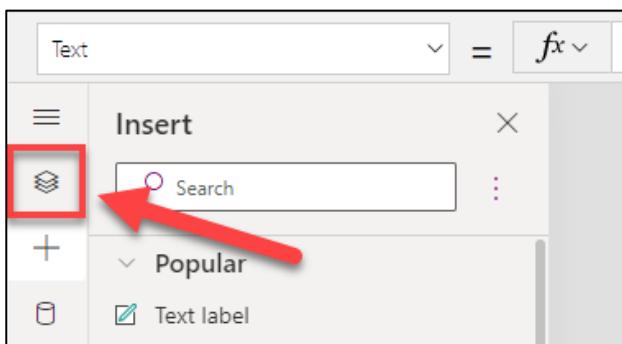
- With **Main Screen** selected in the Tree View pane, select the **Insert** (+) button from the navigation pane.



- From the **Insert** pane, drag and drop **Text Label** onto the **Main Screen**.

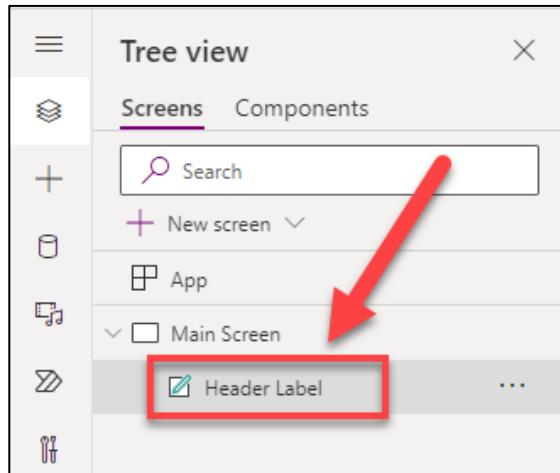


- From the navigation pane, select the **Tree View** tab.

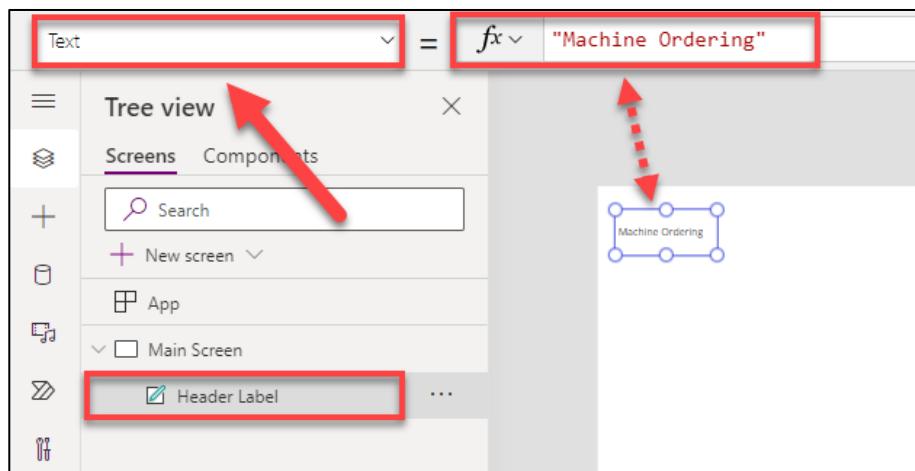


- Rename **Label1** to **Header Label** (Refer to the previous tasks on renaming controls).

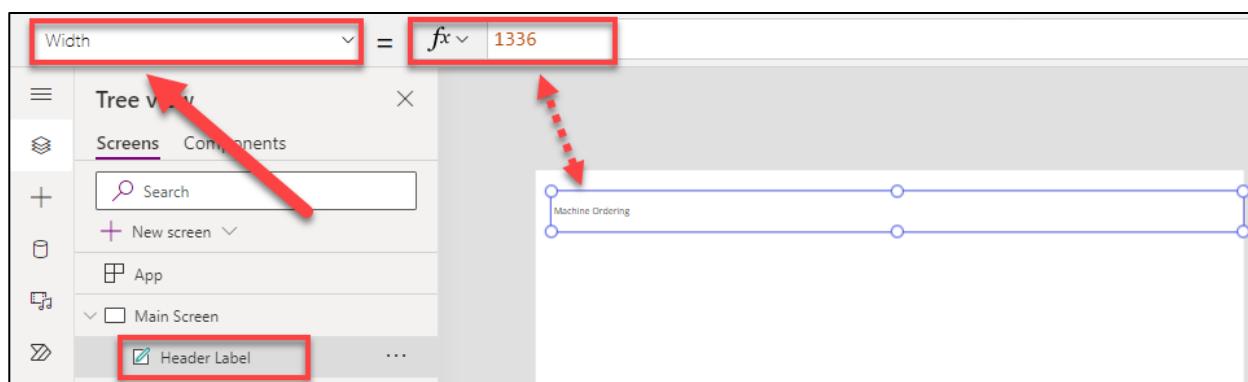
**Note:** It is IMPORTANT to rename this label correctly, so subsequent instructions in the lab work as expected.



- With **Header Label** still selected in the **Tree View** pane, select **Text** from the property value drop-down list and enter "**Machine Ordering**" in the formula bar. You can also type directly in the label.

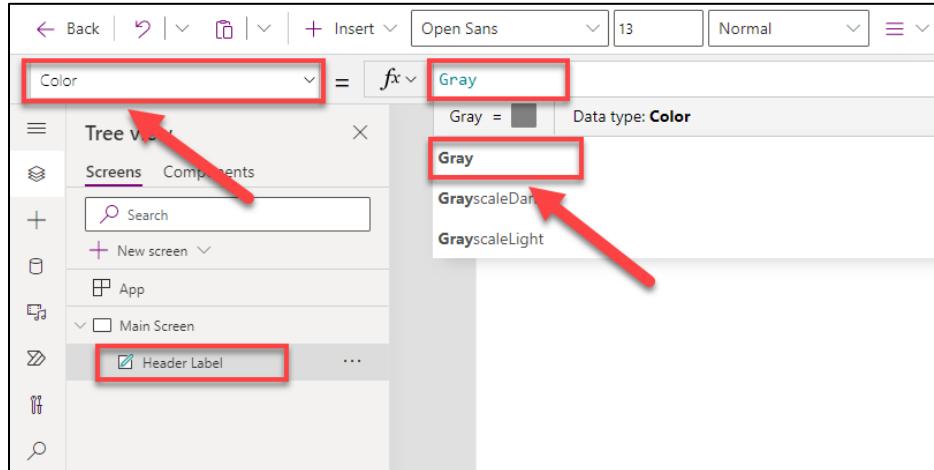


- Select **Width** from the property value drop-down. Set the **Width** of the **Header Label** to **1366** by typing in the formula bar.

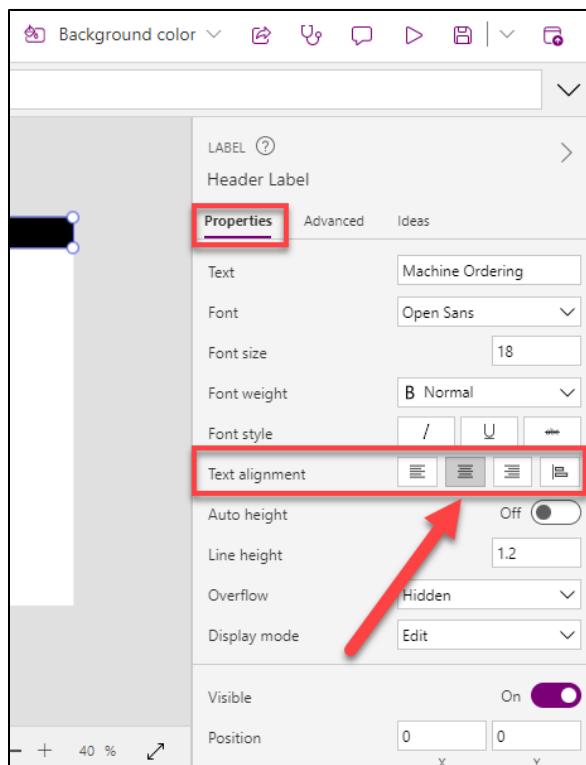


- Using the property value drop-down and the formula bar, change the **X** and **Y** property values of the **Header Label** to **0**.

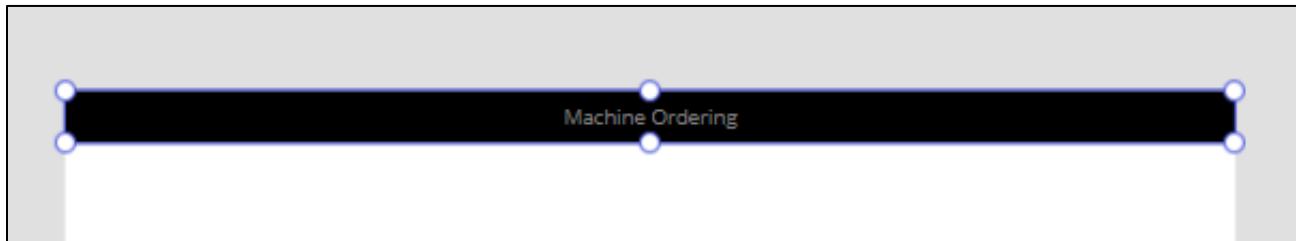
8. Next, set the property value of the **Header Label** to **Color** and then type **Gray** in the formula bar. Select **Gray** from the drop down menu.



9. Set the property value of the **Header Label** to **Fill**. In the formula bar, type **Black**. Select **Black** from the drop down menu.
  10. Set the property value of the **Header Label** to **Size**. In the formula bar, type **18**.
  11. Set the property value of the **Header Label** to **Height**. In the formula bar, type **60**.
  12. From the **Properties** tab of the **Header Label** pane to the right of the screen, change the **Text alignment** to **Align center**.

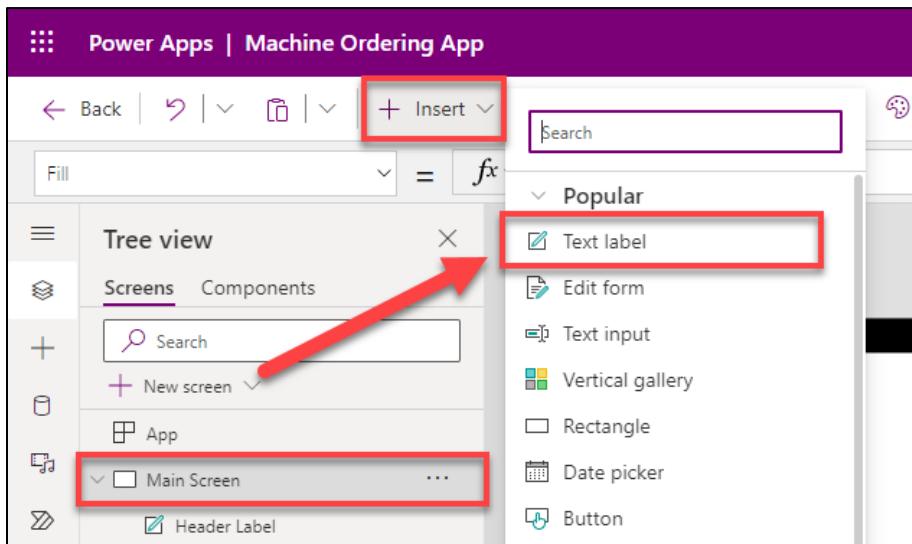


13. The header label should now look like the figure below.



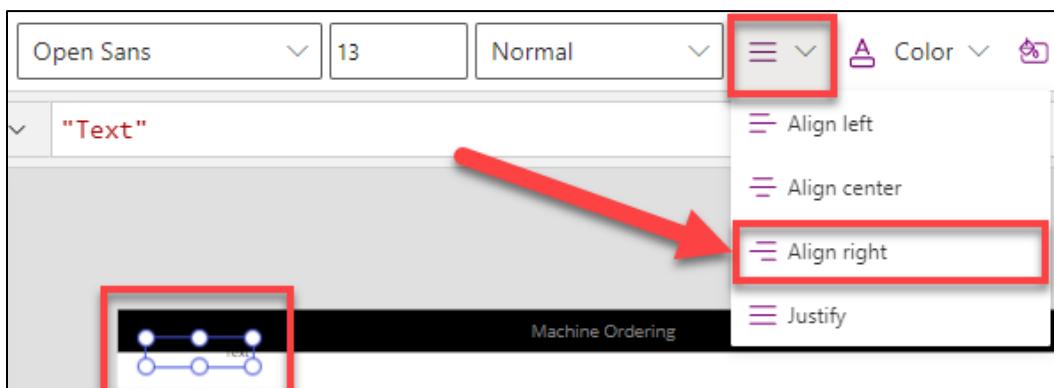
**Tip:** You can also use the formula bar above or the Advanced tab on the far right of the screen to enter specific values or formulas for any property on a control.

14. Select + **Insert** button from the ribbon and add another **Text Label** to the **Main Screen**. You will use this label to display the logged in user's name.



15. Rename the newly added label to **User Label**.

16. Select the **User Label**. From the ribbon, select the **Align** drop down button and select **Align right**.



17. Using the same steps as we did to set the property values of the Header Label, set the **Y** value of the **User Label** to **0**.

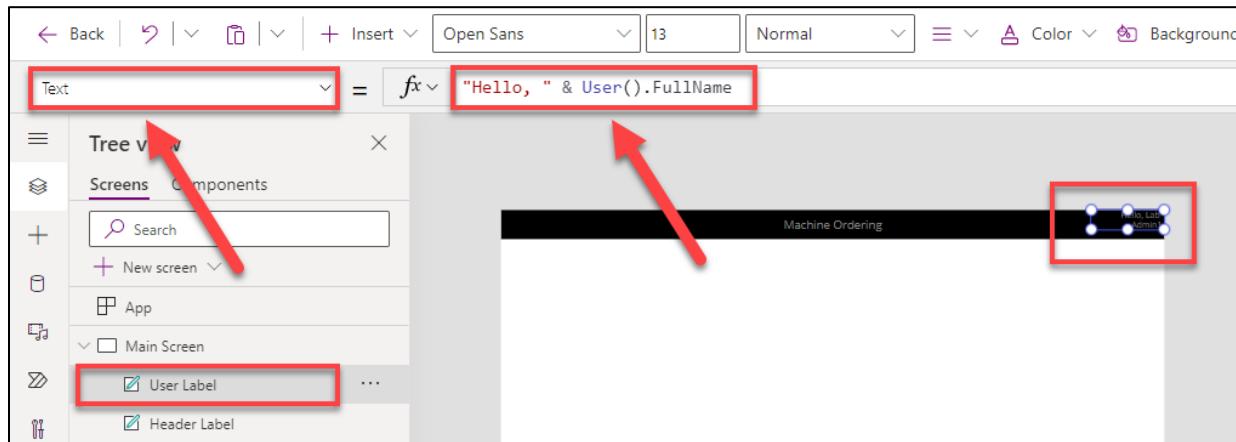
18. Set the **X** value of the **User Label** to **1216**.

19. Set the **Width** value of the **User Label** to **150**.

20. Set the **Color** value of the **User Label** to **Gray**.

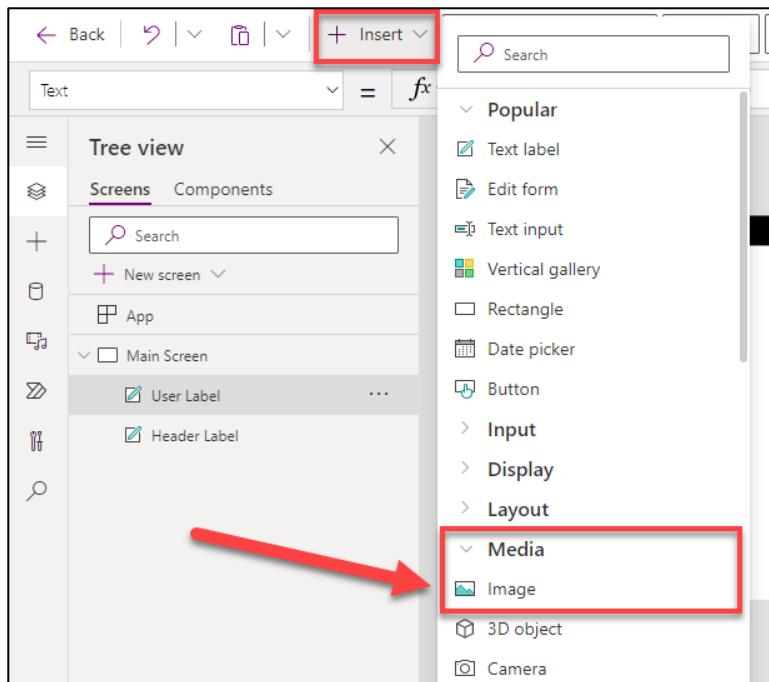
21. Set the **Text** value of the **User Label** to the formula below:

```
"Hello, " & User().FullName
```



**Note:** All functions in Power Apps are case sensitive. As you start typing "User" you will see a drop-down of available choices. It is a good idea to pick from the autocomplete options. You will also notice help text at the top showing the required parameters, in this case, it requires no input parameters.

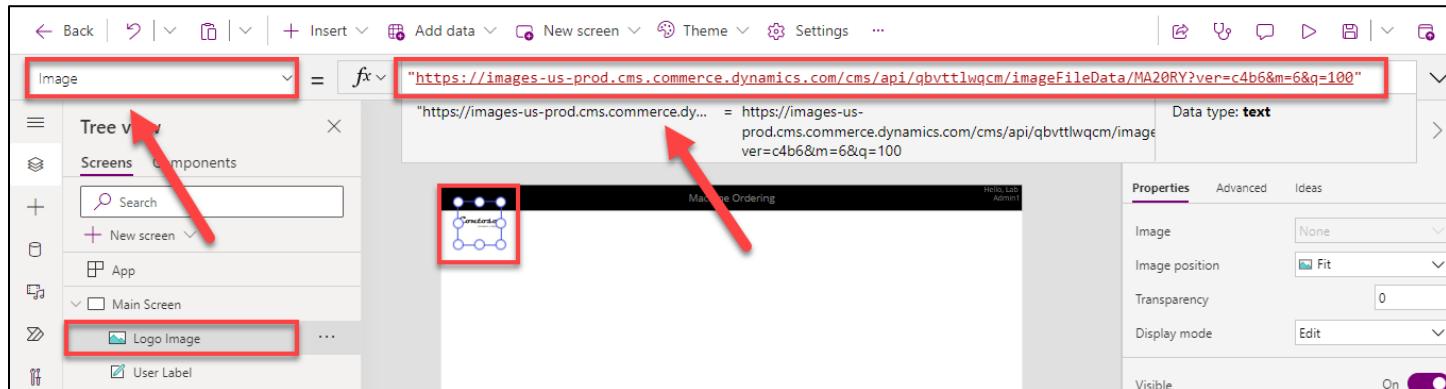
22. Select + **Insert** from the ribbon, expand the **Media** group and select **Image**.



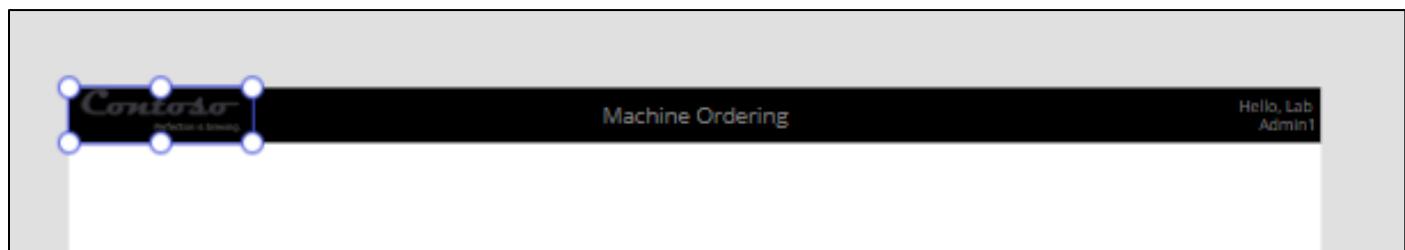
23. **Rename** the image **Logo Image** in the Tree view using the same steps as we did to rename the labels

24. Set the **Image** property value of the **Logo Image** to the formula below:

```
"https://images-us-
prod.cms.commerce.dynamics.com/api/qbvttlwqcm/imageFileData/MA20RY?ver=c4b6&m=6&q=100"
```



25. Using the same steps as we have previously, set the **X** and **Y** property values of the **Logo Image** to **0**.
26. Set the **Height** property value of the **Logo Image** to **60**.
27. Set the **Width** property value of the **Logo Image** to **200**.
28. The top part of the screen should now look like the figure below:

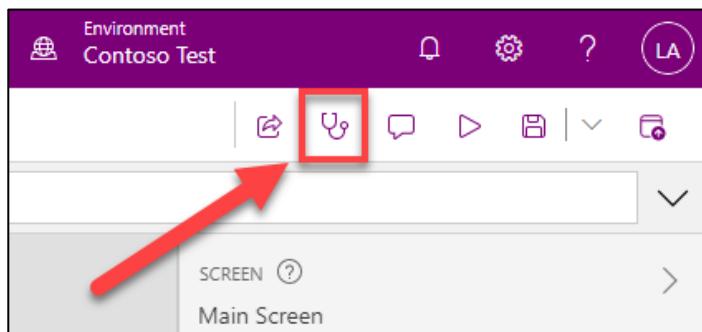


**Note:** The **User()** function in Power Apps allows you to retrieve the Email, Full Name, and Picture for the currently logged in user. App users will always be logged in with their business or school account (Azure Active Directory (AAD) credentials), so this information will always be available for any Power Apps app.

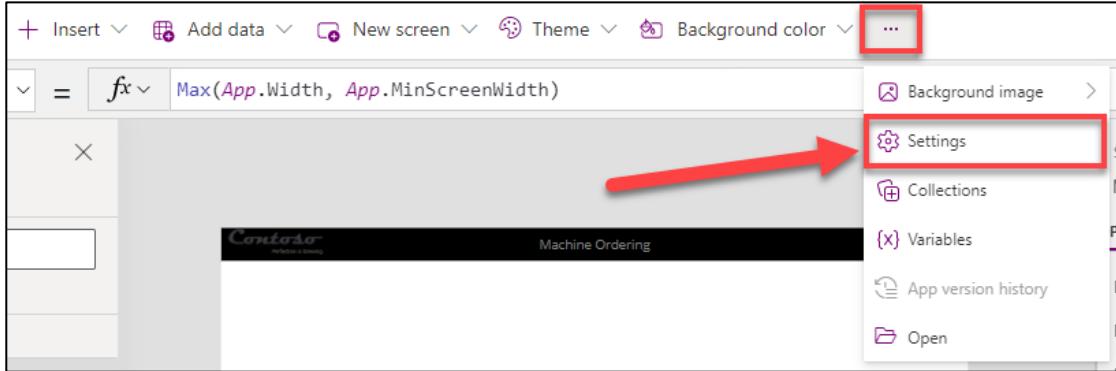
## Task 6: Save the Application

In this task, you will save an initial version of the app. It is a good practice to keep saving app updates at regular intervals.

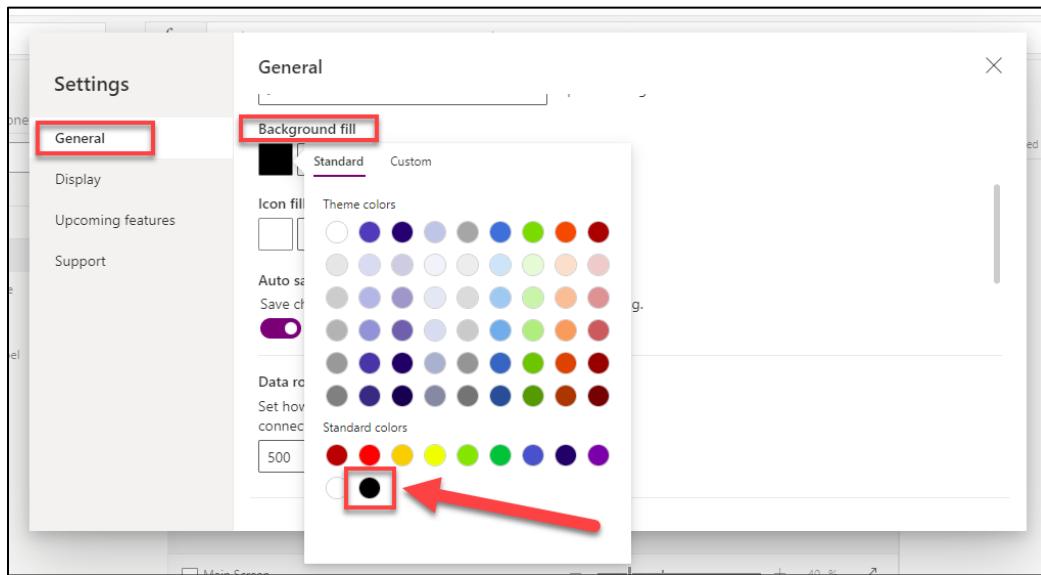
1. First, you will check if there are any errors. Select the **App Checker** icon located in the ribbon at the top of the screen.



2. The **App Checker** pane will appear. Errors will be displayed here if there are any.
3. Close the **App Checker** pane by selecting the X in the top right corner of the pane.
4. Select **Settings** from the ribbon at the top of the screen. Depending on your screen and how the ribbon is set up, you may have to select the **ellipses** (...) in the ribbon to expand a menu where the **Settings** button is located.

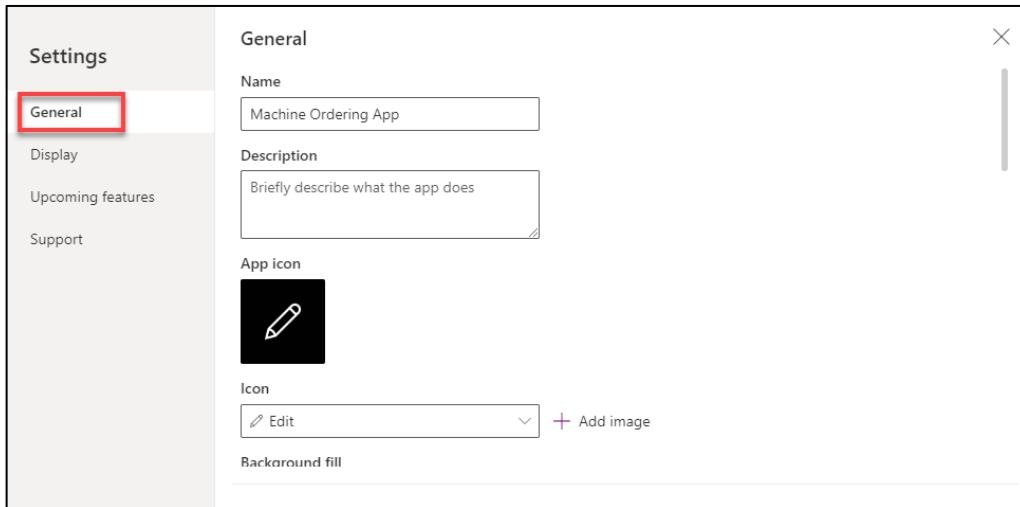


5. The Settings dialog box will appear. Under the **General** tab of the **Settings** pane to the left, change the **Background fill** to **Black**.

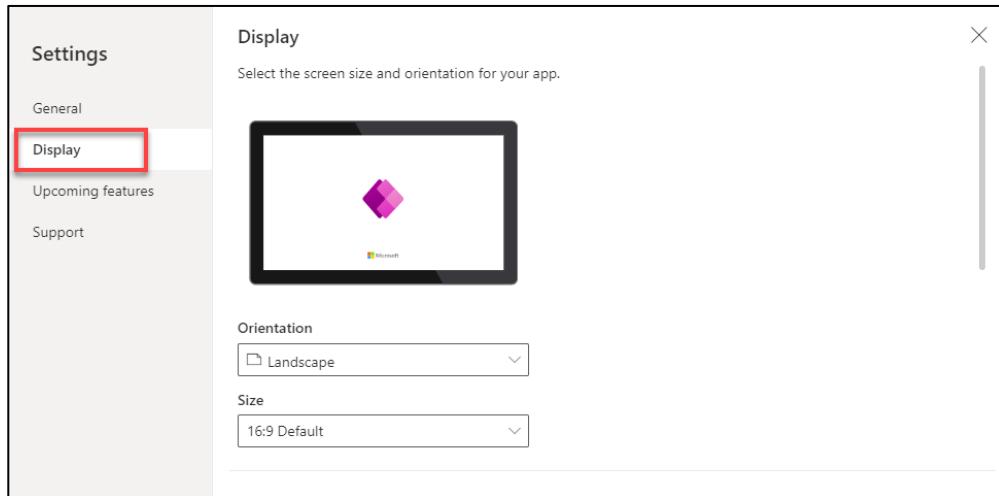


In the General tab of the Settings pane, you can also:

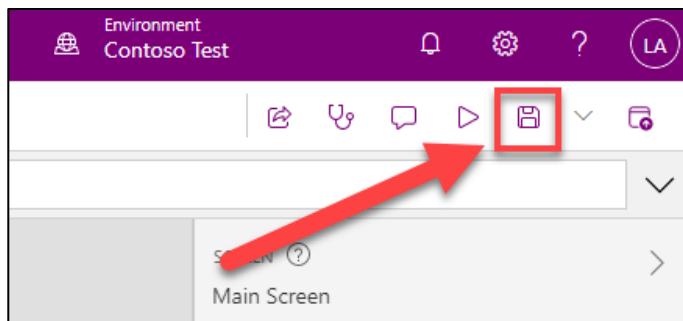
- Change your app name
- Customize the app icon – choose a background color and icon



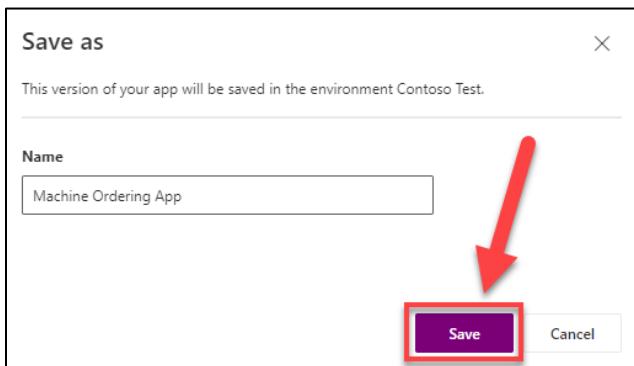
6. Select the **Display** tab in the Settings pane to the left to view the available screen orientation and aspect ratio settings. For this app, we will leave it at the default setting of **Landscape** with **16:9 aspect ratio**.



7. Close the **Settings** dialog box by selecting the **X** in the top right corner.
8. In the ribbon at the top of the screen, select **Save**.



9. Select **Save** again in the **Save as** dialog box and wait for the application to be saved.



**Tip:** In Power Apps when you save a version of your app the first version is published by default and available to everyone you share the app with. Subsequent saves are only visible to the app maker in the studio. You must explicitly publish it for all app users to get the update. For more details on saving, publishing and sharing apps, see:

[Publish App](#)

[Share App](#)

[Save and Publish App](#)

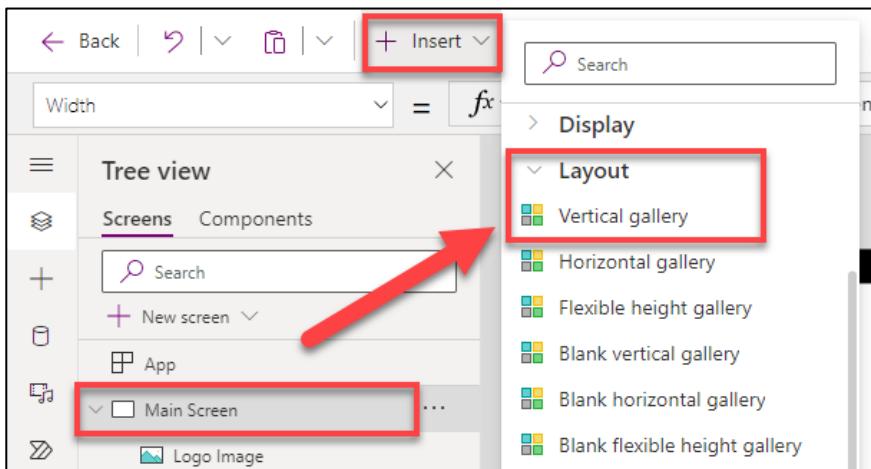
## Exercise 2: Add Machine Gallery and Connect to Data Source

In this exercise, you will add a gallery of all available machines making it easy for users to browse the list and get a quick overview of the machines available.

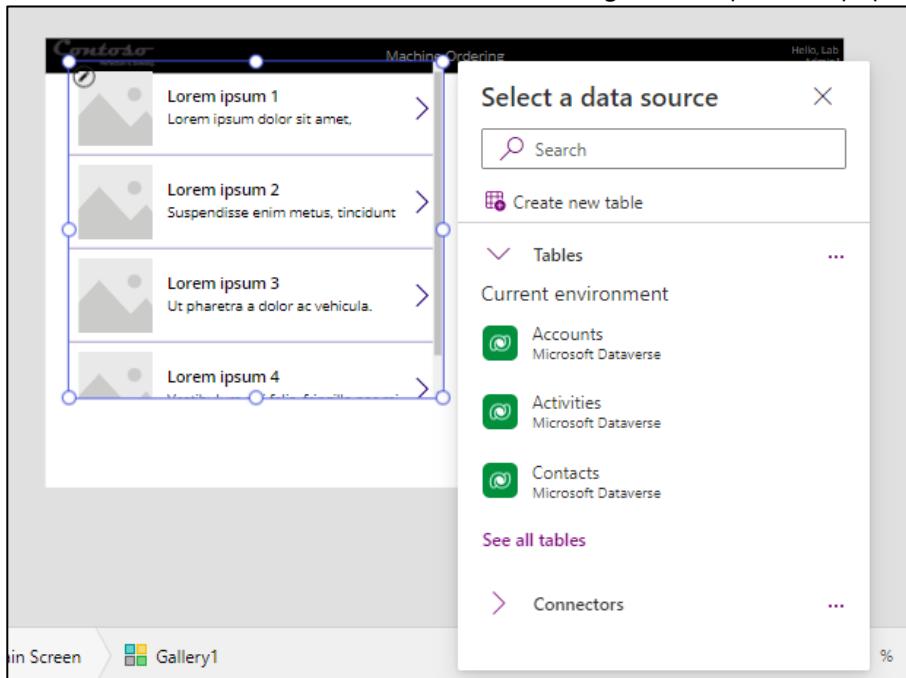
### Task 1: Add machine type gallery

In this task, you will add a gallery that will list the machine types. This will be a single column vertical gallery down the left side of the screen, with each cell displaying an image of the machine type. This gallery will later be used as a filter for the Machine gallery you will create.

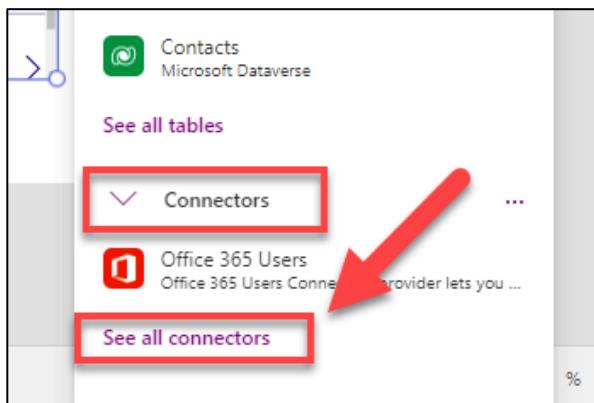
1. Select the **Main Screen** from the **Tree view pane**.
2. Select **+ Insert** from the ribbon, expand the **Layout** group and select **Vertical gallery**.



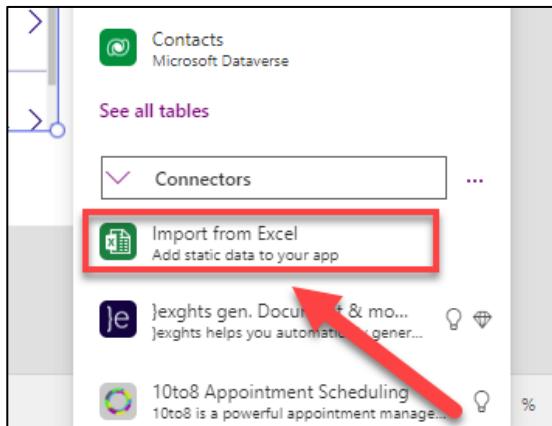
This will add a gallery called **Gallery1** onto the screen. Notice the control tree view on the left displays this gallery with three controls within it – two labels and an image. A data pane will pop up on the right.



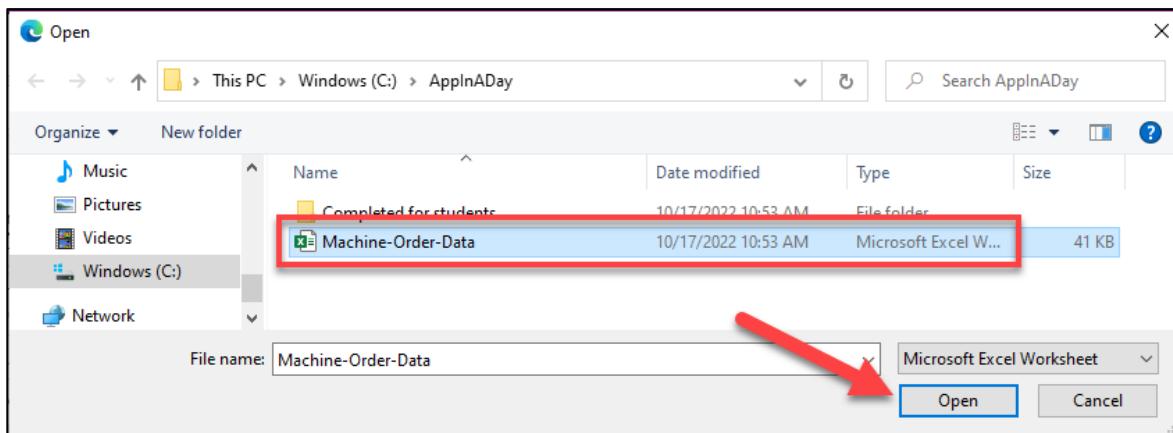
3. From the Select a data source dialog box, expand **Connectors**, then choose **See all connectors**.



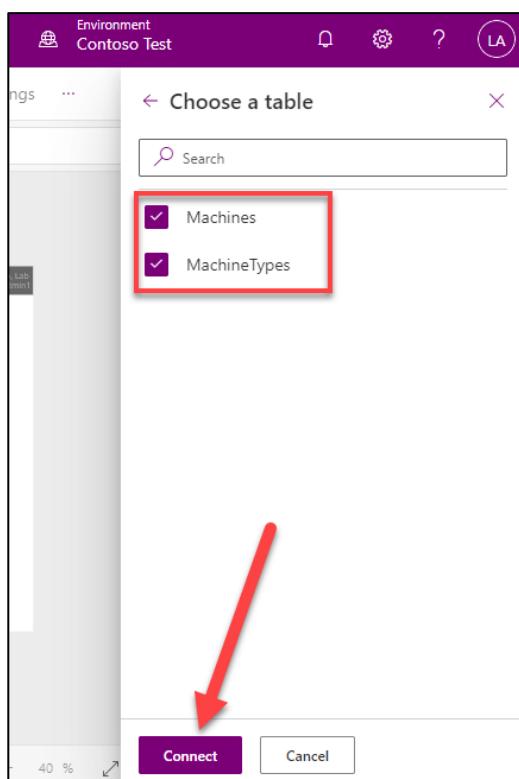
4. Select **Import from Excel**.



In the **File Open** dialog box, browse to the location where you unzipped the data file (for example **C:\AIAD\PAHandsOnLabContent\**) and select **Machine-Order-Data.xlsx**. Then, select open in the bottom right corner of the dialog window to load the data.

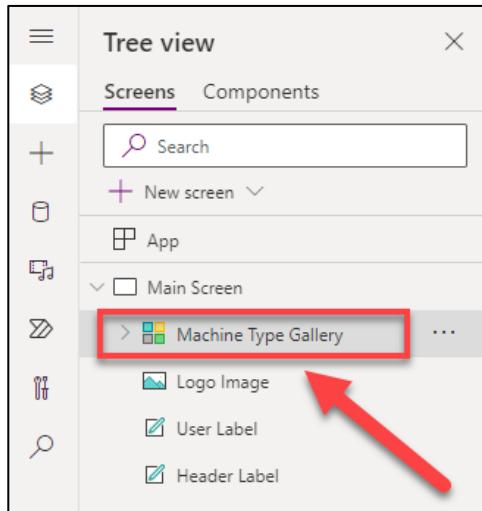


5. Select both tables, **Machines** and **MachineTypes**, from the Choose a table pane and select the **Connect** button at the bottom of the pane. This will add both tables as static data into the application.



**Note:** In this lab, you will work with tables imported from a static data file and embedded as resources in the app. If you were building a real solution, the same tables would likely be stored in the cloud, such as in a SharePoint list, a SQL table, or a Microsoft Dataverse table.

6. **Rename** the gallery, using the same steps as we have previously, to **Machine Type Gallery**.



### Tips on working with galleries:

Galleries provide a powerful way to visualize tabular data in Power Apps. It is important to become familiar with customizing a gallery. Key components of a gallery: the gallery control, the template cell (first cell), and controls within the template cell.

To select the **entire gallery** – select the gallery in the tree view to the left or select the second or third cell. Selecting any cell that is not the first cell of the gallery will select the entire gallery. Now you can specify properties that apply to the entire gallery, such as the Items property, which is the data source, the gallery fill color, borders, etc.

To customize how each item is displayed in the gallery, you will customize the template cell. Select the template by selecting the first cell of the gallery or select the pencil icon in the top left corner when the entire gallery is selected.

You can now add, remove and customize the controls within the template cell. These changes will then repeat across each item or row in the table.

Go ahead and select the machine image in the template cell and **change its size**. Notice how the size of the image changes in all the cells.

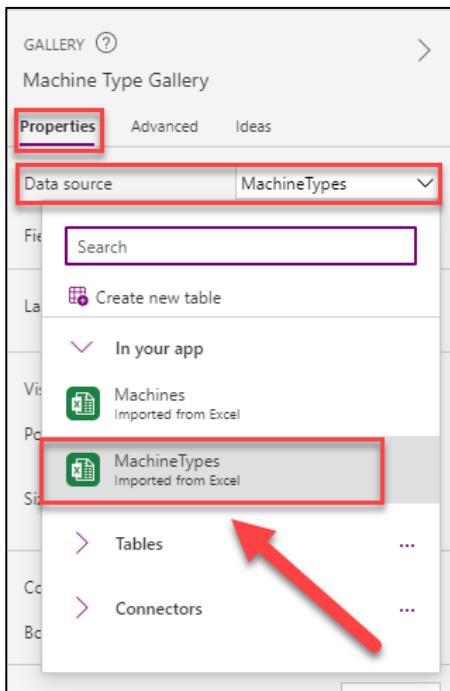
You can also test your gallery right on the canvas by holding down the Alt key to activate.

You will customize the machine gallery in subsequent steps.

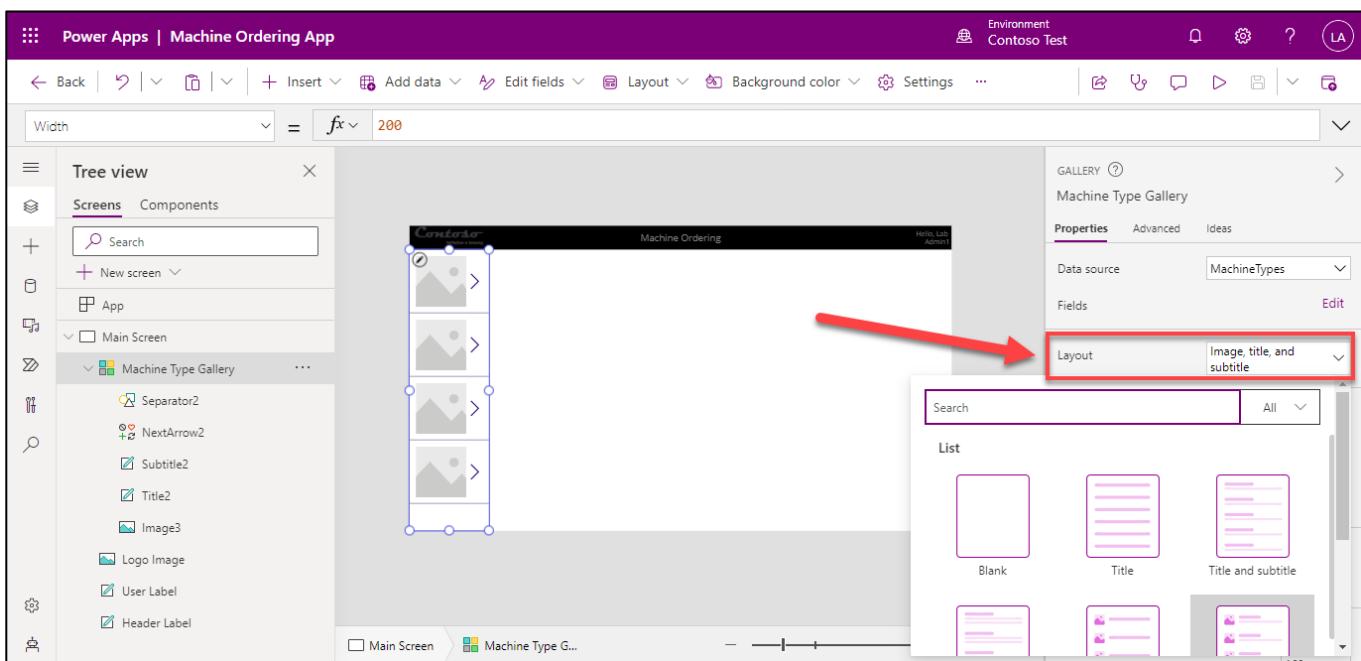
*Don't worry about making the gallery pixel perfect, the purpose of this exercise is to get your app working with a good enough UX. You can always repeat these labs to practice your pixel perfect skills.*

*When working with control positioning X refers to horizontal positioning and Y refers to vertical positioning.*

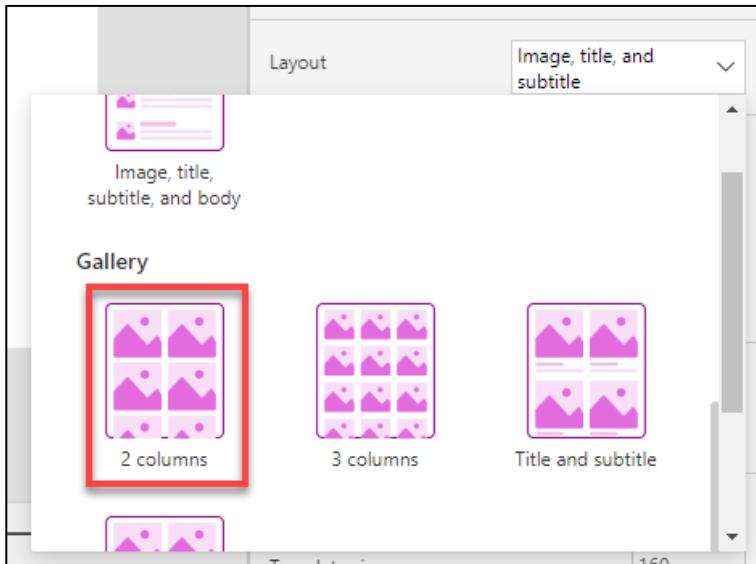
7. Select the **Machine Type Gallery**, go to the Properties tab and select **MachineTypes** as Data source.



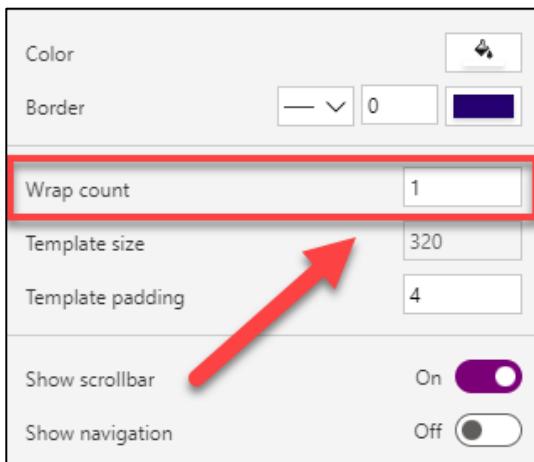
8. Using the same steps as we have previously in the lab, set the **X** property value of the **Machine Type Gallery** to **0**.
9. Set the **Y** property value of the **Machine Type Gallery** to **60**.
10. Set the **Height** property value of the **Machine Type Gallery** to **708**.
11. Set the **Width** property value of the **Machine Type Gallery** to **200**.
12. Select **Machine Type Gallery** to the left of the screen. Then, in the **Properties** tab, select the **Layout drop-down**.



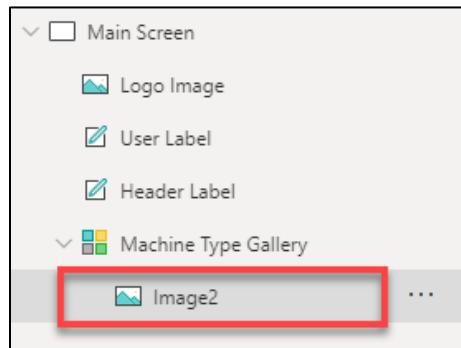
13. Scroll down to the **Gallery** section and select **2 Columns**.



14. Change the **Wrap Count** from **2** to **1**. This will change it to a single column gallery.

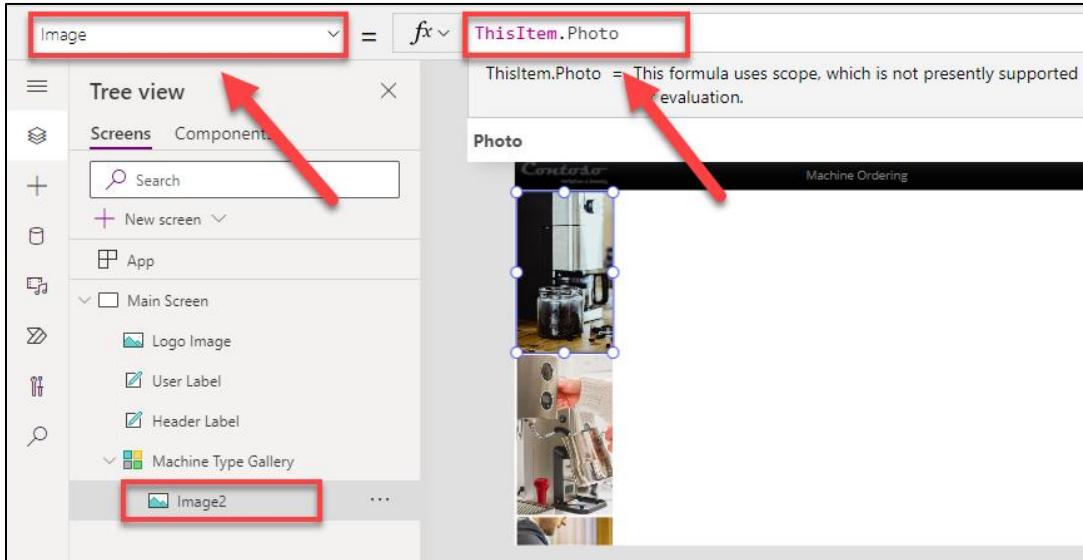


15. Select the **Image control** within the gallery in the Tree view.

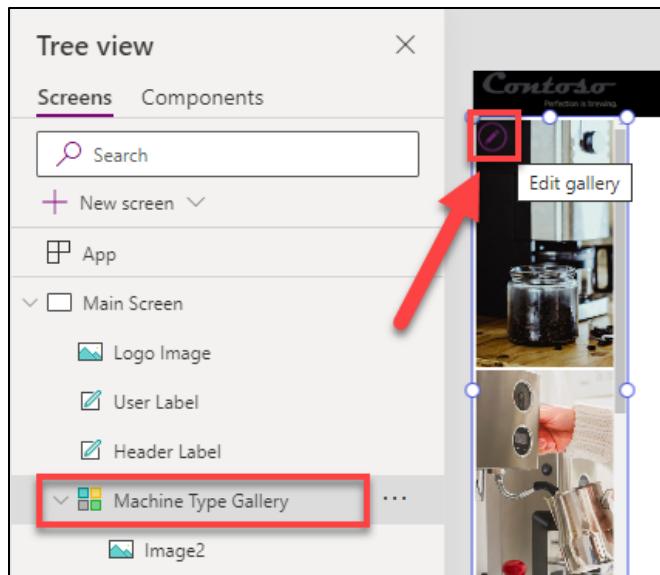


16. Set the **Image** property value to the formula below so that the image value is set to the photo URL:

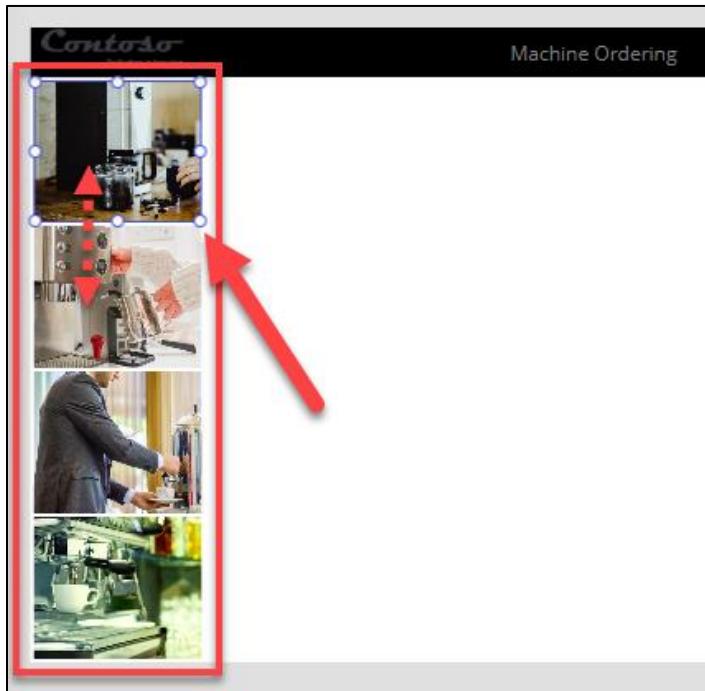
ThisItem.Photo



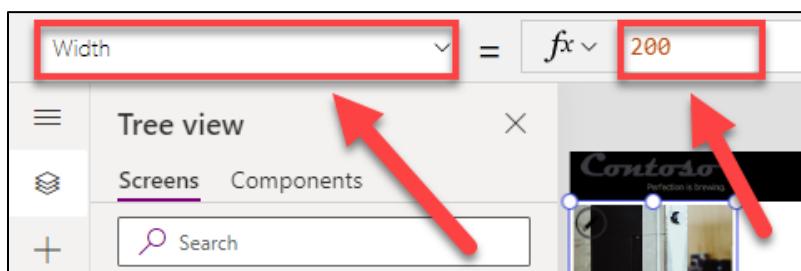
17. Select the **Machine Type Gallery** from the Tree view pane to the left and then choose the **Edit gallery** button. This action will put the gallery in edit mode.



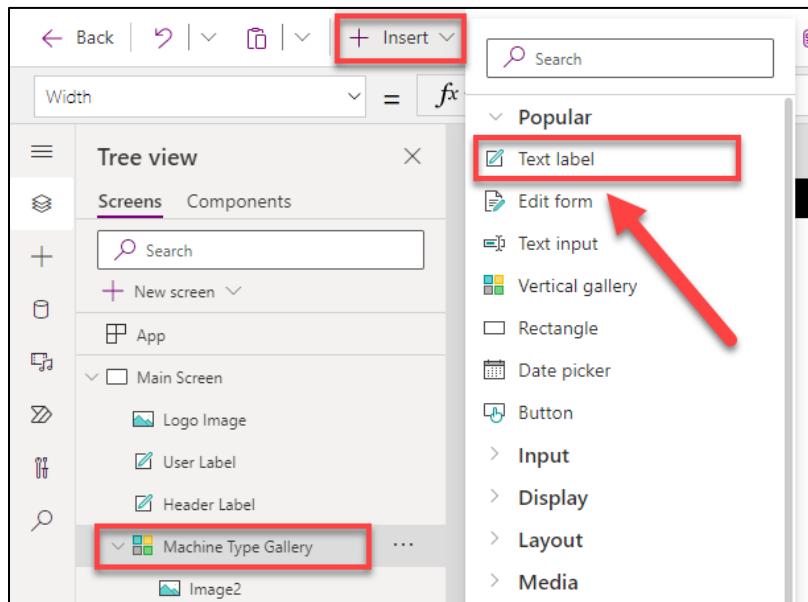
18. Reduce the **height** of the selected template cell by dragging the corners of the image. Notice that as you reduce the height of the selected cell, the rest of the cells reduce in height as well. Continue to reduce the height of the cells until all four image cells occupy the template without having to scroll to view each image.



19. Ensure that after you have changed the height to now show all four images, without scrolling, that the **Width** property value of the **Machine Type Gallery** image is still set to **200**. If the width is not set to 200, change it by typing into the formula bar.

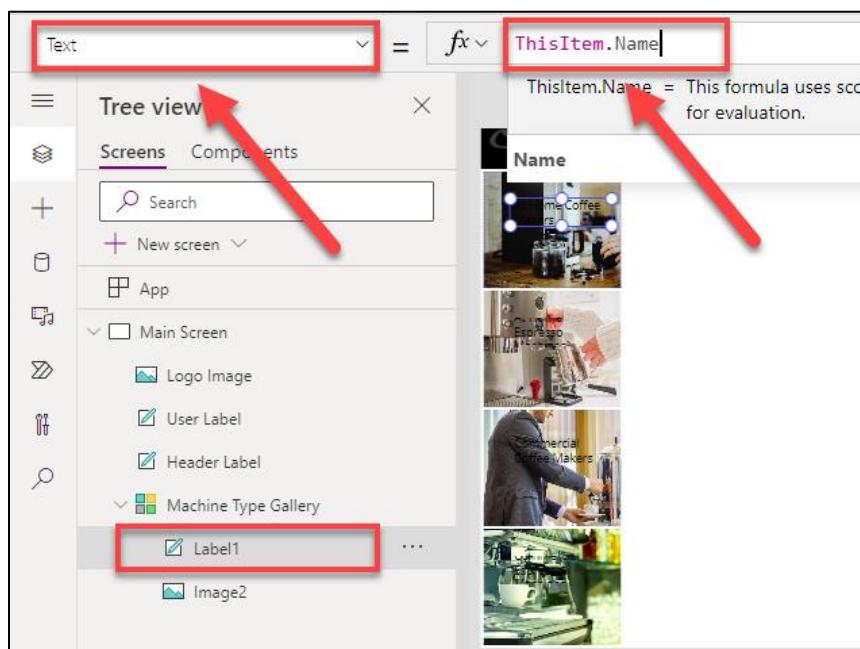


20. Make sure the gallery is still in **Edit** mode. Select + **Insert** from the ribbon at the top of the screen and select **Text label** from the drop-down.



21. Set the **Text** property value of the **Label** to the formula below:

`ThisItem.Name`



22. Using the same steps as previously in the lab, set the **Width** property value of the **label** to **192**.

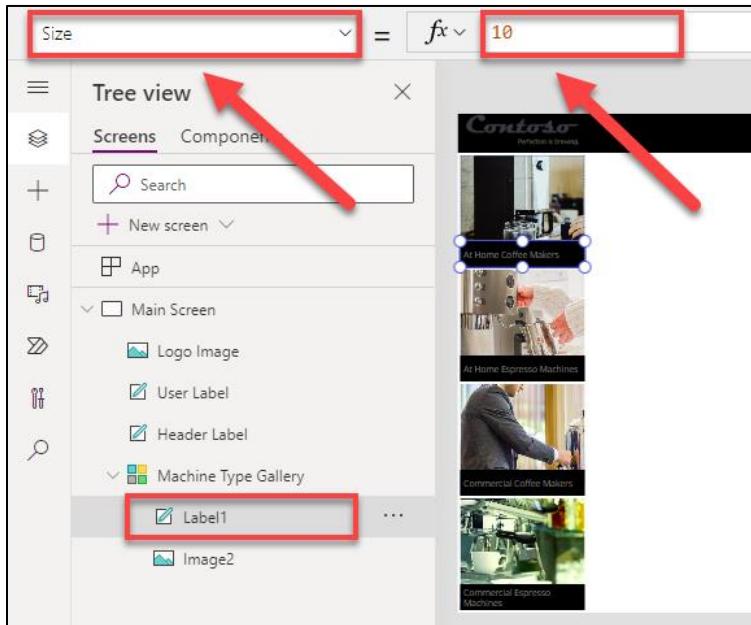
23. Set the **X** property value of the **label** to **0**.

24. Set the **Y** property value of the **label** to **132**.

25. Change **Fill** property value of the **label** to **Black**.

26. Change **Color** property value of the **label** to **Gray**.

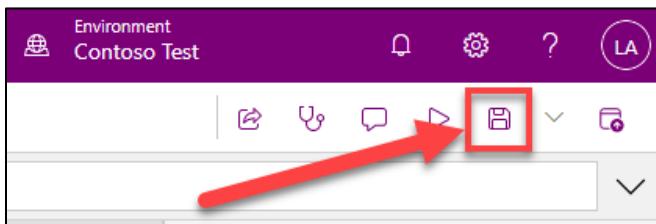
27. Change the **Size** property value of the **label** to **10**.



28. The main screen should now look like the image below.

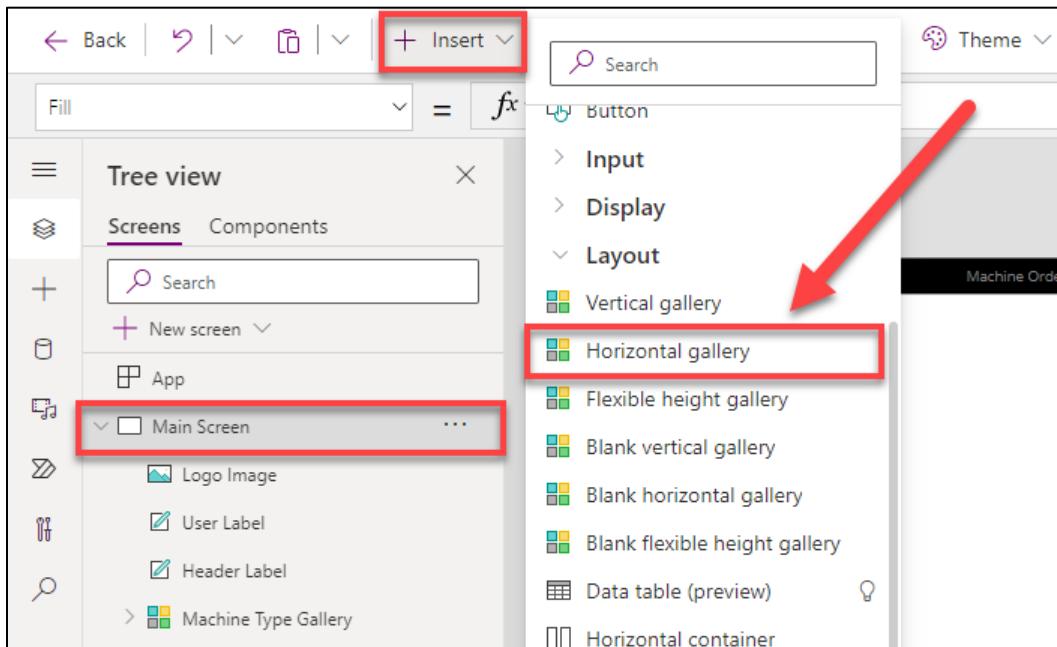


29. Select **Save** from the ribbon at the top of the screen and wait for the application to be saved.

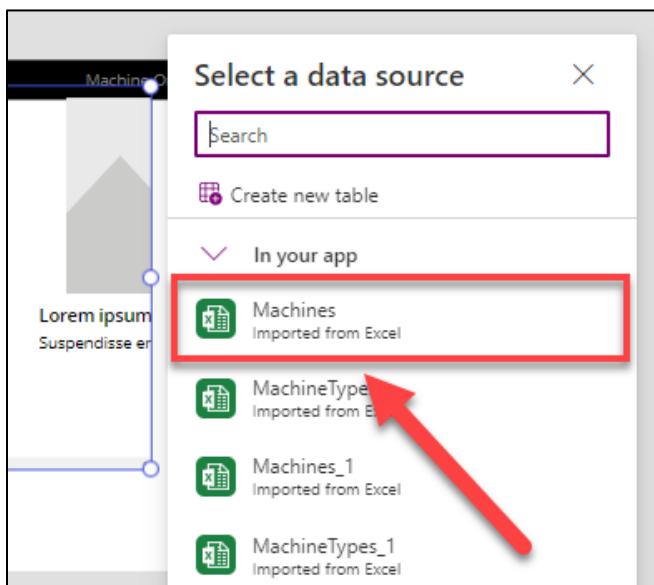


## Task 2: Add machine gallery

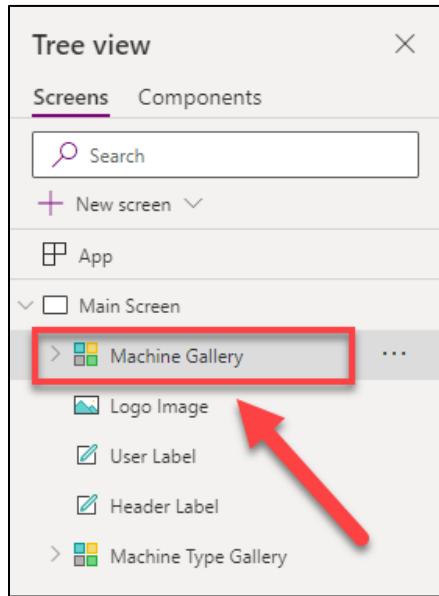
- With the Main Screen selected from the Tree view pane, select **+ Insert** from the ribbon at the top of the screen. Expand the **Layout** group and select **Horizontal gallery**.



- Select **Machines** as the Data source in the dialog box that appears.

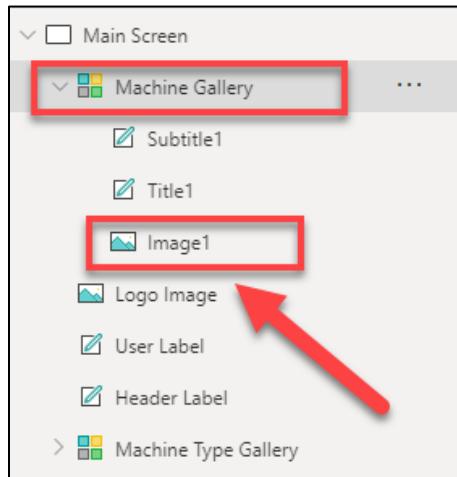


- Rename the gallery, located in the Tree view, to be named **Machine Gallery**. You can either right-click on the gallery name or select the **ellipses** (...) next to the gallery name and type the new name in the text box.



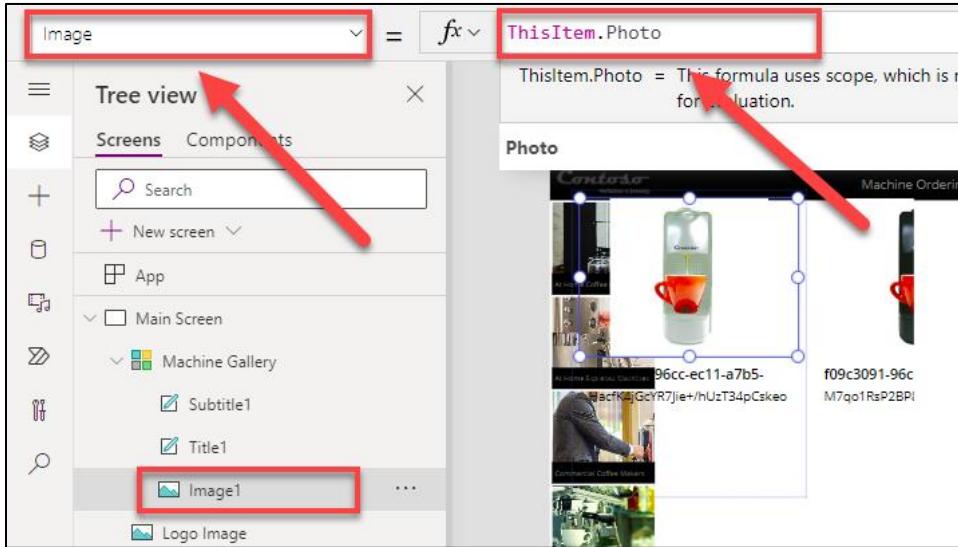
### Task 3: Arrange the machine gallery

1. Expand the **Machine Gallery** and select the **Image**.



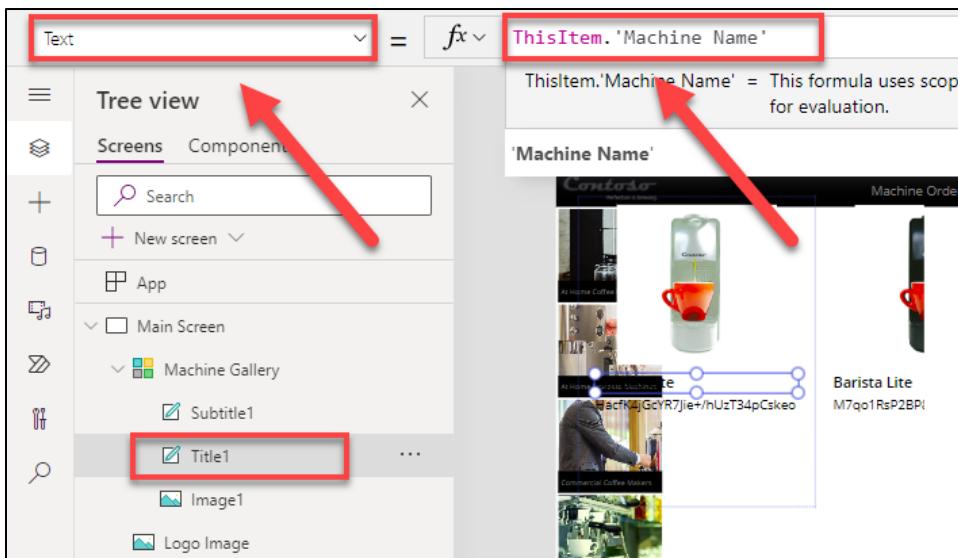
2. Set the **Image** property value of the image to the formula below:

`ThisItem.Photo`



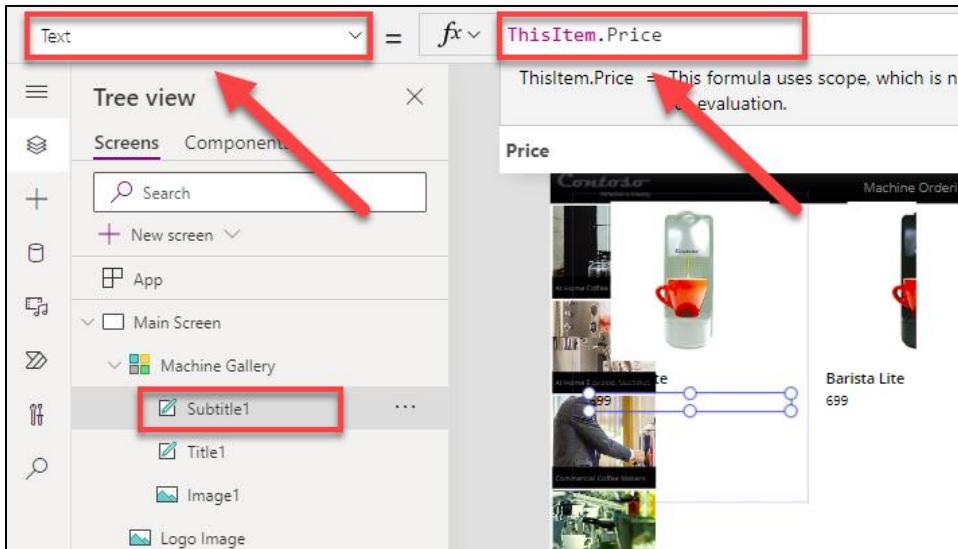
3. Expand the **Machine Gallery** from the Tree view pane and select the **Title**.
4. Set the **Text** property value of the title to the formula below:

`ThisItem.'Machine Name'`

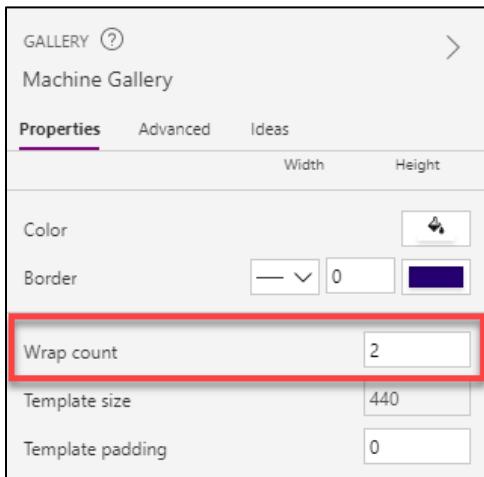


5. Expand the **Machine Gallery** from the Tree view pane and select the **Subtitle**.
6. Set the **Text** property value of the subtitle to the formula below:

`ThisItem.Price`



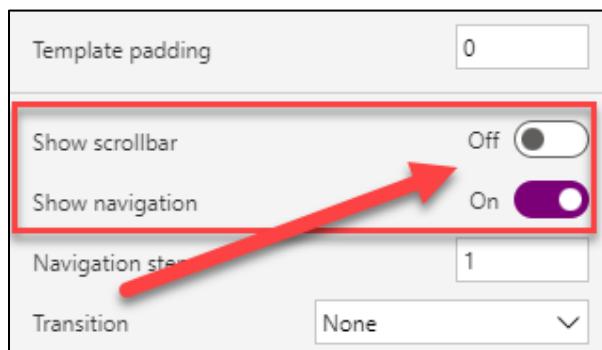
7. Select the **Machine Gallery** from the Tree view pane to the left of the screen.
8. Set the **X** property value of the **Machine Gallery** to **200**.
9. Set the **Y** property value of the **Machine Gallery** to **60**.
10. Set the **Height** property value of the **Machine Gallery** to **650**.
11. Set the **Width** property value of the **Machine Gallery** to **1165**.
12. Navigate to the **Machine Gallery** pane to the right of the screen Under the **Properties** tab, set the **Wrap count** to **2**.



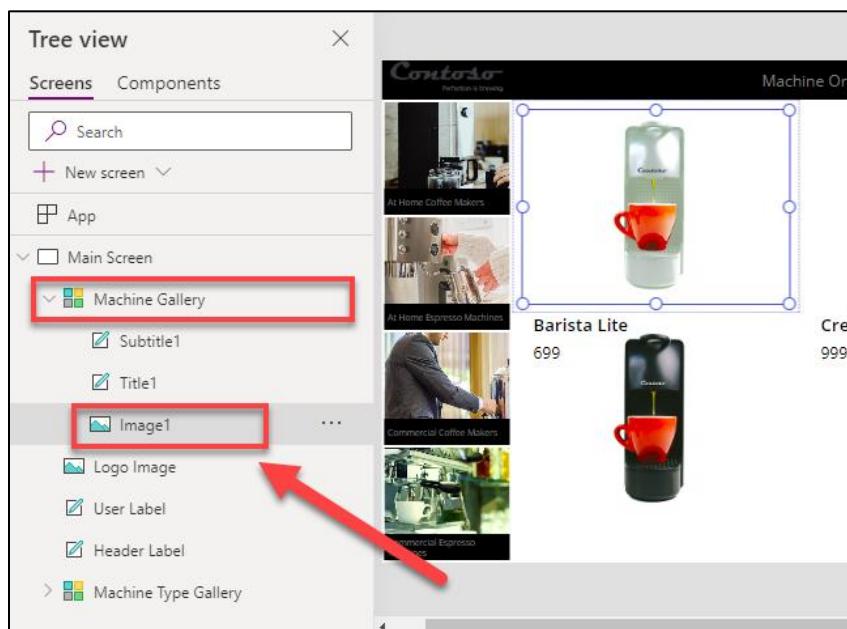
13. Your Machine gallery should look like the one in the figure below:



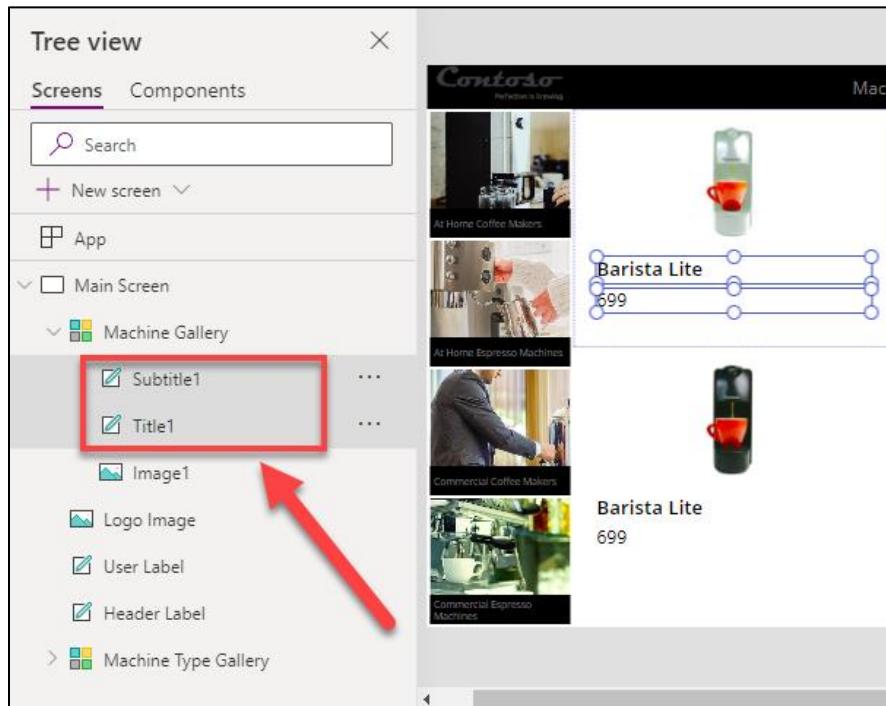
14. While still under the Properties tab of the Machine Gallery pane to the right of the screen, set **Show scroll** to **Off**.
15. Set **Show navigation** to **On**.



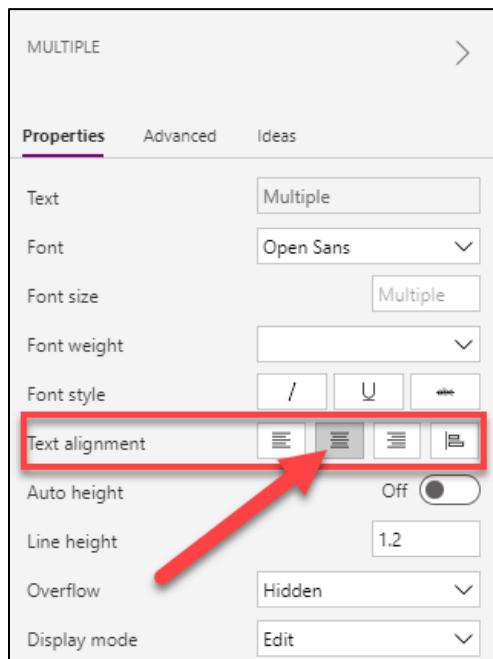
16. Select the **image** inside the **Machine Gallery** in the Tree view pane to the left of the screen.



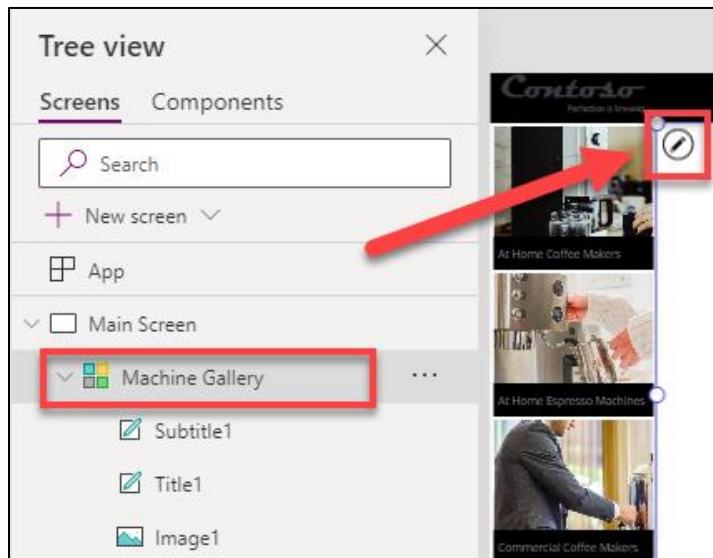
17. Set the **Width** property value of the **image** to **200**.
18. Set the **Height** property value of the **image** to **170**.
19. Select both the **Title** and **Subtitle** inside the **Machine Gallery**. Hold the **Ctrl (control)** key to select multiple controls.



20. Go to the **MULTIPLE** pane to the right, and under the **Properties** tab, select **Center** for **Text alignment**.



21. Select the **Machine Gallery** from the Tree view pane and select the **Edit** gallery button.



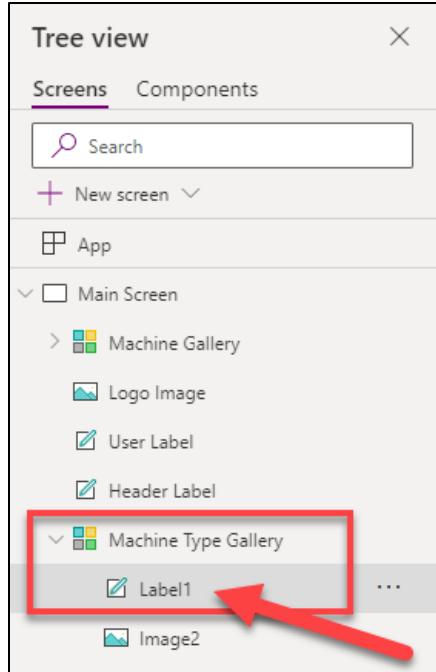
22. Make the template **narrower** by dragging the edges of the image selected until you can see total of **8** machines.  
Your screen should look like the one in the figure below:



## Task 4: Highlight the selected item in the gallery

In this task, you will use the **TemplateFill** property of the **Machine Type Gallery** to specify a highlight color for the selected item. You can decide how you want to indicate the selected item. We will change the label fill for this gallery.

1. From the Tree view pane, select the **Machine Type Gallery** and select the **Label**.



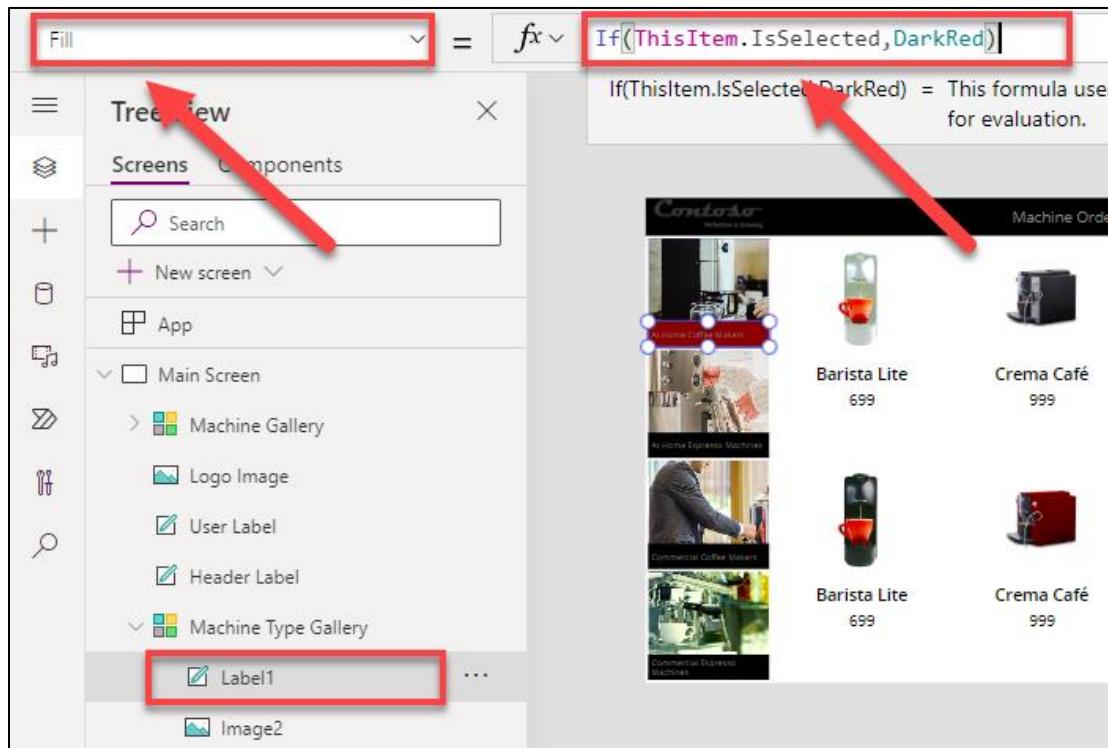
2. Change the **Fill** property value of the **label** to the formula below. This formula will set the label fill to **dark red** for the selected item:

```
If(ThisItem.IsSelected,DarkRed)
```

Alternately, you could set the Fill property to:

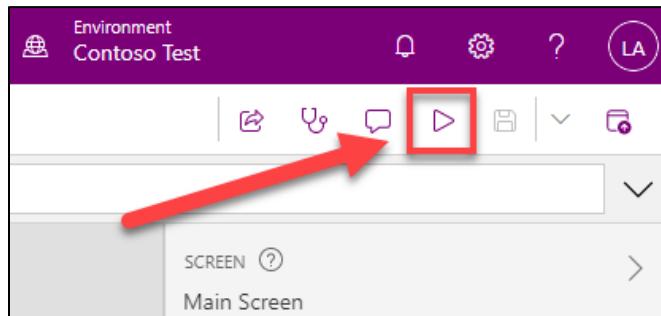
```
If(ThisItem.IsSelected,ColorFade ('Header Label'.Fill,75%))
```

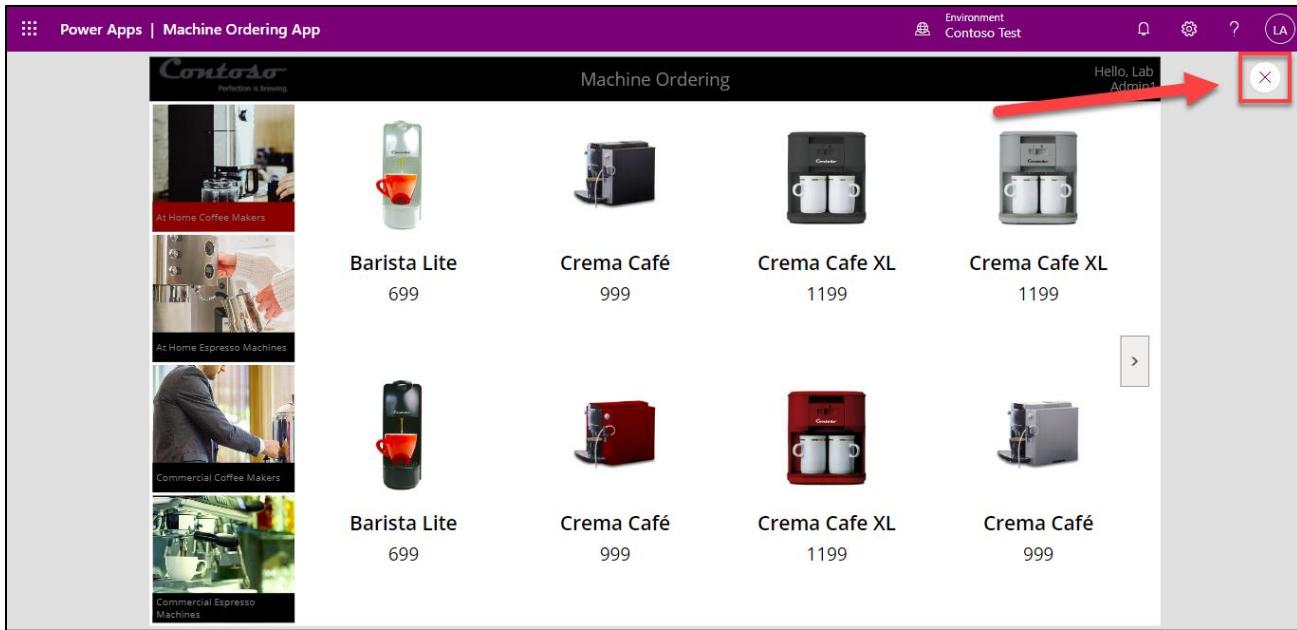
This approach is recommended so the fill color matches the header label with a 75% fade. If you change the fill color of header label, the fill color of the selected item in the gallery will automatically change.



- Now try using the preview mode to perform a quick test of this highlighting. You can enable preview mode by holding down the **Alt key** (also known as the Option key) and selecting a few different manufacturers in the gallery, notice the selected item in the manufacturer gallery is highlighted in a light blue color. The preview mode ends when you **stop holding the Alt key**.

Alternatively, you could select the **Play** (▶) button in the top right corner of the screen to enter preview mode. To **exit** the preview mode, you would then select the **X** in the top right corner or use the **Esc key** on your keyboard.





## Task 5: Filter the machine gallery based on selected machine type

In this task, you will use the **Filter()** function to filter the items in the **Machine Gallery** to only display machines that match the selected item in the **Machine Type Gallery**.

1. Select the **Machine Gallery** from the Tree view pane to the left of the screen.
2. Set the **Items** property value of the **Machine Gallery** to the formula below:

```
Filter(Machines, 'Machine Type ID' = 'Machine Type Gallery'.Selected.'Type ID')
```



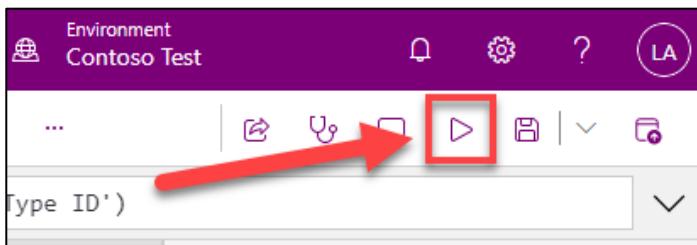
for alternate/European locales:

```
Filter(Machines, 'Machine Type ID' = 'Machine Type Gallery'.Selected.'Type ID')
```

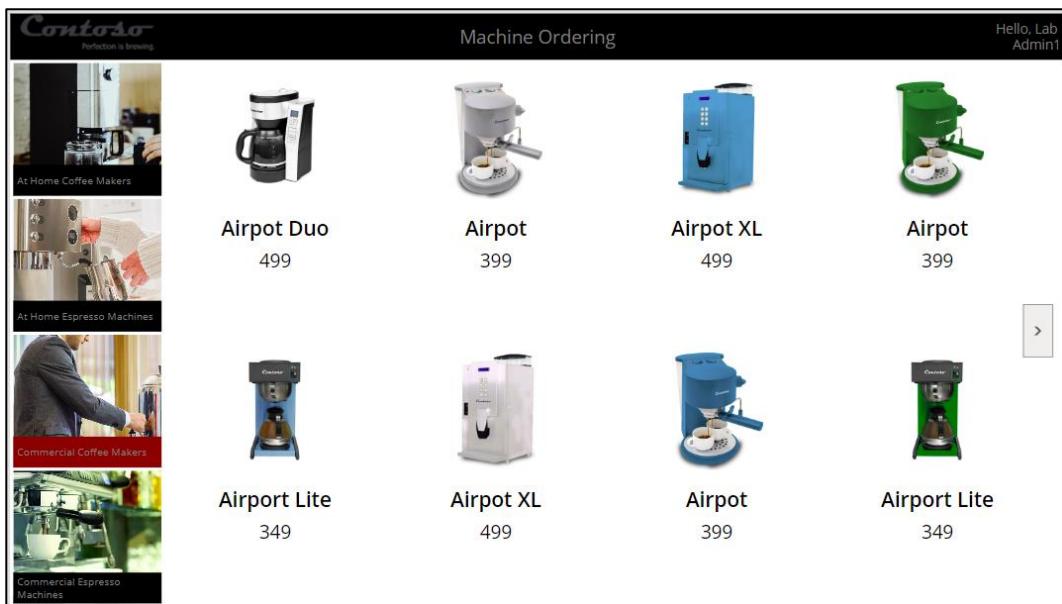
3. The **Machine Gallery** should now show machines that match the selected item of the machine types. Your app canvas should now look similar to the one shown in the figure below:



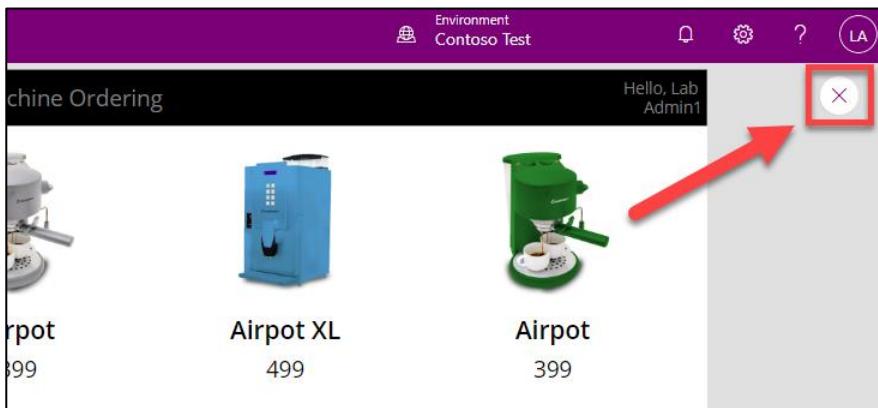
- Select the button to Preview the app, located in the top right corner of the screen.



- The app should then be in the Preview mode.
- Select an item from the machine type gallery.
- The machine gallery should now show machines that match the selected machine type. Select different machine types to see the machine gallery change in the preview.



- To **close** the preview, select the **X** in the top right corner of the screen.



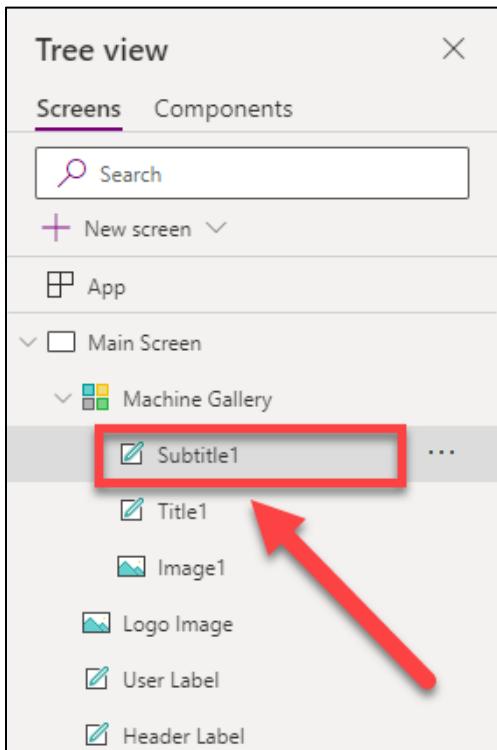
**Note:** If you get an error when entering the **Filter** command, check the name of the machine type gallery. The name within the filter command must match the name of your gallery.

More details on the *Filter()* function is available at [Filter Lookup](#).

A complete set of expressions is available at [Formula Reference](#).

## Task 6: Configure text labels in the machine gallery

- Expand the **Machine Gallery** in the Tree view pane and select the **Subtitle**.



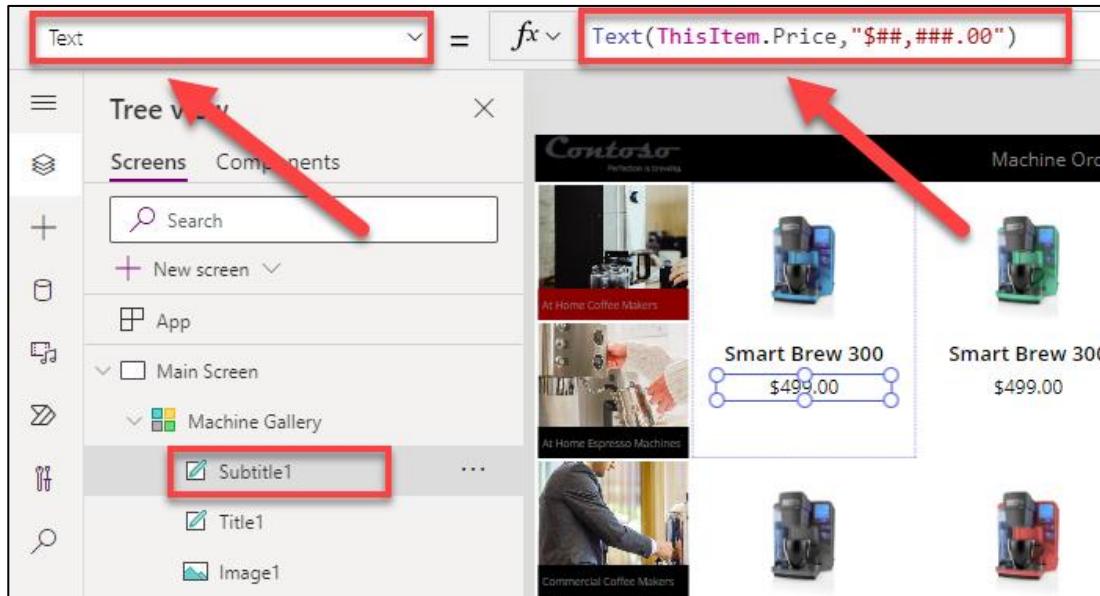
2. To add the **dollar sign (\$)** to the **Subtitle**, change the **Text** property value of the **Subtitle** to the following formula:

```
Text(ThisItem.Price, "$##,###.00")
```

Or for alternate/European locales:

```
Text(ThisItem.Price; "###.###,00")
```

**Note:** After you enter the above value in the formula bar, it will automatically resolve to include your locale, e.g. [\$.en-US]. If you see an error here, it might be because your locale is not yet supported, in which case as a workaround, manually change it to [\$.en-US]:



## Task 7: Conditional formatting to highlight machine above \$10,000

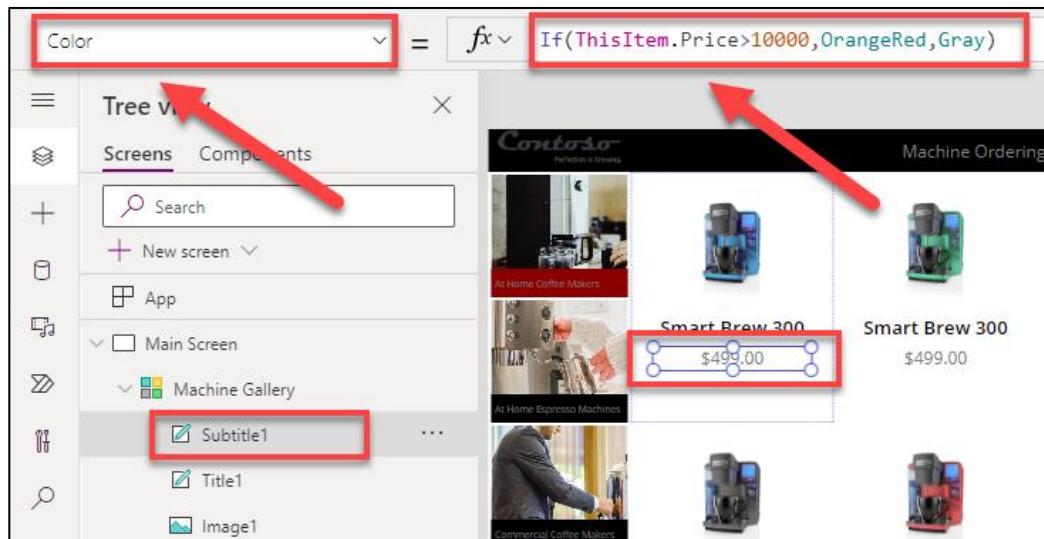
We can make it easy to spot machines that cost more than \$10,000, by displaying the price in Red.

1. Select the **label** in the **template cell** that displays the price and set the **Color** property value to the formula below:

```
If(ThisItem.Price>10000,OrangeRed,Gray)
```

Or for alternate/European locales:

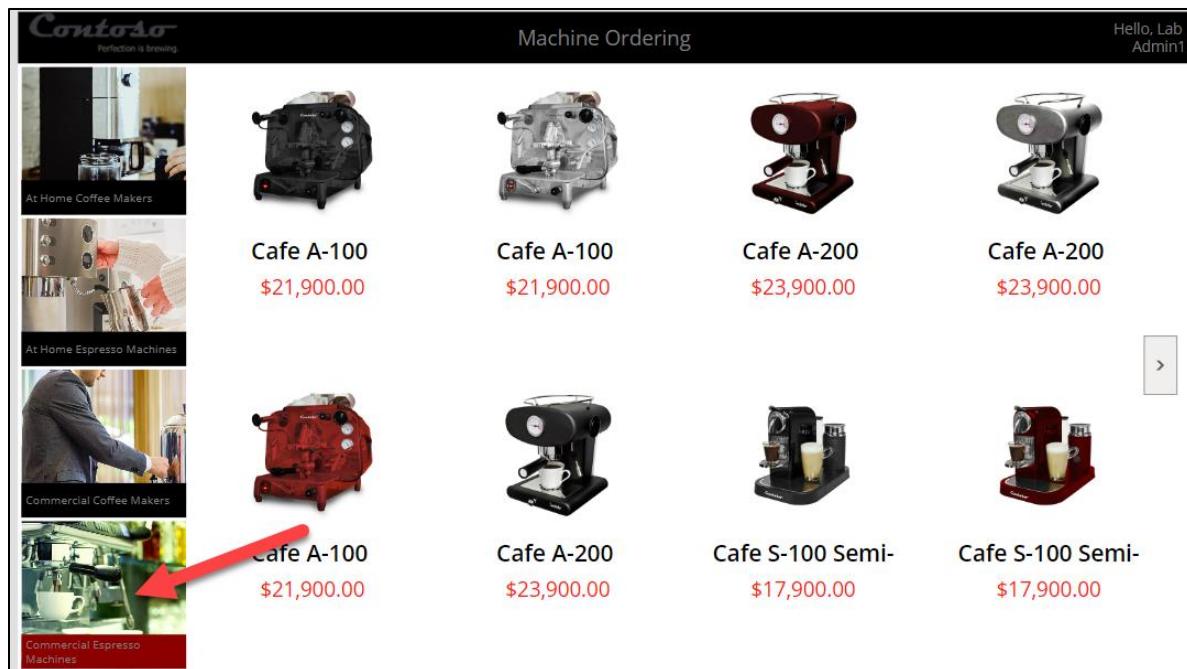
```
If(ThisItem.Price>10000;OrangeRed;Gray)
```



**Note:** As you are typing this formula notice that the autosuggest shows a choice of matching colors. Power Apps comes with a set of standard colors that you can easily reference in any property that accepts a color value. You can also set specific RGB values.

For a full list of Color functions and colors, see [Function Colors](#)

1. Turn on the **Preview mode** for the app by selecting the **Play** ( button in the top right corner of the screen.
2. Select **Commercial Espresso Machines** from the Machine Type Gallery. The price for the machines that are over 10,000 dollars should become red.

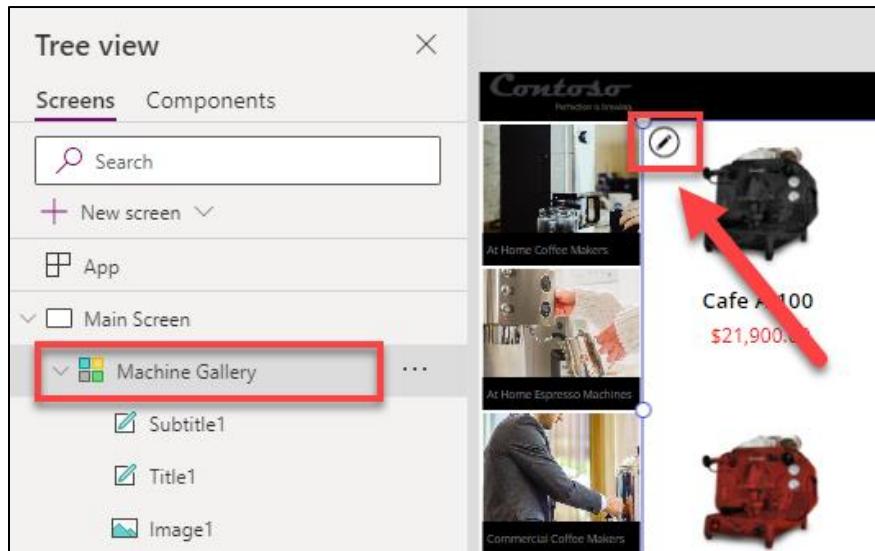


3. To close out of the **Preview mode**, select the **X** in the top right corner of the screen.

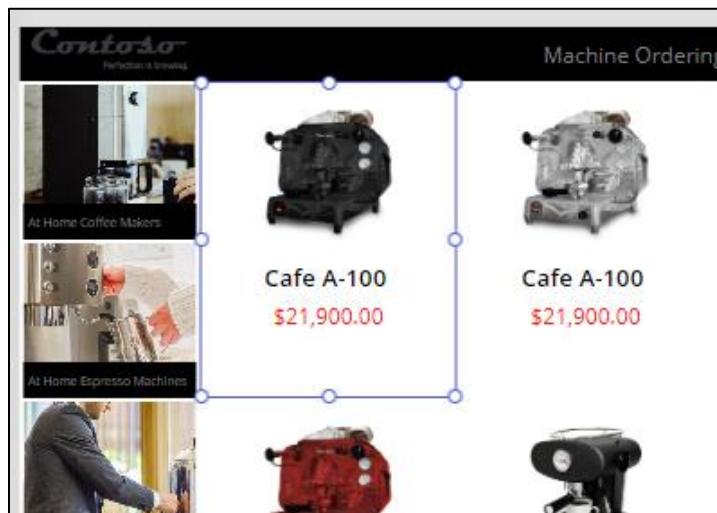
## Task 8: Add a checkbox to add a machine to the Compare list

We want to allow users to select multiple machines to compare before making a final selection on the next screen.

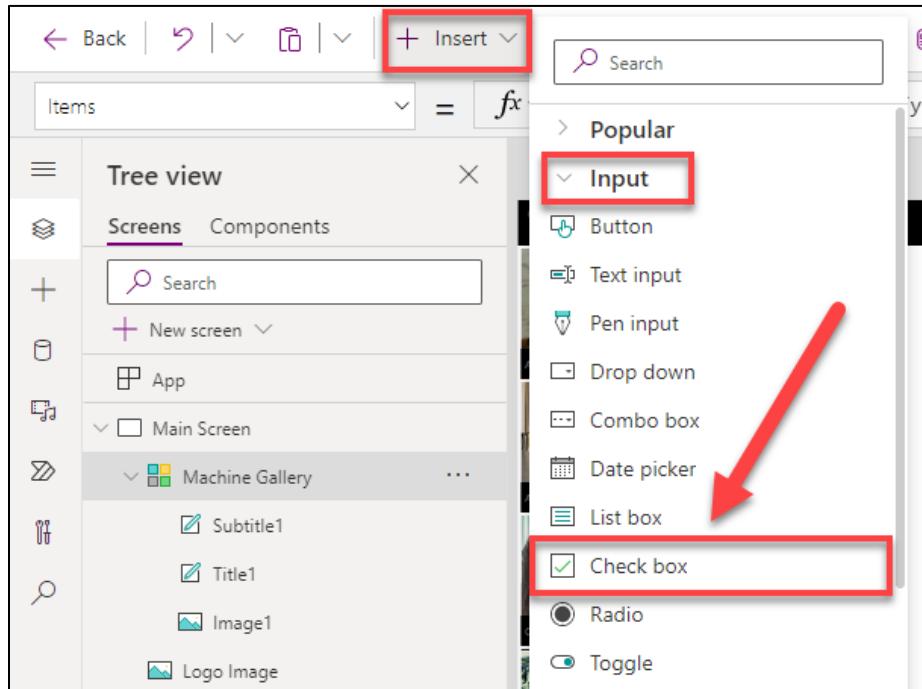
1. Select the **Machine Gallery** from the **Tree view pane**, then select the **Pencil edit icon** in the top left of the gallery to select the template cell.



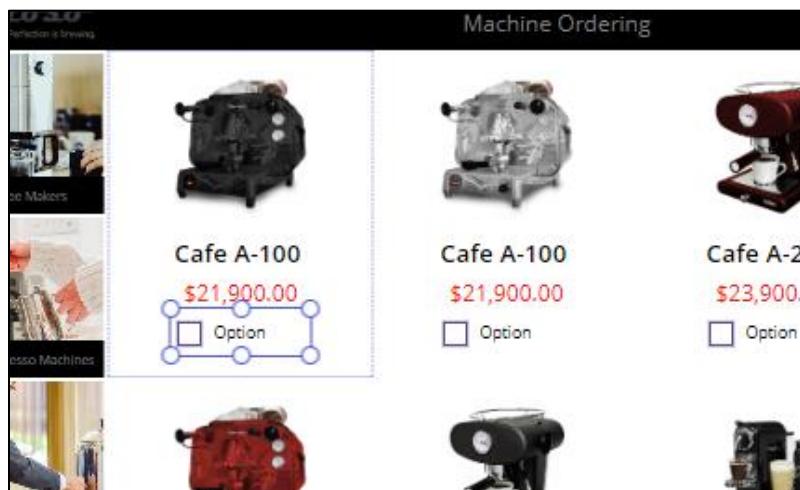
2. Make sure that only the first item in the gallery is selected (not the entire gallery).



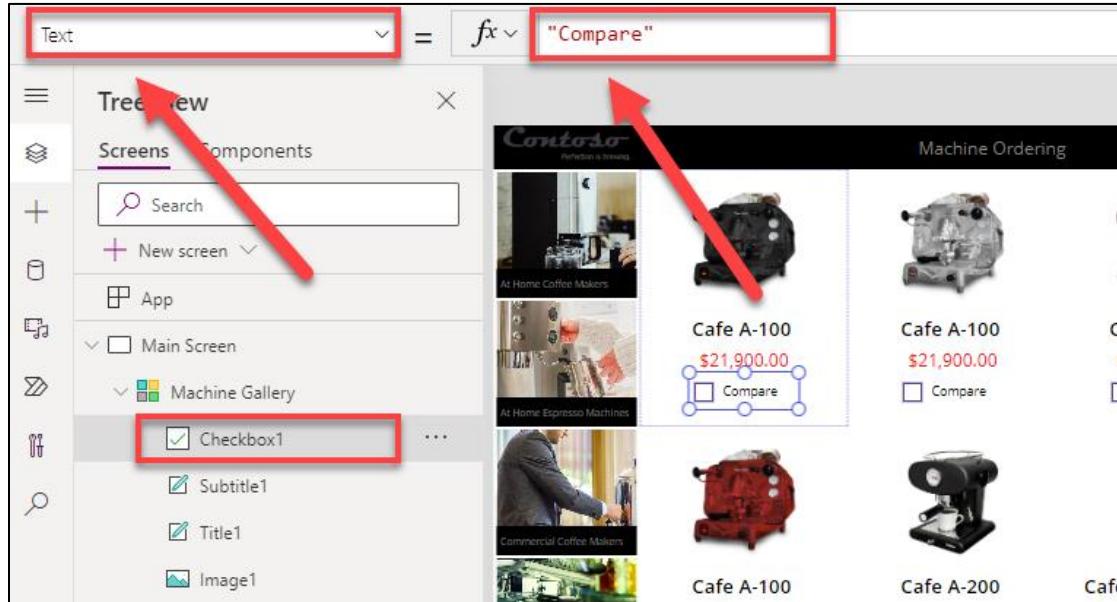
3. Select **+ Insert** from the ribbon at the top of the screen, then expand the **Input** group, and select **Checkbox**.



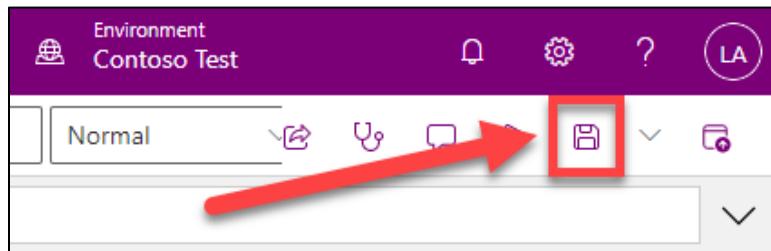
4. Move the inserted checkbox **below** the price.



5. Change the **Text** property value of the **Checkbox** by typing “**Compare**” in the formula bar.



- Select the **Save** button within the ribbon in the top right corner of the screen and wait for the application to be saved.

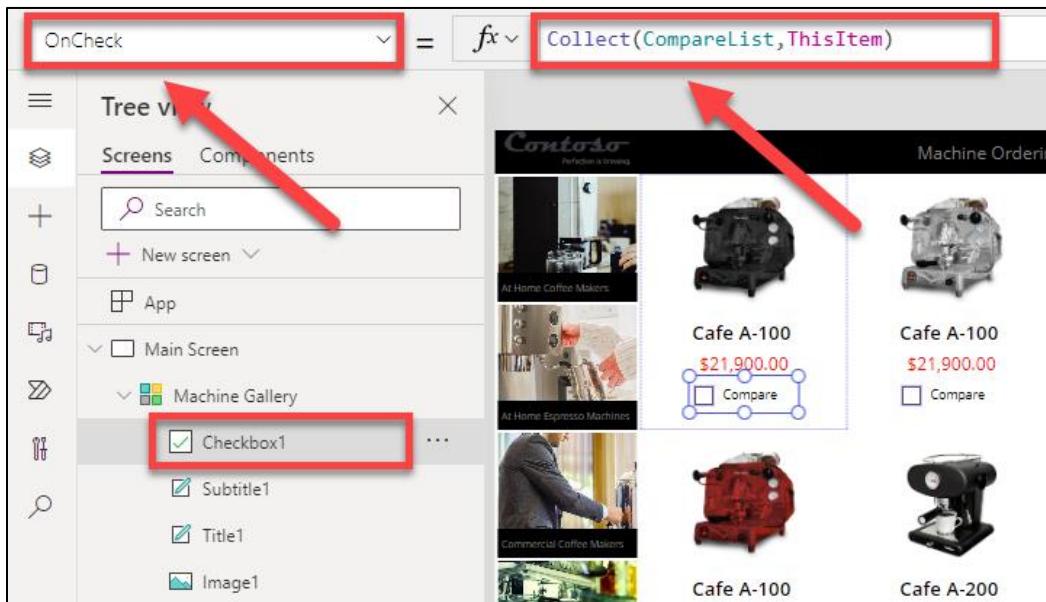


## Task 9: Create a collection for the selected machines

When a user selects a machine to compare, we will add it to a collection called **CompareList**. You can think of this as an in-memory collection of machines that have been selected for comparison.

- Select the **Checkbox** control from the Tree view pane and change the **OnCheck** property value to the formula below:

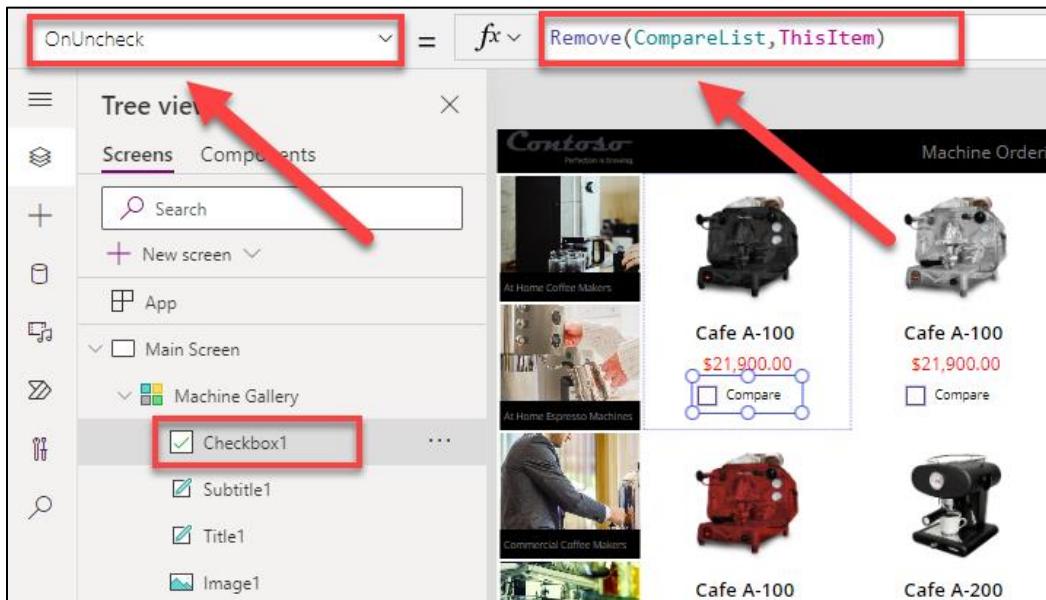
```
Collect(CompareList,ThisItem)
```



2. Next, set the **OnUncheck** property value of the **Checkbox** to the formula below:..

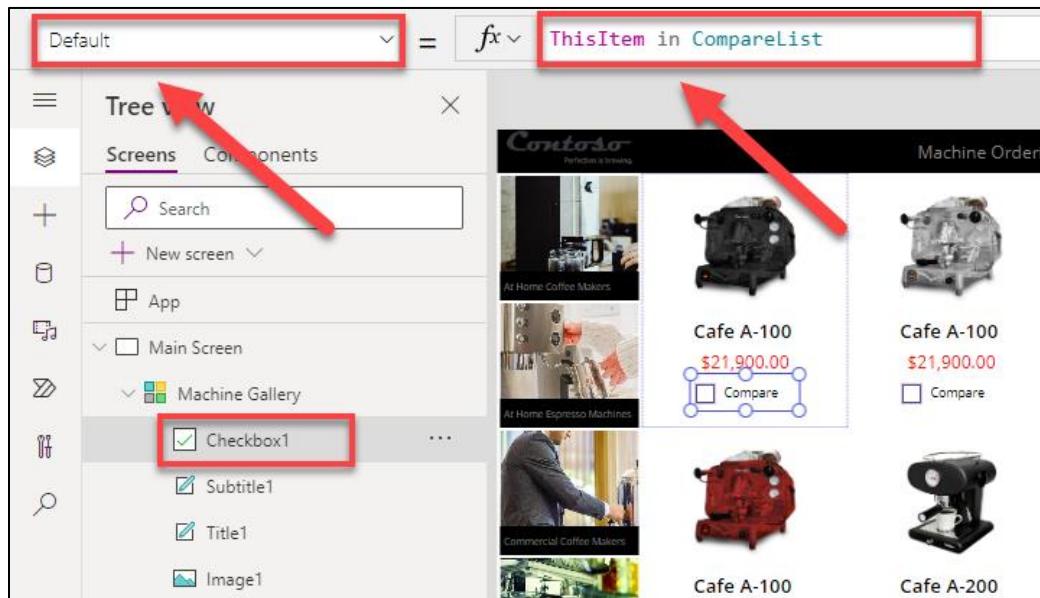
```
Remove(CompareList, ThisItem)
```

This is required to make sure the unchecked items are removed from the collection.



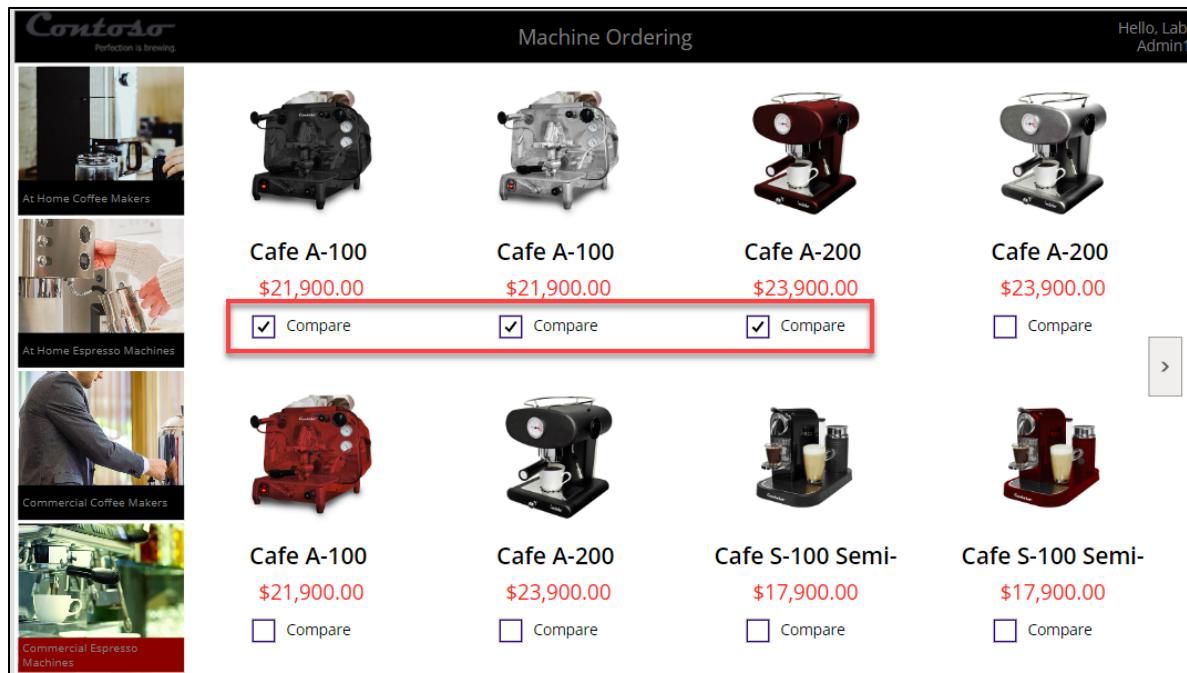
3. Set the **Default** property value of the **Checkbox** to the formula below:

```
ThisItem in CompareList
```

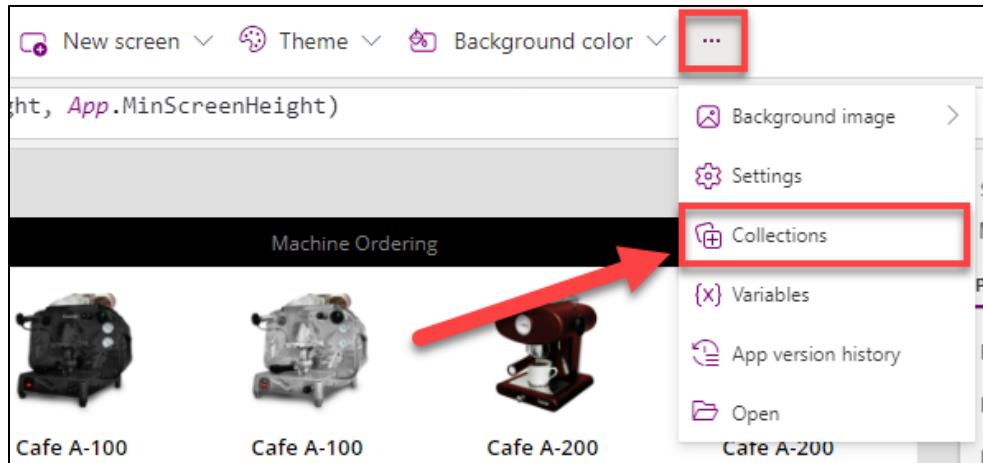


The **Default** setting of the checkbox is a **Boolean true or false value** that determines if the checkbox should be checked or not by default. Setting it to this formula will ensure that the checkbox is checked by default if the item has already been added to the collection since the result will be true, i.e. this item \*is\* in CompareList.

- Let's test out adding items to a collection by running the app in the **Preview mode**; select the **F5 key** on your keyboard, or select the **Preview button** in the ribbon to the top right of the screen. Select the checkboxes of three different machines within the app.



- Close out of Preview mode** by selecting the **X** in the top right corner.
- Select the **ellipsis (...)** button within the ribbon at the top of the screen, then select **Collections**.

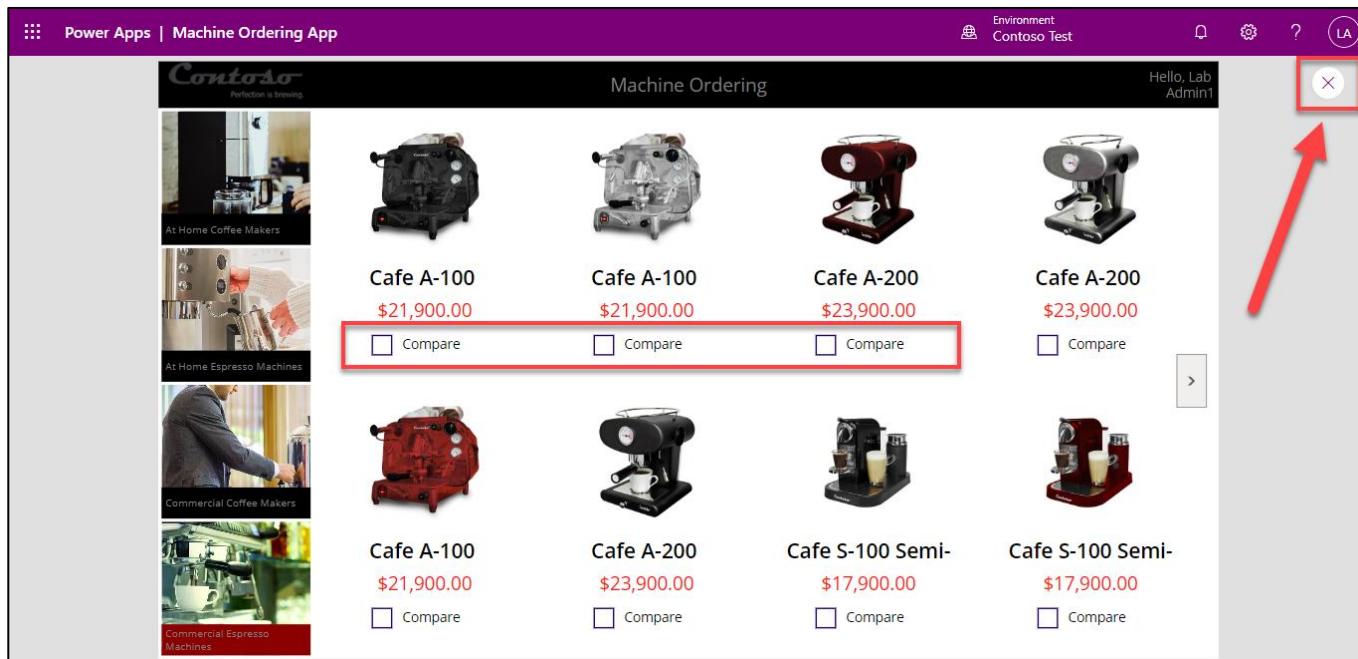


7. You will see the **CompareList** collection appear and the three items you selected while in the Preview mode.

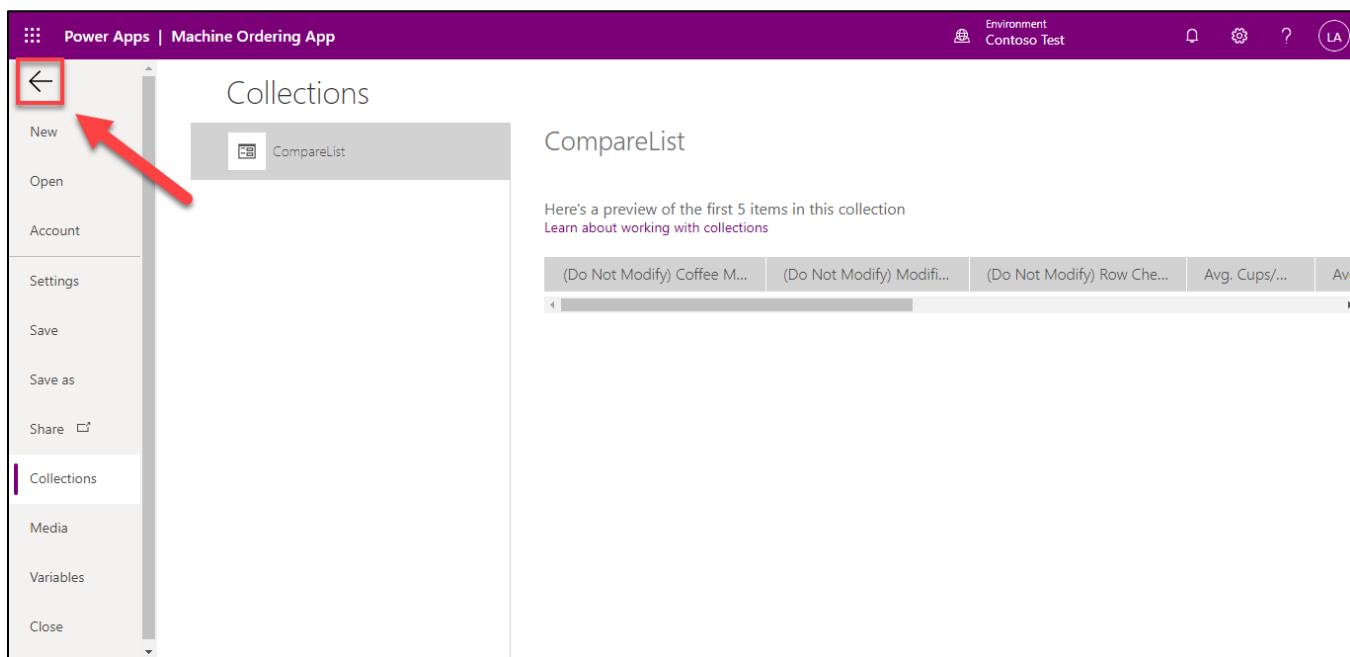
(Do Not Modify) Coffee Machine	(Do Not Modify) Modified On	(Do Not Modify) Row Checksum	Avg. C
fa9c3091-96cc-ec11-a7b5-000d3a142f68	5/5/2022 2:01 PM	v\$HTuOeQp89UXAxtPAsZ8GgrqtYiaPlxysaklh824cn1oo5txLX5sBlZyPXCxI8k7AWrPROqzTcE22y0Ag==	1-50
fc9c3091-96cc-ec11-a7b5-000d3a142f68	5/5/2022 2:01 PM	evD7M+RSSVtHt3BL942KEZQM7yktIAstd2z1T9gg6ACHG3OmxtA17d+jAvChFL0mk995SEXeJ32YqaG5YrMQ==	1-50
fe9c3091-96cc-ec11-a7b5-000d3a142f68	5/5/2022 2:02 PM	IVxtCVISjhSQNmrcOFN6M6X3GU8kw+tluqKOSmiYsqVdj8Vbw+hsmHNb[D]WxnAX4hqj+V5P8UMh46+8vYnw==	1-50

**Note:** Each item in the collection has all the information for each machine that we get from the **Machines** data source, not just the fields we display in the Machine Gallery.

8. Select the **back arrow** in the top left corner of the screen to navigate **back** to the **main view**.
9. Select the **Preview mode button** again within the ribbon in the top right corner of the screen.
10. **Uncheck** all the checked items and then select the **X** in the top right corner to **close** the preview.



11. Select the **ellipses (...)** button in the ribbon at the top of the screen and select **Collections** again.
12. All items have now been **removed** from the **CompareList** collection.
13. Select the **back arrow** in the top left corner to navigate back to the main screen view.



For more information on working with Collections in Power Apps, see:

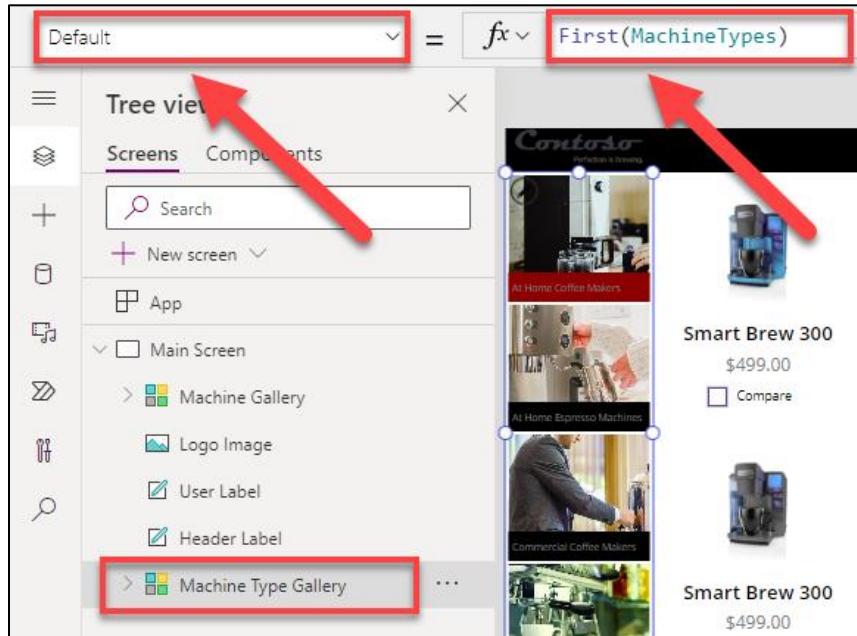
[Create Update Collections](#) and [Clear Collections](#)

## Task 10: Set the default selection to the first machine type and test the app

To avoid getting a **blank list** of machines when the app starts, set the **default selected item** in the **Machine Type Gallery** to be the **first item**.

1. Select **Machine Type Gallery** in the tree view to the left of the screen and set the **Default** value property of the gallery to the formula below:

First(MachineTypes)

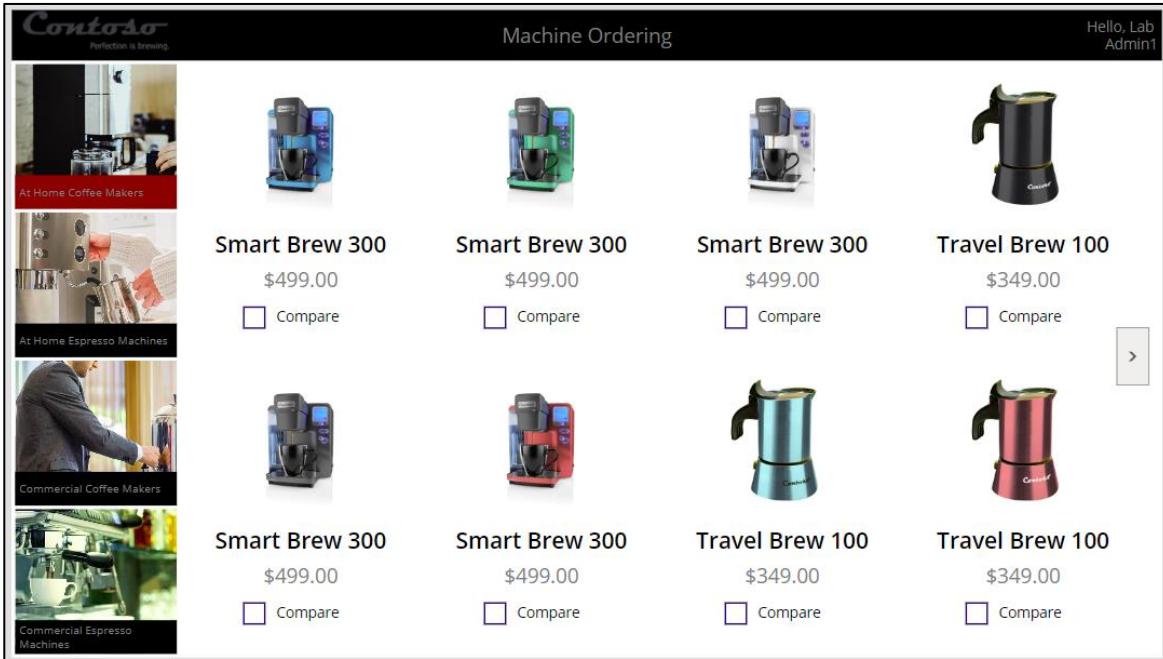


This will set it to the first item in the table.

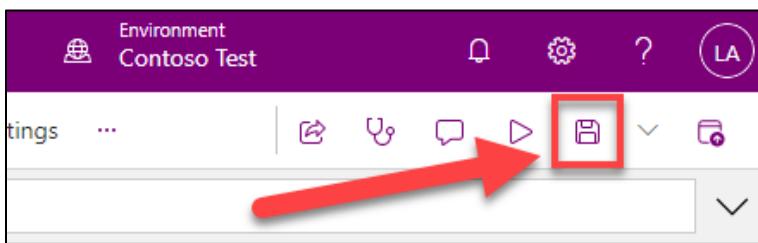
2. To **preview** the app, press the **Preview mode** button in the upper right corner of the ribbon at the top of the screen. You can also access the Preview mode by selecting the F5 key on your keyboard.

**Note:** You can also test your app right on the canvas by holding down the Alt key to activate buttons and other controls, as well as double-clicking to type into controls.

3. Your app should now look like the one in the figure below:



4. To **exit the Preview mode**, select the **X** in the top right corner of the screen.
5. Select **Save** located in the ribbon at the top of the screen and wait for the application to be saved. If the Save button is not available your app is already up to date.
6. Do not navigate away from this page.



## Exercise 3: Add Compare Screen

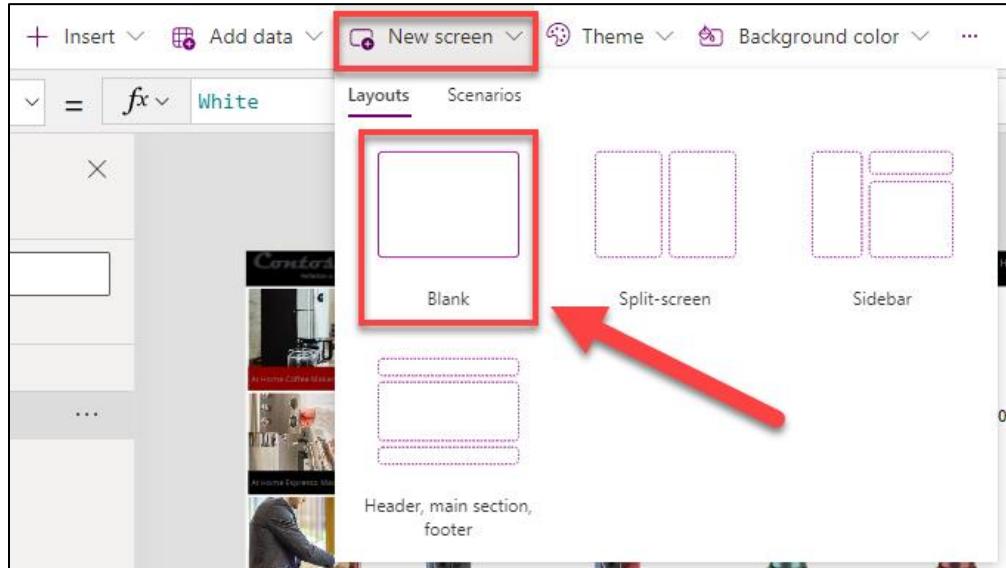
The second screen is where users compare the selected machines and then choose the one they wish to submit for approval. This screen will include:

- A back button for navigation back to the main screen.
- A list of selected machines for comparison (carried over from the main screen).
- Additional details for each machine.
- Highlighting the selected machine

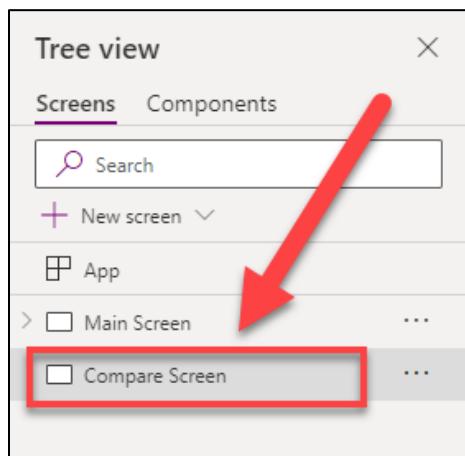
In a subsequent lab, you will create the database tables to store the machine orders and add an edit form to this screen to enter additional information and submit the request.

## Task 1: Add screen

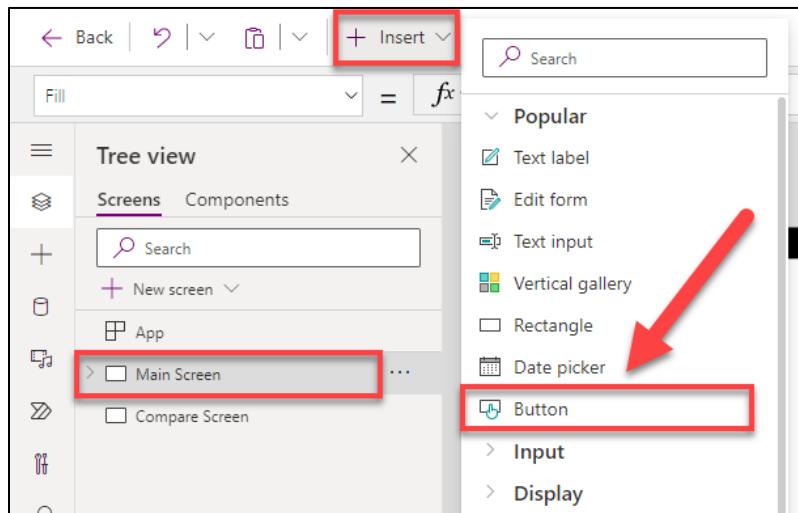
1. From the ribbon select **New Screen** and then choose **Blank**.



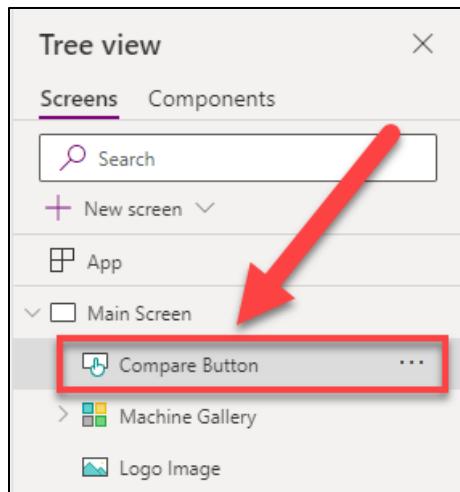
2. In the Tree view pane, select the **ellipses (...)** to the right of the **new screen** that was added. Select **Rename** from the options menu and change the name of the new screen to **Compare Screen**.



3. Within the Tree view, select the **Main Screen**, choose **+ Insert** from the ribbon at the top of the screen, expand the **Popular** group, and then select **Button**.

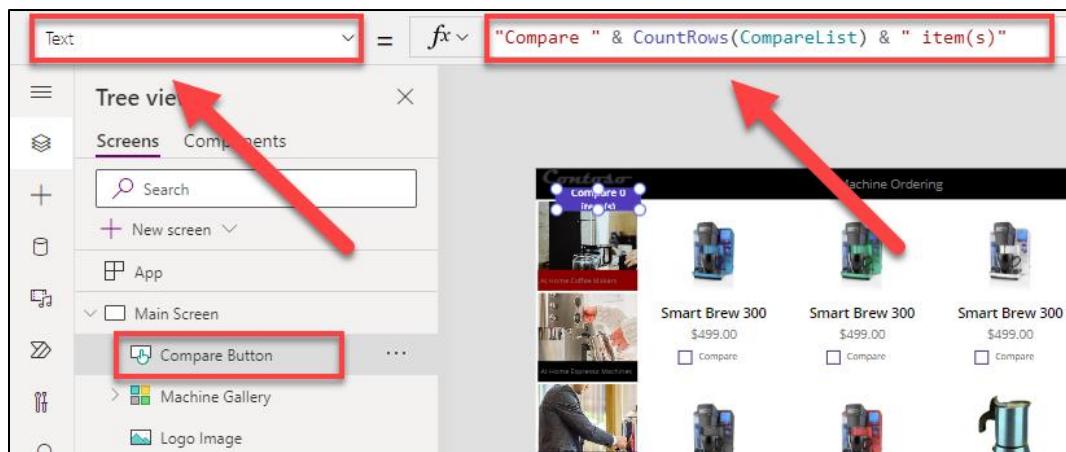


4. Within the **Tree view** to the left of the screen, select the **ellipses (...)** next to the newly added button under the **Main Screen**. Select the **Rename** option and change the name of the button to **Compare Button**.



5. Select the **Compare Button** from the **Tree view** to the left of the screen.  
 6. Set the button's **Text** property value to the formula below by typing in the formula bar at the top of the screen:

"Compare " & CountRows(CompareList) & " item(s)"



7. Set the **Fill** property value of the **Compare Button** to **Black**.

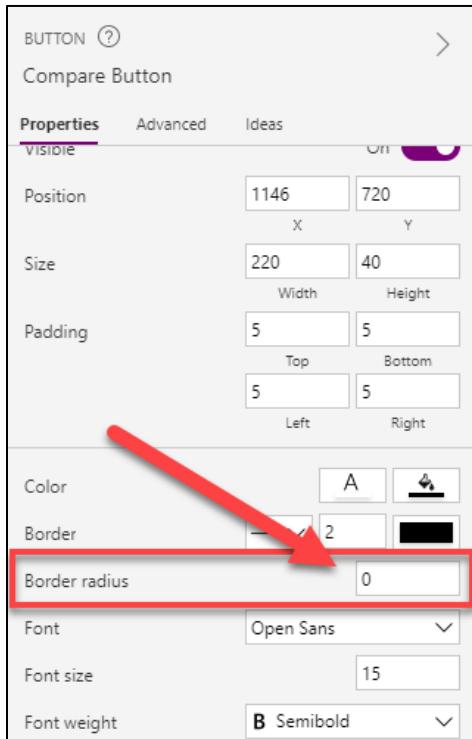


8. Set the **Width** property value of the **Compare Button** to **220**.  
 9. Set the **Height** property value of the **Compare Button** to **40**.  
 10. Set the **X** property value of the **Compare Button** to **1140**.  
 11. Set the **Y** property value of the **Compare Button** to **720**.  
 12. Set the **DisplayMode** of the **Compare Button** to the formula below. This formula will disable the button if there are no items selected and enable it if at least one item is selected:

```
If(CountRows(CompareList) > 0, DisplayMode.Edit, DisplayMode.Disabled)
```

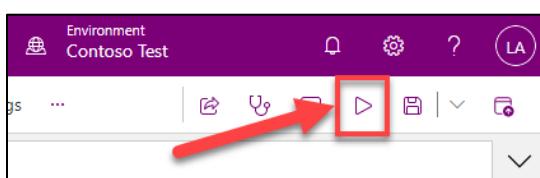
The screenshot shows the Power Apps canvas editor. On the left, the Tree view pane lists components: Screens, Components, Main Screen, Compare Button, Machine Gallery, Logo Image, User Label, Header Label, and Machine Type Gallery. The 'Compare Button' item is highlighted with a red box and has a red arrow pointing to it from the top-left. In the center, the main canvas area displays a 'Machine Ordering' screen with a grid of coffee machines. Each machine has a 'Compare' button. A red arrow points from the formula bar to the 'Compare' button on the screen. The formula bar shows the formula: `If(CountRows(CompareList) > 0, DisplayMode.Edit, DisplayMode.Disabled)`. The preview on the right shows the same screen with the 'Compare' button highlighted. A red box highlights the 'Compare' button in the preview, and another red arrow points from the formula bar to this highlighted button.

13. Select the **Compare Button** in the Tree view pane to the left of the screen, go to the **Properties** tab within the **Compare Button** pane to the right of the screen and set the **Border radius** to **0** to remove the rounded edge of the button.



14. Select the **Machine Gallery** from the Tree view pane to the left of the screen and **resize** the Machine Gallery within the canvas so that the Compare Button does not overlap with the Compare Checkboxes.

15. Next, select the **Preview mode** button located within the ribbon in the top right corner of the screen.



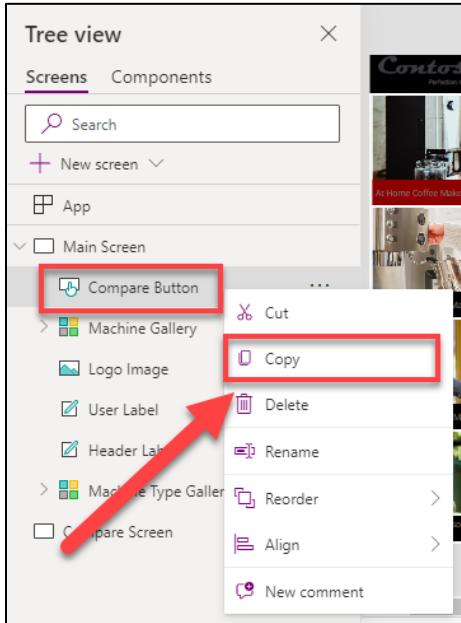
16. Select a few different machines within the Preview mode. Notice that as the machines are selected, the Compare Button changes to a **Black** fill color and the number of items selected in the Compare Button changes.

The screenshot shows a list of coffee makers under the heading "Machine Ordering". On the left, there are four categories: "At Home Coffee Makers", "At Home Espresso Machines", "Commercial Coffee Makers", and "Commercial Espresso Machines". The main area displays four rows of products. The first row contains three "Smart Brew 300" models, each with a price of \$499.00 and a "Compare" button. The second row contains two "Smart Brew 300" models and one "Travel Brew 100" model. The third row contains one "Smart Brew 300" model and one "Travel Brew 100" model. The fourth row contains one "Travel Brew 100" model. Red boxes highlight the "Compare" buttons for the three Smart Brew 300s in the first row, and a red arrow points from this group to a black button labeled "Compare 3 item(s)" located at the bottom right of the screen.

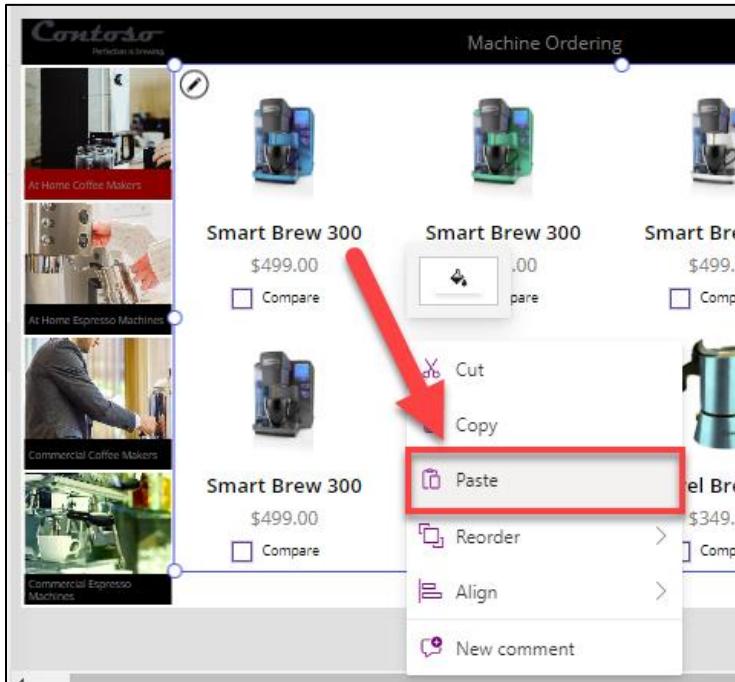
17. **Unselect** all machines – notice the Compare Button changes back to a gray fill color and the number of items selected changes back to 0. Select the **X** in the top right corner to **close** out the Preview mode and navigate back to the canvas.

This screenshot is identical to the previous one, but the three "Smart Brew 300" machines in the first row now have unselected "Compare" buttons, indicated by a gray fill color. A red arrow points from this group to a gray button labeled "Compare 0 item(s)" located at the bottom right of the screen.

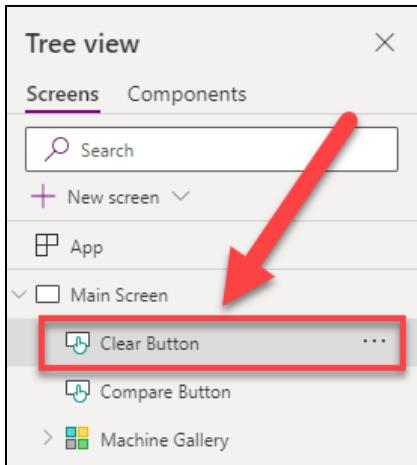
18. Select the **Compare Button** within the Tree view pane to the left of the screen. Right-click on the Compare button and from the menu, select **Copy (Ctrl-C)**.



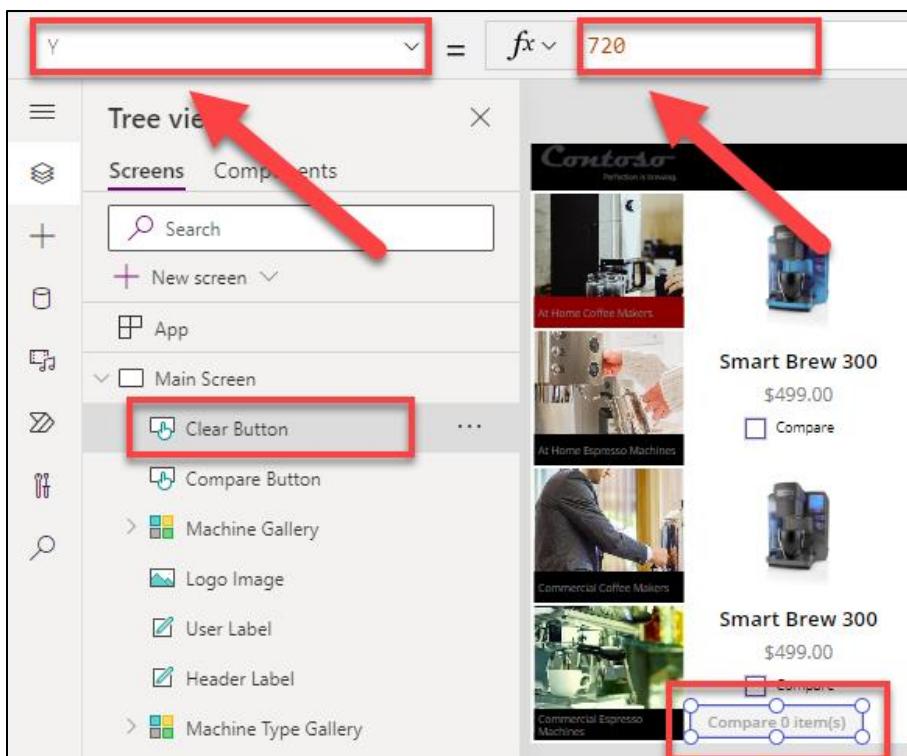
19. Next, right-click in the white space of the **Main Screen** canvas. From the menu, select the option to **Paste (Ctrl-V)**.



20. Within the **Tree view** pane to the left of the screen, select the **ellipses (...)** next to the newly added button, and from the options menu, select **Rename**. Change the name of the button to **Clear Button**.

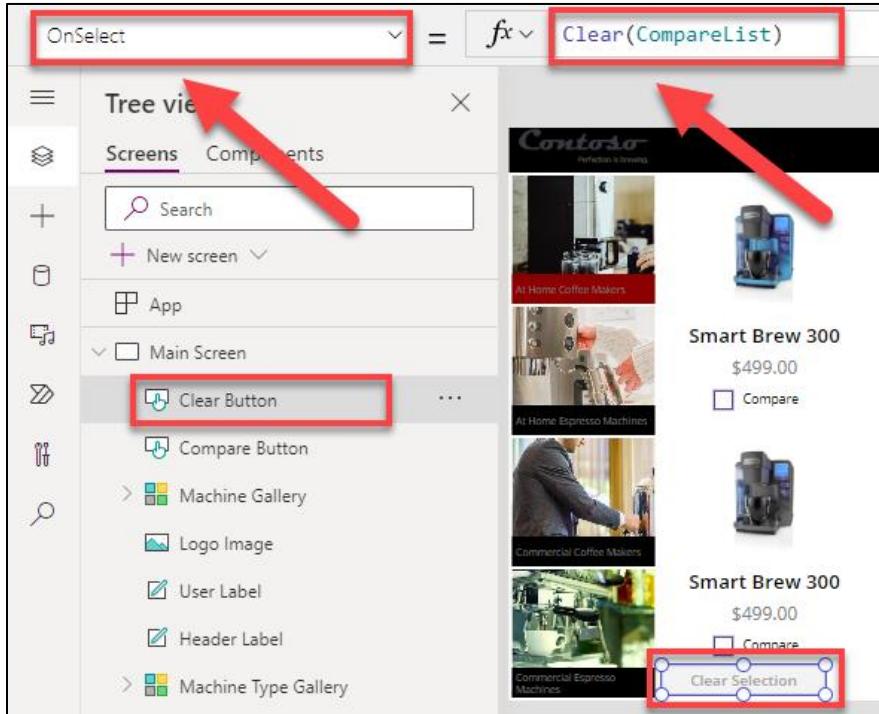


21. Set the **X** property value of the **Clear button** to **205**.
22. Set the **Y** property value of the **Clear button** to **720**.



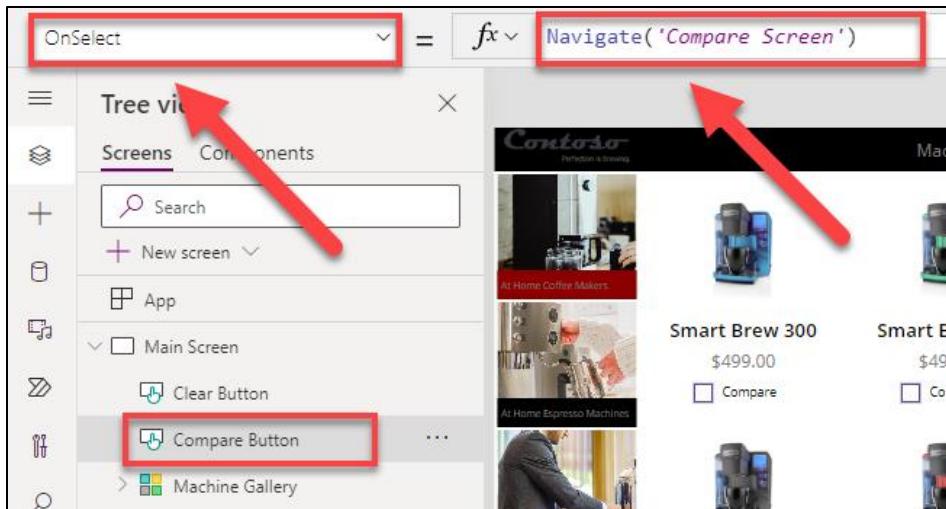
23. Change the **Text** property value of the Clear Button to "**Clear Selection**".
24. Set the **OnSelect** value of the **Clear Button** to the formula below. This formula will remove all the items in the **CompareList** collection:

```
Clear(CompareList)
```



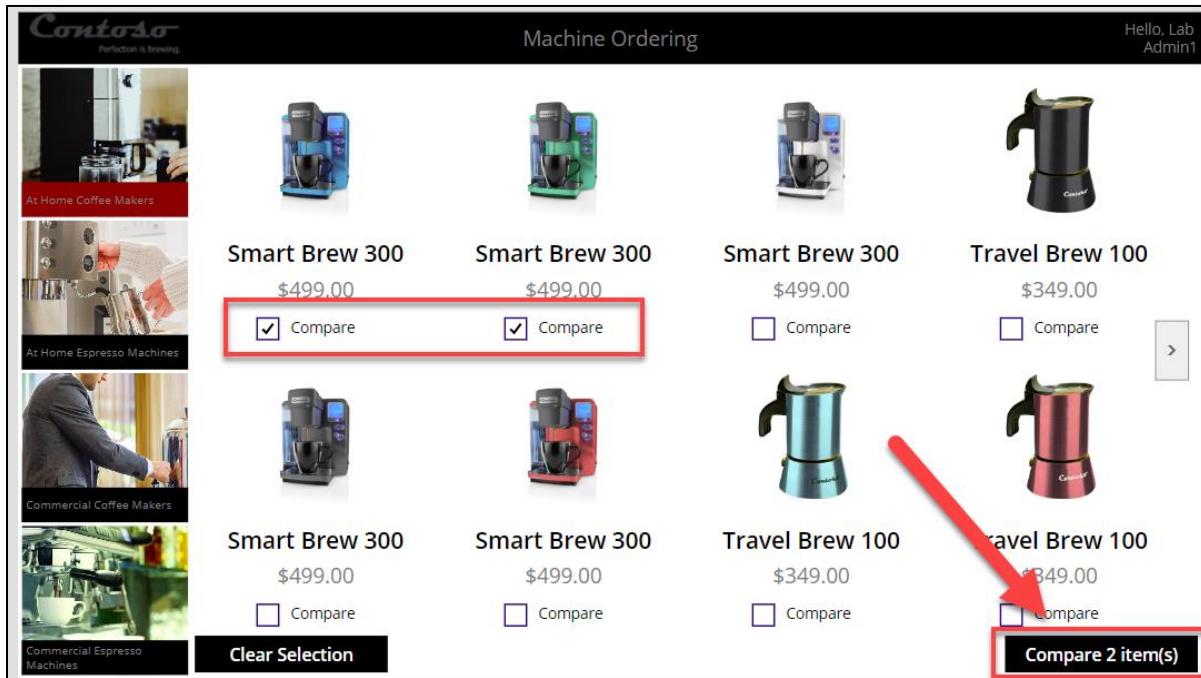
25. Select the **Compare Button** in the Tree view pane to the left of the screen, and change the **OnSelect** value to the formula below:

```
Navigate('Compare Screen')
```

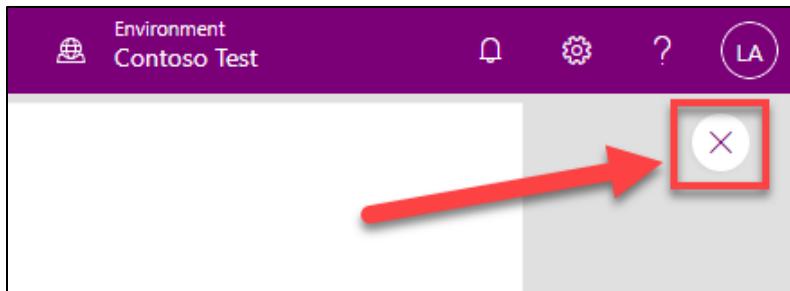


26. Select the **Preview mode** button within the ribbon to the top right of the screen.

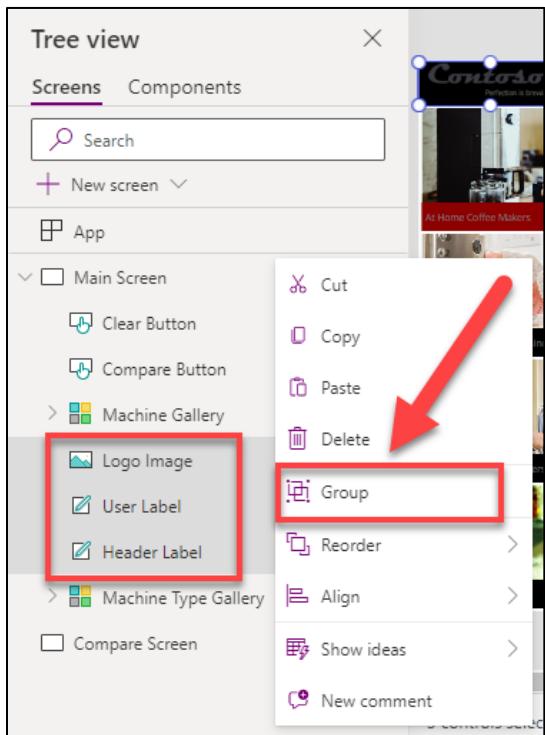
27. Select a couple of machines and select the **Compare** button and verify that it takes you to the second screen.



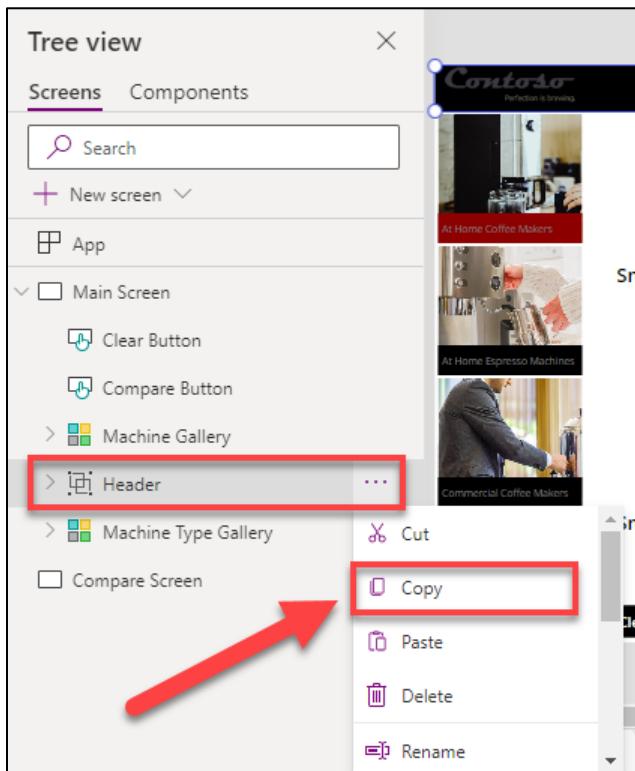
28. You should navigate to the new empty screen. Close the preview by selecting the X in the top right corner of the screen.



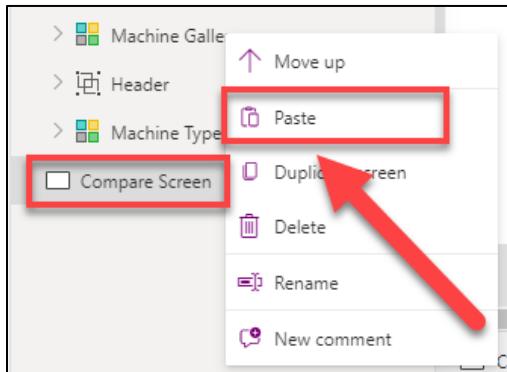
29. Select the **Main Screen** in the **Tree view** pane to the left of the screen.  
30. Multi-select the **User Label**, **Header Label**, and **Logo Image** by holding down the **Ctrl** key on your keyboard. Then, right-click and select **Group** from the options.



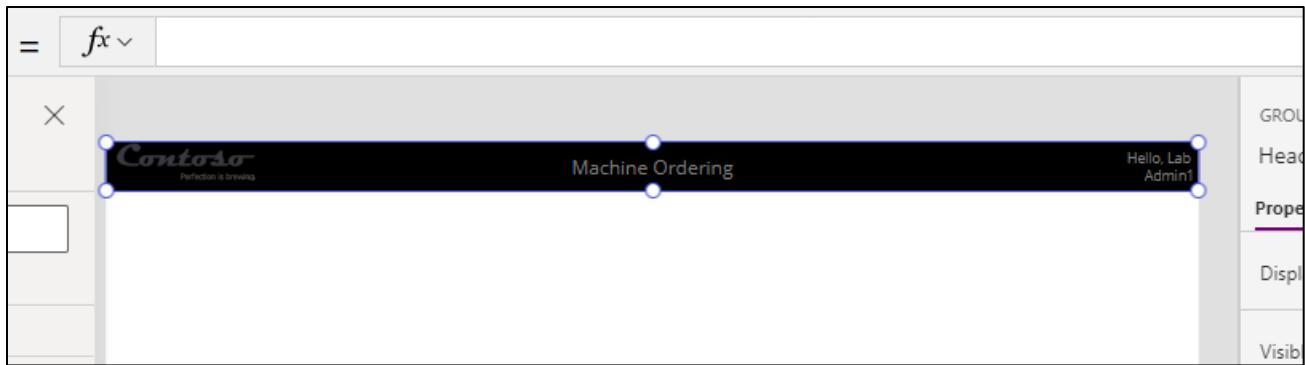
31. Select the **ellipses (...)** to the right of the newly added Group. Rename the group to **Header**.
32. Select the **ellipses (...)** to the right of the **Header** and select **Copy**.



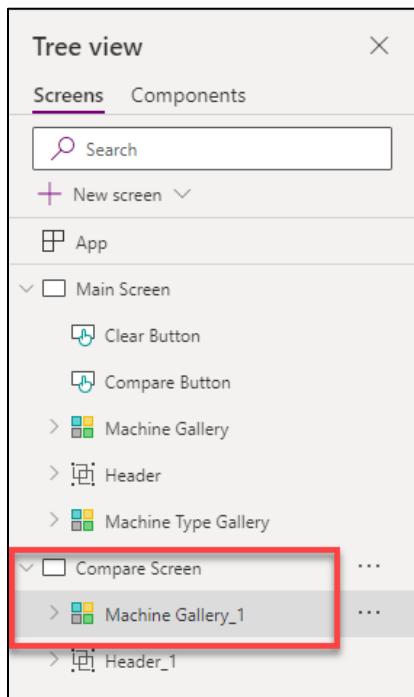
33. Right-click on the **Compare Screen** in the Tree view pane to the left of the screen and select **Paste**.



34. The **Header** within the **Compare Screen** should look like the figure below:



35. Using the same steps as previously, copy **Machine Gallery** from the **Main Screen** and paste it in the **Compare Screen**.



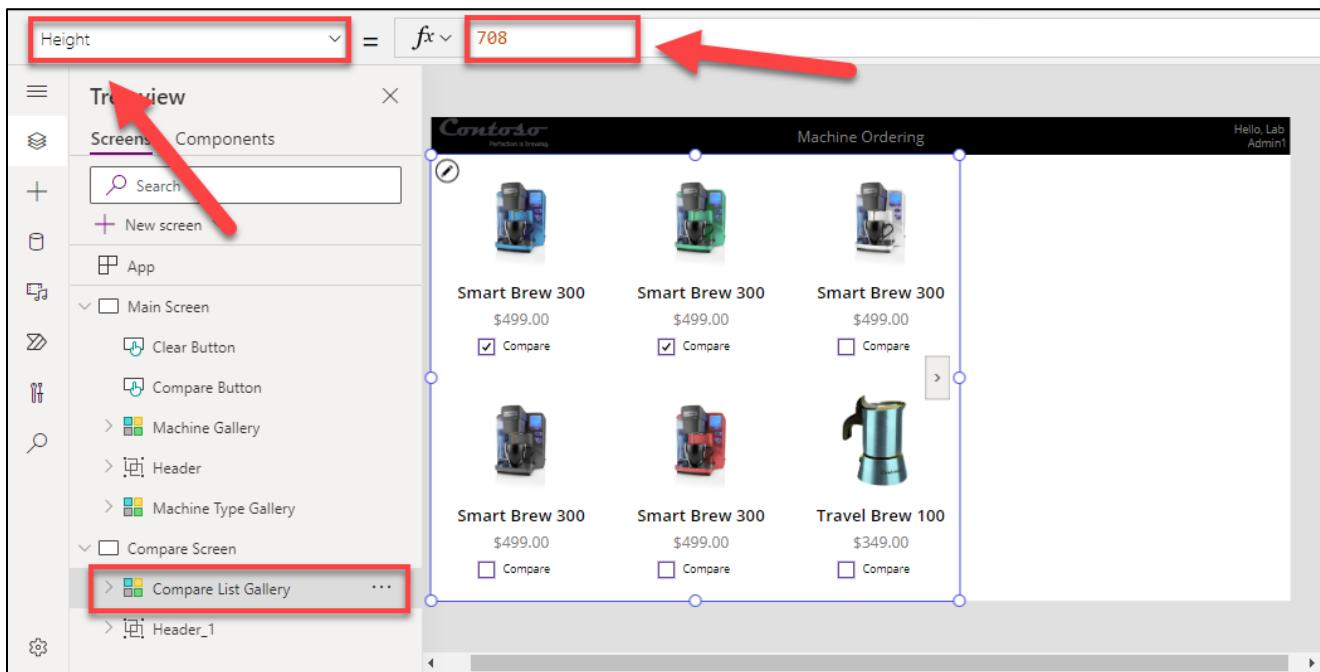
36. **Rename** the **gallery** within the Compare Screen to **Compare List Gallery**.

37. Set the **X** property value of the **Compare List Gallery** to **0**.

38. Set the **Width** property value of the **Compare List Gallery** to **840**.

39. Set the **Height** property value of the **Compare List Gallery** to **708**.

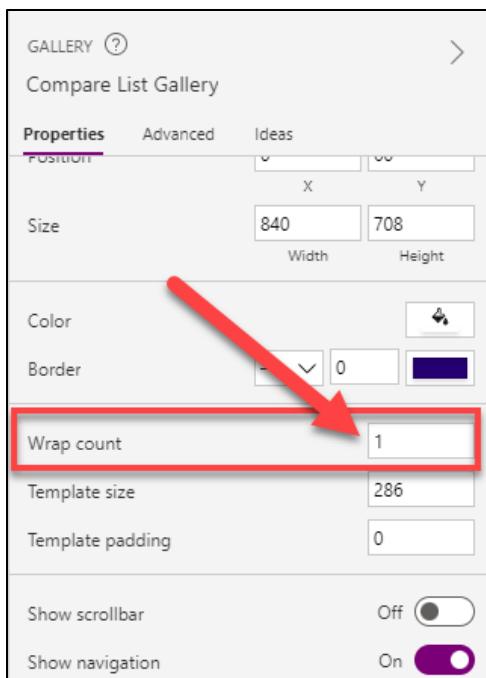
40. The gallery should now look like the figure below:



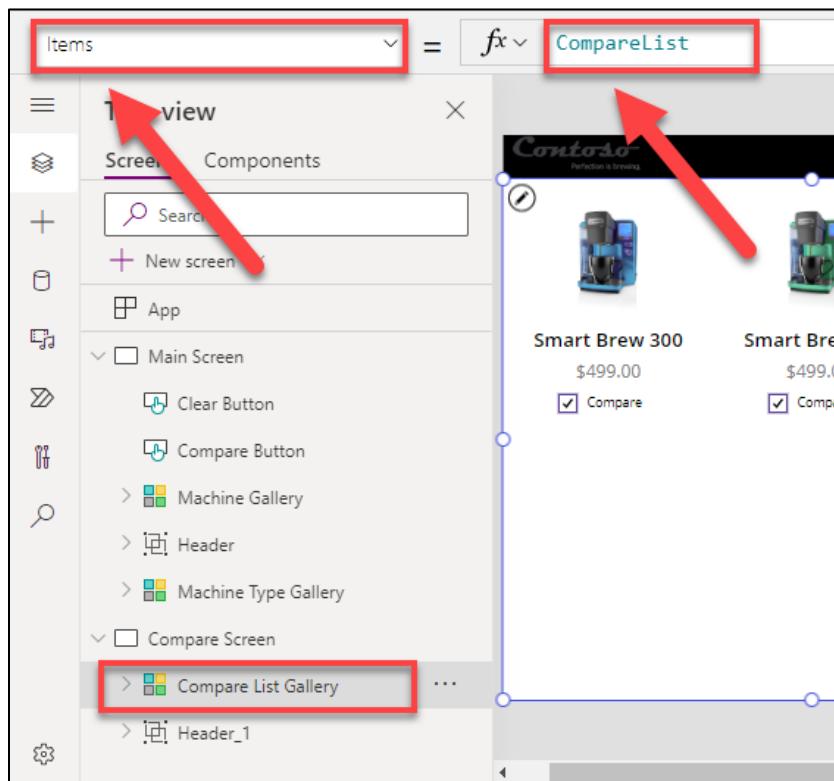
## Task 2: Configure the gallery

In this task, you will configure the gallery to show machines that were selected from the comparison gallery on the Main Screen.

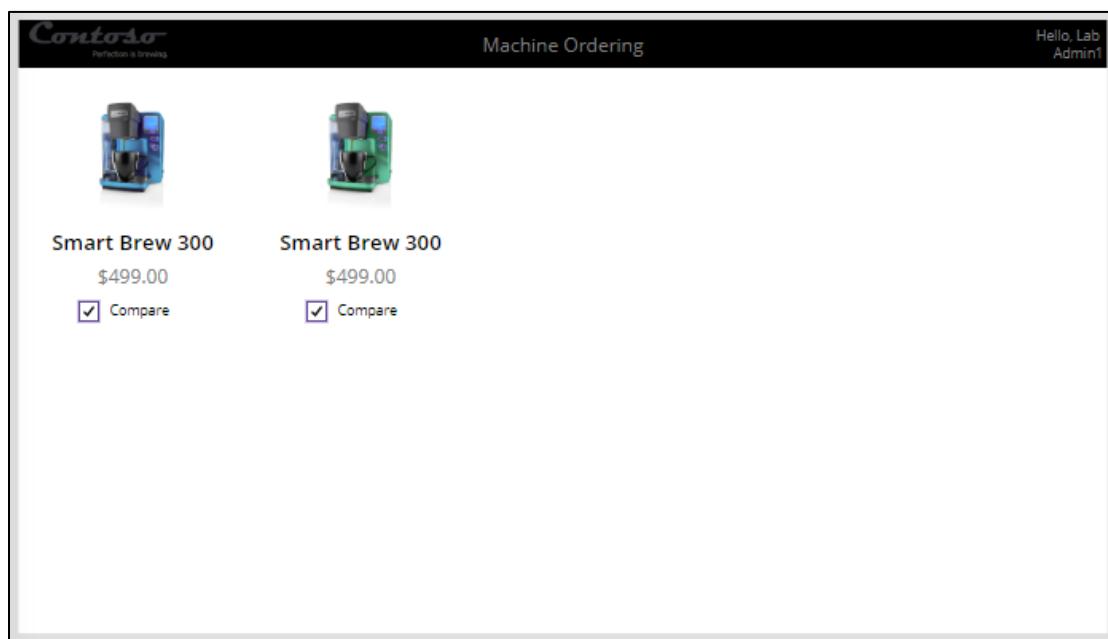
1. Select the new **Compare List Gallery** within the Tree view pane to the left of the screen.
2. In the **Compare List gallery pane** to the right of the screen, go to the **Properties** tab and change the **Wrap count** to 1.



3. With the **Compare List Gallery** selected change the **Items** property value of the **Compare List Gallery** by typing in the formula bar at the top of the screen. Set the new **Items** property value to **CompareList**.



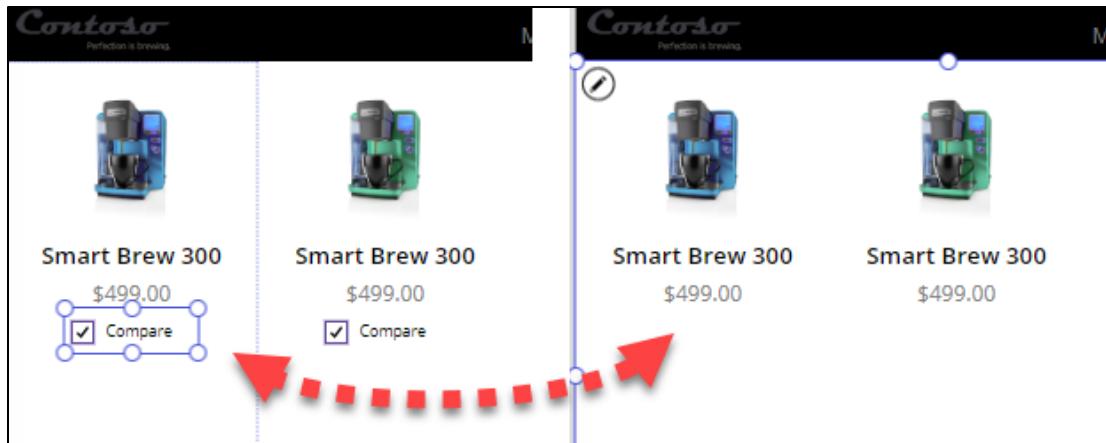
4. The gallery will now show the selected items from the Main Screen.



## Task 3: Remove and add controls to the gallery

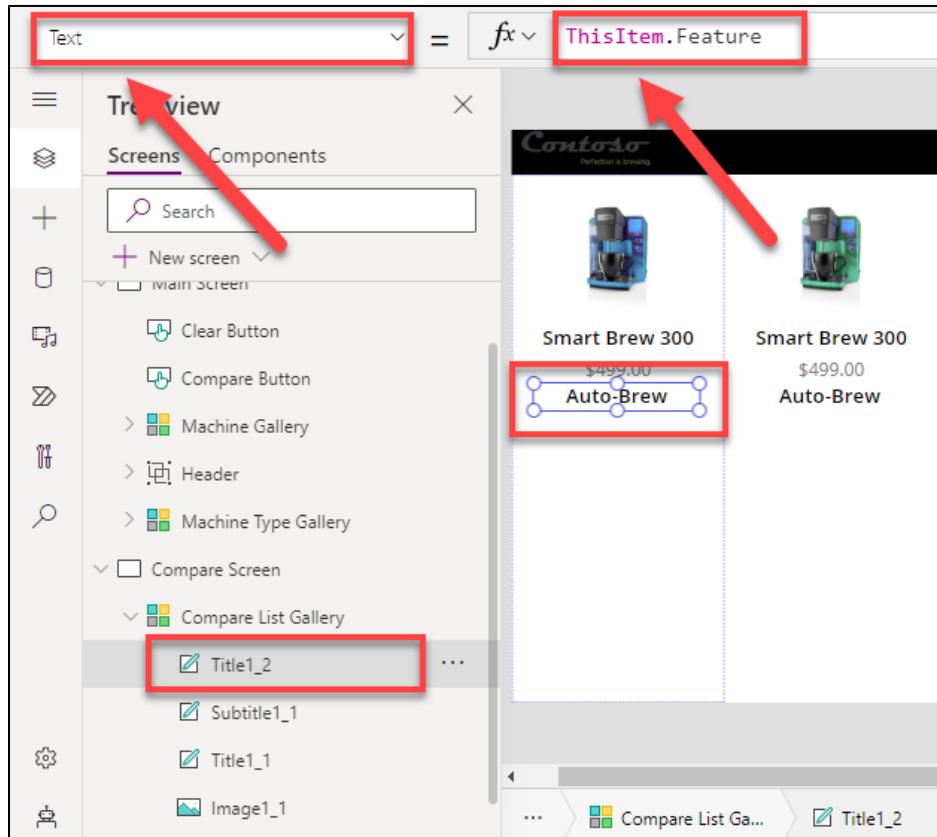
In the **Compare Screen** we are selecting a given item to get approved, so we do not need a Compare checkbox.

1. Select the **Compare** checkbox, within the Compare Screen, on the left most template cell and press the **Delete** key on your keyboard to **delete the checkbox**.

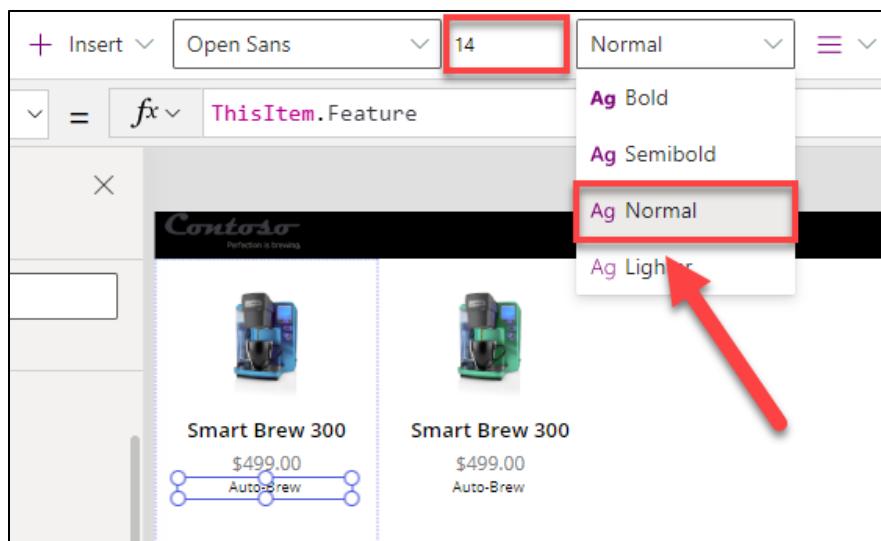


2. Now let's add a few labels to display additional attributes about the machine. A good way to do this is to copy and paste. Select the first title label within the **Compare List Gallery** that is displaying the machine name. Copy (Ctrl-C) and paste it (Ctrl-V) to itself within the Compare List Gallery. **Rename** these labels as you go for ease of use later.
3. Set the **X** property value of the newly added **Title** label to **30**.
4. Set the **Y** property value of the newly added **Title** label to **280**.
5. Set the **Text** property value of the newly added **Title** label to the formula below:

ThisItem.Feature

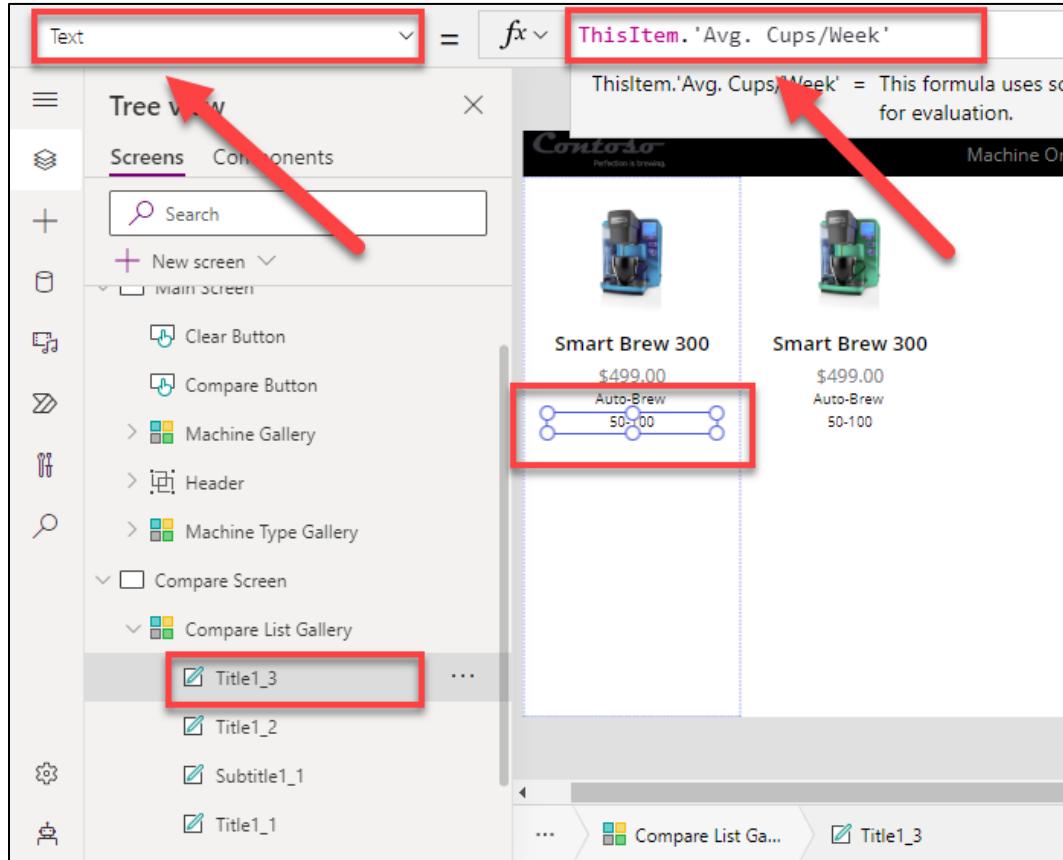


- Using the ribbon at the top of the screen, change the **font weight** from **Semibold** to **Normal** and change the **Size** property to **14**.

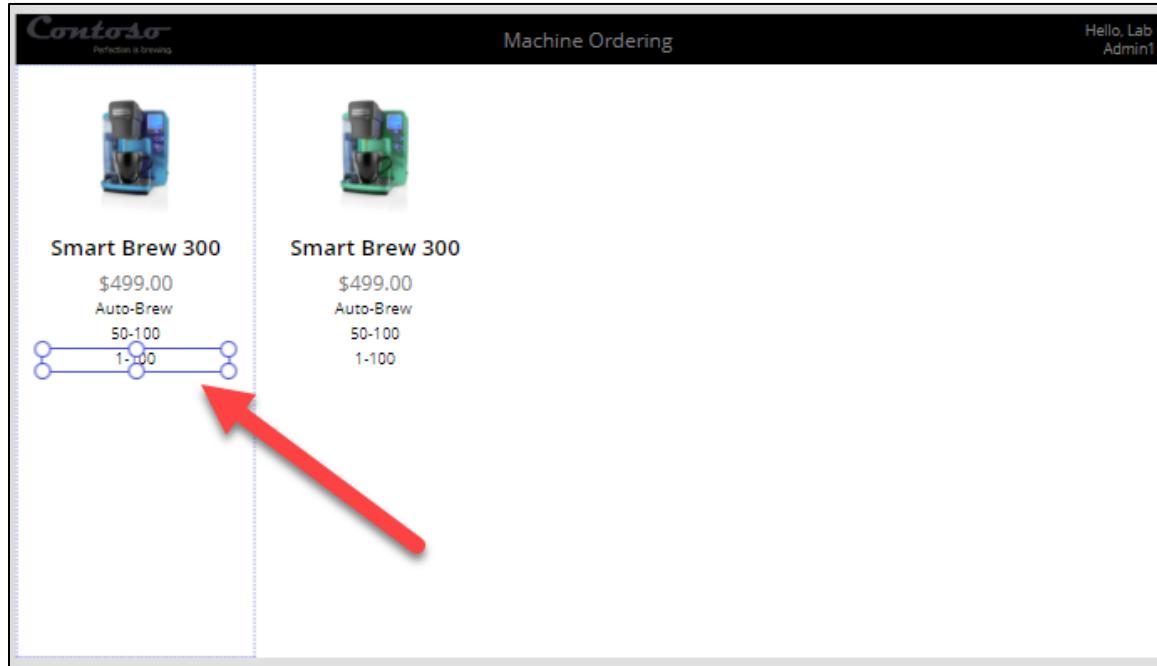


- Copy** and **paste** this title label to itself, just as we did previously.
- Set the **X** property value of the newly added **title label** to **32**.
- Set the **Y** property value of the newly added **title label** to **310**.
- Set the **Text** property value of the newly added **title label** to the formula below:

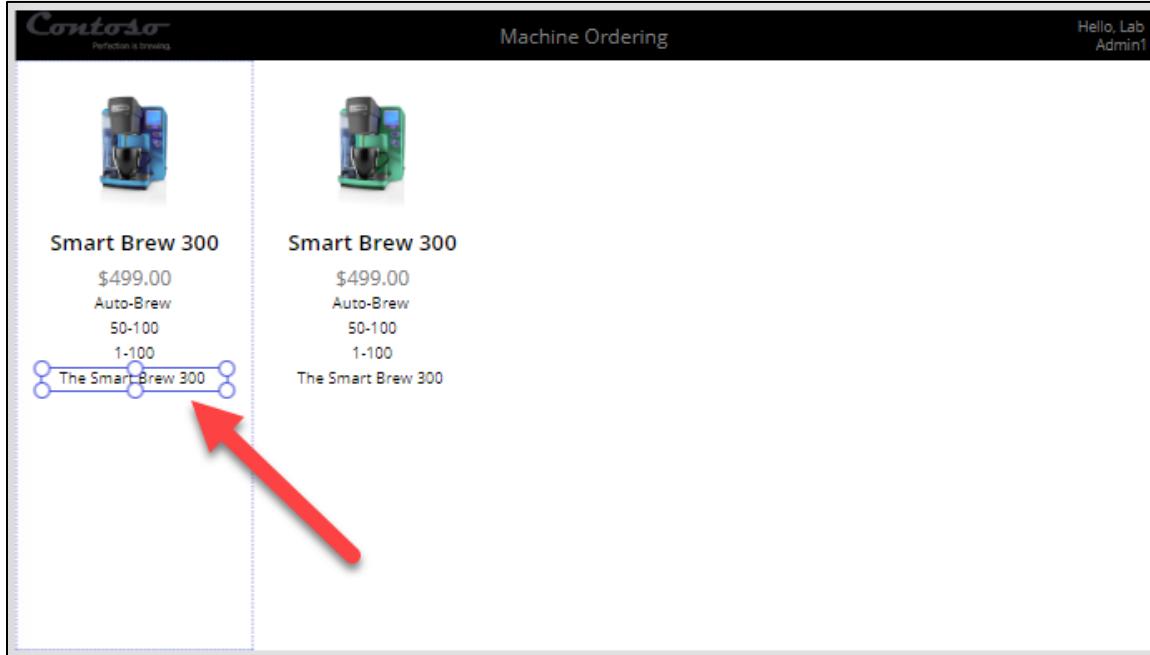
`ThisItem.'Avg. Cups/Week'`



11. Next, we will repeat the previous steps to add in a label with the information of the average espressos per week for each machine selected and shown in the Compare Screen. Start by selecting the **Compare List Gallery** within the Tree view pane to the left of the screen.
12. **Copy** one of the title labels within the **Compare List Gallery** in the Tree view pane. Then, **paste** the label it to itself to add in another title label to the Compare List Gallery.
13. Set the **X** property value of the newly added **label** to **32**.
14. Set the **Y** property value of the newly added **label** to **340**.
15. By typing in the **formula bar**, set the **Text** value of the **label** to the formula below to retrieve the information on the average espressos per week for each machine being compared:  
`ThisItem.'Avg. Espressos/Week'`
16. The newly added label should appear as it does in the figure below:



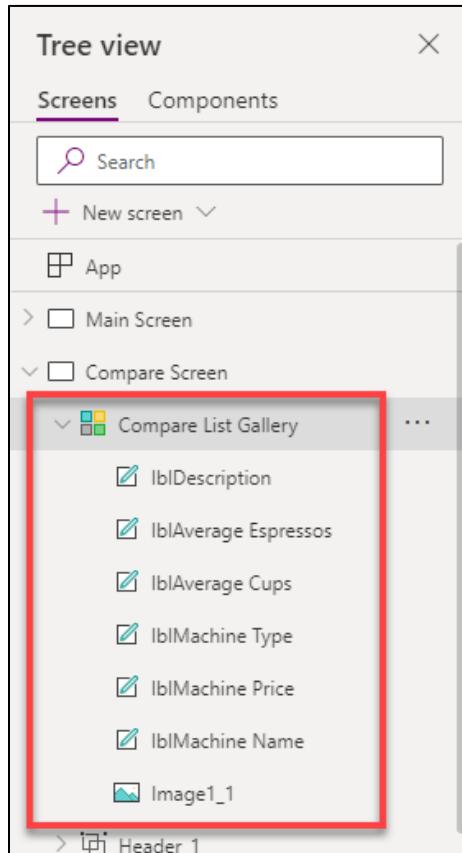
17. Next, let's add in a **description** for each of the machines selected and shown in the Compare List Gallery.
18. With the **Compare List Gallery** selected within the Tree view pane to the left of the screen, **copy** one of the **title labels** within the Compare List Gallery.
19. **Paste** the copied **title label** onto itself to generate a new title label within the Compare List Gallery.
20. Set the **X** property value of the newly added **label** to **32**.
21. Set the **Y** property value of the newly added **label** to **370**.
22. By typing in the **formula bar**, set the **Text** value of the newly added **label** to the formula below. This will provide each machine selected and shown in the Compare List Gallery with a **description** of that specific machine:  
`ThisItem.Description`
23. The newly added label should appear as it does in the figure below:



24. Rename each of the titles and labels within the Compare List Gallery in the Tree view pane to a more appropriate name. To **rename**, select the **ellipsis (...)** to the right of each label, then select **Rename** from the list of options.

Title1_1	lblMachine Name
Subtitle1_1	lblMachine Price
Title1_2	lblMachine Type
Title1_3	lblAverage Cups
Title1_4	lblAverage Espressos
Title1_5	lblDescription

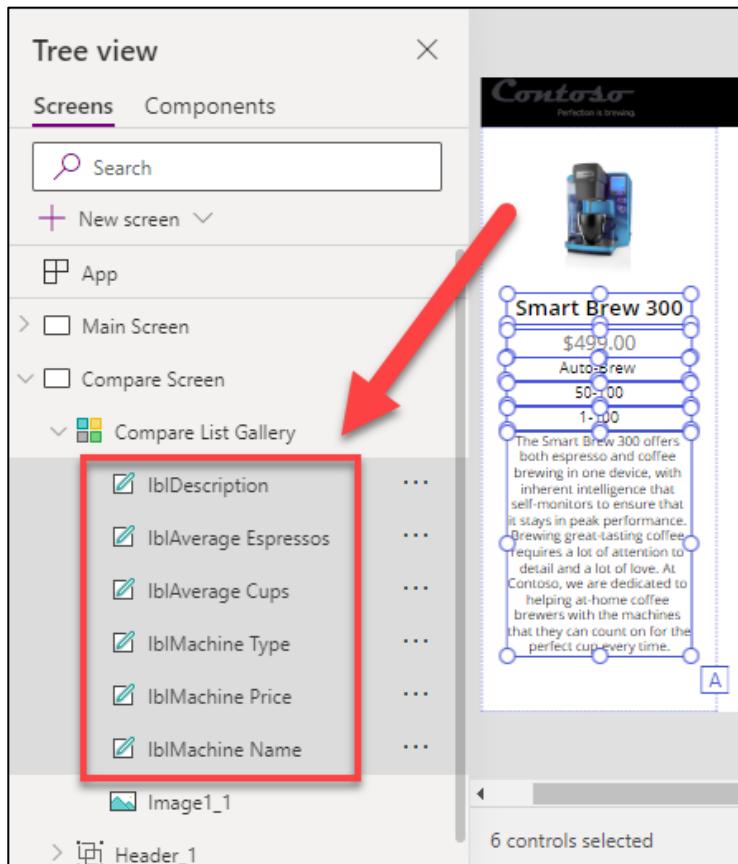
25. The Compare List Gallery within the Tree view pane should appear as it does in the figure below:



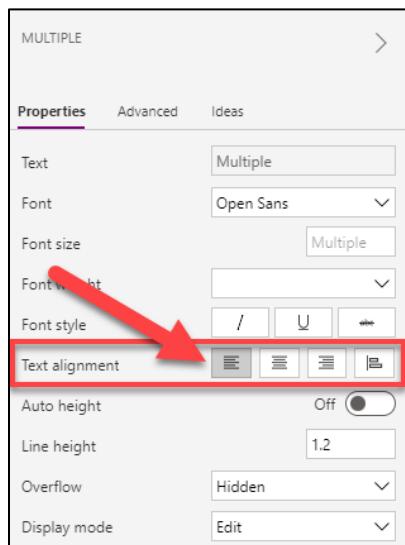
26. Select the **Description** label within the Compare **List Gallery** from the **Tree view** pane to the left of the screen.
27. From the **Description** pane to the right of the screen, under the **Properties** tab, change the **Font size** to **12**.
28. While still in the **Properties** tab of the **Description** pane, turn **on** the **AutoHeight**.

The screenshot shows the 'Machine Ordering' screen with two coffee machine cards. The properties pane is open for the 'LblDescription' label. The 'Properties' tab is selected. The 'Font size' is set to 12, and the 'Auto height' toggle is turned on (indicated by a purple switch). Red arrows point to both the 'Font size' field and the 'Auto height' toggle.

29. Next, select all the **labels** within the **Compare List Gallery**. Hold down the **Ctrl** key on your keyboard to **multi-select**.



30. Go to the **Properties** pane and set the **Text alignment** to **Align left**.



31. The gallery should now look like the figure below:

The screenshot shows a Power Apps Canvas App interface. At the top, there is a header bar with the Contoso logo, the text "Machine Ordering", and a greeting "Hello, Lab Admin1". Below the header, there is a gallery of two coffee machines. Each machine has a thumbnail image, a title, price, and some descriptive text. The first machine is a "Smart Brew 300" priced at \$499.00, with brewing ranges of Auto-Brew, 50-100, and 1-100. Its description mentions it offers both espresso and coffee brewing. The second machine is also a "Smart Brew 300" with the same price and brewing ranges, but its description is identical to the first one.

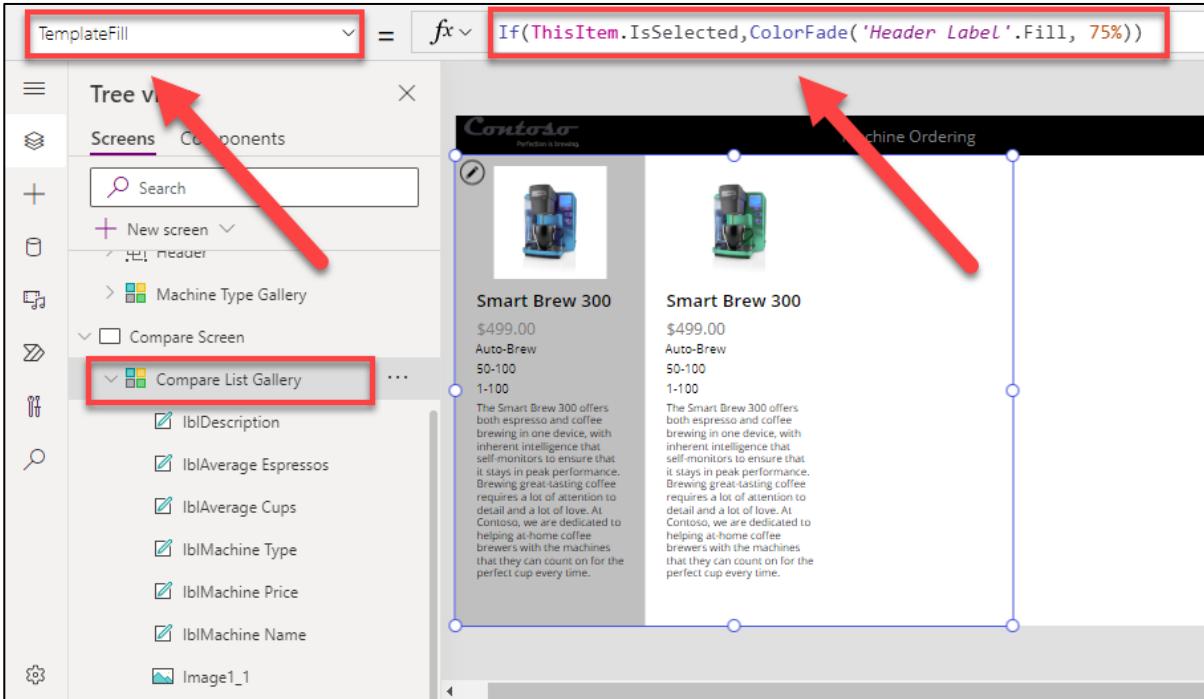
Machine Model	Price	Brewing Range	Description
Smart Brew 300	\$499.00	Auto-Brew, 50-100, 1-100	The Smart Brew 300 offers both espresso and coffee brewing in one device, with inherent intelligence that self-monitors to ensure that it stays in peak performance. Brewing great-tasting coffee requires a lot of attention to detail and a lot of love. At Contoso, we are dedicated to helping at-home coffee brewers with the machines that they can count on for the perfect cup every time.
Smart Brew 300	\$499.00	Auto-Brew, 50-100, 1-100	The Smart Brew 300 offers both espresso and coffee brewing in one device, with inherent intelligence that self-monitors to ensure that it stays in peak performance. Brewing great-tasting coffee requires a lot of attention to detail and a lot of love. At Contoso, we are dedicated to helping at-home coffee brewers with the machines that they can count on for the perfect cup every time.

**Note:** For this lab, to save time you may add one or two of these additional properties and skip adding all the additional machine properties.

## Task 4: Highlight the selected machine

1. Select the **Compare List Gallery** from the Tree view pane to the left of the screen.
2. With the whole gallery selected, set the **TemplateFill** property to the formula below:

```
If(ThisItem.IsSelected,ColorFade('Header Label'.Fill, 75%))
```



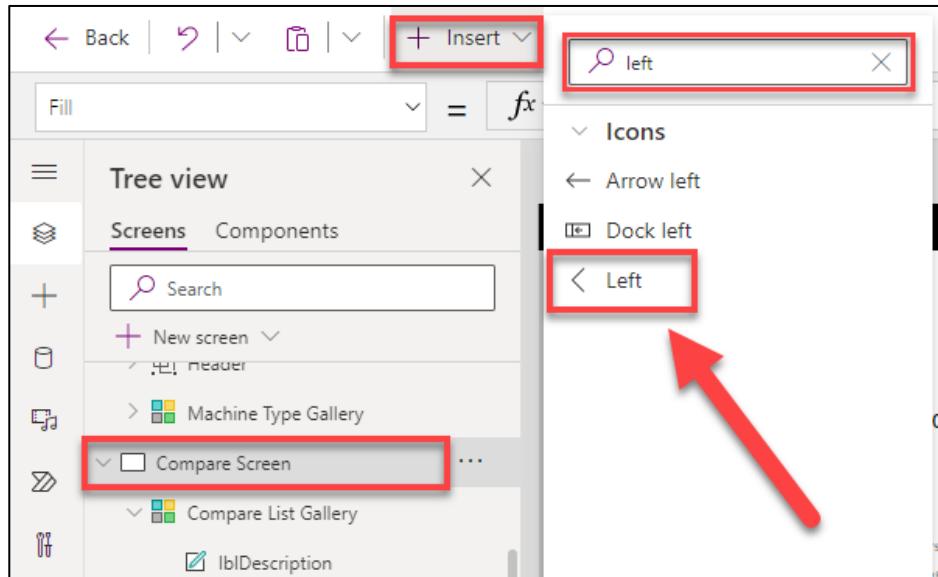
This is conditionally setting a Fill color if the cell is selected.

You could have set a specific color or RGB value, but we recommend using the ColorFade function, so it matches the header label with a 75% fade. If you change the fill color of header label, this template fill color will automatically change.

3. Holding down the **Alt** key on your keyboard, select a different item in the gallery. Notice the selected item is highlighted in a light gray color.

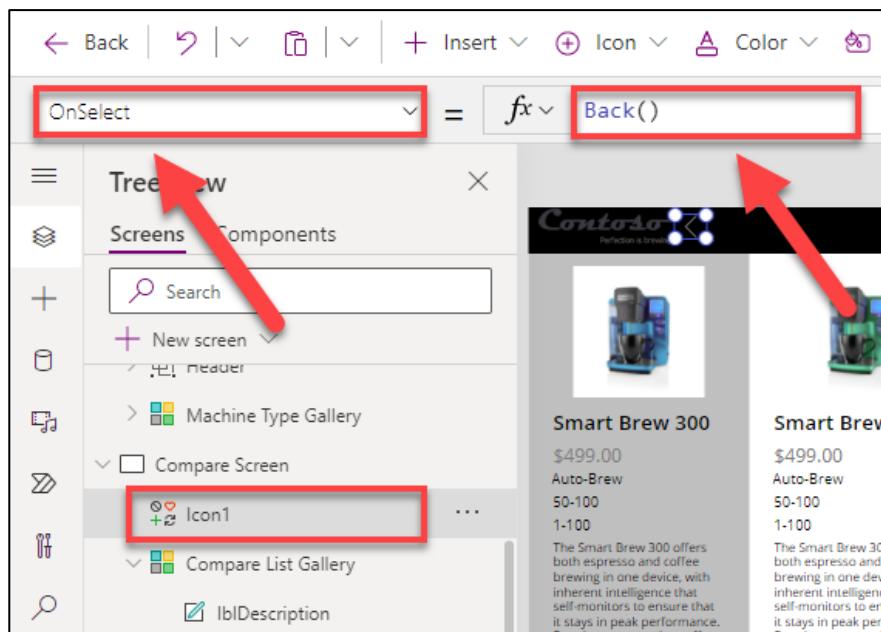
## Task 5: Add an icon to navigate to the first screen

1. Select the **Compare Screen** from the Tree view pane to the left of the screen.
2. Select **+ Insert** from the ribbon at the top of the screen. Using the **Search** text box at the top of the Insert menu, search for **left**. Select the **Left** icon.



3. Set the **Color** property value of the **icon** you just added to **Gray**.
4. Set the **Height** property value of the **icon** to **30**.
5. Set the **Width** property value of the **icon** to **40**.
6. Set the **Y** property value of the **icon** to **10**.
7. Set the **X** property value of the **icon** to **190**.
8. Set the **OnSelect** action for the icon to the formula below. This will cause navigation back to the previous screen:

`Back()`



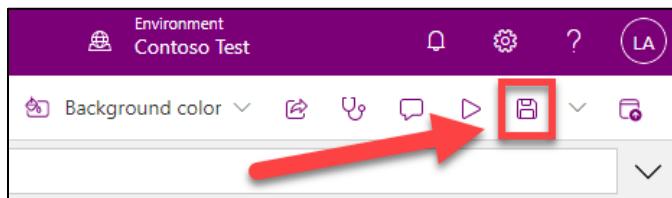
#### Optional UI enhancement:

Add **padding around the icon** using the Properties pane. Set the padding values to 10 each for Top, Bottom, Left, and Right. This will make the icon look smaller but still have a larger hit target for the click action. This is a good pattern to use for most icons.

## Task 6: Test the app

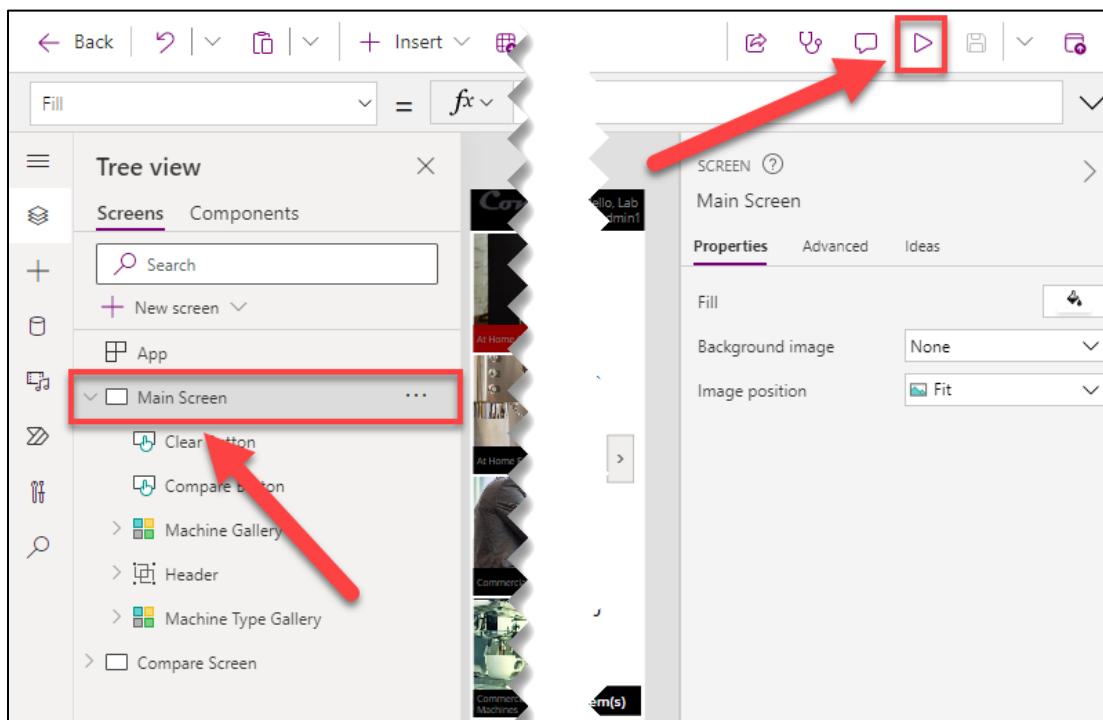
Before we begin this task, let's **save** the app by selecting **Save**. It is a good idea to save your app regularly.

Select the **Save** button from the ribbon in the top right corner of the screen.

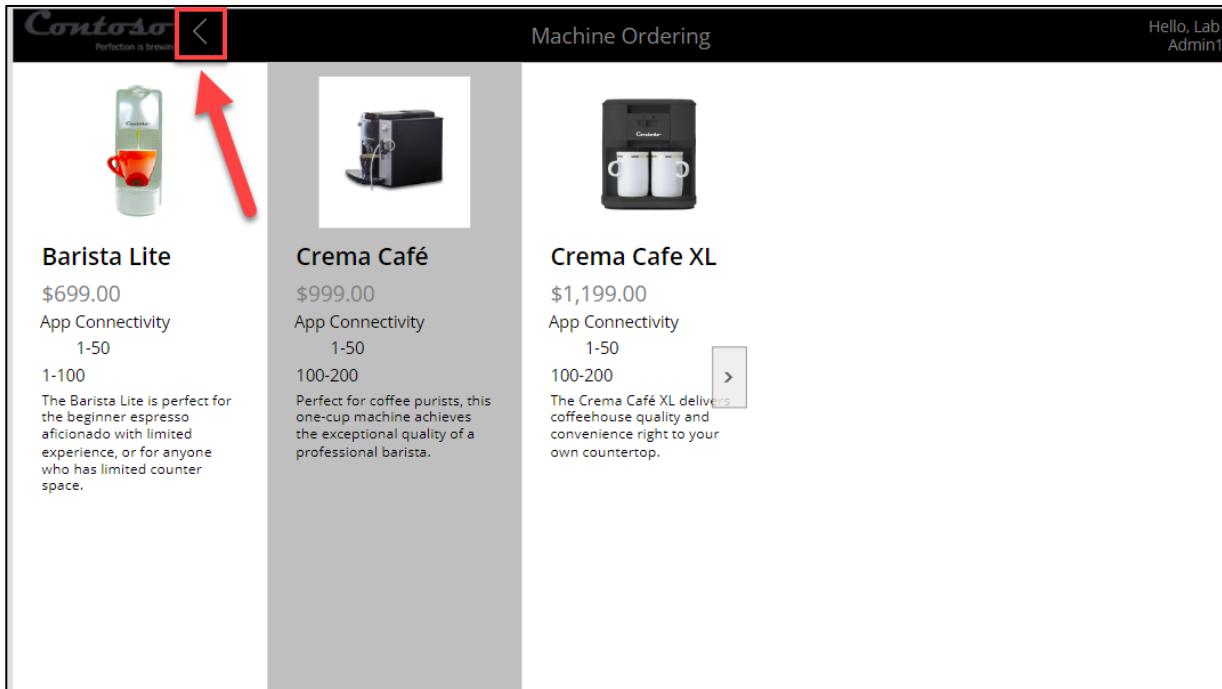


**Note:** You can also test your app right on the canvas by holding down the Alt key to activate buttons and other controls, as well as double-clicking to type into controls.

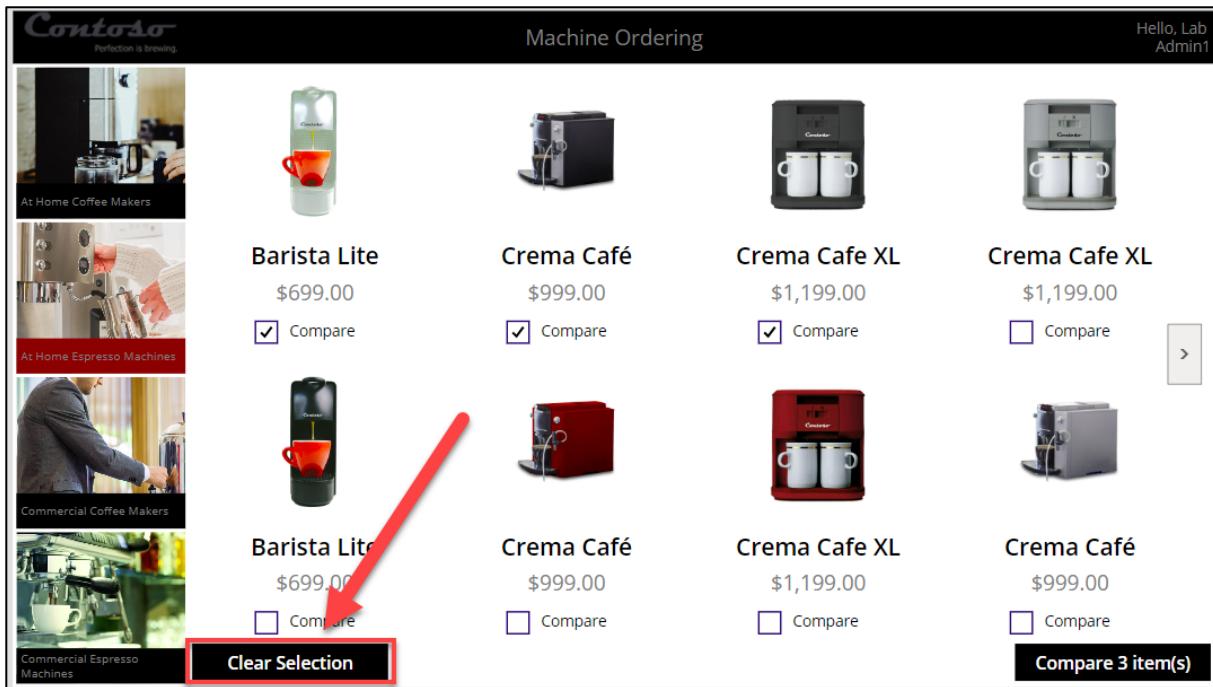
1. Navigate to the **Main Screen** from the Tree view pane to the left. Select the **Preview** mode button from the ribbon in the top right corner of the screen.



2. **Uncheck** any checked machines.
3. Select one of the **Machine types** to the left.
4. Select the **Compare** checkbox on a few machines on the **main screen**.
5. Select the **Compare** button to navigate to the **compare screen**.
6. Select different machines in the gallery and verify that the selection highlight works.
7. Select the **Back** button that we just added previously and confirm you navigate back to the **main screen**.



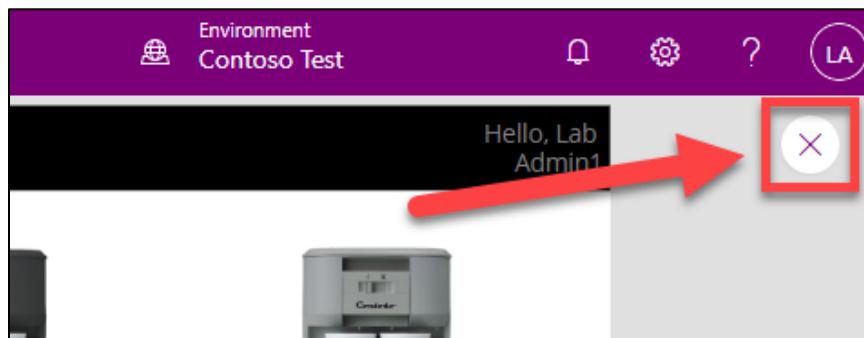
8. Select the **Clear Selection** button.



9. The **CompareList** should clear, and the **Compare** button should become disabled.



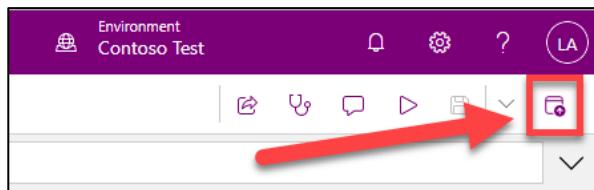
10. Close the **Preview mode** by selecting the **X** in the top right corner of the screen.



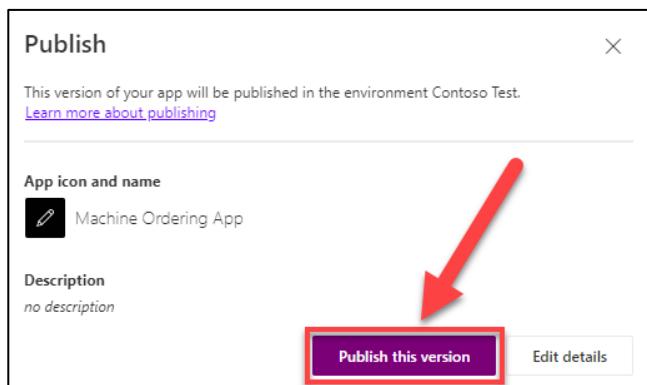
## Task 7: Test the app on a mobile device

Congratulations! You've created your Power Apps app. Now let's publish and test it on a mobile device.

1. Select the **Publish** button from the ribbon in the top right corner of the screen..

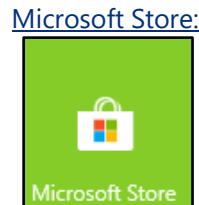
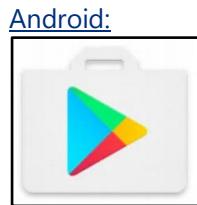


2. The Publish dialog box will appear. Select **Publish this version** on the confirmation prompt.



This action will publish the latest saved version of the app.

3. Go to your mobile device's app store application. Search for "**Power Apps**" and install the Power Apps application. Launch the app.

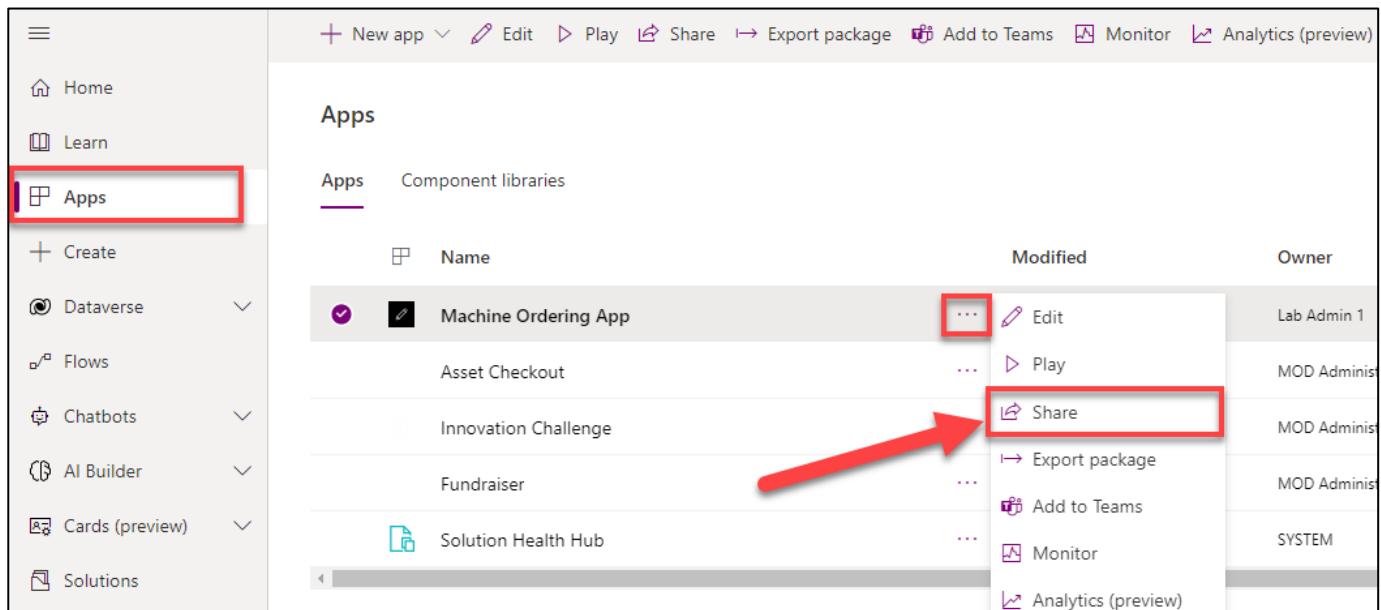


4. When the app starts, it will prompt for your business or school account credentials. **Log in** with the same account that you used to create the Power Apps app. You should see the app you just created in the list of apps. **Run the app.**

## Task 8: [Optional] Share the application with a colleague

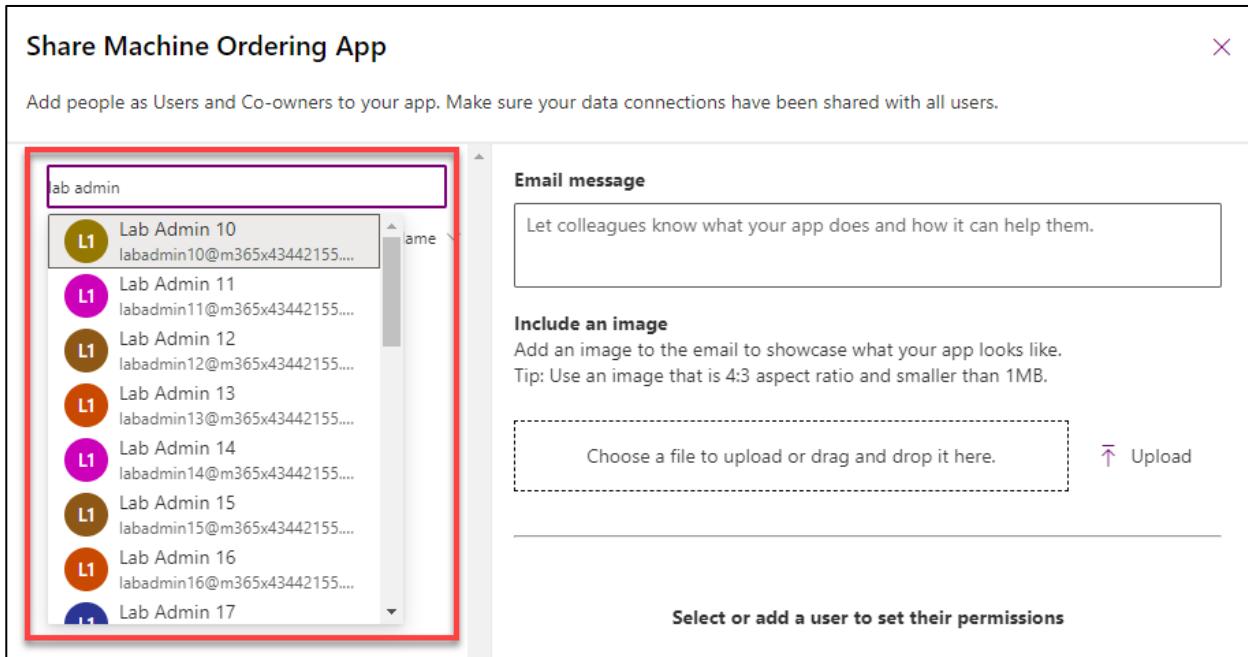
You may optionally share the application with another user within the same organizational tenant as the user who created the app. So, if you had logged in as meganb@contoso.com, you may share the app with any other User, Security Group or Distribution Group within the @contoso.com tenant.

1. To **share** the app, go to [Make Power Apps](#). **Log in** if prompted for credentials.
2. Select **Apps** in the left pane, look for your **Machine Ordering App** in the app list, select the **ellipsis (...)** to the right of the app to bring up the context menu. Select the **Share** option.

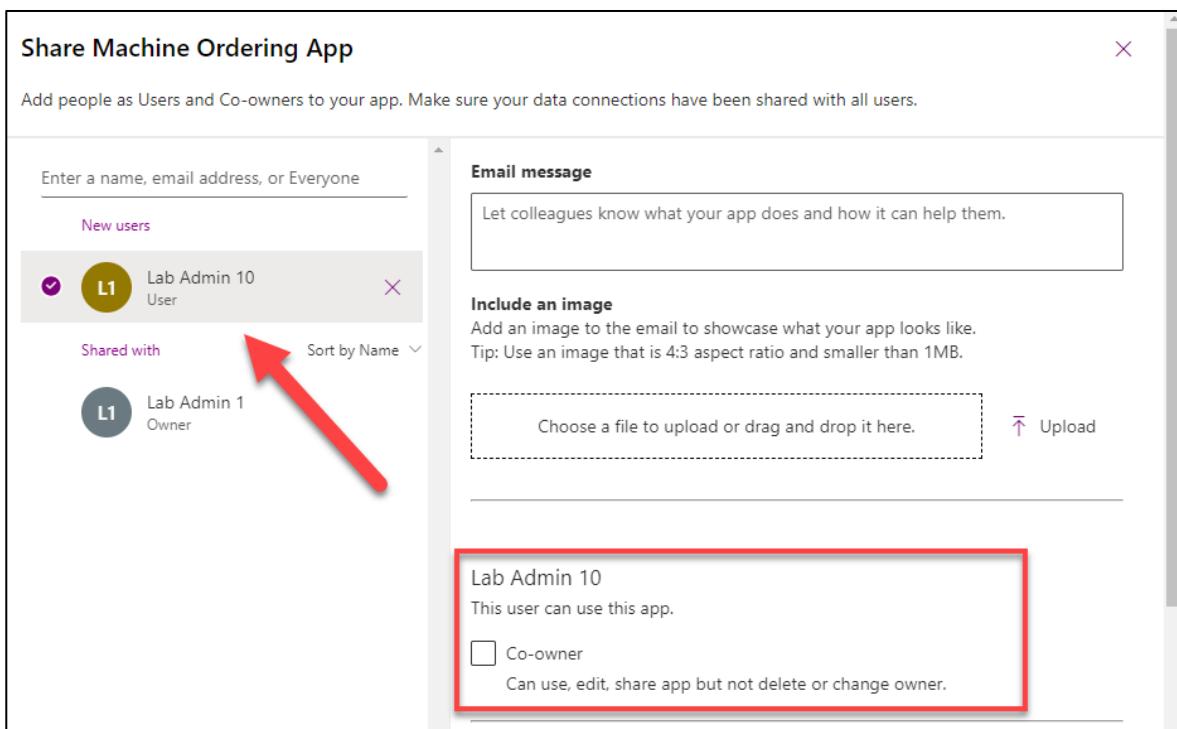


Name	Modified	Owner
Machine Ordering App	...	Lab Admin 1
Asset Checkout	...	MOD Administ
Innovation Challenge	...	MOD Administ
Fundraiser	...	MOD Administ
Solution Health Hub	...	SYSTEM

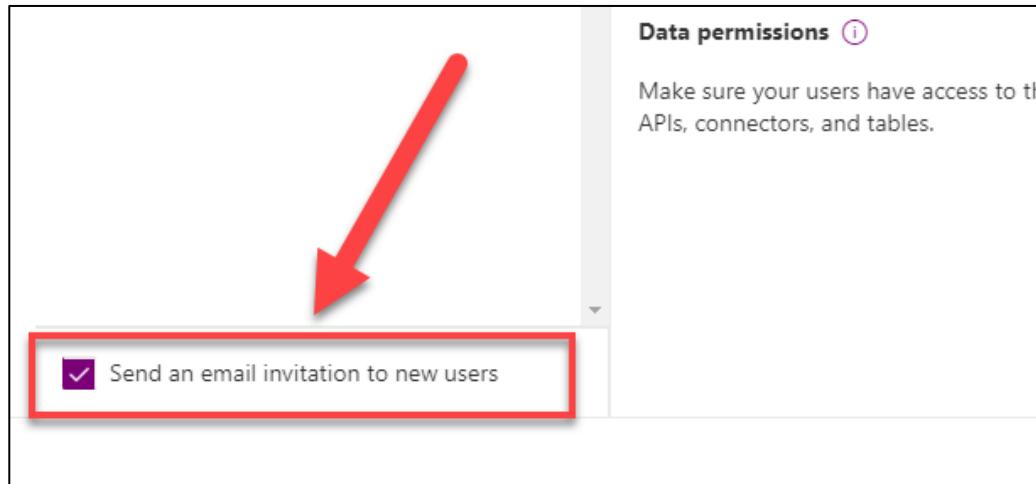
3. Within the Share screen, enter the **name** or **email** of the user you would like to share the app with. You may also share it with a user group.



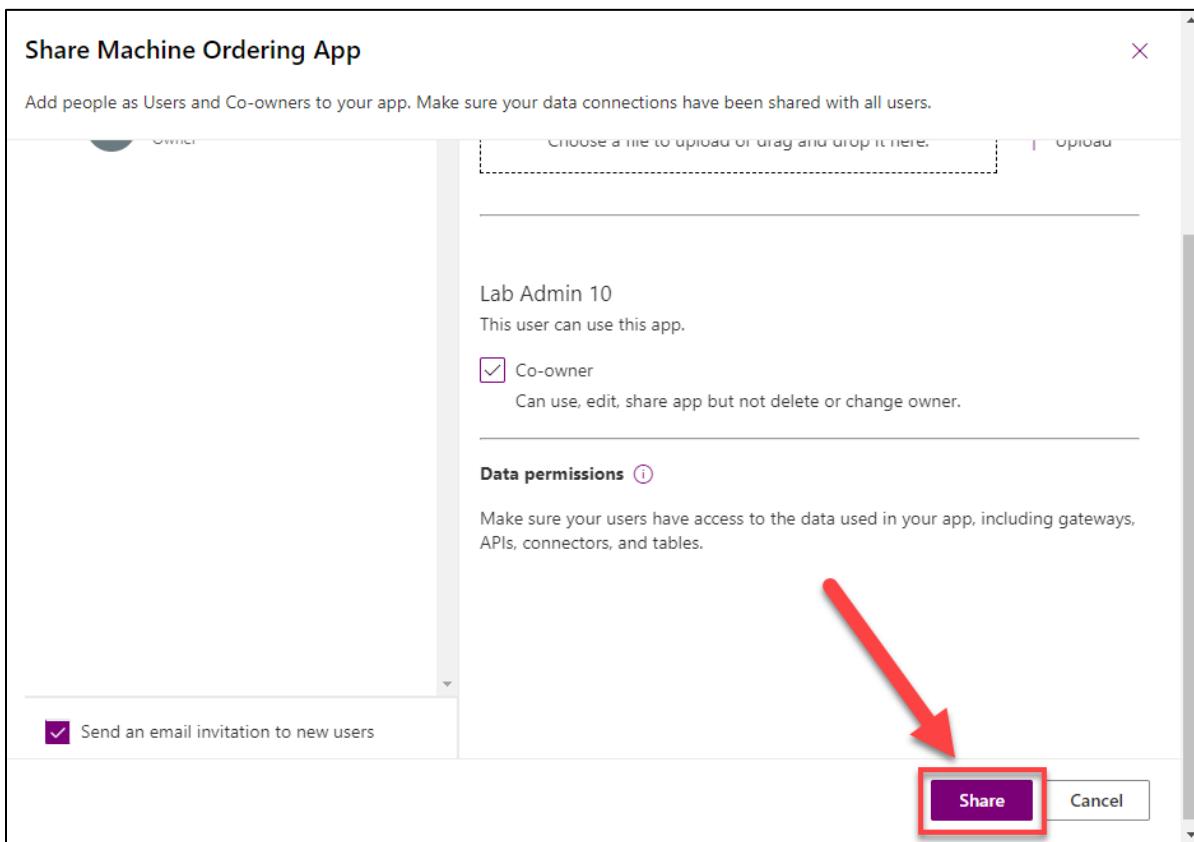
4. Select the user or group; this will add it to the **Shared with** list below. You may provide this user/group either **Can use** or **Can edit** permissions.



5. If the **Send an email invitation** is checked, when you hit **Save**, the user or all users in the group will receive an email letting them know that the app has been shared with them, along with a link to open the app.



- Once you have selected and added everyone to whom you wish to share this app, and made adjustments as to if they are allowed to edit, use, or share, select the Share button located in the bottom right corner of the Share dialog box.



## Next steps

Now that you have learned the basics of creating an app, take a little time to think about what you would like to create next. What made you most excited about the coffee machine ordering app? What would you have done differently?

## References

App in a Day introduces some of the key capabilities available in Power Apps. For a list of learning resources, see [Power Apps Resources](#) and [Power Automate Resources](#).

### Power Apps

- [Website](#) | [Blog](#) | [Documentation](#) | [Community](#) | [Suggest Ideas](#) | [Webinars](#)
- [Product updates](#)
- [YouTube playlist](#)
- [Licensing / Pricing](#)
- Support – [known issues](#) | [view/report issues](#) | [create a support ticket](#)

### Power Automate

- [Website](#) | [Blog](#) | [Documentation](#) | [Community](#) | [Suggest Ideas](#) | [Webinars](#)
- [Product updates](#)
- [Guided Learning](#) | [YouTube Playlist](#)
- [Licensing / Pricing](#)
- [Support](#)

### Microsoft Dataverse

- [Microsoft Dataverse documentation portal](#)
- [Feature updates](#)

### Microsoft Power Platform

- [Power Platform](#)

# Copyright

© 2022 Microsoft Corporation. All rights reserved.

By using this demo/lab, you agree to the following terms:

The technology/functionality described in this demo/lab is provided by Microsoft Corporation for purposes of obtaining your feedback and to provide you with a learning experience. You may only use the demo/lab to evaluate such technology features and functionality and provide feedback to Microsoft. You may not use it for any other purpose. You may not modify, copy, distribute, transmit, display, perform, reproduce, publish, license, create derivative works from, transfer, or sell this demo/lab or any portion thereof.

COPYING OR REPRODUCTION OF THE DEMO/LAB (OR ANY PORTION OF IT) TO ANY OTHER SERVER OR LOCATION FOR FURTHER REPRODUCTION OR REDISTRIBUTION IS EXPRESSLY PROHIBITED.

THIS DEMO/LAB PROVIDES CERTAIN SOFTWARE TECHNOLOGY/PRODUCT FEATURES AND FUNCTIONALITY, INCLUDING POTENTIAL NEW FEATURES AND CONCEPTS, IN A SIMULATED ENVIRONMENT WITHOUT COMPLEX SET-UP OR INSTALLATION FOR THE PURPOSE DESCRIBED ABOVE. THE TECHNOLOGY/CONCEPTS REPRESENTED IN THIS DEMO/LAB MAY NOT REPRESENT FULL FEATURE FUNCTIONALITY AND MAY NOT WORK THE WAY A FINAL VERSION MAY WORK. WE ALSO MAY NOT RELEASE A FINAL VERSION OF SUCH FEATURES OR CONCEPTS. YOUR EXPERIENCE WITH USING SUCH FEATURES AND FUNCTIONALITY IN A PHYSICAL ENVIRONMENT MAY ALSO BE DIFFERENT.

**FEEDBACK.** If you give feedback about the technology features, functionality and/or concepts described in this demo/lab to Microsoft, you give to Microsoft, without charge, the right to use, share and commercialize your feedback in any way and for any purpose. You also give to third parties, without charge, any patent rights needed for their products, technologies and services to use or interface with any specific parts of a Microsoft software or service that includes the feedback. You will not give feedback that is subject to a license that requires Microsoft to license its software or documentation to third parties because we include your feedback in them. These rights survive this agreement.

MICROSOFT CORPORATION HEREBY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH REGARD TO THE DEMO/LAB, INCLUDING ALL WARRANTIES AND CONDITIONS OF MERCHANTABILITY, WHETHER EXPRESS, IMPLIED OR STATUTORY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. MICROSOFT DOES NOT MAKE ANY ASSURANCES OR REPRESENTATIONS WITH REGARD TO THE ACCURACY OF THE RESULTS, OUTPUT THAT DERIVES FROM USE OF DEMO/ LAB, OR SUITABILITY OF THE INFORMATION CONTAINED IN THE DEMO/LAB FOR ANY PURPOSE.

## DISCLAIMER

This demo/lab contains only a portion of new features and enhancements in Microsoft Power Apps. Some of the features might change in future releases of the product. In this demo/lab, you will learn about some, but not all, new features.