Getting Started with Microsoft Flow

Lab Time: 60 minutes

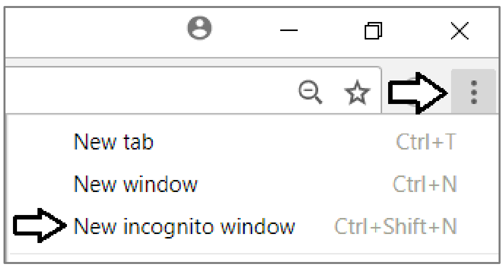
Lab Folder: C:\Student\Modules\01_GettingStarted\Lab

Lab Overview: This lab covers how to get up and running with the Power Platform by creating a new Microsoft 365 tenant with trial subscriptions to Office 365, PowerApps, Flow, Power BI and SharePoint Online. The act of creating and configuring this new Microsoft 365 tenant will yield an isolated testing and development environment for building and testing flows. After that, you will begin to work with Microsoft Flow.

Exercise 1: Create a new Microsoft 365 Trial Tenant

In this exercise, you will create a new Microsoft 365 tenant which allows you to create up to 25 user accounts with Office 365 Enterprise E5 trial licenses. Note that the Enterprise E5 trial license provides the benefits of the PowerApps, Flow, Power BI Pro and SharePoint licenses.

1. Navigate to the Office 365 trial sign up page using an Incognito browser window.
   a) Launch the Chrome browser.
   b) Using the dropdown menu in the upper right, select the command to open a **New incognito window**.

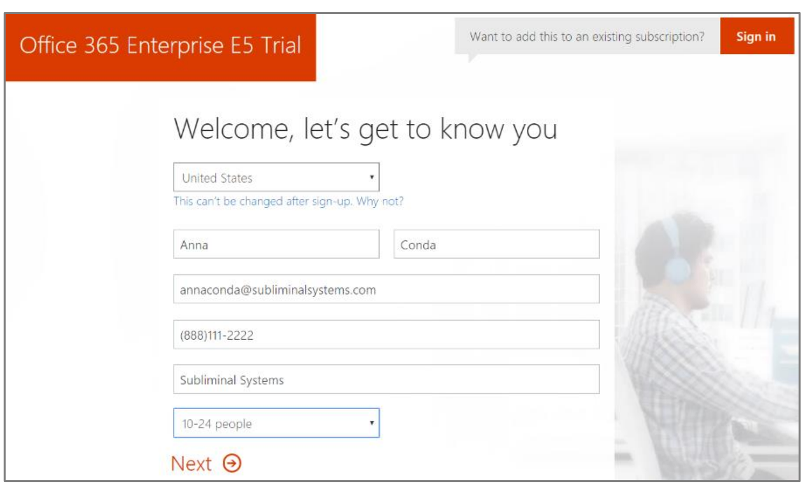


   c) Copy and paste the following URL into the address bar of the incognito window to navigate to the sign up page.

https://go.microsoft.com/fwlink/p/?LinkID=698279&culture=en-US&country=US

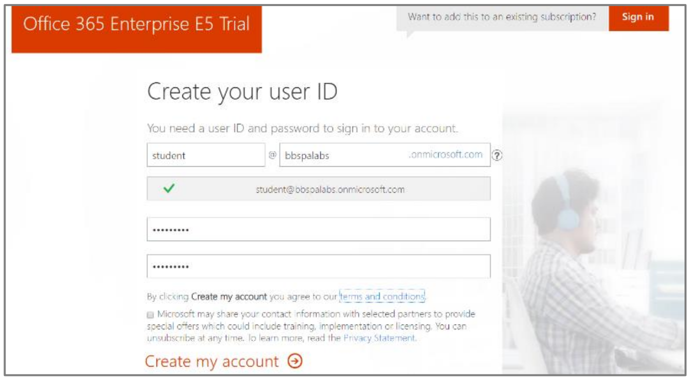
It's not always necessary to sign up for an Office 365 trial account using an incognito window. However, most errors that occur when attempting to sign up are caused by cached browser settings from another Office 365 account such as your work account. The solution to overcoming most errors when signing up for a trial account is using an incognito window.

2. Fill out the form with your personal information and click **Next**.



The information you provide on the next page of the signup process will be used to name your new Microsoft 365 tenant.

3. On the **Create your user ID** page…
   a) Enter a user name
   b) Enter a unique company name *(you might have to try a few before you get one that's unique)*
   c) Enter a password that you will remember.

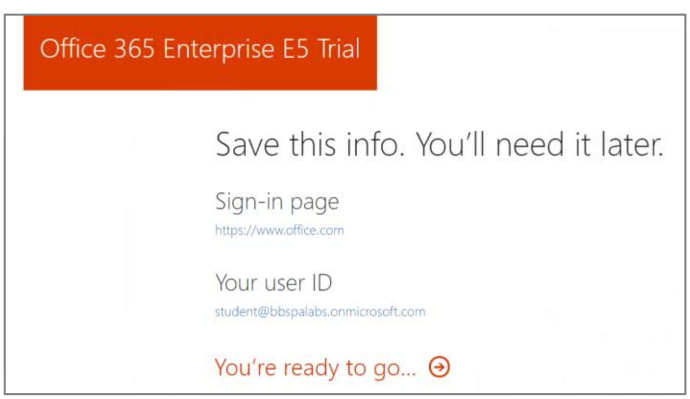


> Note that the company name you enter on this page will be used to create the domain name for your new Office 365 trial tenant. For example, if you were to enter a company name of **bbspalabs**, it would result in the creation of a new Microsoft 365 tenant within a domain of **bbspalabs.onMicrosoft.com**. The user name you enter will be used to create the first user account which will be given administrative permissions within the Microsoft 365 tenant. If you enter a user name of **Student**, then the email address as well as user principal name for this account will be **Student@bbspalabs.onMicrosoft.com**.

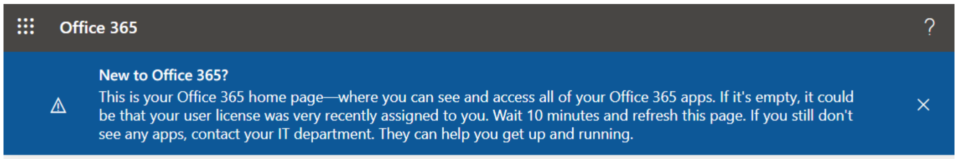
   d) Click **Create my account** to continue and move to the next step.

4. Complete the validation form to prove you are not a robot.
   a) Select the **Text me** option and provide the number of your mobile phone.
   b) When you go through this process, a Microsoft service will send you a text message that contains an access code.
   c) You retrieve the access code form your mobile device and use it to complete the validation process.

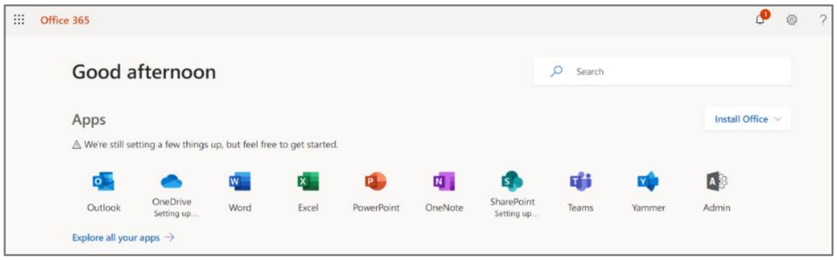
5. Once you have completed the validation process, click the **You're ready to go…** link to navigate to the portal welcome page for your new Office 365 trial tenant. Note that you should already be logged on using the user account that was created during the signup process.



6. If you are prompted an Office 365 promotion dialog, click the **x** button in the top right corner to close it.



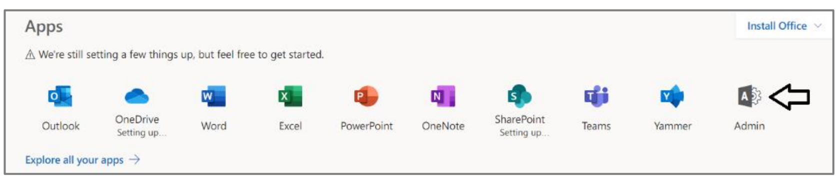
7. At this point, you should be located on an Office 365 welcome page. Notice the fancy new icons for all the Office applications!



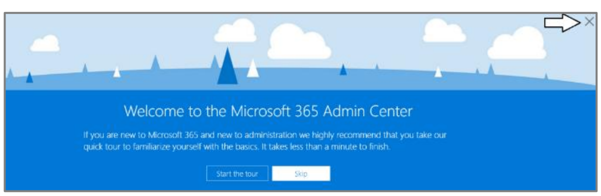
At this point, you have already created your new Microsoft 365 tenant which can support creating up to 25 user accounts with Office 365 Enterprise E5 trial licenses. Note that some Microsoft 365 services within your new Microsoft 365 tenant such as the Microsoft 365 admin center, PowerApps, Flow and Power BI can be accessed immediately. Other services in your Microsoft 365 tenant such as Outlook, OneDrive for Business and SharePoint Online will not be ready immediately and can take some time to provision.

There is no more need to run the browser in incognito mode anymore because it's only required to get through the signup process. You can now return to using a standard browser window. However, it's always a good thing to check to see who you are logged in as because sometimes the browser may log you on using a different Office 365 account you have instead of your new trial account.

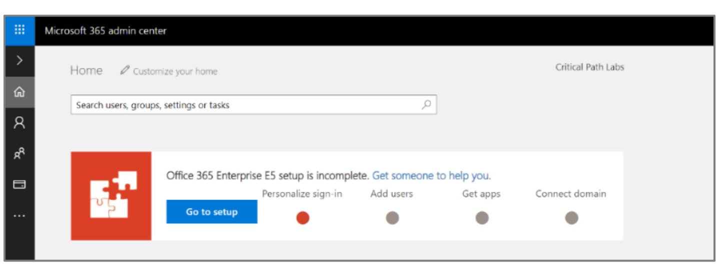
8. Click the **Admin** tile to go to the **Microsoft 365 admin center**



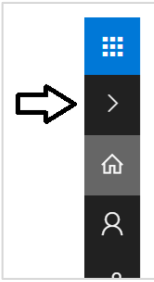
9. If you are presented with the **Welcome to the Microsoft 365 Admin Center** dialog, close it by clicking the **X** in the top right corner.



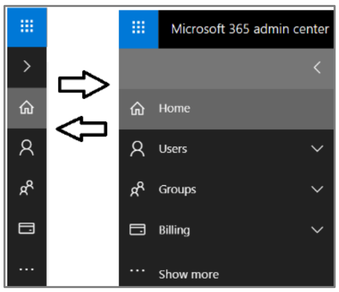
10. Verify that you are able to access the home page of the **Microsoft 365 admin center** at https://admin.microsoft.com/AdminPortal.
    a) The following screenshot shows the home page of the Microsoft 365 admin center.



b) Locate the top **Menu** button for the left navigation menu. It's the second button from the top with the arrow icon which sits just beneath the Microsoft 365 app launcher menu button.

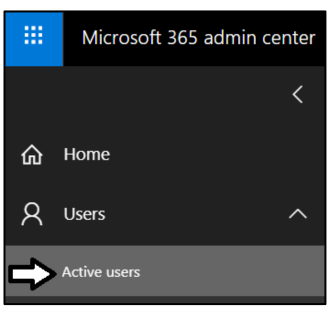


c) Click the top **Menu** button several times and see how it toggles the left navigation between a collapsed and expanded mode.

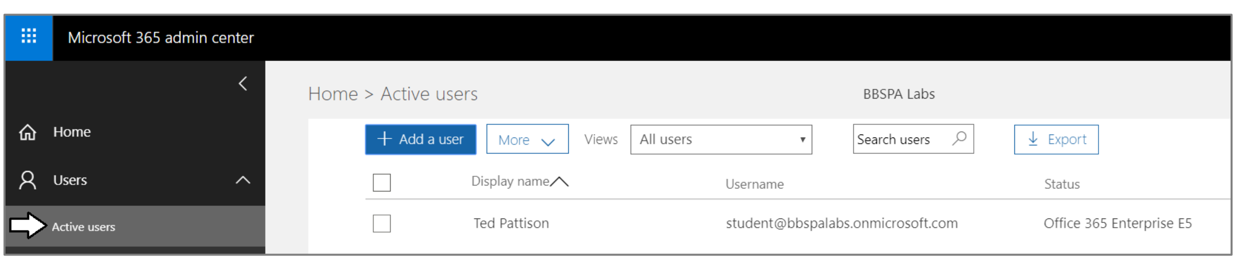


Over the next few steps, you will configure your new Microsoft 365 tenant by creating a secondary user account that you will need later when you begin experimenting with sharing apps and flows with other users.

1. Make sure you are in the browser on the home page of the Microsoft 365 admin center.
2. Inspect the set of Active Users in the current tenancy.
   a) In the left navigation menu, expand the **Users** node and click **Active users** to navigate to the **Active users** page.

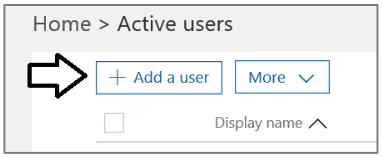


   b) Once the **Active users** page is displayed, you should be able to verify that the user account you are currently logged on as is the only user account that exists in the current tenancy. Remember that this account has been set up as a global administrator within the Microsoft 365 tenant because it is the primary user account that was created when the tenant was initially created.

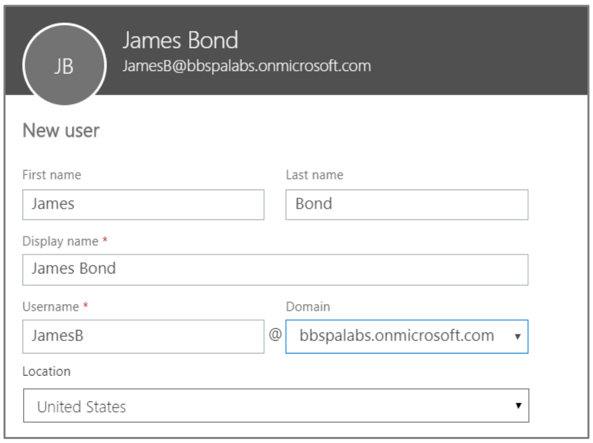


3. Create a new user account.

   a) On the **Active Users** page, click the **Add a user** button to create a new user account



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

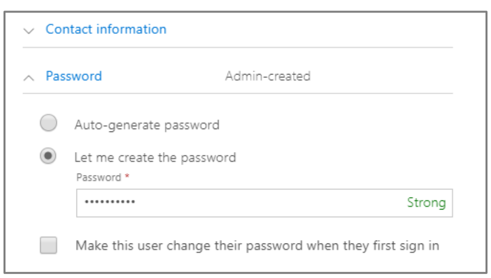


   c) Expand **Password** section under **Contact Information** section.

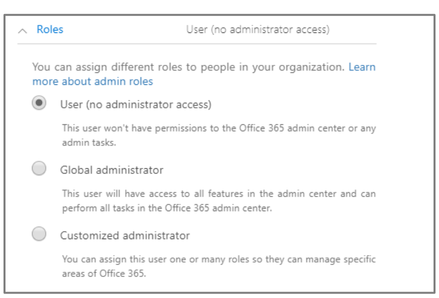
      i) Select the option for **Let me create the password**.

      ii) Enter a password of **pass@word1** into the textboxes labeled **Password** and **Retype Password**.

      iii) Uncheck the checkbox for the option labeled **Make this user change their password when they first sign in**.

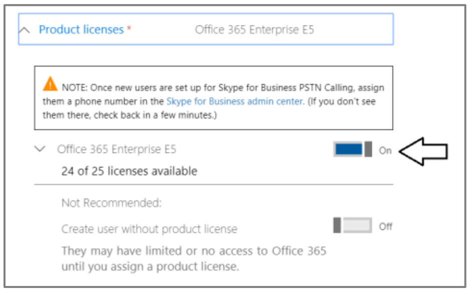


   d) Expand the **Roles** section. You do not need to change anything in this section, although you should note that this new user account will be created as a standard user account without any administrator access or privileges.



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

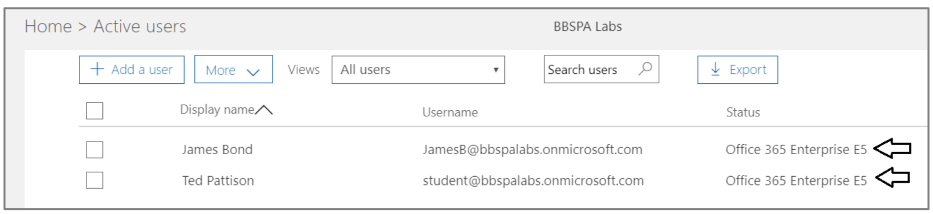
e) In the **Product licenses** section, make sure the **Office 365 Enterprise E5** license is set to **On**..



f) Click the **Add** button at the bottom of the new user form to create the new user account.

g) When you see the **User was added** message, click **Send email and close** to dismiss the **Add new user** task pane.

h) Verify that the new user account has been created and is displayed along with your primary user account.

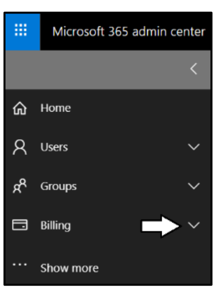


Exercise 2: Create a Trial Subscription for PowerApps Plan 2

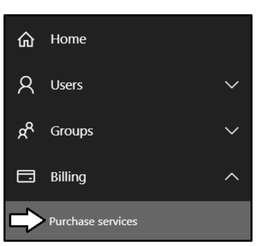
> In this exercise, you will configure your new Microsoft 365 tenant by creating a new subscription based on PowerApps Plan 2.

1. Navigate to the home page of the Microsoft 365 Admin center.
2. Create a new subscription for PowerApps Plan 2.

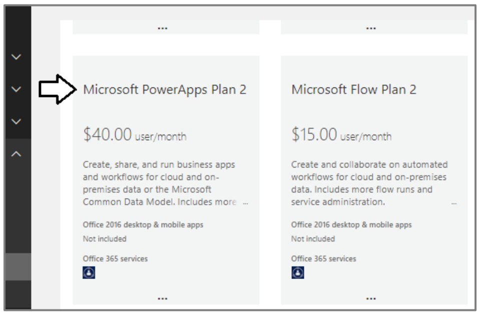
a) Click on **Billing** in the left navigation to expand the menu items underneath.



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

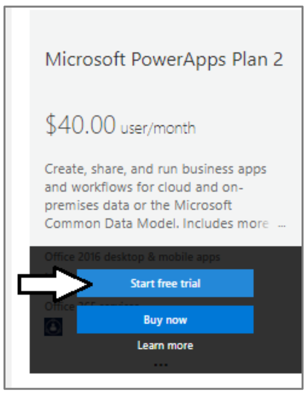


c) Scroll down the page and find the subscription with the name **Microsoft PowerApps Plan 2**.

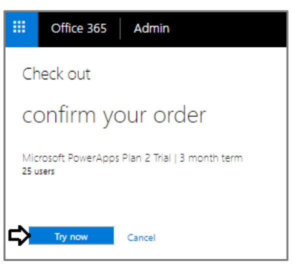


d) Hover over the ellipse (…) menu at the center on the bottom to see the flyout menu.

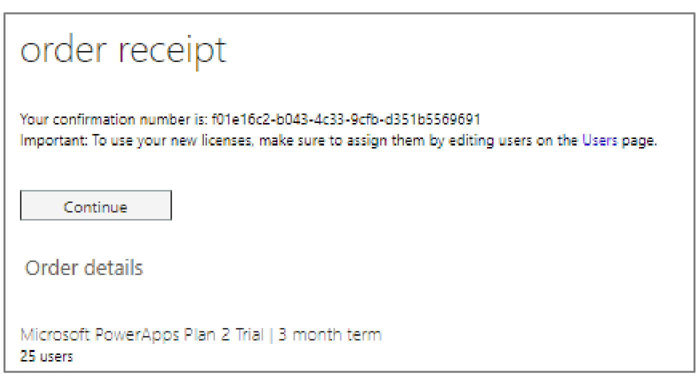
e) Click the **Start free trial** button



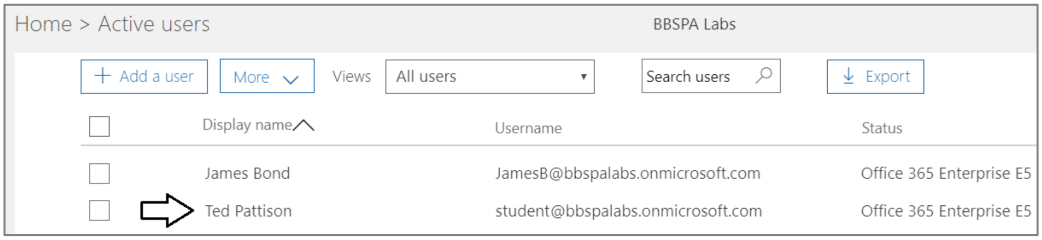
f) When prompted to confirm your order, click **Try now**.



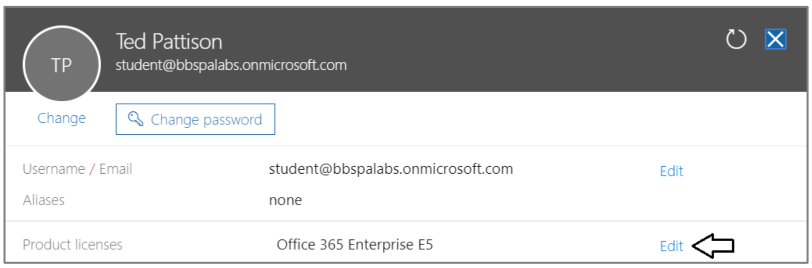
g) You should see an order receipt to confirm you have created the new trial subscription.



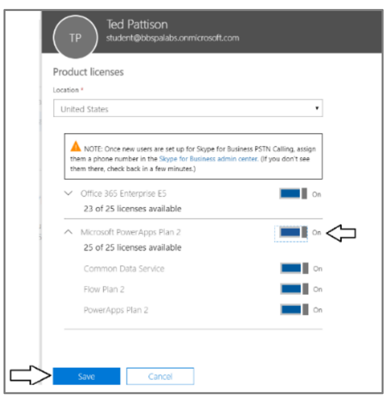
3. Configure your user account by assigning a PowerApps Plan 2 license.
    a) Navigate back to the Active Users page in the Office 365 Admin center.
    b) Click on your user account to edit it.



    c) Click the **Edit** link for **Product licenses**.



    d) Enable the **Microsoft PowerApps Plan 2** subscription and then click Save below.



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

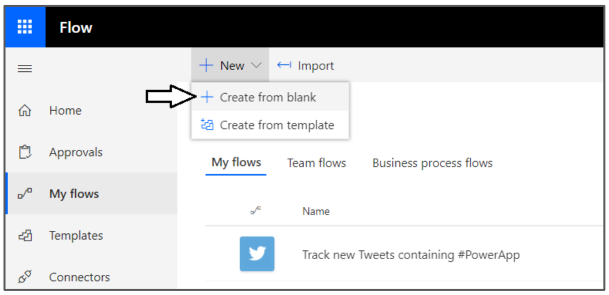
    e) You should be able to confirm your user account has been configured with a **Microsoft PowerApps Plan 2** subscription.

You will not actually need the Microsoft PowerApps Plan 2 subscription until you reach the lab exercises which work with the Common Data Service for Apps. However, the PowerApps Plan 2 does provide the extra licensing beyond the Office 365 license such as the ability to use premium connectors and custom connectors.

Exercise 3: Create a Flow that is Manually Triggered by a Button

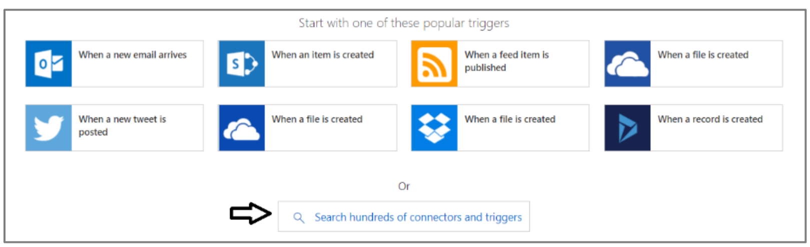
In this exercise, you will create a new flow from blank without using a template. This will give you a chance to see how to build a flow from the ground up. In this specific case, you will create a new flow that uses the Flow button for mobile trigger which allows a user to easily kick off a flow from a mobile device.

1. Create a new flow from blank.
   a) Navigate to Microsoft Flow and click the **My flows** link.
   b) Create a new flow by clicking the **Create from blank** link.

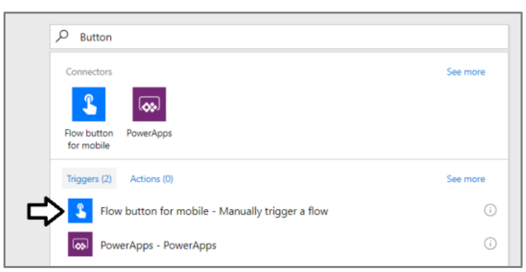


Since you have created a new flow without using a template, the flow is empty and you are prompted to select a trigger.

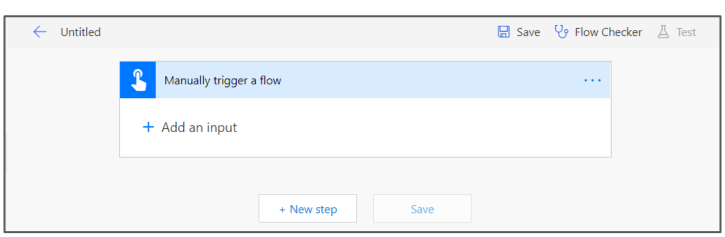
   c) Click the **Search hundreds of connections and triggers** link to search for a trigger.



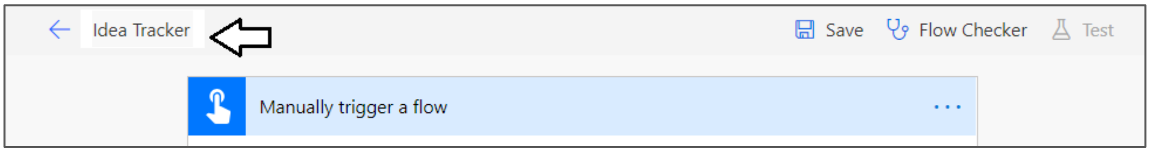
   d) When you see the search box, type in the word **“Button”** to find the trigger you need.
   e) Select the trigger named **Flow button for mobile – Manually trigger a flow**.



   f) You should now see a new untitled flow in the Flow Designer.

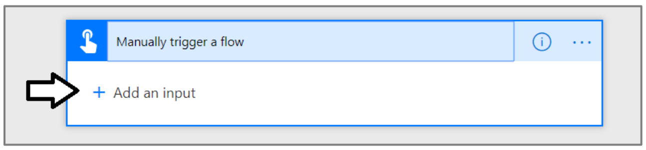


g) Give the new flow a name of **Idea Tracker** as shown in the following screenshot.

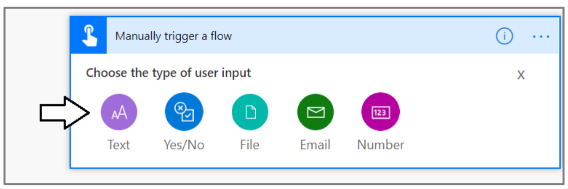


The Flow button trigger allows you to add input values. This makes it possible to prompt the user who is manually running the flow for input data that will be passed to the flow. In this flow, you will prompt the user for an idea and a value that indicates the idea quality.

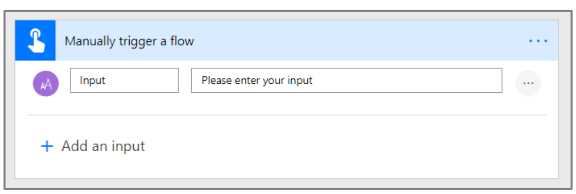
h) Click the **Add an input** link.



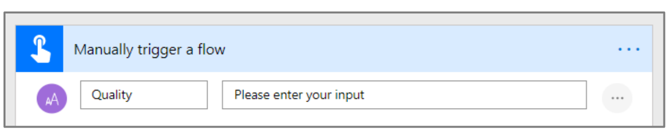
i) When prompted to **Choose the type of user input**, click **Text**.



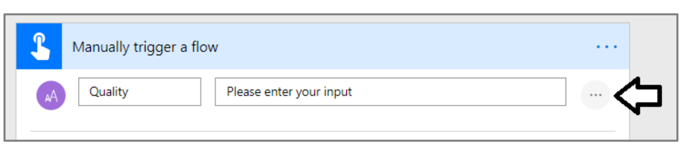
j) You should now see an input that by default is named **Input**.



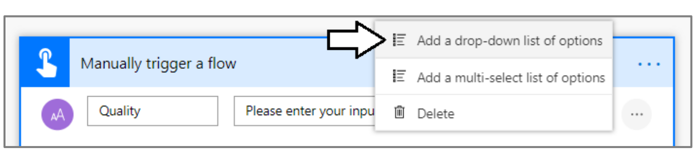
k) Change the name of the input to **Quality** as shown in the following screenshot.



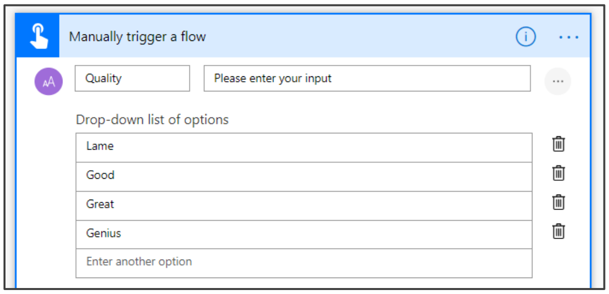
l) Click the ellipse (**...**) drop menu on the right-hand side of the **Quality** input.



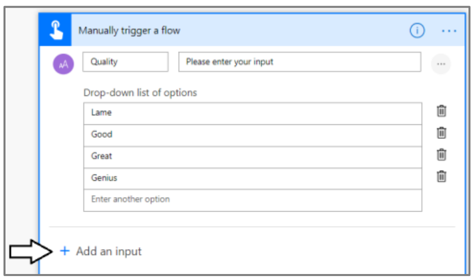
m) Select the option for **Add a list of options** from the dropdown menu.



n) Under **List Options**, add four choices which include **Lame**, **Good**, **Great** and **Genius** as shown in the following screenshot.

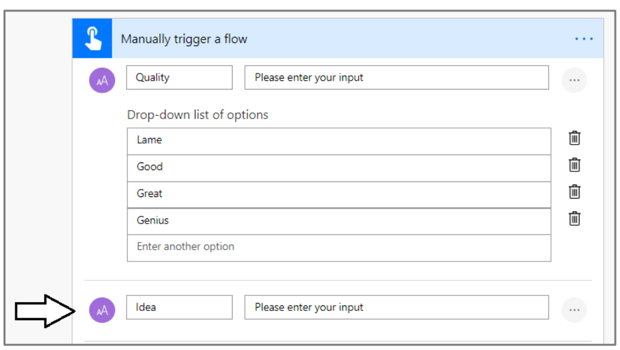


o) Click **Add an input** to add a second input field.



p) When prompted to **Choose the type of user input**, click **Text**.

q) Change the name of the second input field to **Idea**.

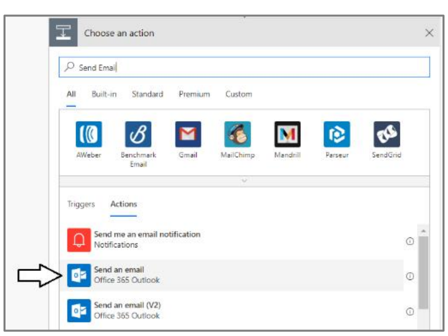


2. Add an action to send an email message every time the flow is triggered.

   a) Click **New Step** at the bottom of the Flow Designer to add a new action.

   b) Type **"Send Email"** into the search box to search for the **Send an email action**.

   c) Select the **Send an email - Office 365 Outlook** action.

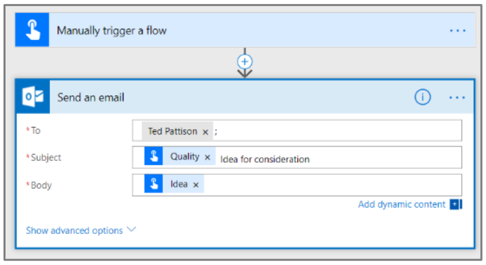


d) In the **Send an email action**, add your Office 365 trial account email address to the **To** field.

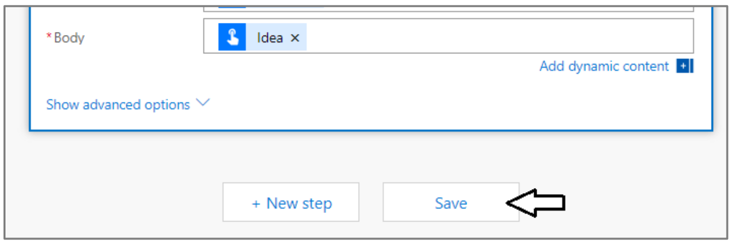
e) In the **Subject** field, add the **Quality** field from flow data followed by the text **" Idea for consideration"**.

f) In the **Body** field, add the **Idea** field from flow data.

g) When you are done, the **Send an email** action should match the following screenshot.

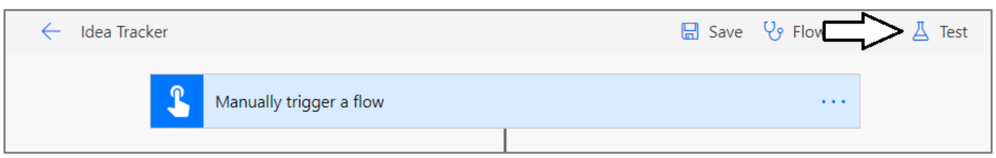


h) Click the **Save** button at the bottom of the Flow Designer to save your flow.

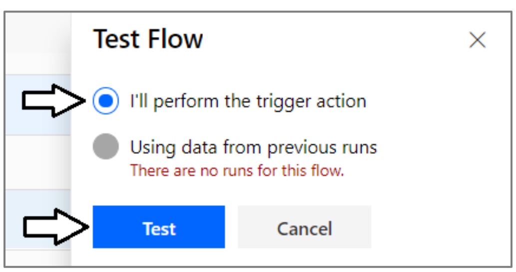


3. Test the **Idea Tracker** flow by running it from the browser.

a) Click the **Run Now** link to manually trigger the flow.

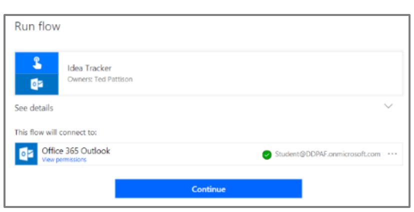


b) Choose **I'll perform the trigger action** option and click **Test**.

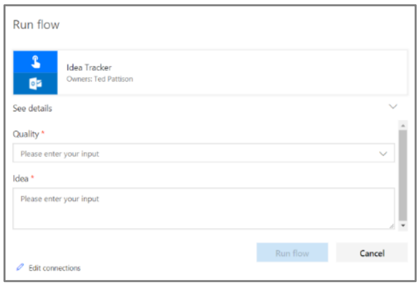


c) If prompted, sign in with your Office 365 trial account and grant permissions to the Office 365 Outlook connector.

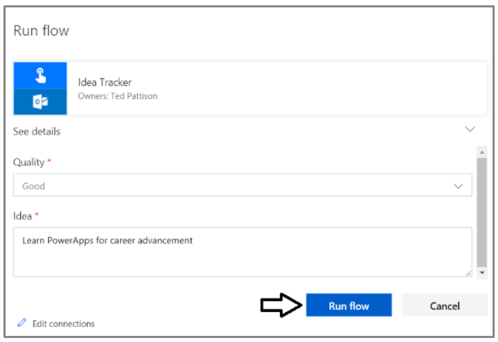
d) Click the **Continue** button.



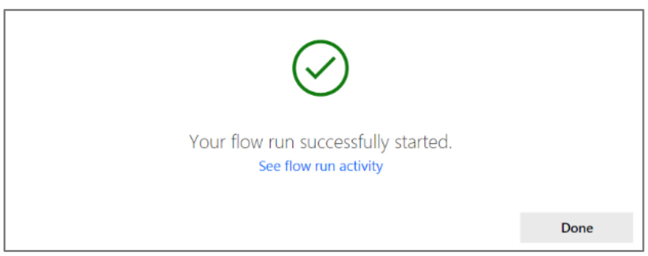
e) You should now be prompted with a page that allows you to enter values for the two input fields named **Quality** and **Idea**.



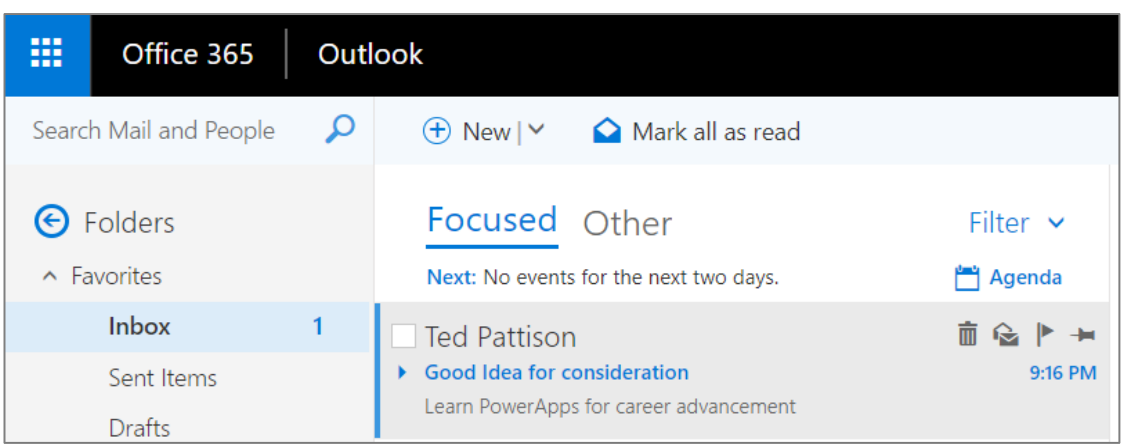
f) Enter some sample test values for the input fields named **Quantity** and **Idea** and then click **Run flow**.



g) You should see a message indicating that the flow ran successfully.



4. Check your inbox to see the message created by the **Idea Tracker** flow.
   a) Return to your inbox in Outlook.
   b) Verify that you received the message with your idea.



Exercise 4: Create a SharePoint List to Store Customer Data

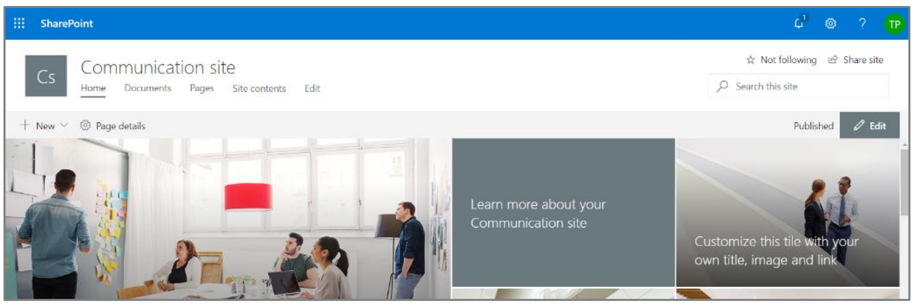
In this exercise, you will create a new modern SharePoint list named **Customers** to track customer data. After creating the **Customers** list, you will then add the necessary site columns and configure the default view to track customer data. In the final steps you will create a few new SharePoint list items to provide some sample data for when you build a canvas app in the next exercise.

NOTE: You can skip this exercise if you have already created the SharePoint Customers list in a previous exercise.

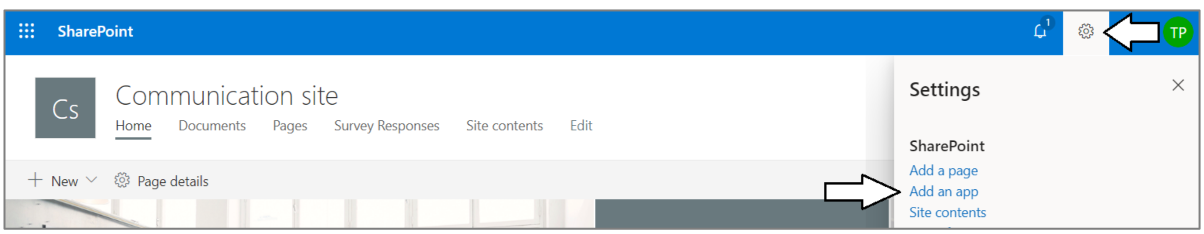
1. Create a new SharePoint list named **Customers.**
   a) Navigate to the root SharePoint site for your trial Office 365 tenancy.

The URL for your SharePoint root site can be determined by your Office 365 tenancy name. For example, if your Office 365 tenancy is named **bbspalabs**, then the URL for your SharePoint root site will be https://bbspalabs.sharepoint.com.

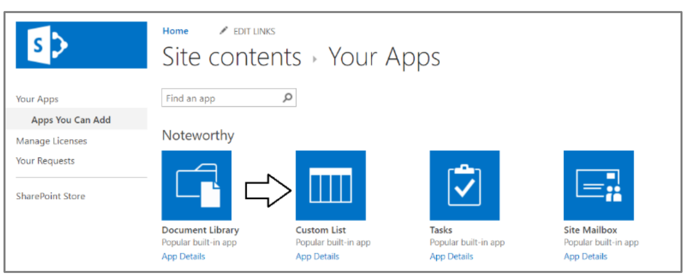
   b) When you navigate to your SharePoint site, it should be a SharePoint Communications site as shown in this screenshot.



   c) Click on the gear icon and then click on **Site contents**

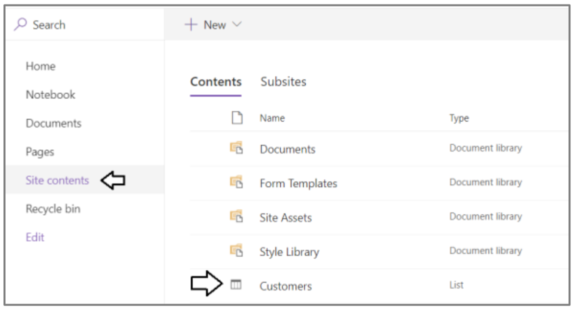


   d) Click the **Custom List** tile to create a new custom list.

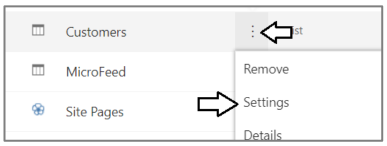


   e) When prompted with the **Adding Custom List** dialog, add a **Name** of **Customers** and click **Create**.

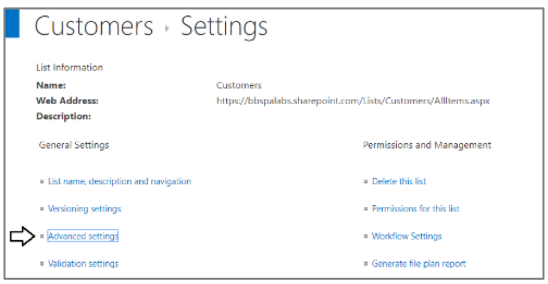
f) Once the **Customers** list has been created, you should be able to locate this new list on the **Site contents** page.



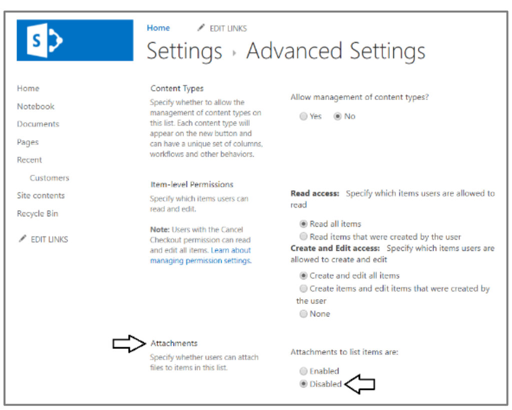
g) On the **Site contents** page, drop down the context menu to the right of the **Customers** list and then click **Settings**.



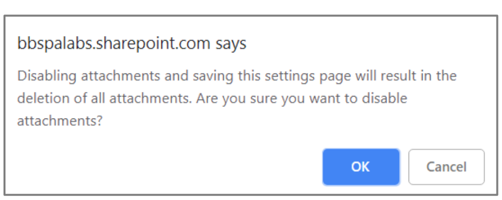
h) On the **Settings** page, click the **Advanced Settings** link to navigate to the **Advanced Settings** page.



i) On the **Advanced Settings** page, change the **Attachments** setting to **Disabled**.



j) When prompted with the warning about disabling attachments, click **OK** to continue.

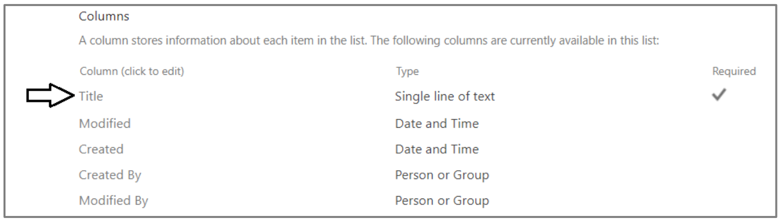


k) Scroll to the bottom of the **Advanced Settings** page and click **OK** to save your changes and return to the **Settings** page.

2. Configure the columns for the new **Customers** list.

a) In the **Setting** page, scroll down to the **Columns** section.

b) Click on the link for the column named **Title** to navigate to the **Edit Column** page

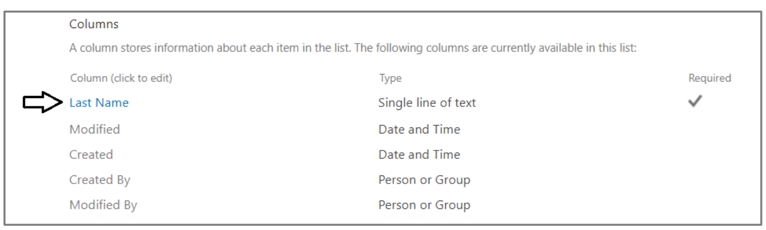


c) The **Column name** should currently have a value of **Title**.

d) Update the **Column name** to **Last Name** to change the column's display name.

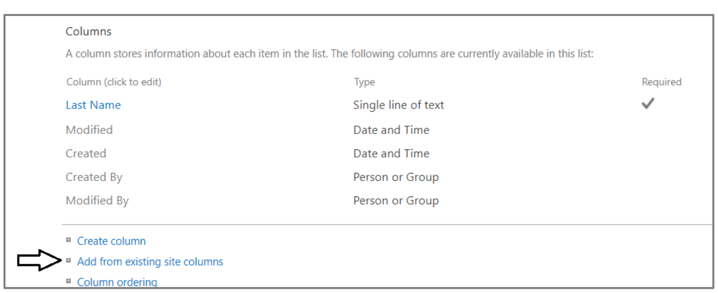
e) Click the **OK** button at the bottom of the **Edit Column** page to save your changes and return to the **Settings** page.

f) You should be able to see the column name has been updated to **Last Name**.



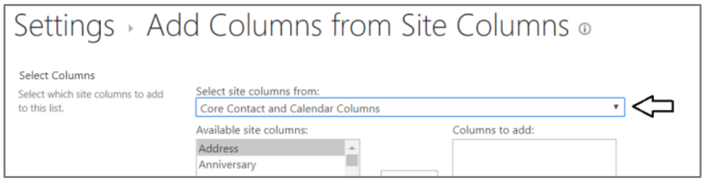
Note that you have updated the column display name to **Last Name** but the underlying site column name is still **Title**.

g) Click **Add from existing site columns** link to navigate to the **Add from existing site columns** page.

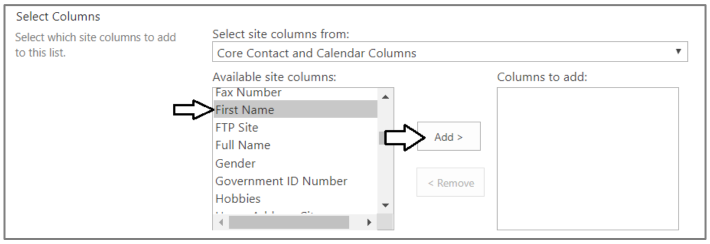


h) On the **Add from existing site columns** page, drop down the **Select site columns from** menu.

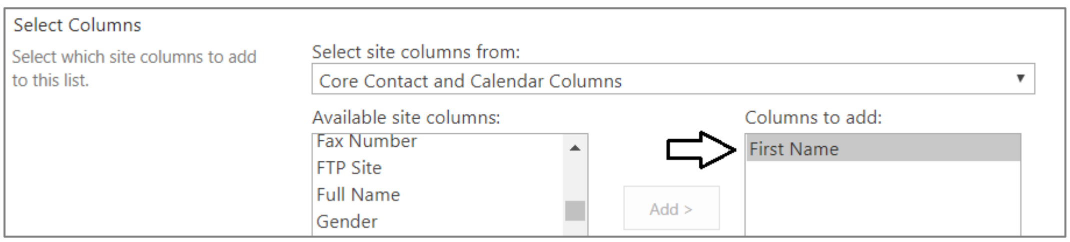
i) Set the **Select site columns from** dropdown menu to **Core Contact and Calendar columns**.



j) In the **Available site columns** list, select **First Name** column and then click the **Add** button.



k) You should now see the **First Name** column in the **Column to add** list.



You will now follow the same steps to add several more site columns to the **Columns to add** list.

l) Add the column named **Company**.

m) Add the column named **E-Mail**.

n) Add the column named **Business Phone**.

o) Add the column named **Home Phone**.

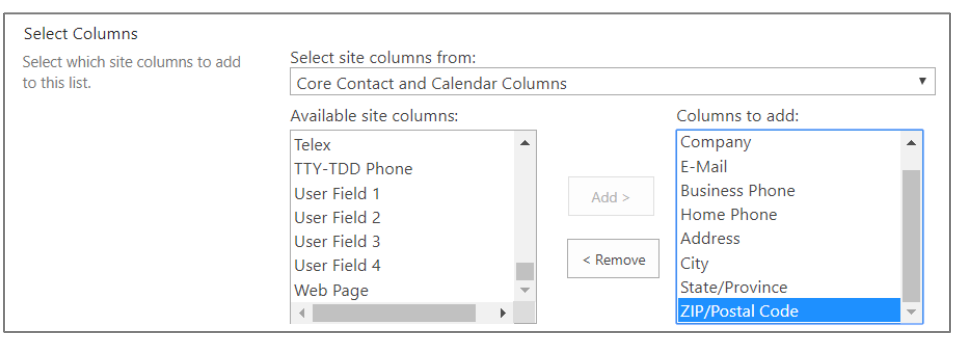
p) Add the column named **Address**.

q) Add the column named **City**.

r) Add the column named **State/Province**.

s) Add the column named **ZIP/Postal Code**.

t) Now that you have added all the site columns you need to the **Columns to add** list, click the **OK** button to save your changes.

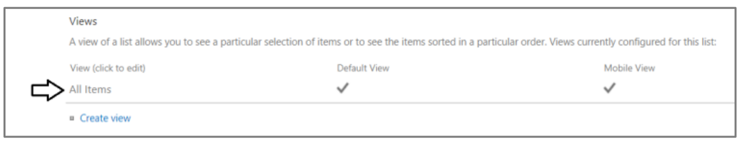


u) You should now be able to see the columns you've added in the **Columns** section of the **Settings** page.

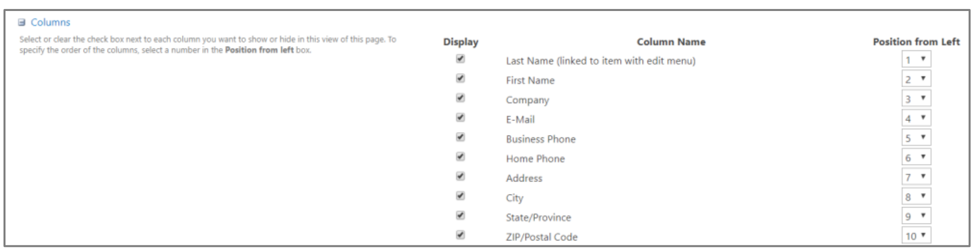
3. Configure the columns displayed in the default view of the **Customers** list.

a) In the **Settings** page, scroll down to the **Views** section.

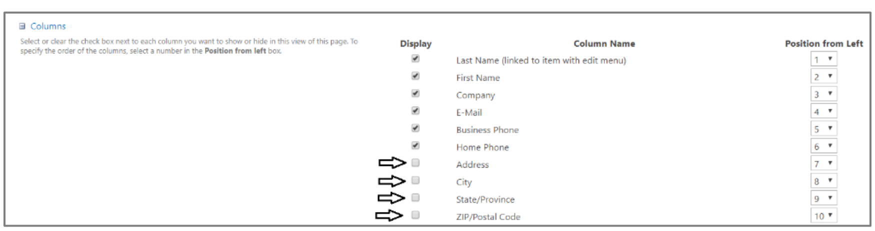
b) Click on the **All Items** link to open this view in the **Edit View** page.



c) You should be able to see that all site columns you added to the list were also added to the default view.

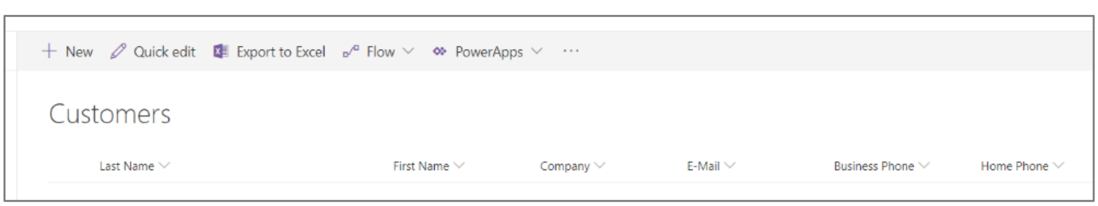


d) Uncheck the **Display** checkbox for **Address**, **City**, **State/Province**, **ZIP/Postal Code**.



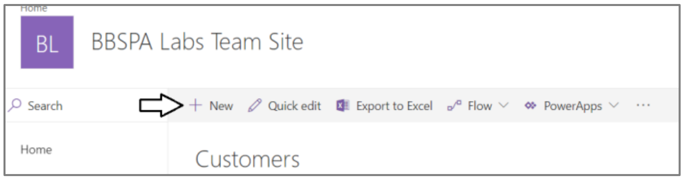
e) Click **OK** at the bottom of the **Edit View** page to save your changes to the **All Items** view and navigate to the default view.

f) The columns in view should now include **Last Name**, **First Name**, **Company**, **E-Mail**, **Business Phone** and **Home Phone**.

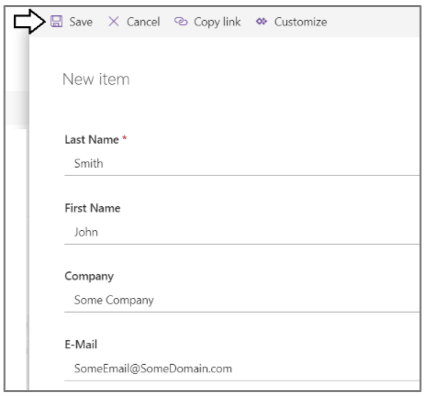


4. Add a new sample customer item to the **Customers** list.

a) Click the **New** button to display the SharePoint add item form.



b) Enter a **Last Name**, **First Name**, **Company** and **E-Mail** using the sample data below such as the data shown below.



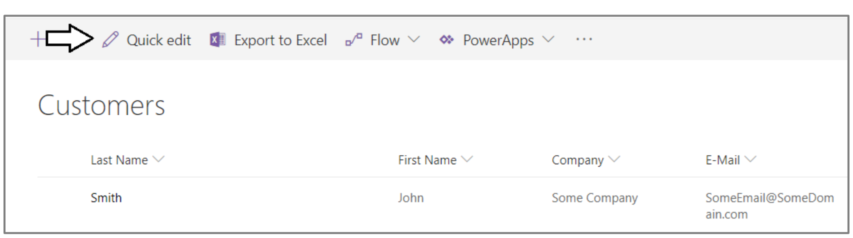
c) Make sure you add data into the fields for **Address**, **City**, **State/Province** and **ZIP/Postal Code**.

The reason you need to add customer data with address, city, state and zip code data has to do with the next lab exercise in which you will automate generating a Word document from a SharePoint item. You will use the customer address information in a flow to generate the customer mailing address which will be written into the Word document.

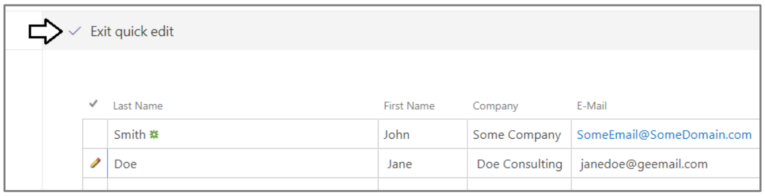
d) Click the Save button to save the new customer list item back to SharePoint Online.

e) You should be able to see the new customer item you've just created in the **Customers** list.

f) Click the **Quick edit** button to enter quick edit mode to add a second customer item



g) After adding a second customer item, click **Exit quick edit** to exit quick edit mode and save your changes.



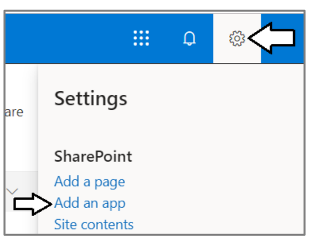
h) The **Customers** list should now have at least two customer items.

You are now done creating the SharePoint list to store customer data. In the next exercise, you will create a new flow that can be triggered by selecting one of these customer list items.

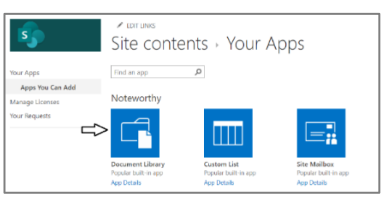
Exercise 5: Create a Flow to Generate a Word Document from a SharePoint List Item

In this exercise, you will create a new flow that is triggered by selecting a customer item from the SharePoint **Customers** list. You will build the flow to generate a new Word document and populate its content from data in the SharePoint list item that triggered the flow.

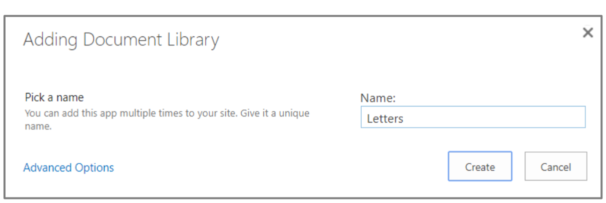
1. Create a SharePoint document library to store letters that are generated by the flow you will create in this exercise.
   a) Navigate to your SharePoint site.
   b) Click the **Add an app** menu command from the **Site Actions** menu.



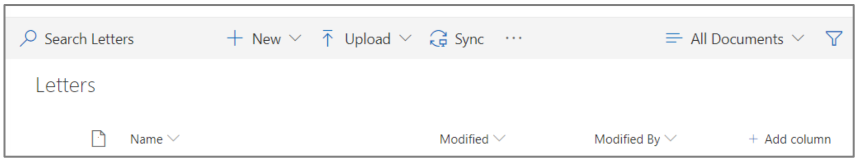
   c) Select a list type of **Document Library**.



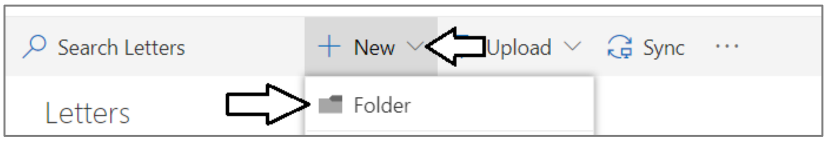
   d) Enter a **Name** of **Letters** for the document library and click **Create**.



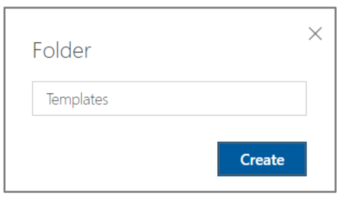
2. Create a folder inside the Letters document library to store a letter template.
   a) Once the **Letters** document library has been created, navigate to its default view.



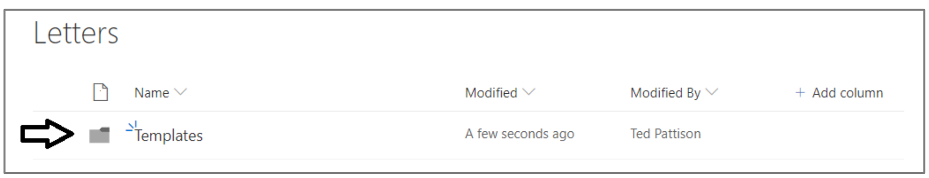
   b) Click the **New > Folder** command to create new folder.



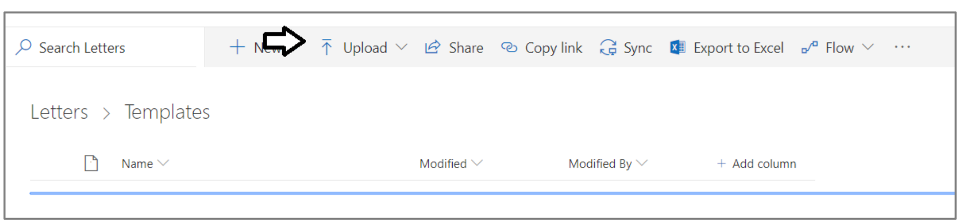
   c) Give the new folder a name of **Templates** and click **Create** to create the new document library.



   d) Once the **Templates** folder has been created, click on the **Templates** link to navigate inside the folder.



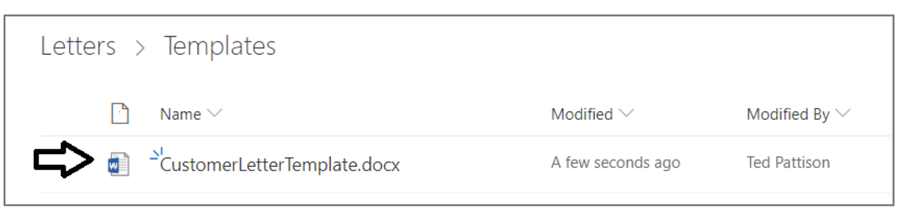
   e) Once you have navigated inside the **Templates** folder, click the **Upload** button to upload a Word template file into that folder.



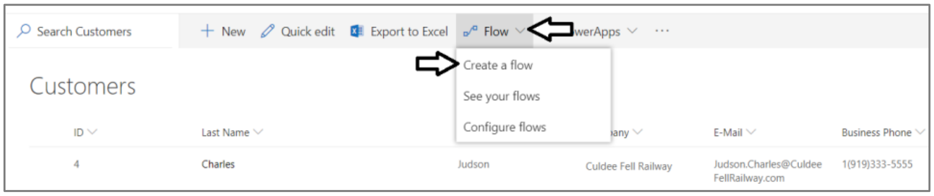
   f) Upload the file named **CustomerLetterTemplate.docx** which is located in the **Student** folder at the following path.

```
C:\Student\Modules\01_GettingStarted\Lab\CustomerLetterTemplate.docx
```

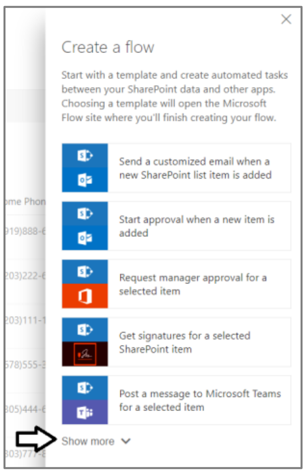
   g) Verify that **CustomerLetterTemplate.docx** has been uploaded to the **Templates** folder.



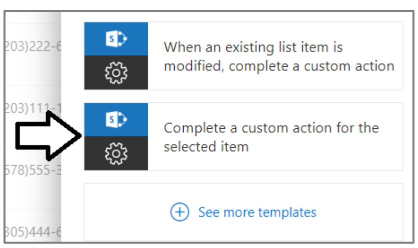
3. Create a new flow on the SharePoint Customers list using the **For a selected item** trigger.
   a) Navigate to the **Customers** list in your SharePoint site.
   b) Drop down the **Flow** menu in the ribbon and select the **Create a flow** command.



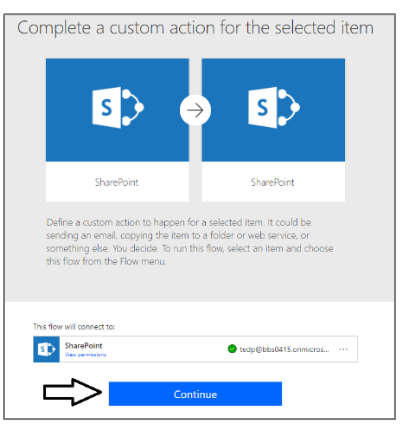
   c) When you see the **Create a flow** pane on the right, click the **Show more** link at the bottom.



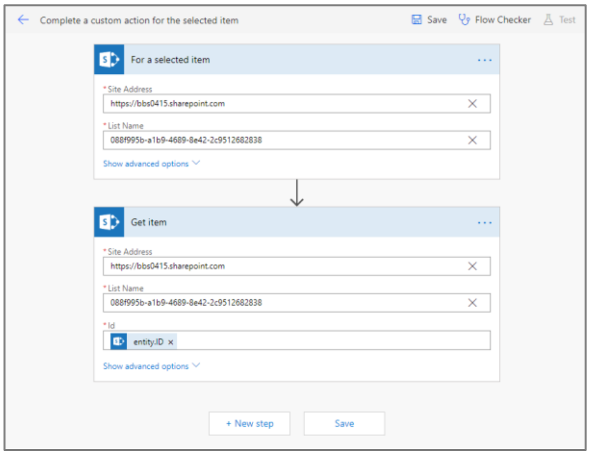
   d) Scroll to the bottom of the templates list and select the template named **Complete a custom action for the selected item**.



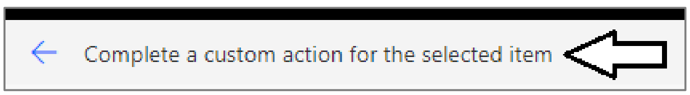
   e) When prompted to grant permissions for a new SharePoint connection, click **Continue**.



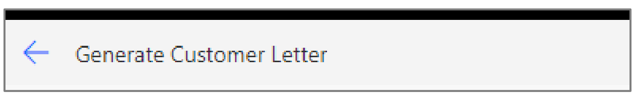
f) You should now see a new flow with a **For a selected item** trigger at the top and a **Get item** action below.



g) At the top left, locate the flow **Name** which has a default value of **Complete a custom action for the selected item**.

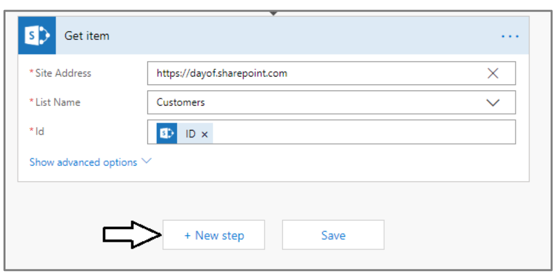


h) Update the **Name** of the flow to **Generate Customer Letter**.



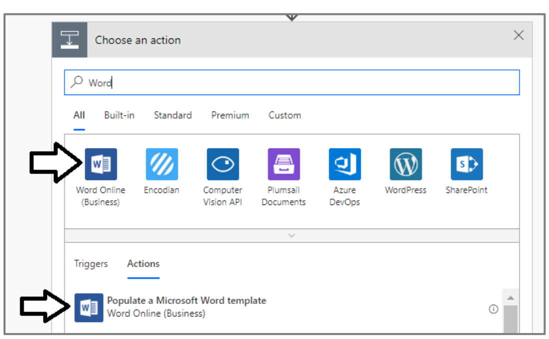
4. Add a new step to generate a new Microsoft Word document using customer data from the selected customer item.

a) Underneath the **Get item** action, click **New step** button to add a new step to the bottom of the flow.

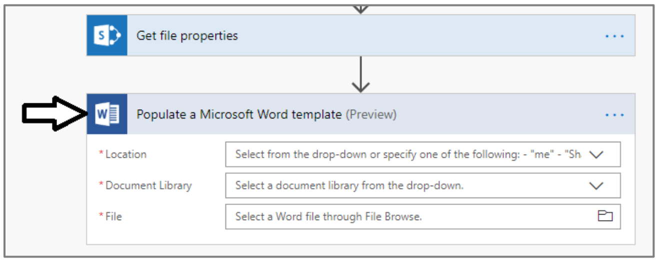


b) Type **Word** into the action search box.

c) Locate and select the action named **Populate a Microsoft Word template**.

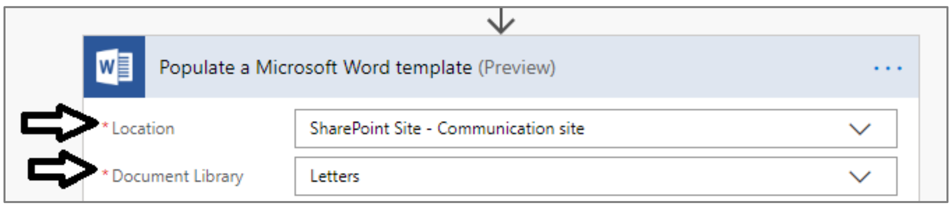


d) The Populate a Microsoft Word template action should appear in the flow designer.

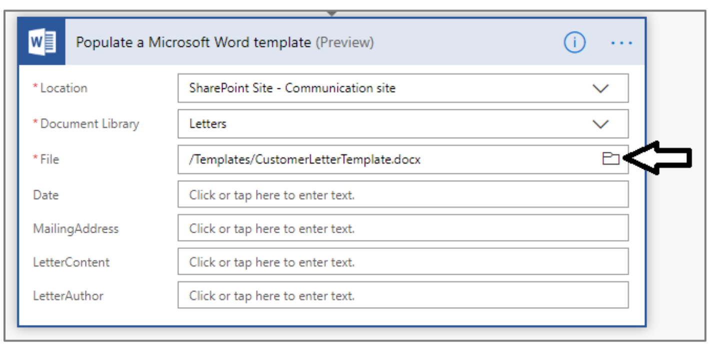


e) Configure the **Location** parameter to reference your SharePoint site.

f) Configure the **Document Library** parameter to reference the **Letters** document library.



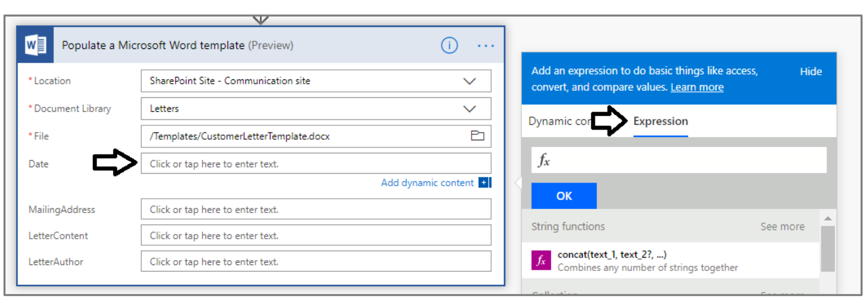
g) Configure the **File** parameter to reference the template file named **CustomerLetterTemplate.docx** in the **Templates** folder.



Once you configure the **File** property to reference the template file named **CustomerLetterTemplate.docx**, the flow designer discovers the input fields in the Word template named **Date**, **MailingAddress**, **LetterContent** and **LetterAuthor** and provides an opportunity for you to initialize these input field values using content generated from the select customer item.

5. Initialize the **Date** input field for the Word document template.

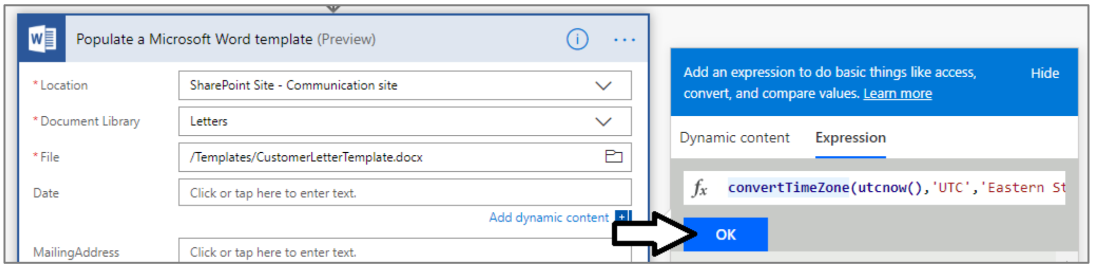
a) Place your cursor in the textbox for the **Date** parameter and then click the **Expressions** tab on the right.



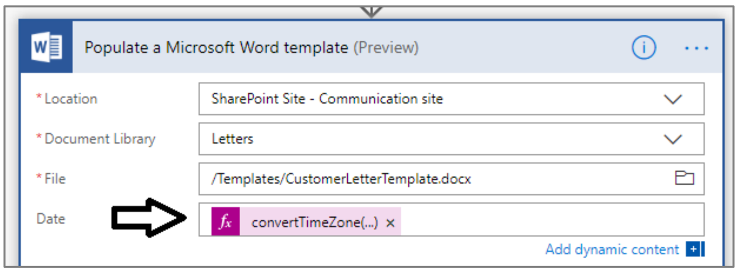
b) Copy the following WDL expression into the clipboard and then paste it into the **Expressions** texbox.

```
convertTimeZone(utcnow(),'UTC','Eastern Standard Time','MMM d, yyyy')
```

c) Once you have pasted the expression into the **Expression** textbox, click the **OK** button to save your changes.



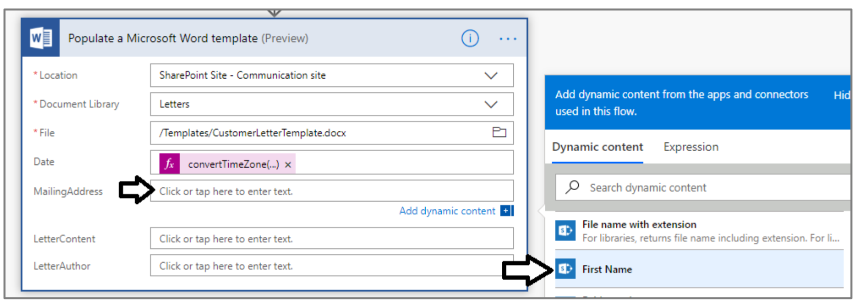
d) You should be able to verify that the expression with the **convertTimeZone** function has been entered correctly.



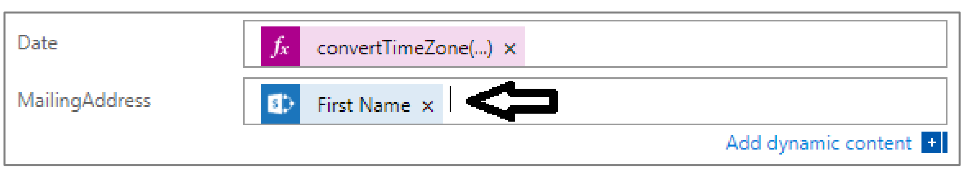
6. Initialize the **MailingAddress** input field for the Word document template.

a) Place your cursor inside the textbox for the **MailingAddress** parameter.

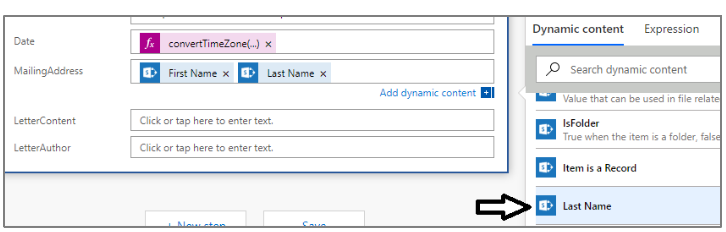
b) Click the FirstName property from the For a selected item trigger.



c) Place the cursor after **First Name** and add a space.



d) After the space, add **Last Name**.



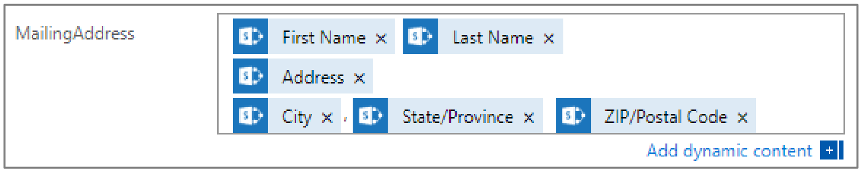
e) Next, add a line break

f) Add **Address**.

g) Add another line break.

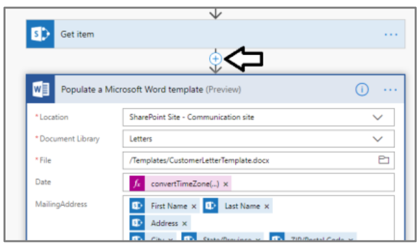
h) Add **City** followed by a comma (**,**) and then a space.

i) Add **State/Province** followed by two spaces and then **ZIP/Postal Code**.

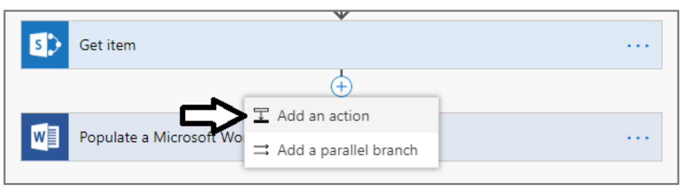


7. Add a new **Compose** step to build the content for the letter body.

a) Click the **+** button in between the **Get item** action and the **Populate a Microsoft Word template**.

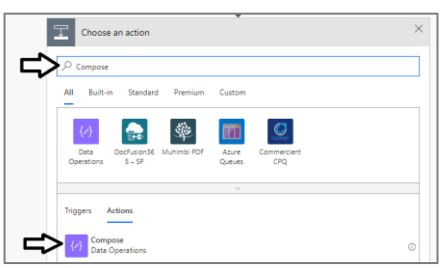


b) Select the **Add an action** command.



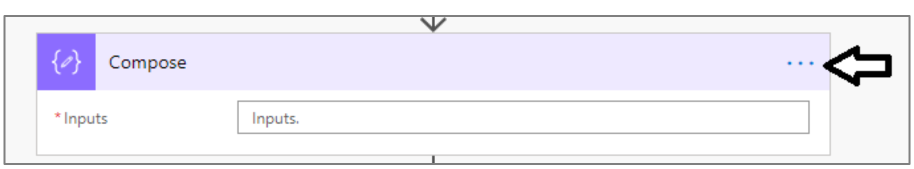
c) Type Compose into the action search textbox.

d) Locate and select the **Compose** action.

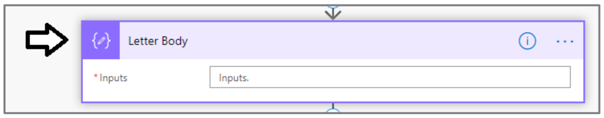


e) The **Compose** action has one input parameter named **Inputs**.

f) Click the ellipse context menu on the right of the Compose action and select the **Rename** command.

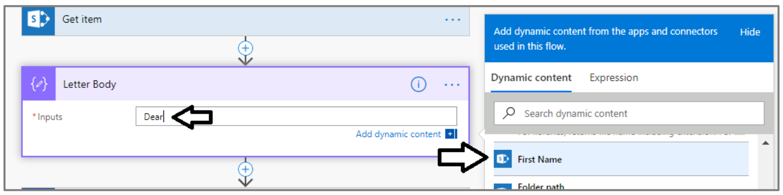


g) Rename the action to **Letter Body**.

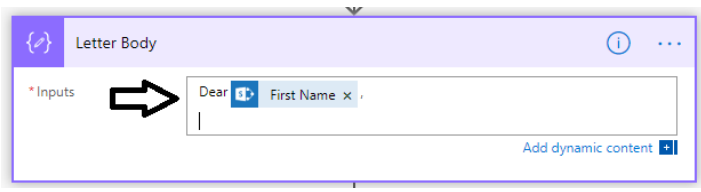


h) Place your cursor inside the **Inputs** textbox and type "**Dear**" followed by a space.

i) Next, add the **First Name** output parameter from the **For a selected** item trigger.



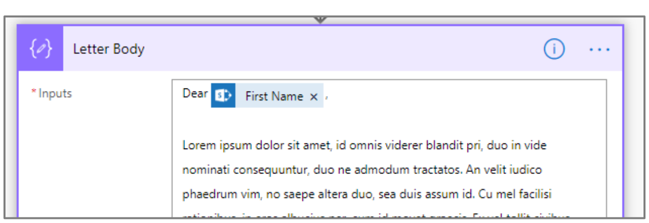
j) Enter a comma (**,**) followed by a line break.



k) Enter content for the letter body by copying and pasting all or part of the following text.

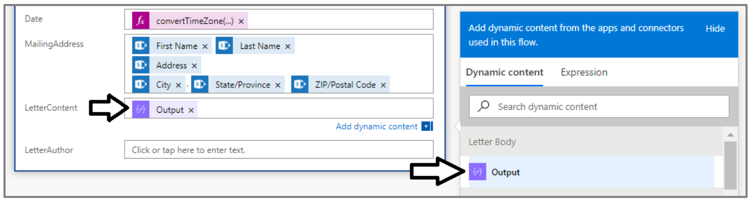
```
Lorem ipsum dolor sit amet, id omnis viderer blandit pri, duo in vide nominati consequuntur, duo ne
admodum tractatos. An velit iudico phaedrum vim, no saepe altera duo, sea duis assum id. Cu mel
facilisi rationibus, in eros albucius per, cum id movet graecis. Ex vel tollit civibus repudiare,
quidam audire vituperatoribus pri an. An eros utinam has.

Dicat veniam reprehendunt usu eu, id pri stet qualisque. Vis tale quaeque incorrupte ea, mea quaestio
imperdiet ei, per eu perfecto lobortis argumentum. Ad his viris appetere gloriatur. Ei eos elit
appareat complectitur. Quo novum aperiri accusamus ei, duis nostrud cum no, at vel dolorum recusabo
patrioque.

Vim no eius verterem urbanitas, error veniam vim an. Ut possit aperiam sed, veniam oporteat sapientem
has eu, pro civibus evertitur ne. Saepe impetus id vis, vel iudico tantas epicurei te. Pri praesent
instructior eu, vix quod lorem commune ei, mea facilisi tacimates antiopam eu.

Erant animal te nam, ius praesent imperdiet abhorreant an. Mea unum dicam gloriatur eu, quem molestie
accusamus vel te. Dicam nonumes at mei, omnis veritus adipisci ne eos. Everti mnesarchum in eam, no ius
aeque vulputate. An debet referrentur vim, duo ne amet melius.

Duo magna mediocrem ocurreret et. Mollis voluptatum ei eam. Placerat scripserit an has, vitae tempor
vim no. Oblique admodum iudicabit est in. Ut suavitate disputationi eum, et modo error commune quo.

Augue fabulas id vel. Nec dico legimus an, diceret qualisque his eu. Molestiae laboramus ex eam, in
sumo essent dignissim his, eu delicata liberavisse mea. Vis ut iudico graeco iriure. Per veniam
eleifend ad, eu sit novum tempor menandri.
```

l) The **Inputs** parameter of the Letter Body action should now contain content for the letter body.



m) Place your cursor inside the **LetterContent** parameter of the **Populate a Microsoft Word template** action.

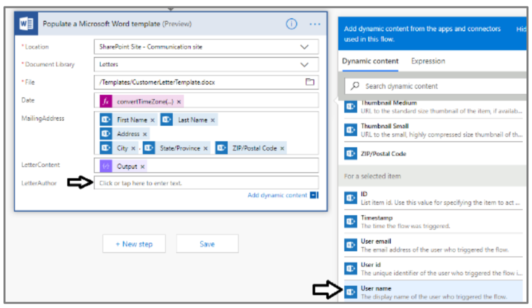
n) Configure the **LetterContent** parameter by assigning the **Output** property of the **Compose** action named **Letter Body**.



8. Initialize the **LetterAuthor** input field for the Word document template.

a) In the **Populate a Microsoft Word template** action, place your cursor inside the textbox for the **LetterAuthor** parameter.

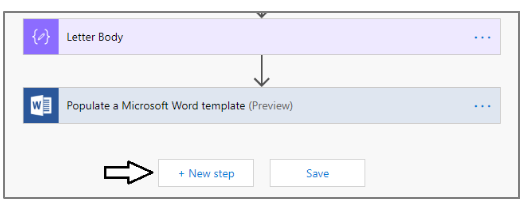
b) Configure the **LetterAuthor** parameter by assigning the **User name** parameter of the **For a selected item** trigger.



c) fff

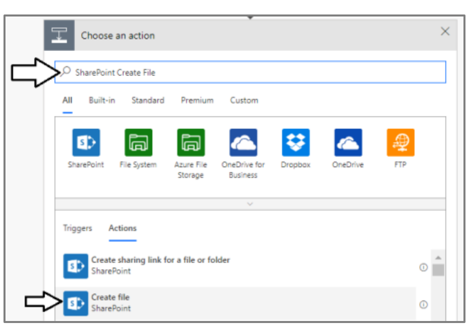
9. Add a new SharePoint Create File action to save the new Word document into the Letters document library.

a) ssss



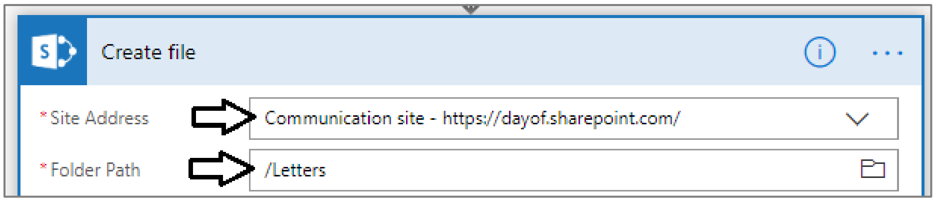
b) Type in **SharePoint Create File** into the action search box.

c) Locate and select the SharePoint **Create File** action.



d) Configure the **Site Address** parameter with the URL to your SharePoint site.

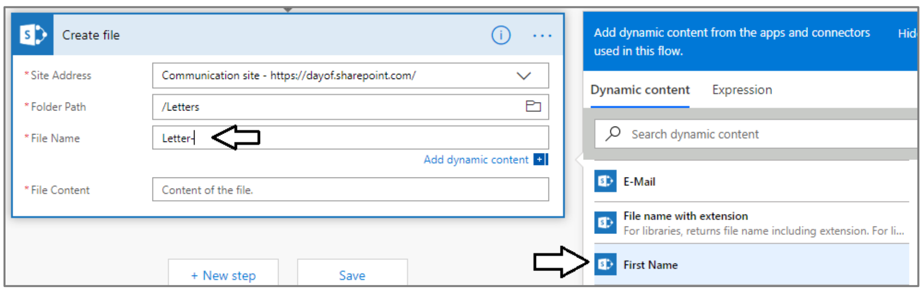
e) Configure the **Folder Path** to reference the **/Letters** document library.



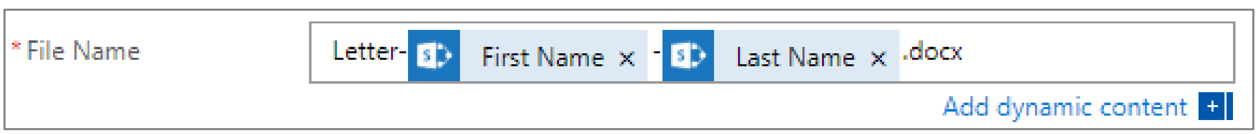
f) Place your cursor into the textbox for the **File Name** parameter.

g) Type in an initial text value of "Letter-".

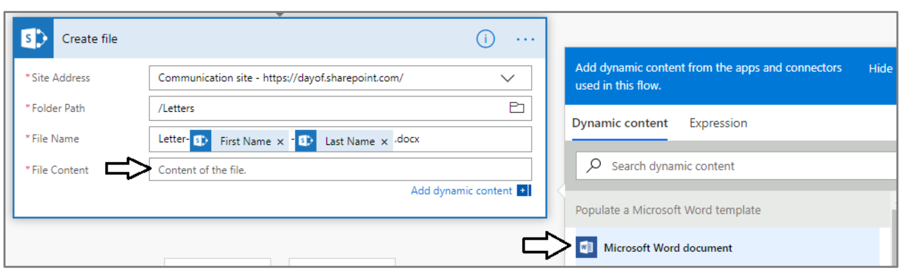
h) Next click on the FirstName output parameter of the trigger.



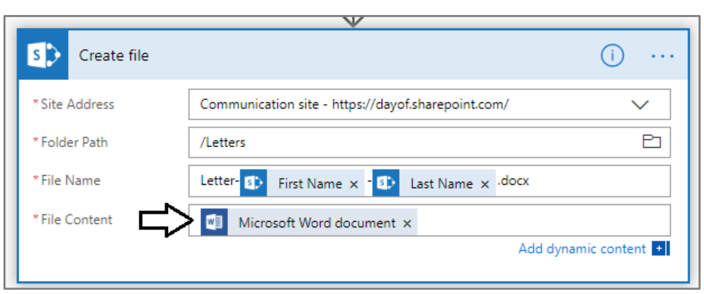
i) After adding the **First Name** parameter, add another hyphen followed by the **Last Name** parameter and then ".docx"



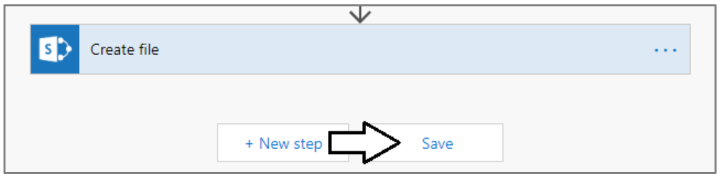
j) Place your cursor inside the textbox for the **File Contents** parameter and then add the **Microsoft Word document** parameter of the **Populate a Microsoft Word template** action as shown in the following screenshot.



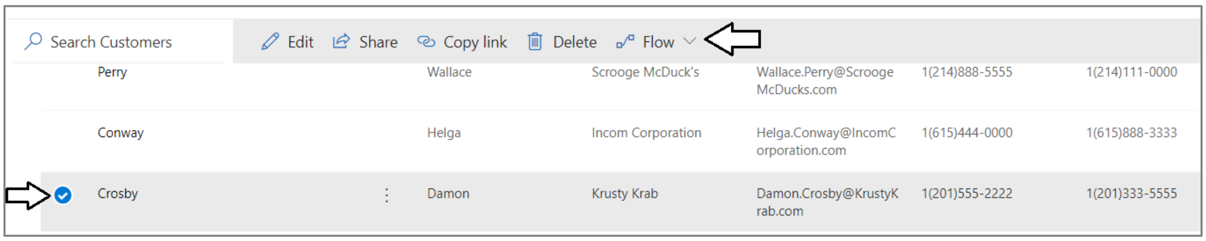
k) The **File Contents** parameter should now be configured with the Microsoft Word document output parameter.



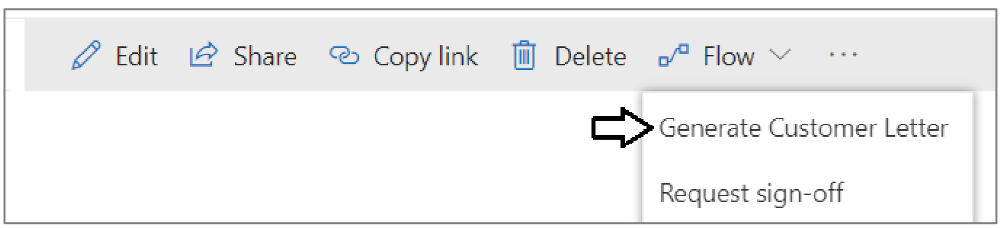
l) Click the **Save** button at the bottom of the flow designer to save you work.



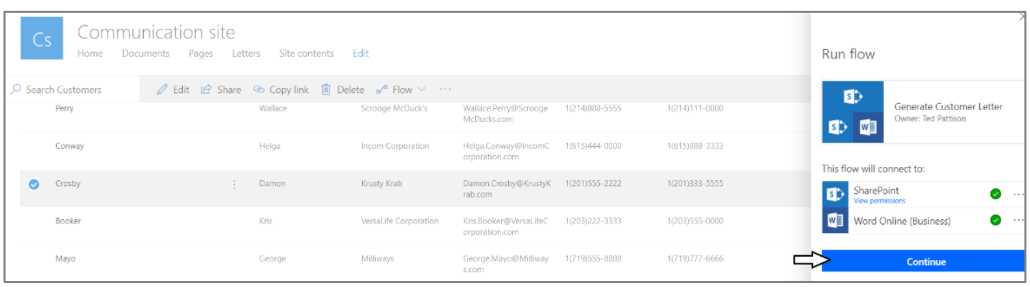
10. Test your work,
    a) Navigate back to the **Customers** list in your SharePoint site.
    b) Select one of the items is in the **Customers** list.
    c) Drop down the **Flow** menu in the ribbon.



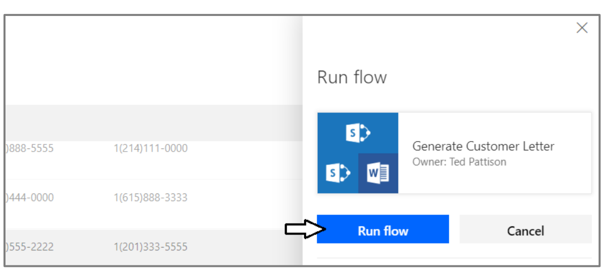
    d) From the **Flow** menu, select the flow named **Generate Customer Letter**.



    e) When the **Run Flow** pane appears, click **Continue**.



    f) Next, click **Run flow** to run the flow on the currently selected item.

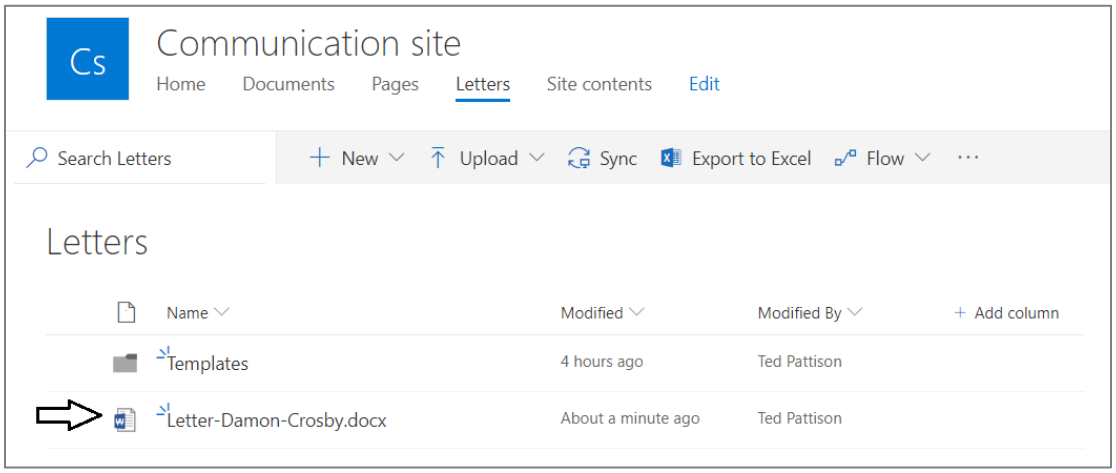


g) You should see a notification telling you that the flow has started.

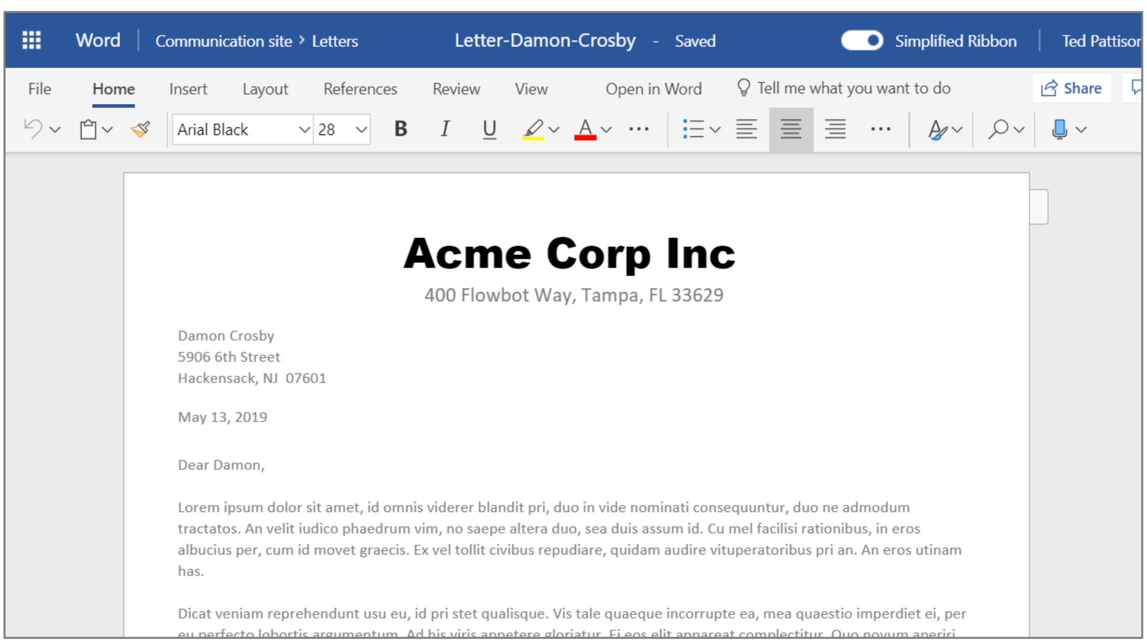
h) After a few seconds, navigate to the **Letter** document library.

i) Your should see that a new Word document has been created as a result of the flow running.

j) Click on the link to the new Word document to open it on Word Online.



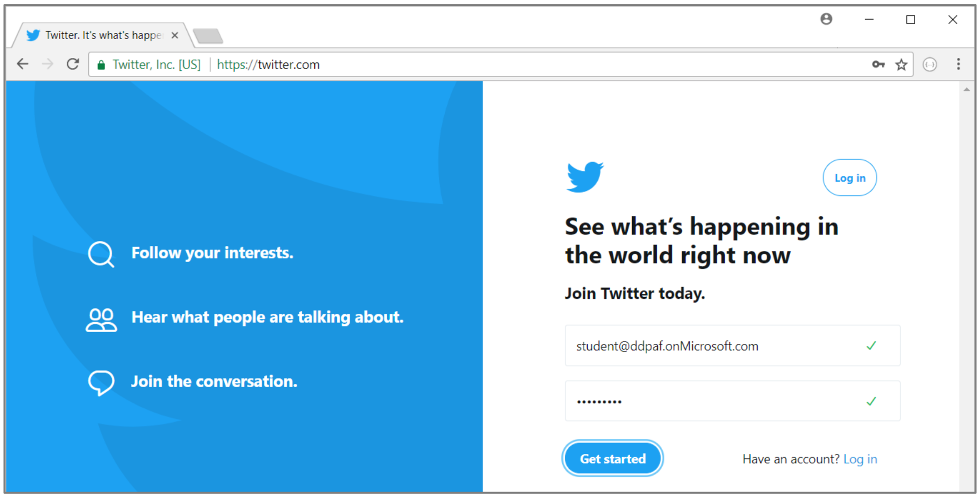
k) You should see that the new Word document has been generated with data from the selected customer item.



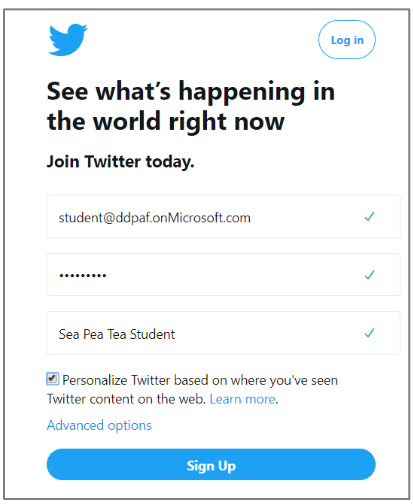
Exercise 6: Create a New Twitter Account for Testing Purposes

In this lab and in later labs, you will require a Twitter account to create Flows that are triggered by tweets of a specific keyword. While you might already have your own personal Twitter account, you likely want to create a new Twitter account so you can sound out test tweets without having them come from your personal account. In this exercise, you will create a new Twitter account using the email address of your trial Office 365 account.

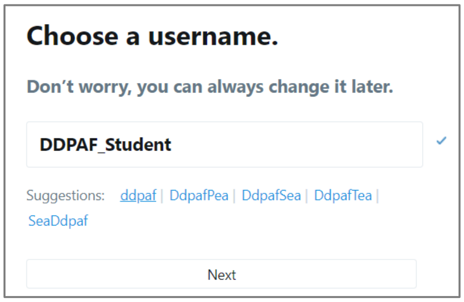
1. Navigate to https://twitter.com.
2. Sign up for a new twitter account using the email address of your Office 365 trial account.
   a) Under the **Join Twitter today** message, enter your Office 365 trial account email address
   b) Enter a password you will remember.
   c) Click the **Get started** button to begin the process of creating a new Twitter account.



   d) Enter a name (*you can make up something fun*) and click the **Sign up** button.



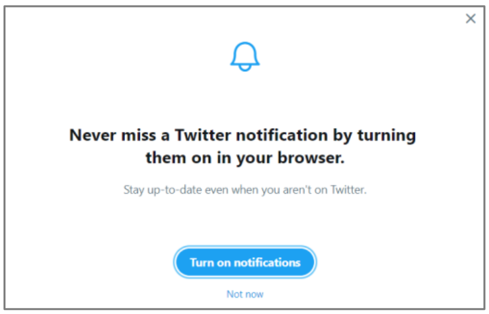
   e) On the page that prompts you for a phone number, click **Skip** to continue.
   f) On the **Choose a username** page, enter a user name that is unique.



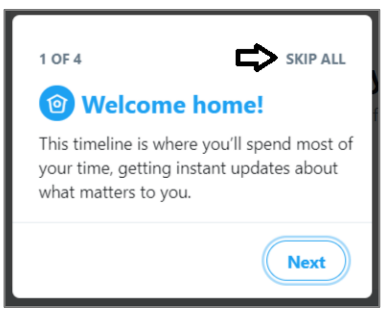
g) On the page with the caption **What are you interested in?**, click **Continue**.

h) On the page with the caption **Want to find friends and see who they follow?**, click **No Thanks**.

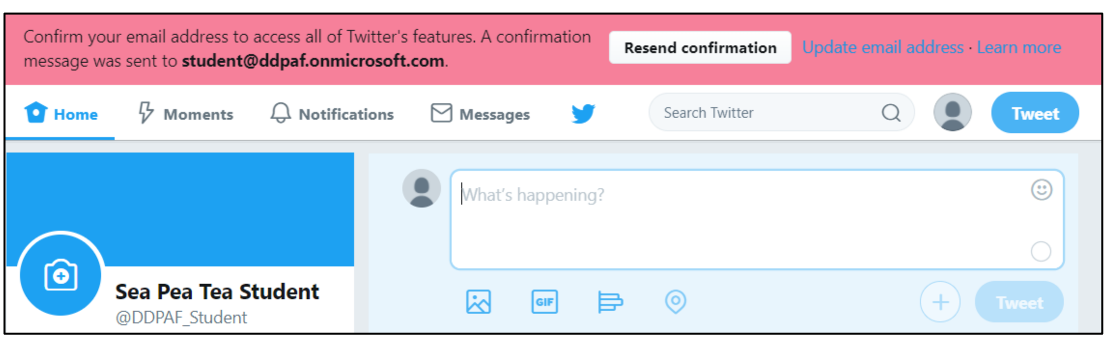
i) On the page which prompts you about Twitter notifications, click the **Not now** link at the bottom.



j) On the **Welcome home!** page, click **SKIP ALL**.



k) You have now created the new Twitter account. However, you will notice that your new Twitter account is not yet ready for use because you must first respond to the confirmation email that has been sent to your Office 365 trial account.

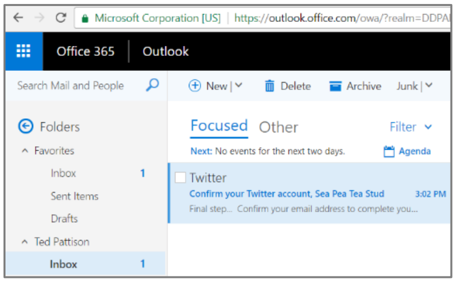


3. Respond to the confirmation email sent by Twitter to activate your new Twitter account.

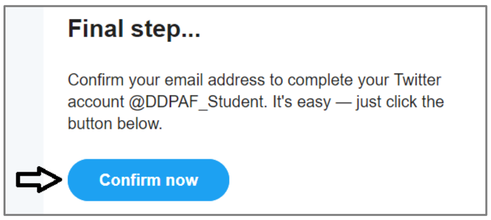
   a) Navigate to the Outlook inbox for your Office 365 trial account at https://outlook.office.com.

b) Sign in using your Office 365 trial account.

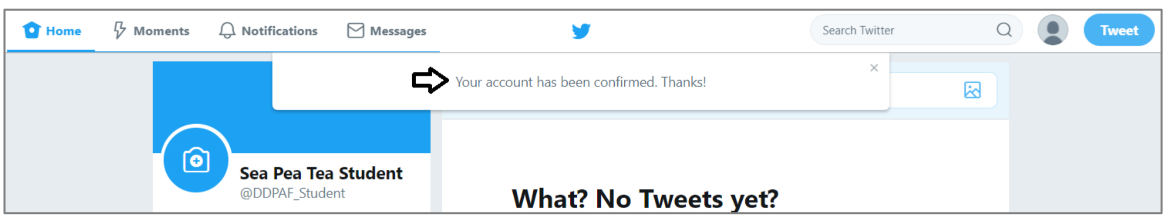
c) Locate and open the confirmation email message sent to you by Twitter.



d) Inside the body of the confirmation email, locate and click on the Confirm now button.

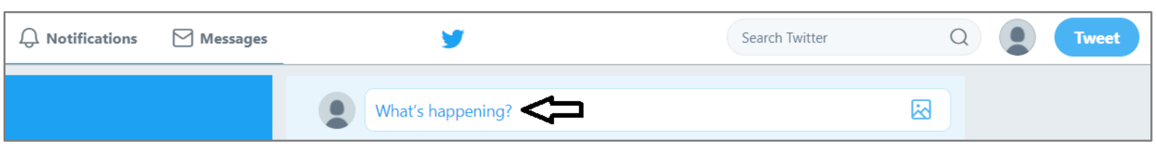


e) You should be redirected to Twitter and you should also see a message indicating your account has been confirmed.



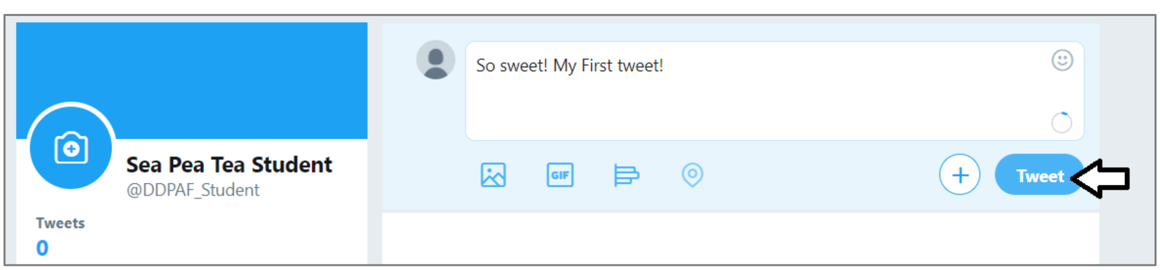
4. Send out your first tweet.

a) Locate the **What's happening** text input control.



b) Place your cursor inside the **What's happening** text input control and type a simple message.

c) Click the **Tweet** button to send out a new tweet with your message.



d) You should be able to verify that your tweet has been sent.

e) This step is optional but it might be more fun if you upload your photo (*or some other photo*) for your new Twitter account.

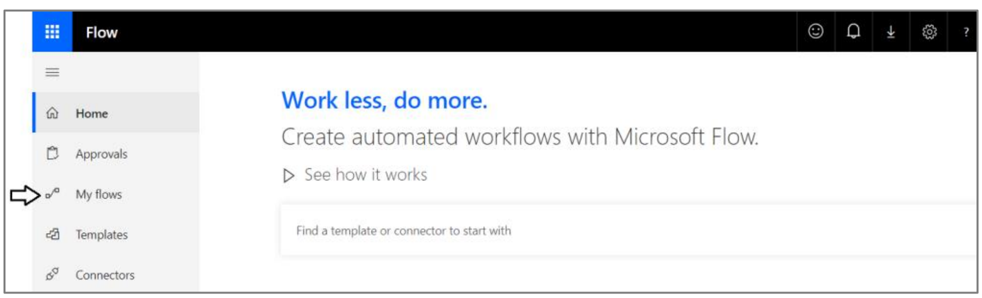
Exercise 7: Create a Flow to Track Twitter Data in an Excel Workbook

In this exercise, you will use one of the out-of-the-box templates to create a new flow that will send you an email whenever someone sends a tweet containing the hashtag **#PowerApps**.

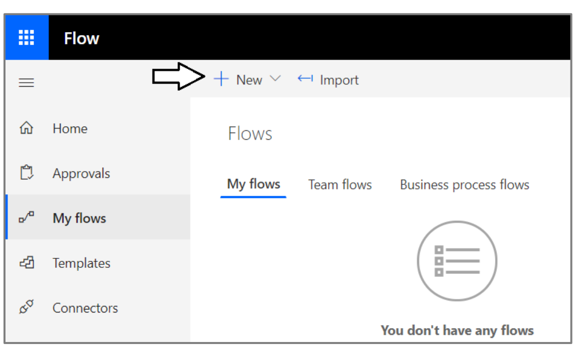
1. Sign in to Microsoft Flow.
   a) Navigate to http://flow.microsoft.com.
   b) Sign in using your Office 365 trial account.

Once you sign in, the actual URL will be localized as in the case of https://us.flow.microsoft.com/en-us/.

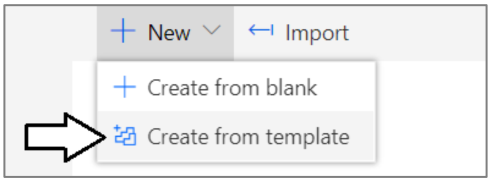
2. Create a new flow using a template.
   a) Click on the **My flows** link.



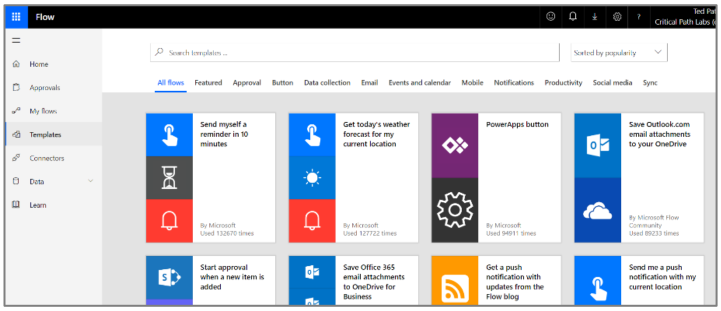
   b) If you haven't created any flows yet, you should see a message prompting you to **Create your first flow**.



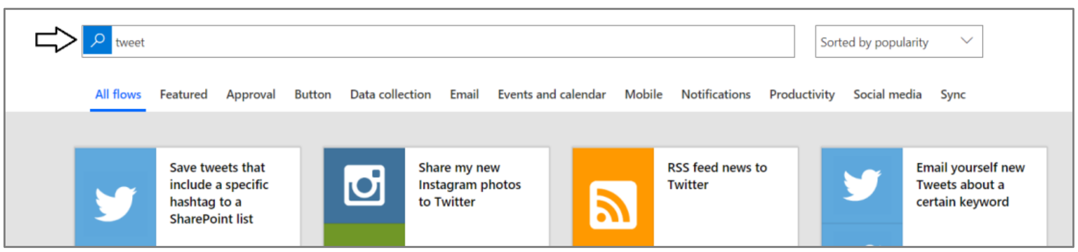
   c) Click the **Create from template** link to begin the process of creating a new flow.



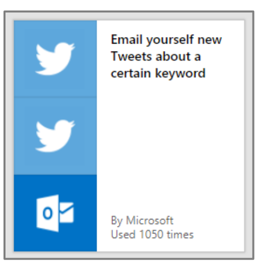
d) You should now see a page containing templates.



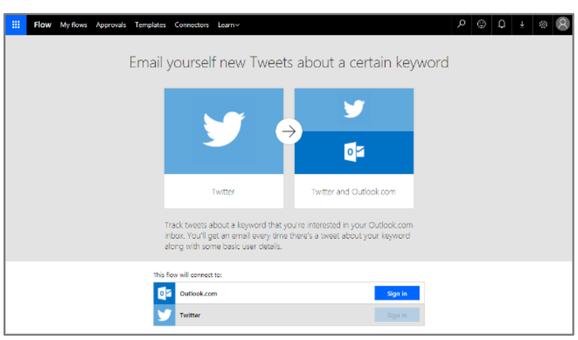
e) Enter the word "tweet" into the search box and then click the button with the search icon.



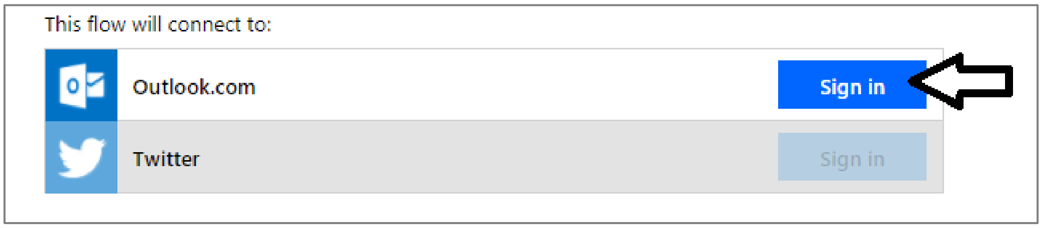
f) Locate and click the **Email yourself new Tweets about a certain keyword** template.



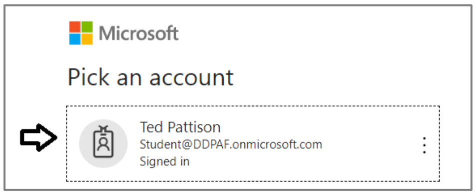
g) You should now see a page that allows you to log into each of the connectors your flow will be using.



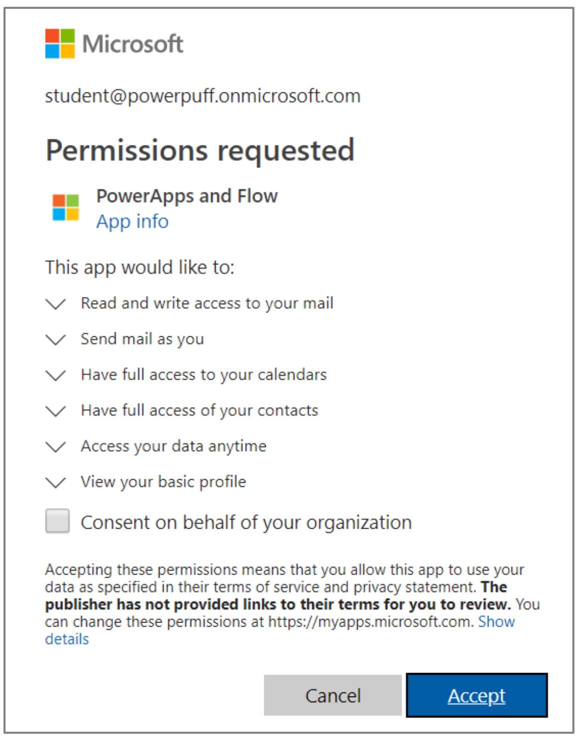
h) Click the **Sign in** button for **Outlook.com**.



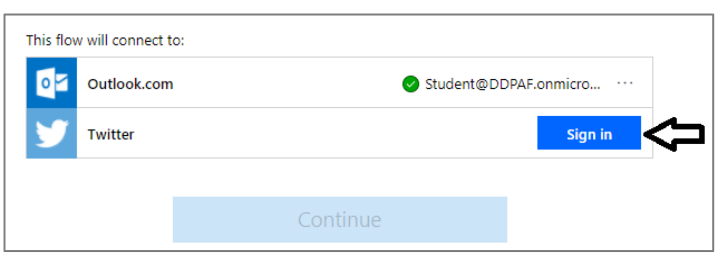
i) Sign in with your Office 365 trial account.



j) You should be prompted to grant permissions to the new flow. Click the **Accept** button to grant these permissions.

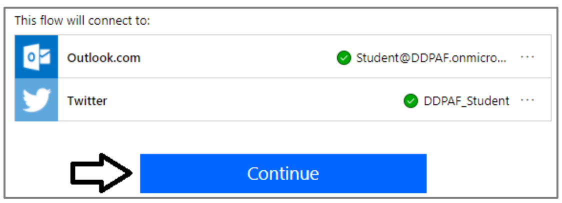


k) Click the **Sign in** button for Twitter.

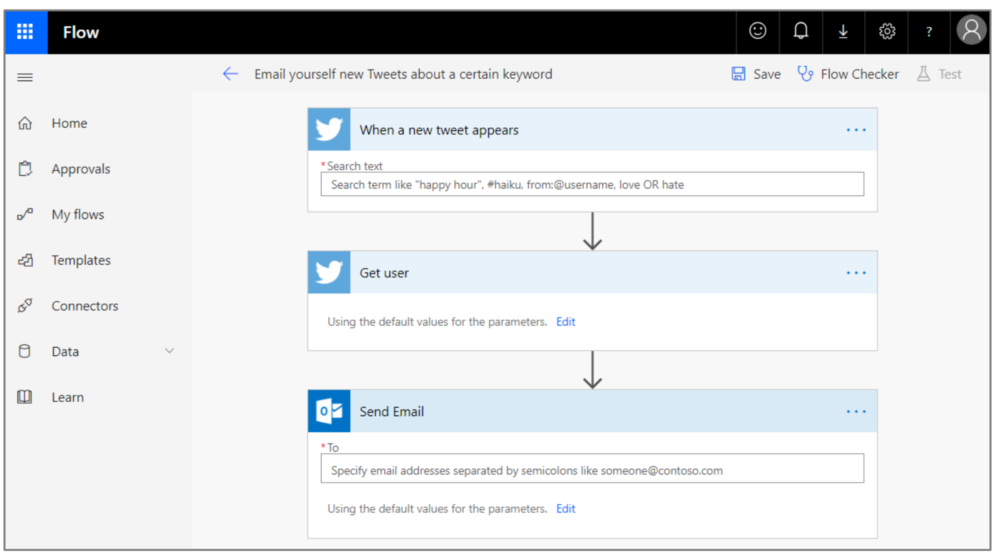


l) On the **Authorize** page, enter your Twitter user account screen name and password. Then click the **Authorize app** button.

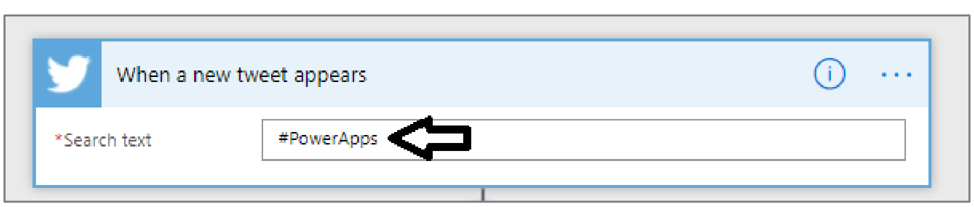
m) Once you have configured permissions, click the **Continue** button.



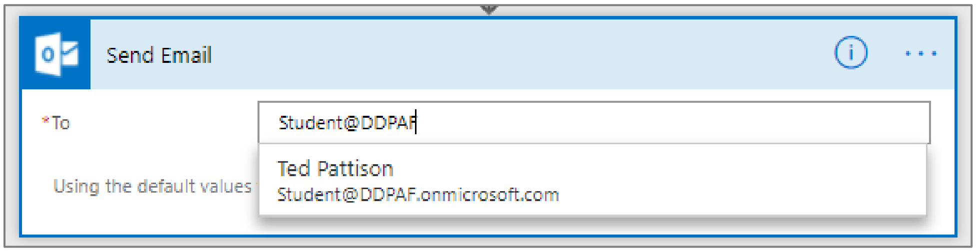
n) You should now see your new flow in the Flow Designer.



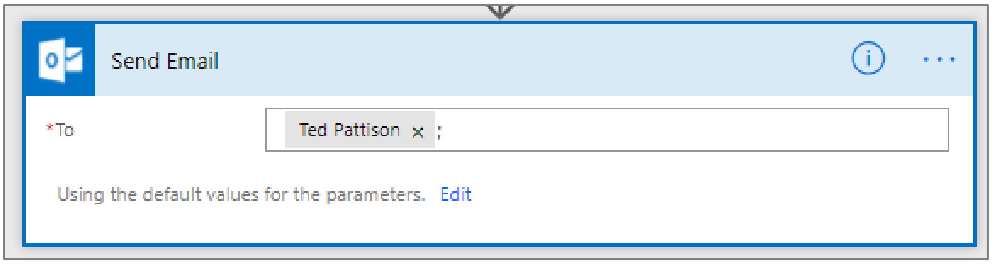
o) In the **When a new tweet appears** trigger, enter a text value of **#PowerApps** in the **Search text** input control.



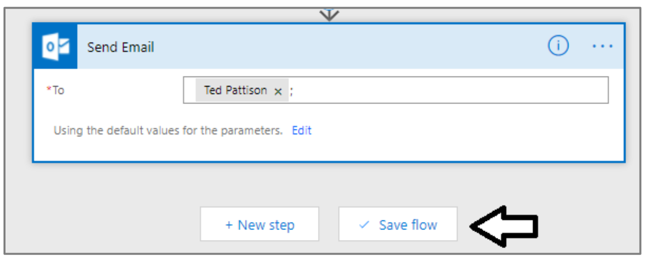
p) In the **Send email** action, enter the email address for your Office 365 trial account.



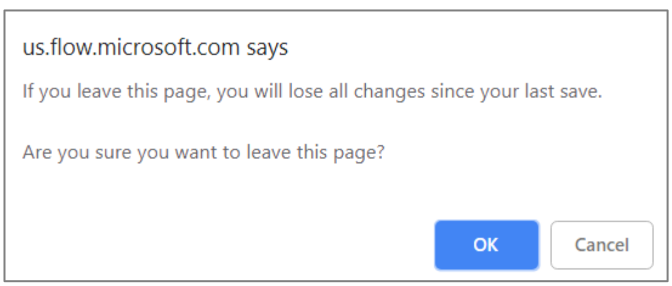
q) Once you add your email address, the Flow Designer should resolve it to the display name of your Office 365 user account.



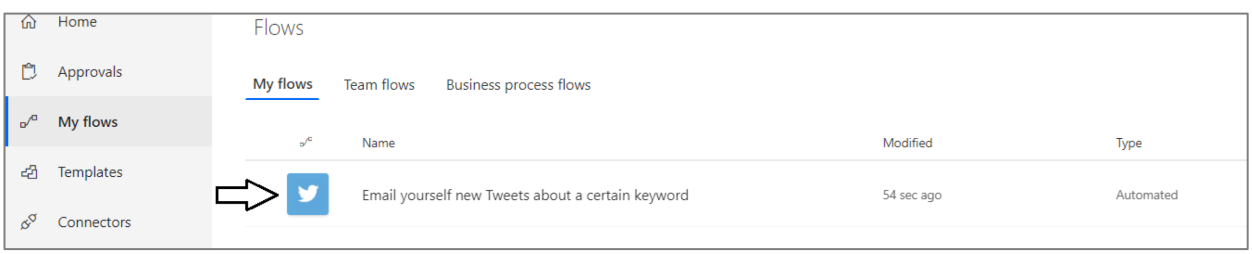
r) Click the **Save Flow** button to save your work.



s) Click on the **My flows** link.



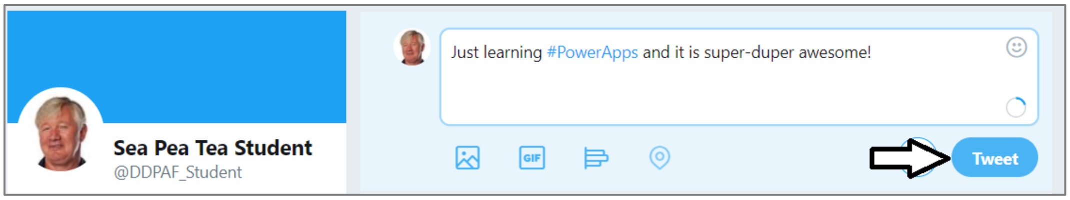
t) You should see your new flow in the list of your flows.



3. Send a tweet with the #PowerApps hashtag.

a) Return to Twitter.com inside the browser.

b) Enter a new message containing the hashtag **#PowerApps** and click the **Tweet** button to send it.

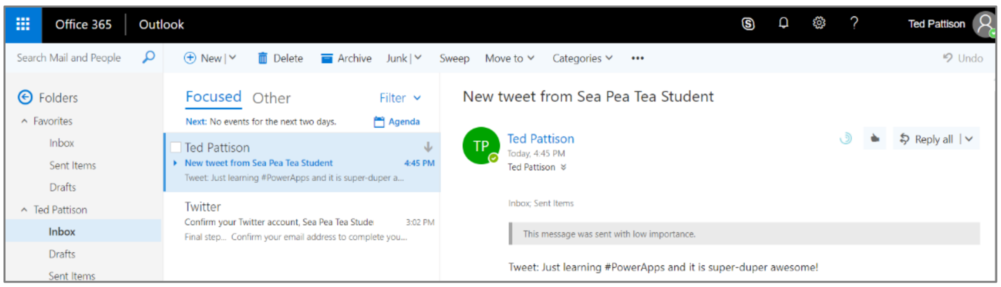


It often takes 5 minutes or so before this flow will start and email you messages with your hashtag. It some cases it could take as many as 15-20 minutes before it starts working correctly.

4. Check your email.

a) Return to the Outlook inbox for your Office 365 user account.

b) Confirm that your received an email about the new tweet containing the **#PowerApps** hashtag.

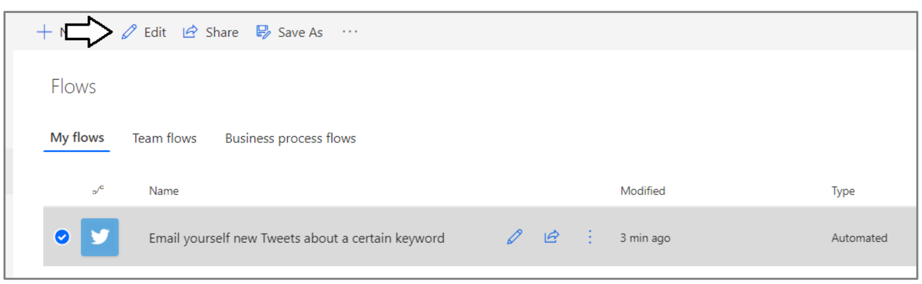


Note that your Office 365 trial user account is the sender of the message.

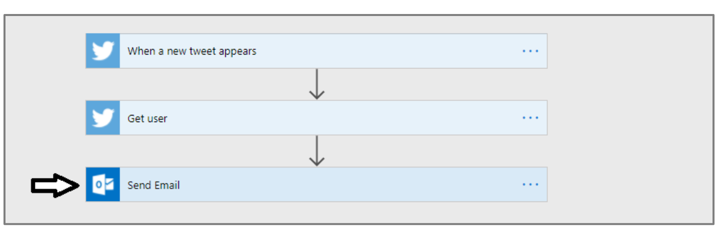
5. Make an edit to the flow that you just created.

a) Return to the **My flows** list and select the flow named **Email yourself new Tweets about a certain keyword**.

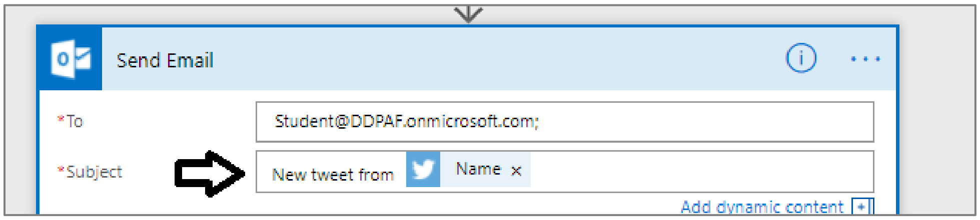
b) Click the **Edit** button in the ribbon to open the flow in edit mode.



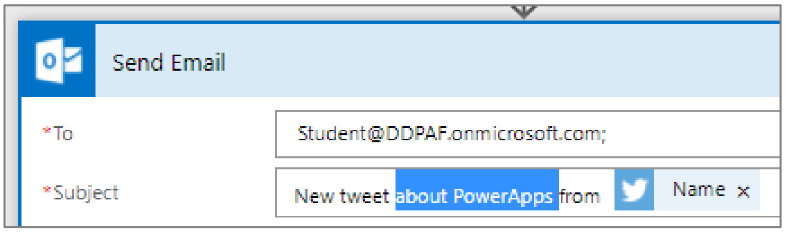
c) Click on the header for the **Send Email** action to open it up for editing.



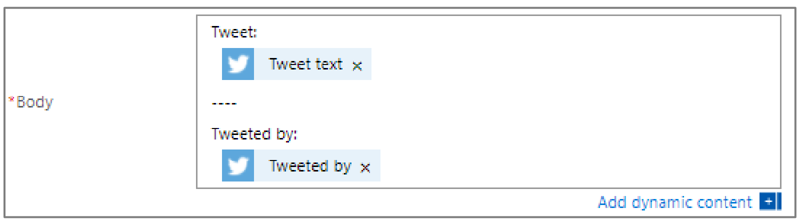
d) Locate the text input control with the email **Subject**.



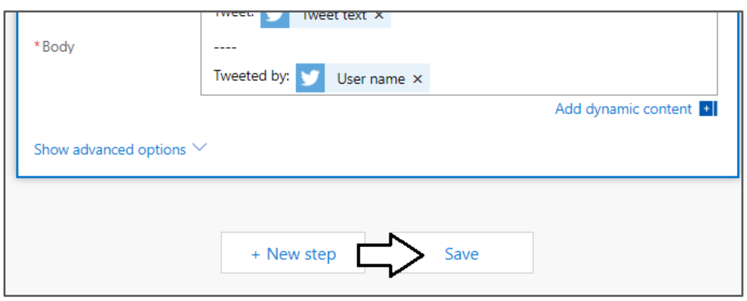
e) Update the **Subject** value by adding the text **about PowerApps** as shown in the following screenshot.



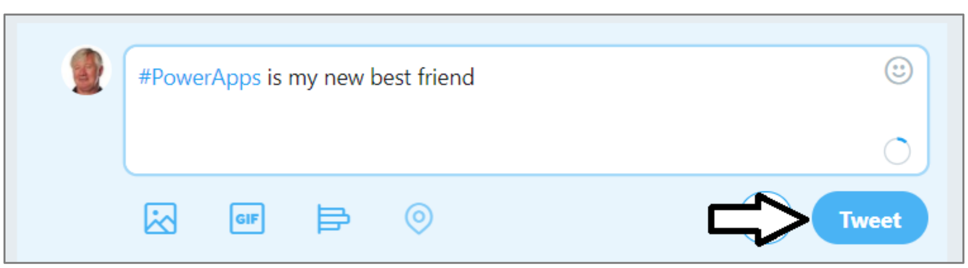
f) Update the email Body by simplifying it as shown in the following screenshot.



g) Click the **Save** button to save your changes to the flow.



6. Send out a new tweet with the **#PowerApps** hashtag.
   a) Return to Twitter.com inside the browser.
   b) Enter a new message containing the hashtag **#PowerApps** and click the **Tweet** button to send it.

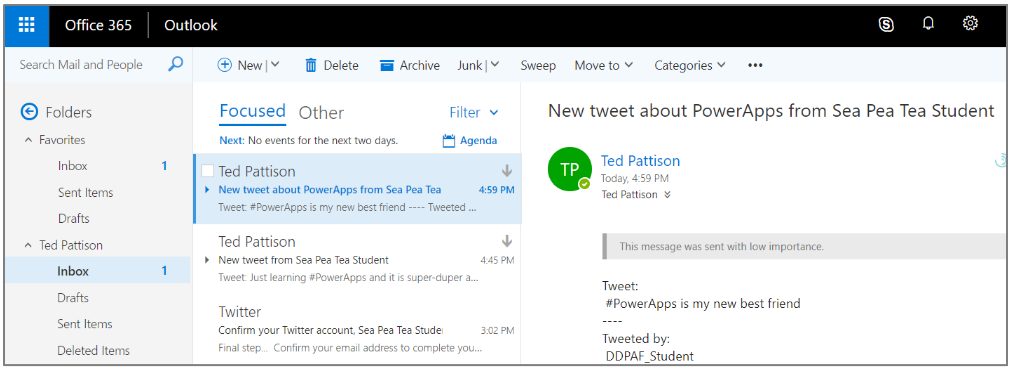


7. Check your email.

a) Return to the Outlook inbox for your Office 365 user account.

b) Confirm that you received an email about the new tweet containing the **#PowerApps** hashtag.

c) Make sure the new email contains “about PowerApps” in the subject and contains your changes to the email body.



Over the next few steps, you will extend the flow you created in the previous exercise by adding tweets into an Excel workbook.

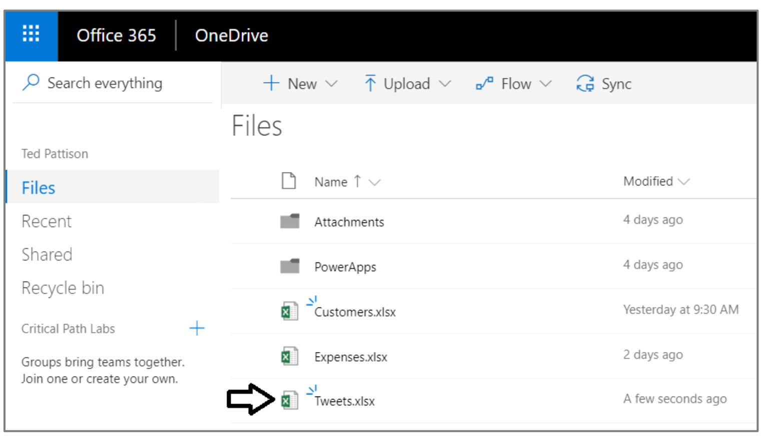
8. Upload the Excel workbook named **Tweets.xslx** to OneDrive for Business.

a) Using Windows Explorer, verify that there is an Excel book named **Tweets.xslx** located at the following path.

```
C:\Student\Modules\03_DesigningFlows\Lab\Tweets.xslx
```

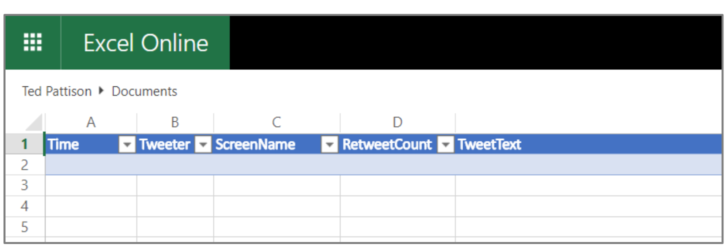
b) Drop down the Office 365 app launcher menu and select **OneDrive** to navigate to your **Files** collection.

c) Click the **Upload** button and then select **Tweets.xslx** to upload this file to OneDrive for Business.



d) Click on **Tweets.xslx** to inspect the contents of this workbook.

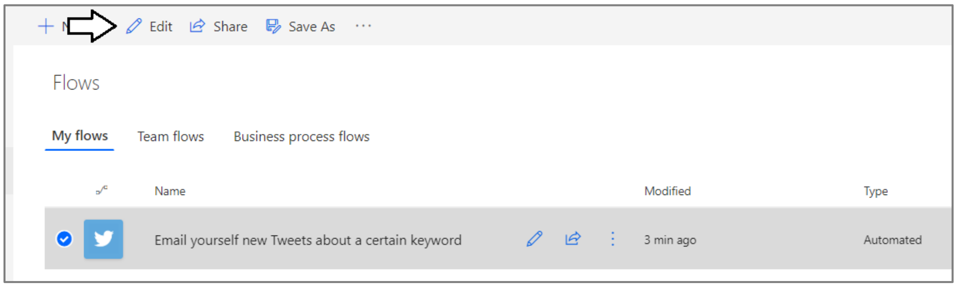
e) You should see that this workbook contains a single worksheet with a table for tracking tweets.



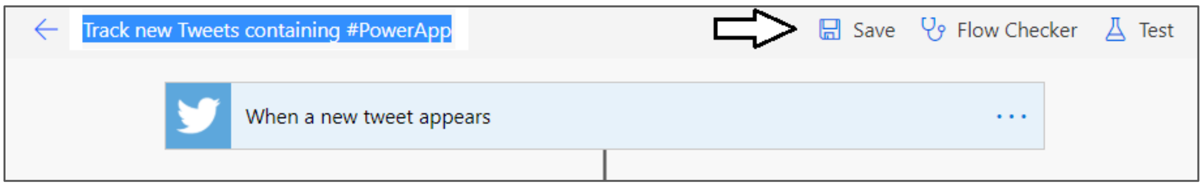
9. Update the title of your flow.

a) Return to the **My flows** list in Microsoft Flow and find the **Email yourself new Tweets about a certain keyword** flow.

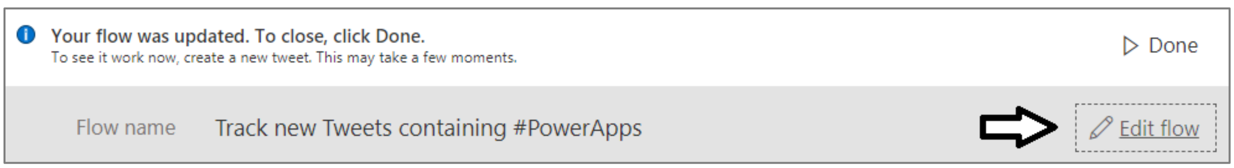
b) Click the button with the pen icon to open the flow in edit mode.



c) Update the flow name to **Track new Tweets containing #PowerApp** and click the **Save** button.

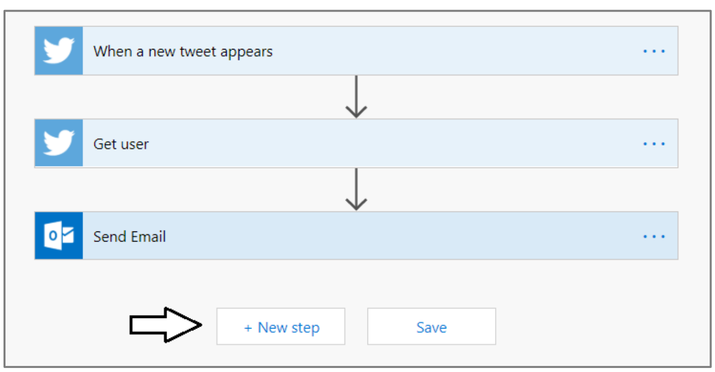


d) Once the flow has been updated with the new name, click the **Edit flow** button.

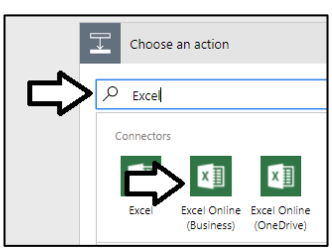


10. Modify your flow to write tweets into this workbook.

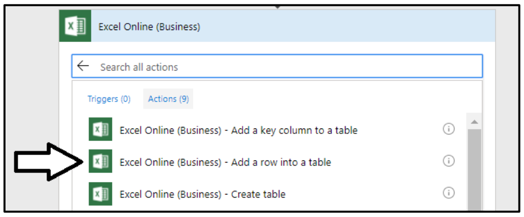
a) Click the **New step** button to add a new step at the end of the flow.



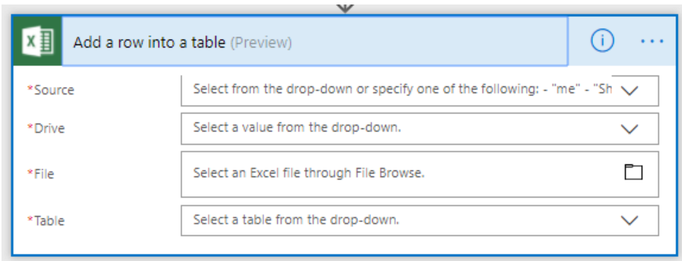
b) Type **"Excel"** into the action search box and then click **Excel Online (Business)** to further filter the available actions..



c) Select the **Excel Online (Business) – Add a row into a table** action.



d) You should now see a new action that requires you to configure its **Source**, **Drive**, **File** and **Table** properties.

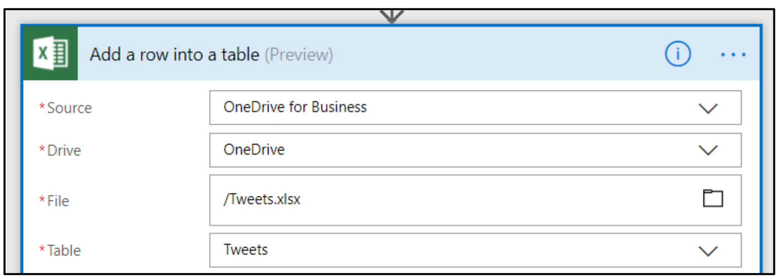


e) Set the **Source** property to **OneDrive for Business**.

f) Set the **Drive** property to **OneDrive**.

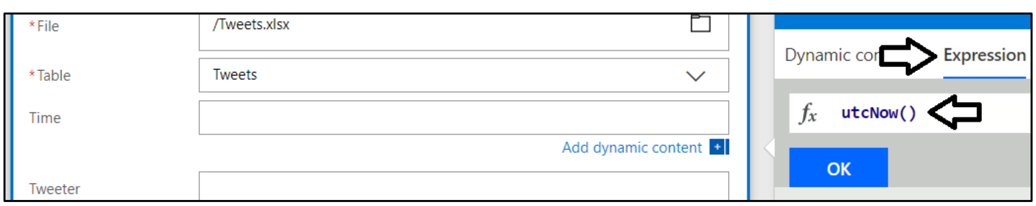
g) Set the **File** property to **/Tweets.xlsx**.

h) Set the **Table** property to **Tweets**.

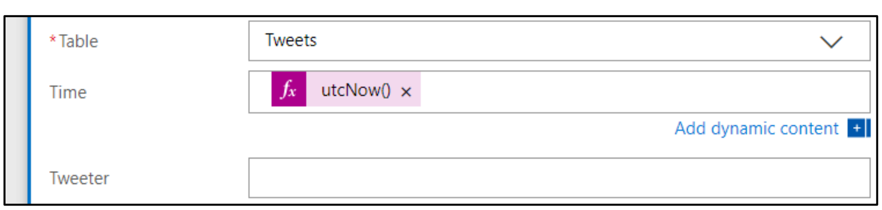


Once you set the **Table** property, you should see that action now has properties for each column in the **Tweets** table.

i) Place your cursor in the Time input box and then add an expressions of **utcNow()** as shown in the following screenshot.



j) Once you have added the expression for Time property, it should match the following screenshot.



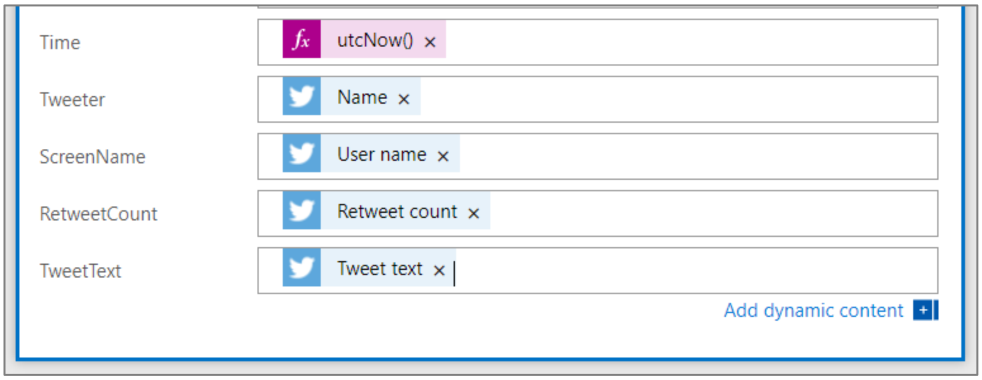
You can set the remaining properties by placing the cursor inside the input control you want to update and then by selecting the value you want from the flow data properties view on the right-hand side.

k) Set the **Tweeter** property to **Name**.

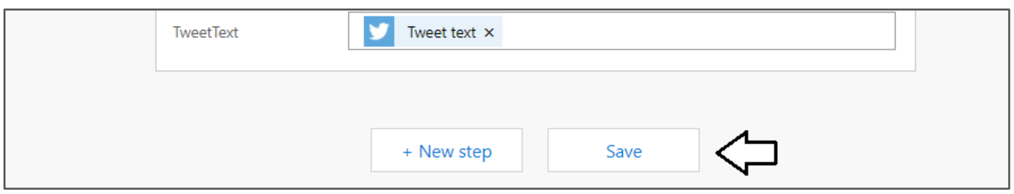
l) Set the **ScreenName** property to **User name**.

m) Set the **RetweetCount** property to **Retweet Count**.

n) Set the **TweetText** property to **Tweet text**.



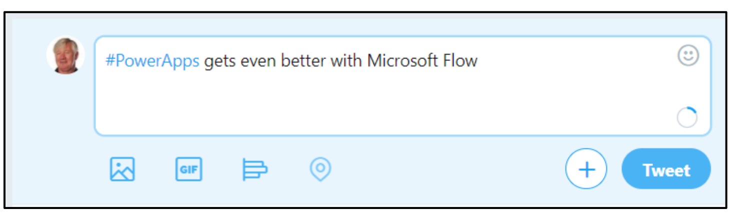
o) Click the **Save** button at the bottom of the Flow Designer to save your work.



11. Send out a new tweet with the **#PowerApps** hashtag.

a) Return to Twitter.com inside the browser.

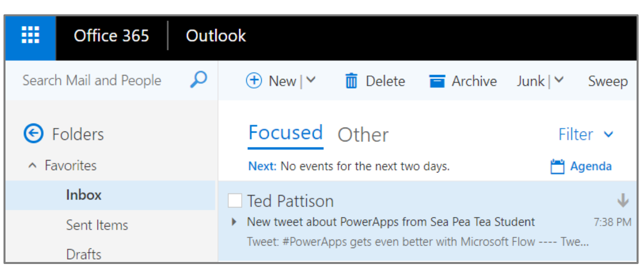
b) Enter a new message containing the hashtag **#PowerApps** and click the **Tweet** button to send it.



12. Check your email.

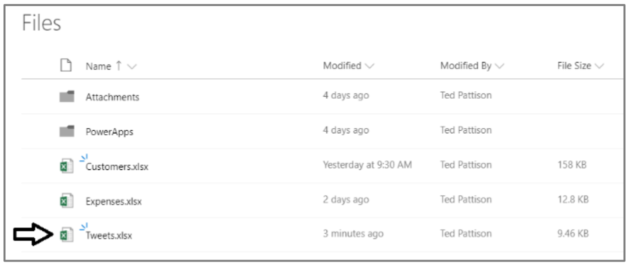
a) Return to the Outlook inbox for your Office 365 user account.

b) Confirm that you received an email about the new tweet containing the **#PowerApps** hashtag.

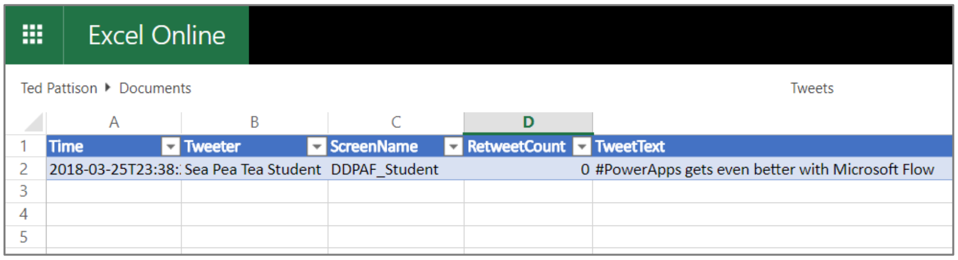


13. Inspect the Excel workbook named **Tweets.xlsx**.

  a) Return to OneDrive for Business and click on **Tweets.xlsx** to open it.



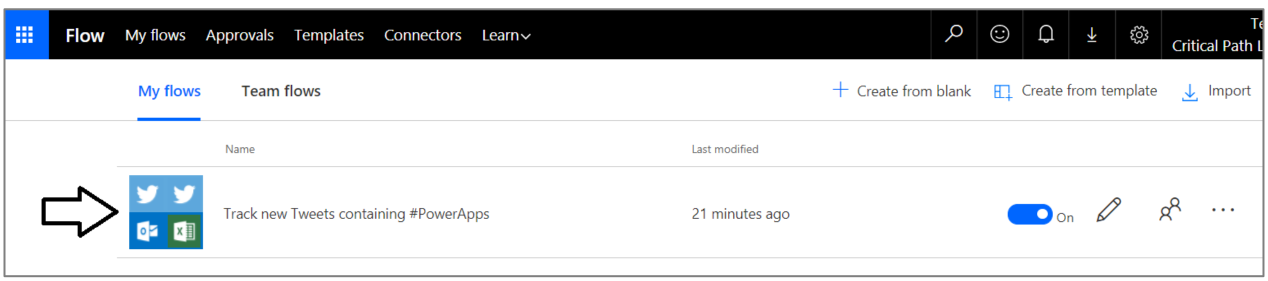
  b) Verify that the table in the workbook contains a new row for the tweet you just sent.



14. Inspect the run history for your flow.

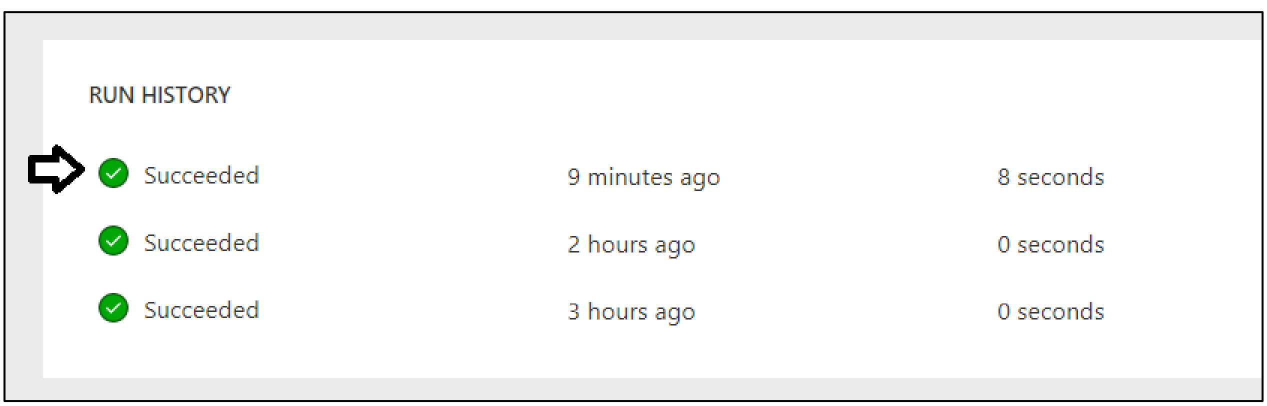
  a) Return to Microsoft Flow and click the **My flows** link.

  b) Click on your flow named **Track new Tweets containing #PowerApps**.



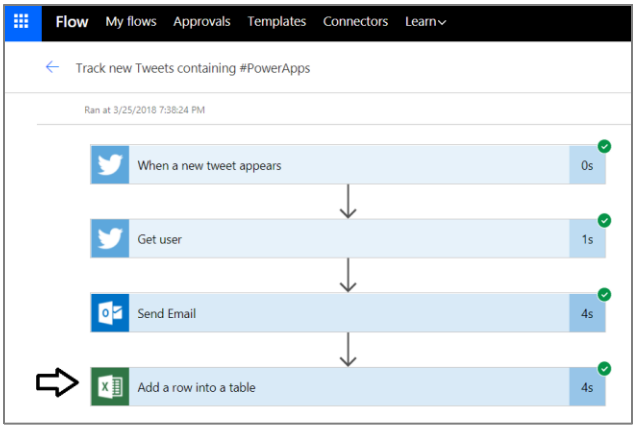
  c) You should now see a list of the flow's **RUN HISTORY**.

  d) Click the top row in the **RUN HISTORY** list.

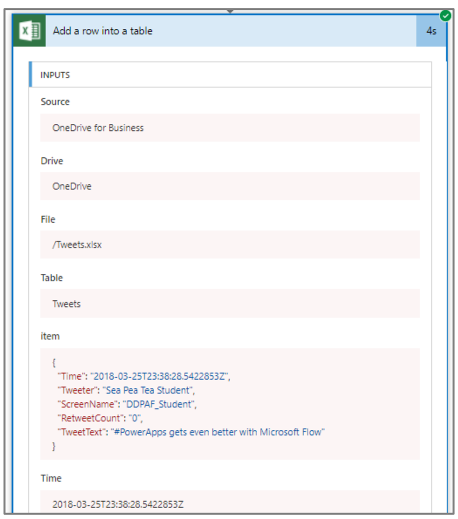


You should now see a view that looks like the Flow Designer. However, the run history view is different because it is read-only.

e) Click on the **Add a row into a table** action.



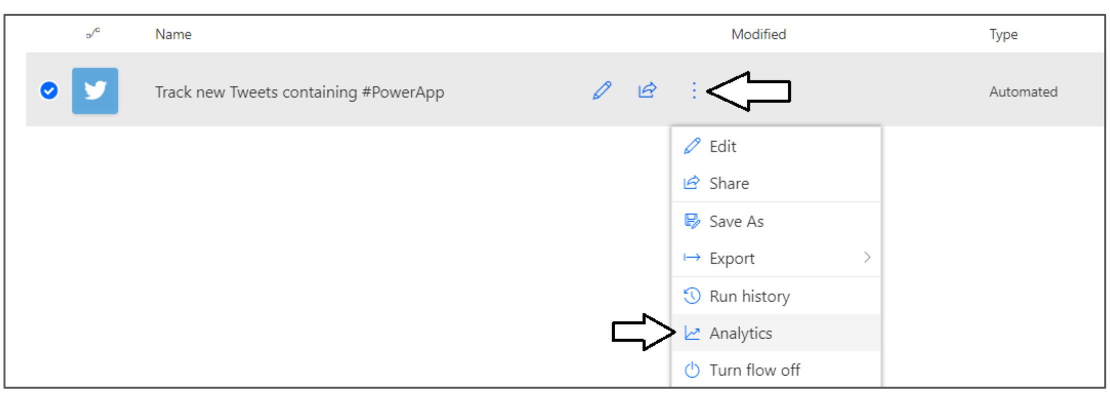
f) Inspect the view for the run history for this action.



15. Inspect the analytics for your flow.

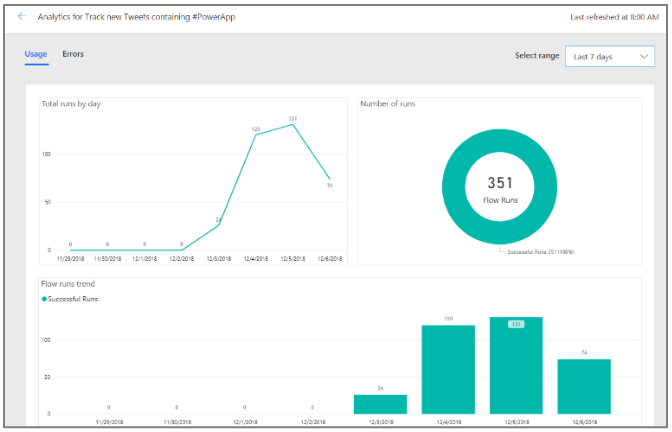
a) Return to the **My flows** list.

b) Use the ellipse (**…**) dropdown menu on the right of your flow to select the **Analytics** menu command.



c) Take a moment to see what data is available in the analytics view.

Note that the Analytics view for your flow doesn't have any data behind it yet because you have just created it If you let this flow run for a few days, it will begin to look like the analytics view shown in the following screenshot.



As you can see, analytics view is more valuable when a flow has analytics data from continually running in production environment.