



# Power Apps Canvas App I

After this LAB 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

## 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

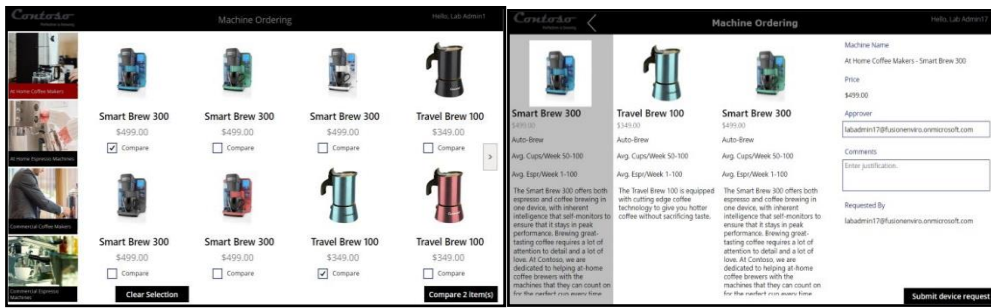
The Microsoft Power Platform technologies enable tech-savvy business users (aka “citizen developers”) to build a customized machine ordering solution. The application user interface and interaction logic are built in Power Apps, the approval workflow is automated using Power Automate, and the machine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



## 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:

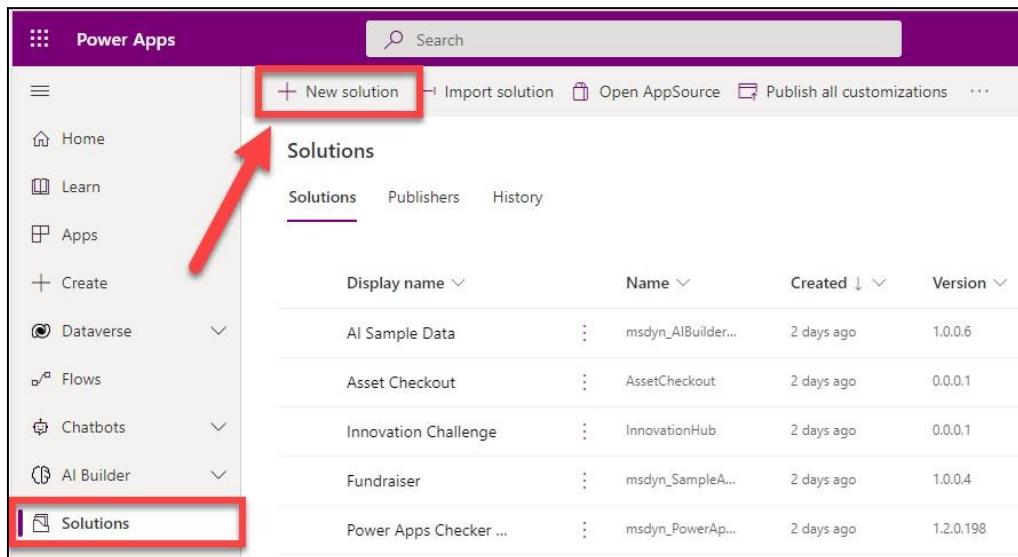
## Create the app in Power Apps

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

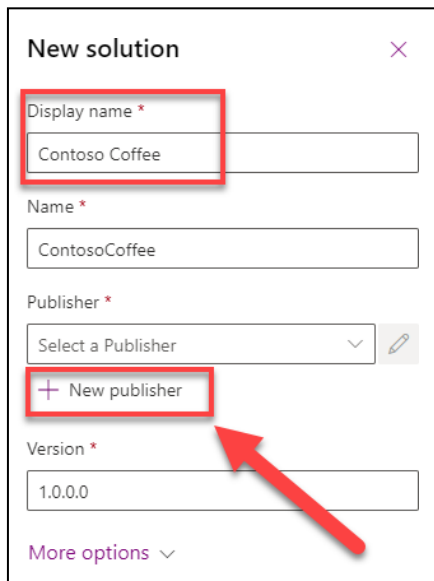
### Task 2: Create a new solution

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.



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



The 'New solution' dialog box contains several input fields. The 'Display name' field is highlighted with a red box and contains the text 'Contoso Coffee'. The 'Name' field contains 'ContosoCoffee'. The 'Publisher' field is a dropdown menu with 'Select a Publisher' and a '+ New publisher' button, which is also highlighted with a red box. A red arrow points from the '+ New publisher' button to the 'Version' field, which contains '1.0.0.0'. At the bottom, there is a 'More options' link with a downward arrow.

New solution

Display name \*

Contoso Coffee

Name \*

ContosoCoffee

Publisher \*

Select a Publisher

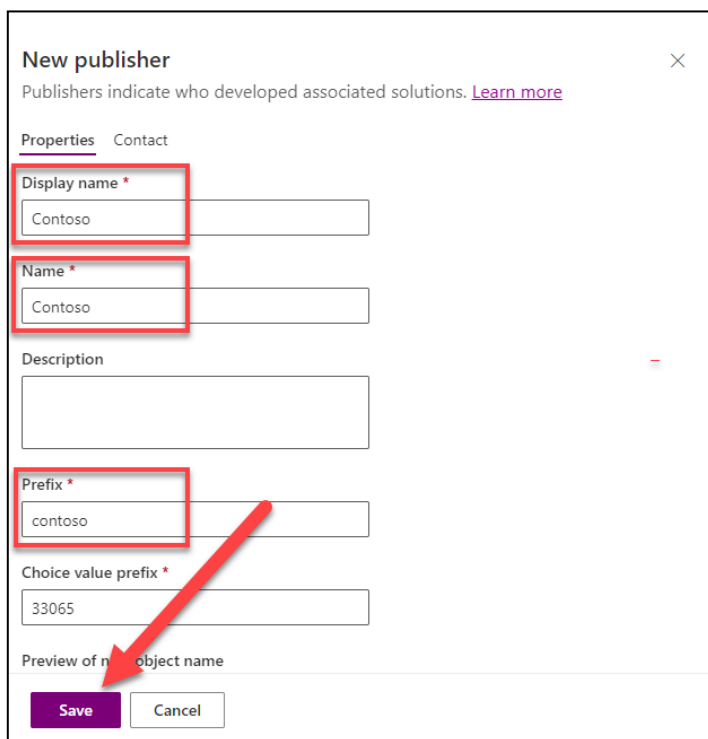
+ New publisher

Version \*

1.0.0.0

More options ▾

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



The 'New publisher' dialog box has two tabs: 'Properties' and 'Contact'. The 'Properties' tab is active. It contains several input fields. The 'Display name' field is highlighted with a red box and contains 'Contoso'. The 'Name' field is also highlighted with a red box and contains 'Contoso'. The 'Prefix' field is highlighted with a red box and contains 'contoso'. A red arrow points from the 'Prefix' field to the 'Choice value prefix' field, which contains '33065'. At the bottom, there is a 'Preview of new object name' section and two buttons: 'Save' and 'Cancel'.

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

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 \* Close

Contoso Coffee

Name \*

ContosoCoffee

Publisher \*

Contoso (Contoso) ✎

+ New publisher

Version \*

1.0.0.0

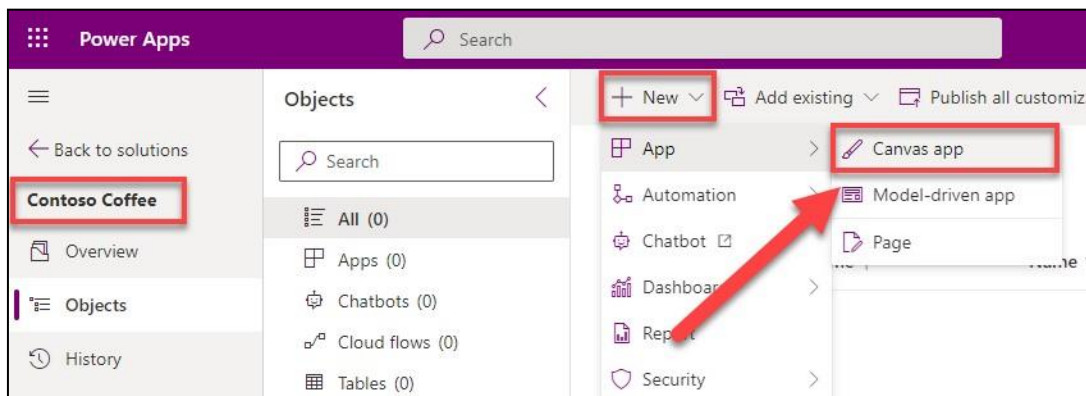
More options ∨

**Create** Cancel

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

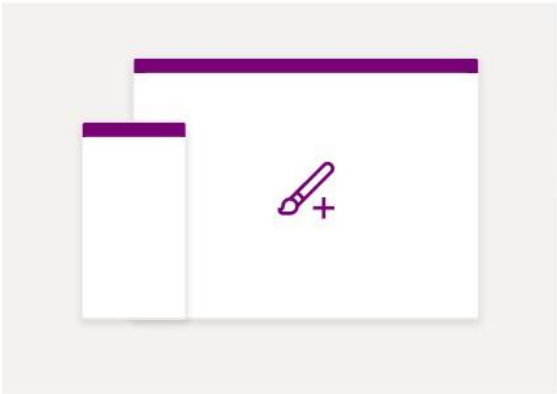
### Task 3: Create a new application

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**.

### Canvas app from blank



App name \*


Machine Ordering App

Format

☒ Tablet

☐ Phone

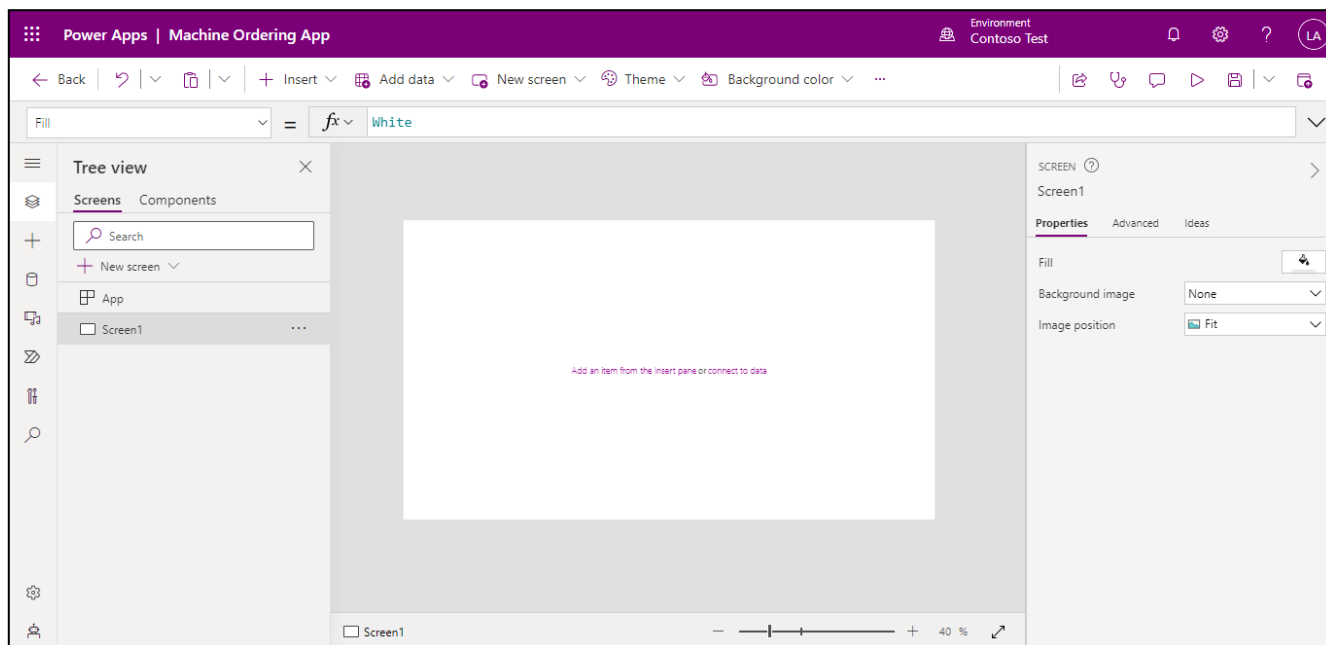
Design the app you want, and connect it to hundreds of data sources.

 Canvas app

Create

Cancel

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:

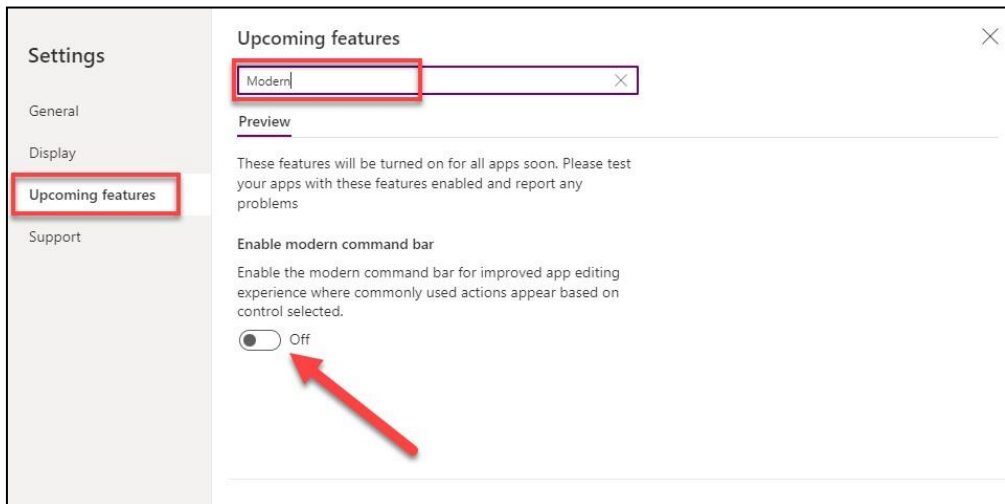


## Task 4: Rename the screen

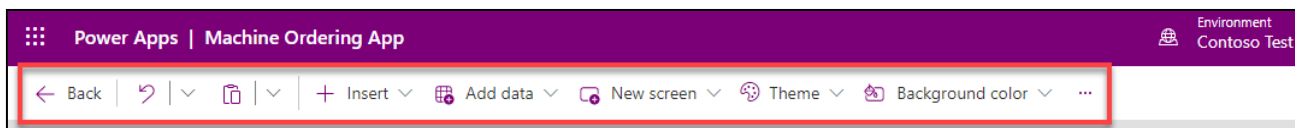
In this task, you will rename Screen1 to Main Screen.

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**.

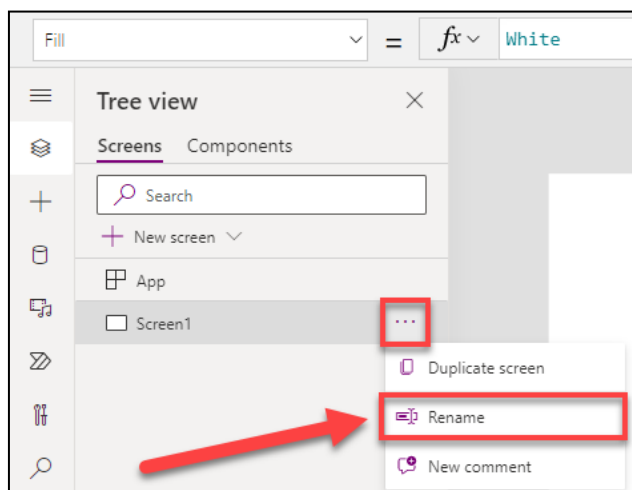


Your command bar should now be set with the modern features as shown in the figure below:

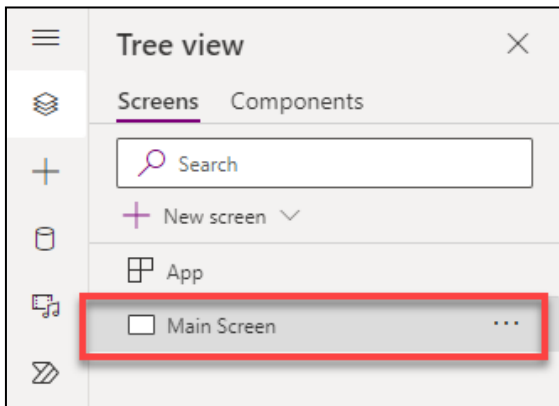


Now that we have everything set and ready to go, we can begin this task.

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**.

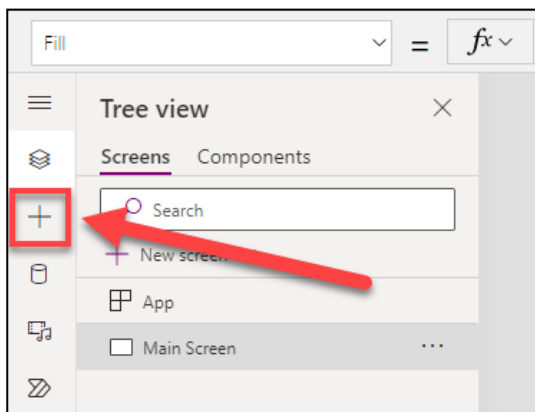


**Note:** You can also rename the screen by clicking on the screen name in the right pane and selecting the edit icon, or double clicking on it.

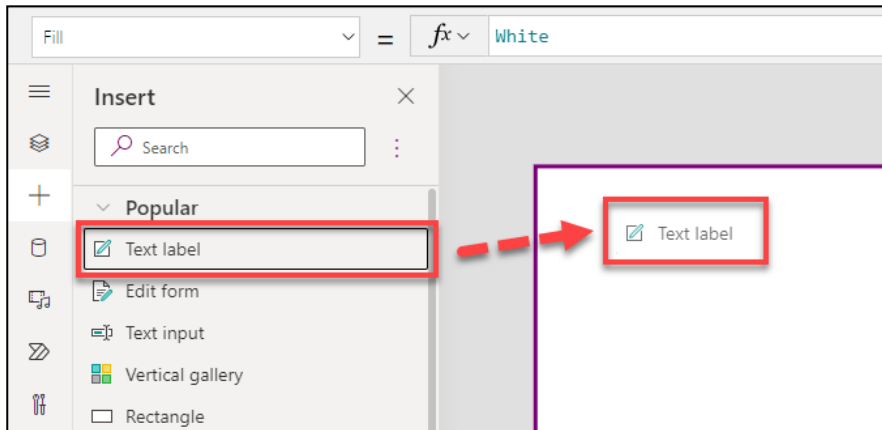
**Tip:** It is a good practice to rename screens and controls as you create them, so they are easier to locate as you work with formulas that reference different controls. In this lab, you will be prompted to rename screens and some of the controls. For the others, you may rename them as you please on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

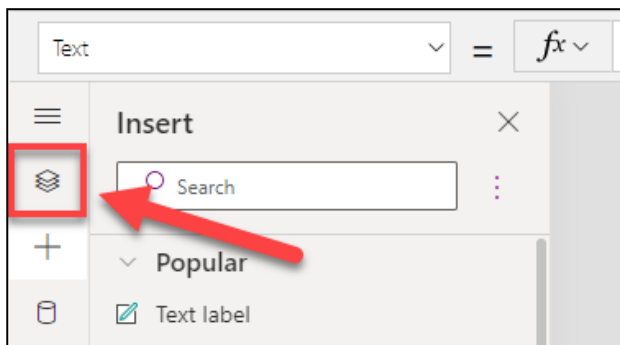
1. With **Main Screen** selected in the Tree View pane, select the **Insert (+)** button from the navigation pane.



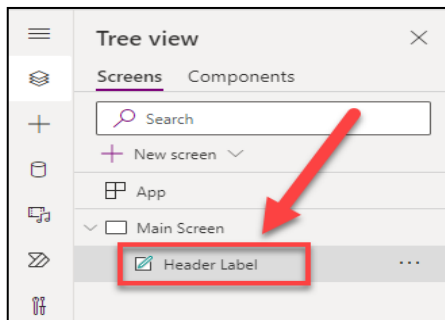
2. From the **Insert** pane, drag and drop **Text Label** onto the **Main Screen**.



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

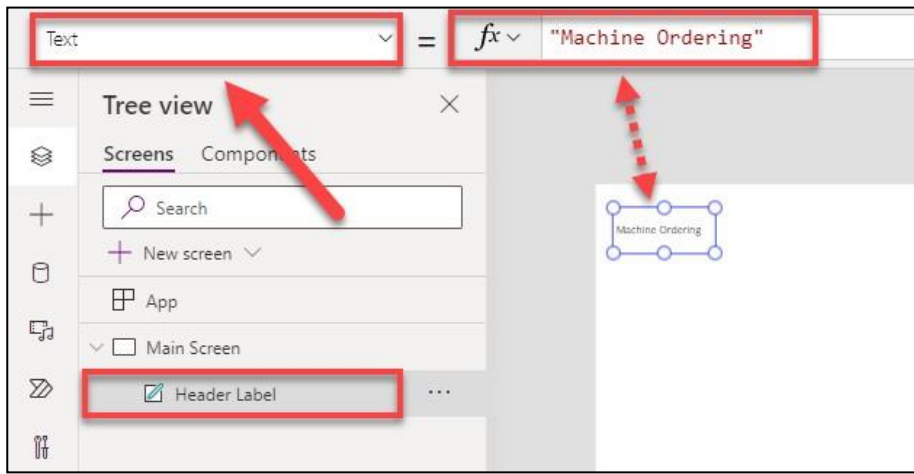


4. Rename **Label1** to **Header Label** (Refer to the previous tasks on renaming controls).

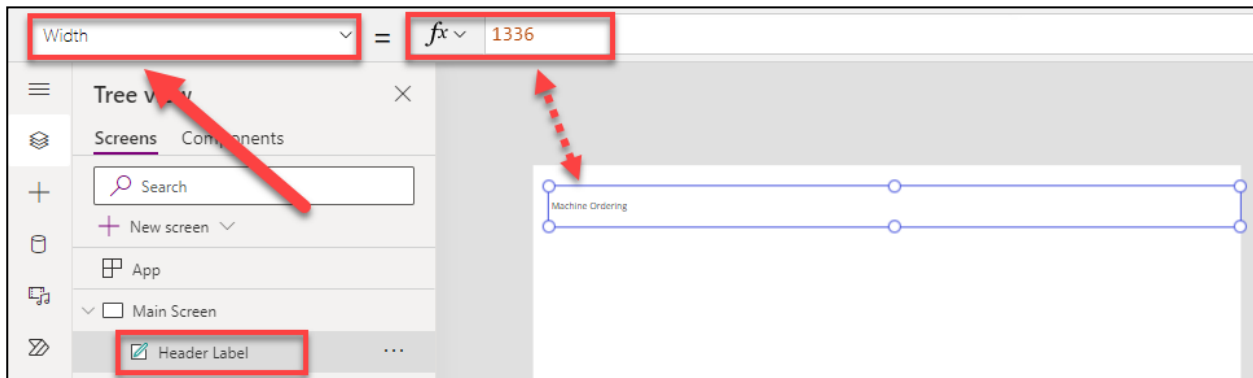




5. With **Header Label** still selected in the **Tree View** pane, select **Text** from the property value drop-down list and enter "**Machine Ordering**" in the formula bar. You can also type directly in the label.

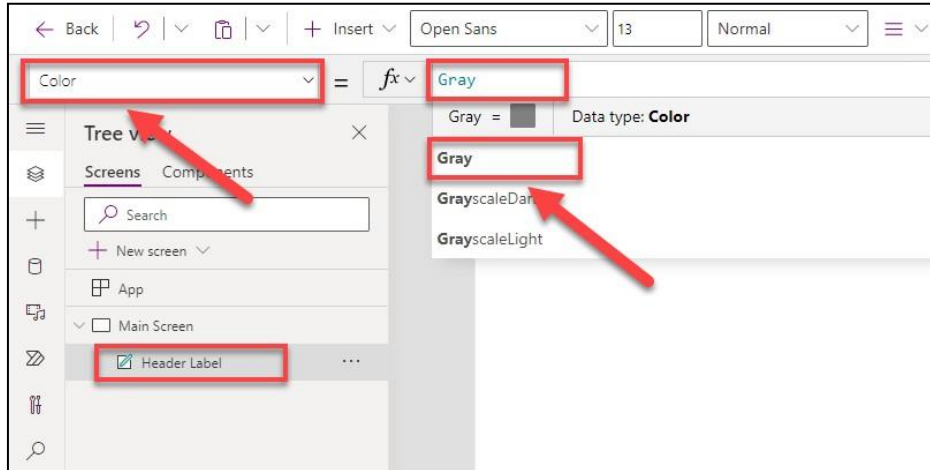


6. Select **Width** from the property value drop-down. Set the **Width** of the **Header Label** to **1366** by typing in the formula bar.

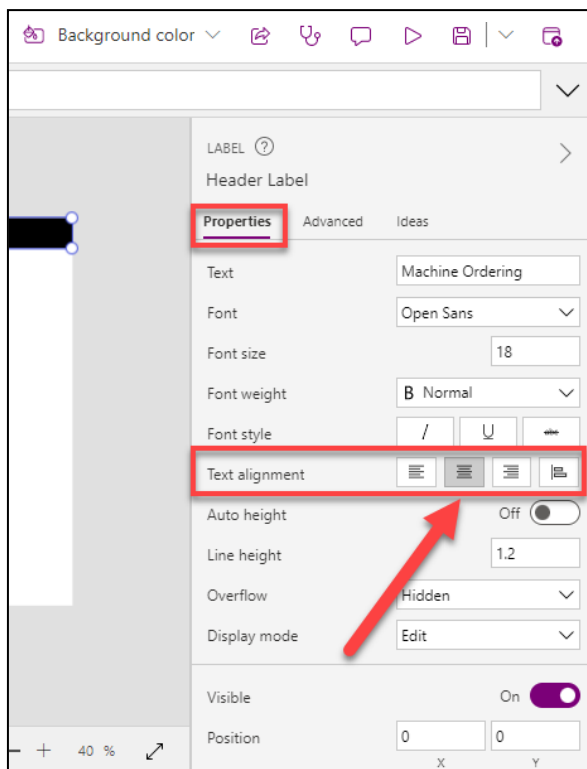


7. Using the property value drop-down and the formula bar, change the **X** and **Y** property values of the **Header Label** to **0**.

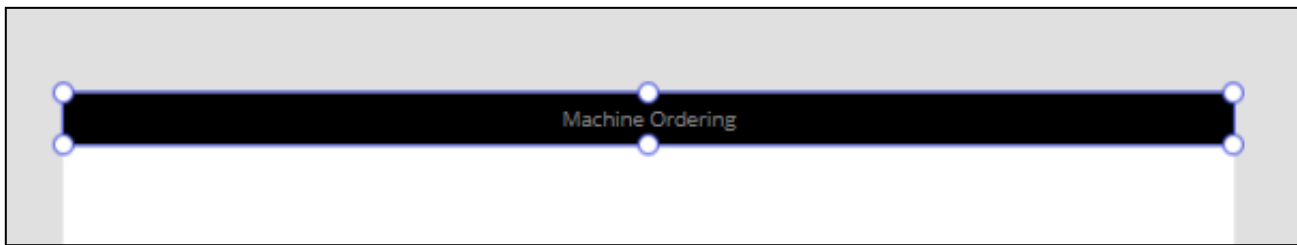
8. Next, set the property value of the **Header Label** to **Color** and then type **Gray** in the formula bar. Select **Gray** from the drop down menu.



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**.

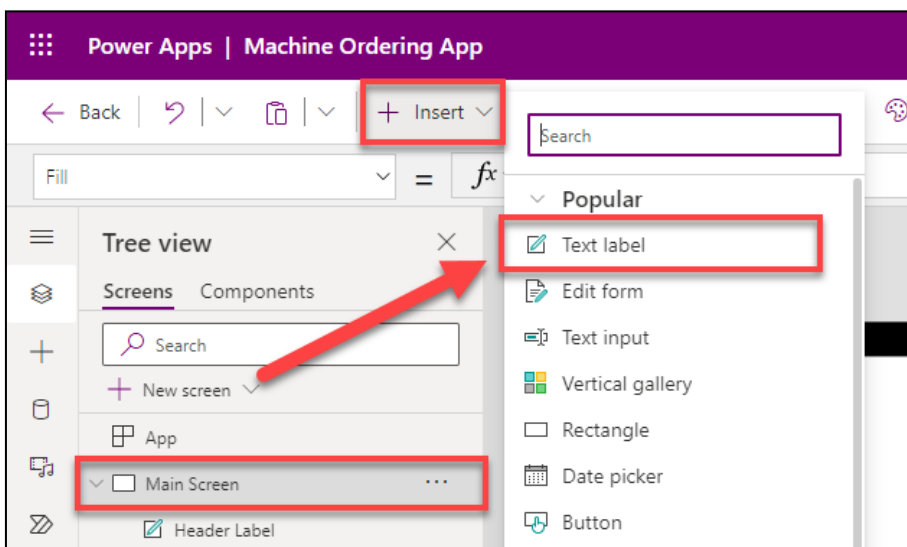


13. The header label should now look like the figure below.

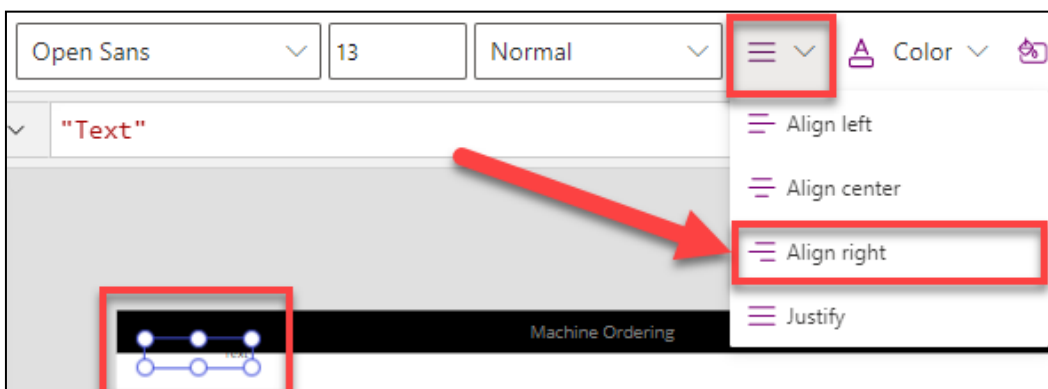


**Tip:** You can also use the formula bar above or the Advanced  tab on the far right of the screen to enter specific values or formulas for any property on a control.

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.



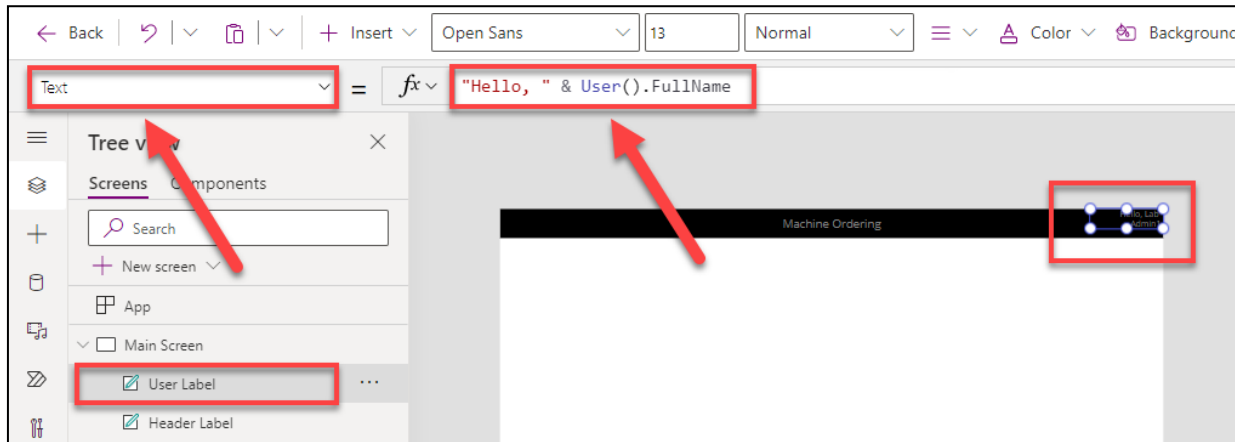
15. Rename the newly added label to **User Label**.
16. Select the **User Label**. From the ribbon, select the **Align** drop down button and select **Align right**.



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**.

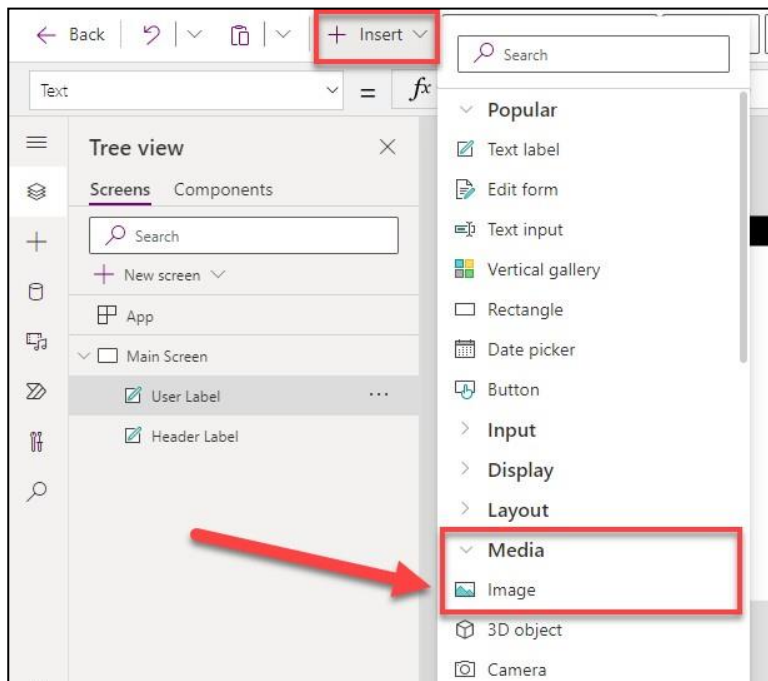
21. Set the **Text** value of the **User Label** to the formula below:

"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.

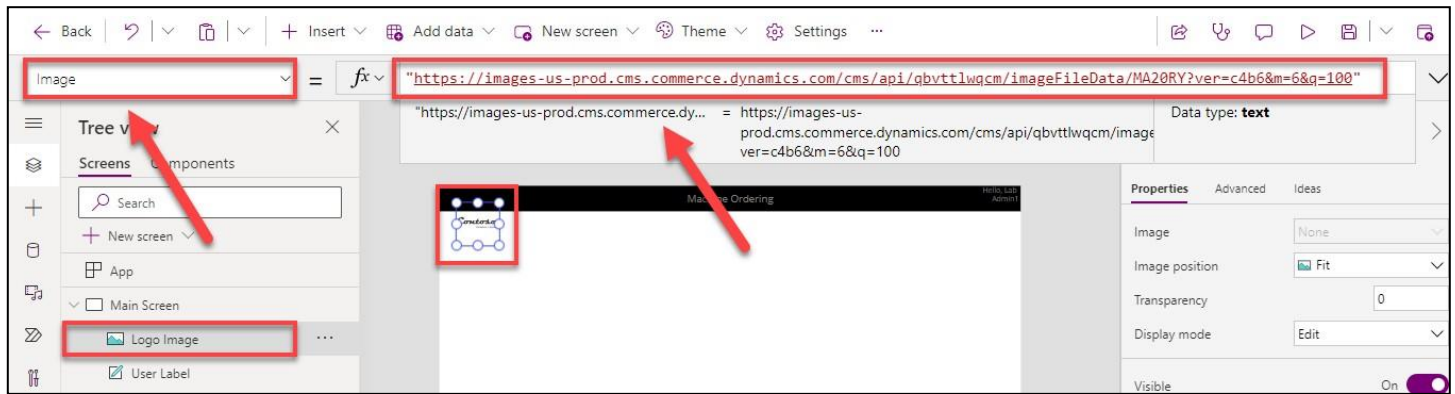
22. Select **+ Insert** from the ribbon, expand the **Media** group and select **Image**.



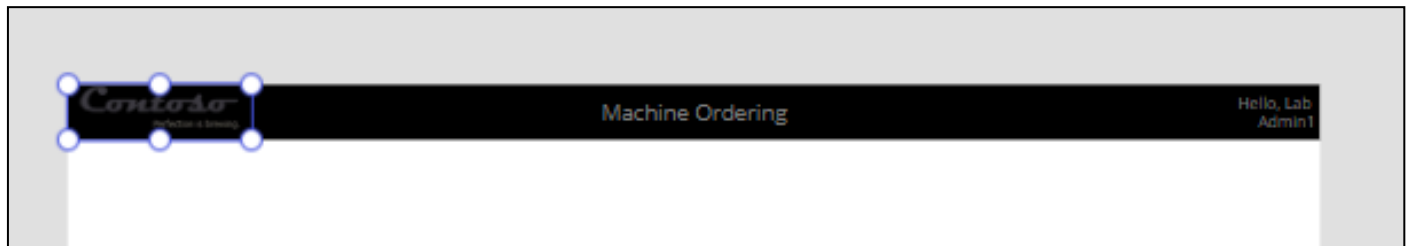
23. **Rename** the image **Logo Image** in the Tree view using the same steps as we did to rename the labels

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

"https://images-us-prod.cms.commerce.dynamics.com/cms/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:

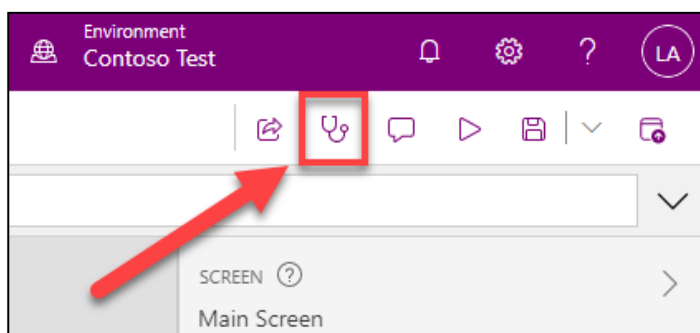


**Note:** The **User()** function in Power Apps allows you to retrieve the Email, Full Name, and Picture for the currently logged in user. App users will always be logged in with their business or school account (Azure Active Directory (AAD) credentials), so this information will always be available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

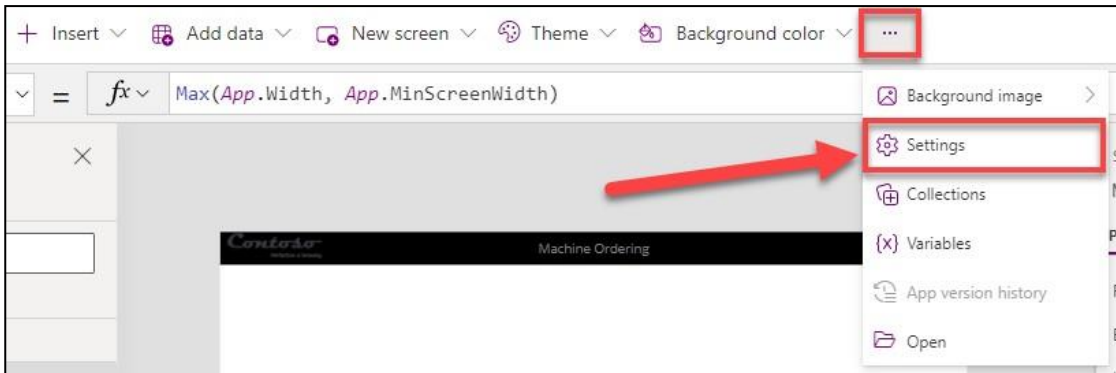
## Task 6: Save the Application

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.

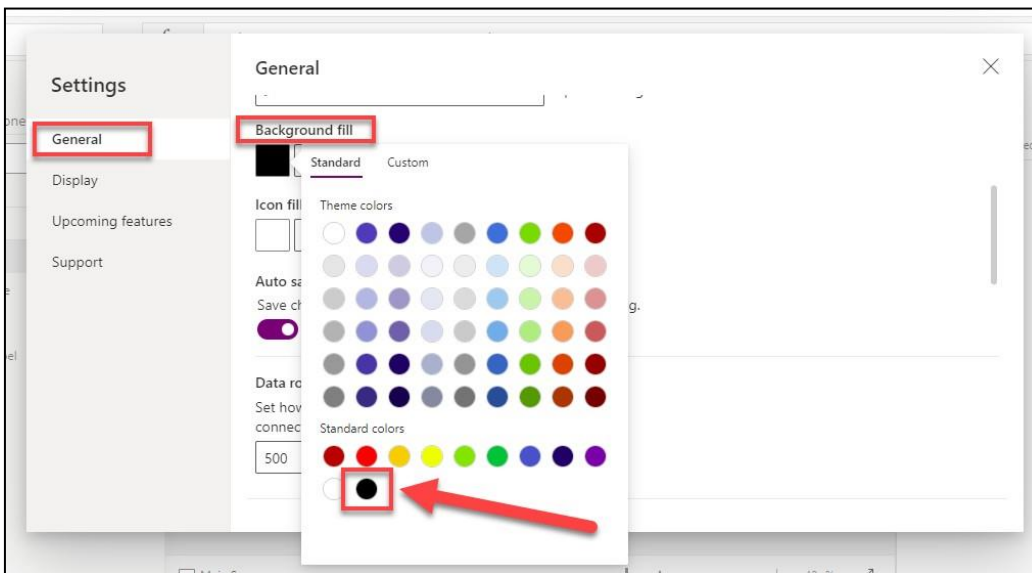
1. First, you will check if there are any errors. Select the **App Checker** icon located in the ribbon at the top of the screen.



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.

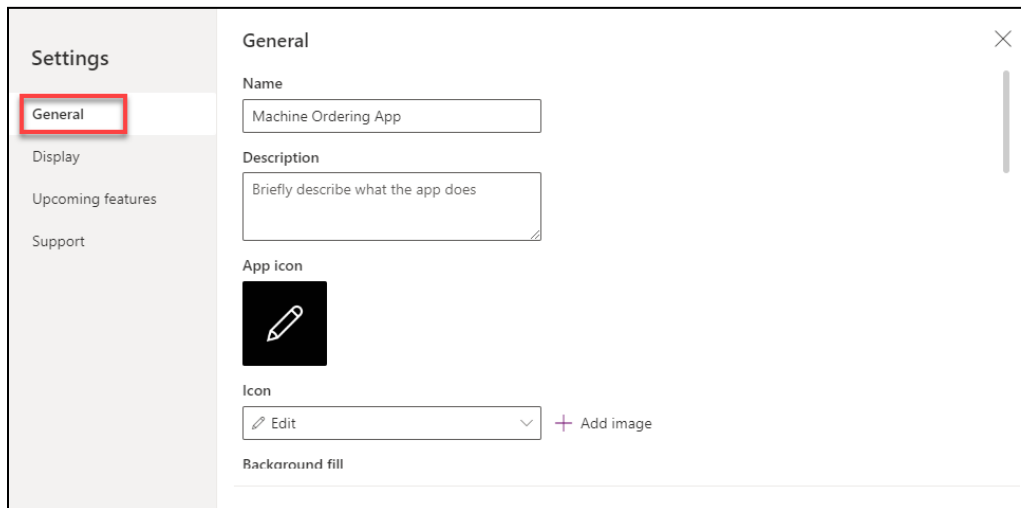


5. The Settings dialog box will appear. Under the **General** tab of the **Settings** pane to the left, change the **Background fill** to Black.

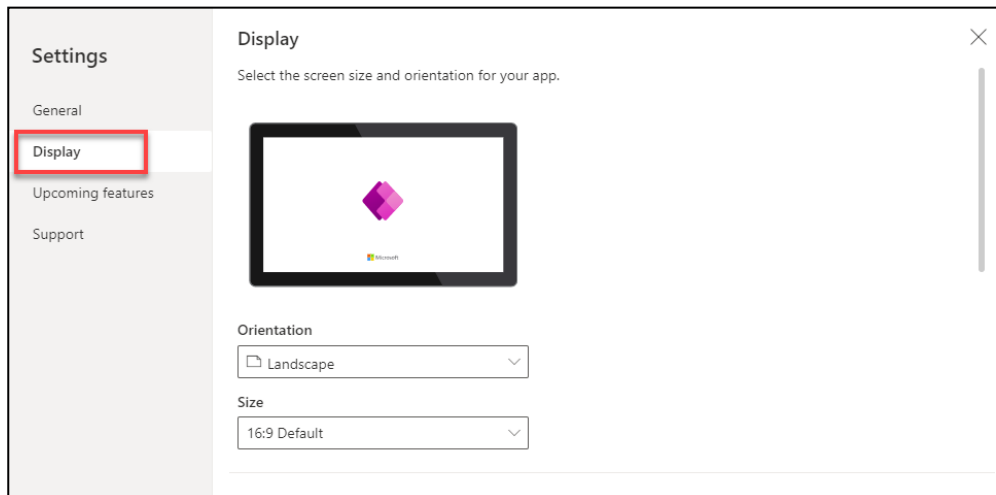


In the General tab of the Settings pane, you can also:

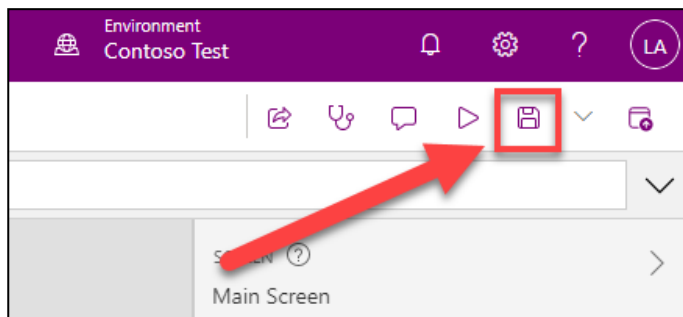
- Change your app name
- Customize the app icon – choose a background color and icon



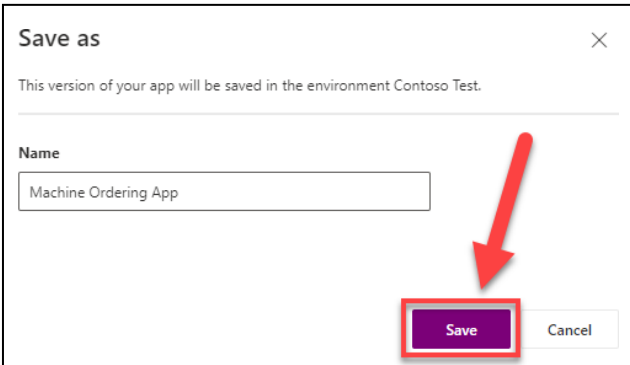
6. Select the **Display** tab in the Settings pane to the left to view the available screen orientation and aspect ratio settings. For this app, we will leave it at the default setting of **Landscape** with **16:9 aspect ratio**.



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.



A screenshot of a 'Save as' dialog box. The title bar says 'Save as' with a close button (X) on the right. Below the title bar, it says 'This version of your app will be saved in the environment Contoso Test.' There is a text input field labeled 'Name' containing the text 'Machine Ordering App'. At the bottom right, there are two buttons: 'Save' (highlighted with a red box and a red arrow pointing to it) and 'Cancel'.

Save as

This version of your app will be saved in the environment Contoso Test.

Name

Machine Ordering App

Save Cancel