

# Getting Started with Microsoft Flow

**Lab Time:** 60 minutes

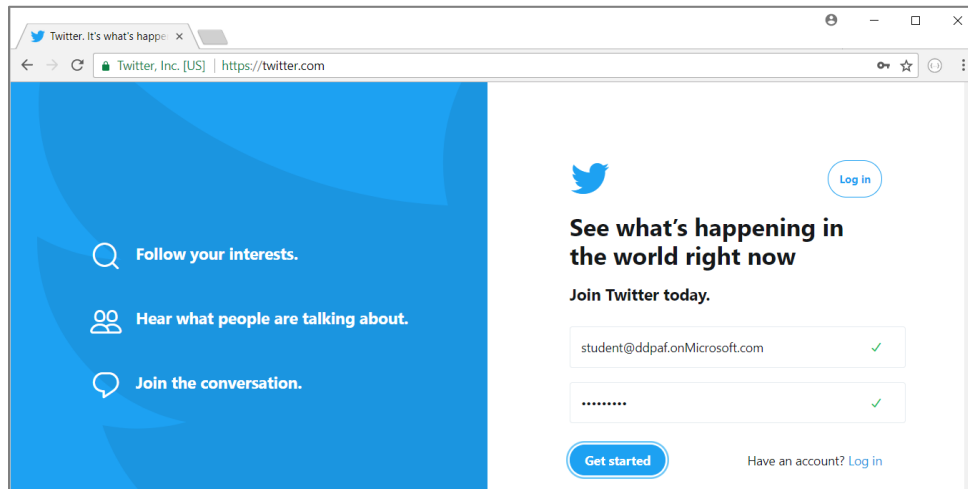
**Lab Folder:** C:\Student\Modules\03\_DesigningFlows\Lab

**Lab Overview:** In this lab, you will begin to work with Microsoft Flow. You will start by creating a new Twitter account for testing purposes. After that, you will build a flow that monitors Twitter for incoming tweets containing a specific hashtag.

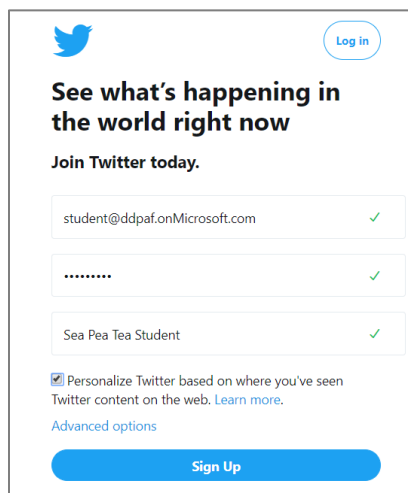
## Exercise 1: Create a New Twitter Account for Testing Purposes

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.

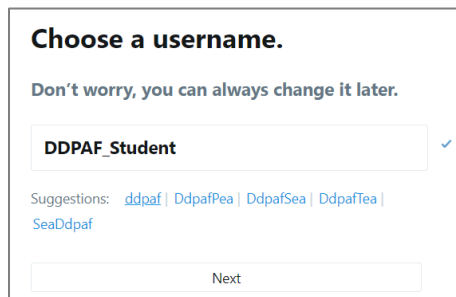
1. Navigate to <https://twitter.com>.
2. Sign up for a new twitter account using the email address of your Office 365 trial account.
  - a) Under the **Join Twitter today** message, enter your Office 365 trial account email address
  - b) Enter a password you will remember.
  - c) Click the **Get started**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



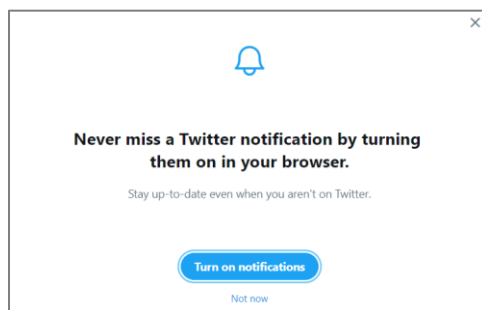
- d) Enter a name (*you can make up something fun*) and click the **Sign up** button.



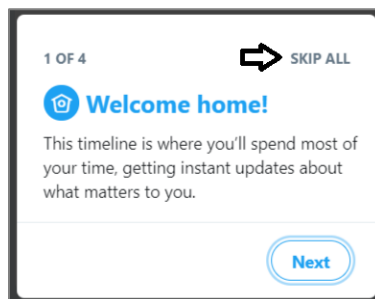
- e) On the page that prompts you for a phone number, click **Skip** to continue.
- f) On the **Choose a username** page, enter a user name that is unique.



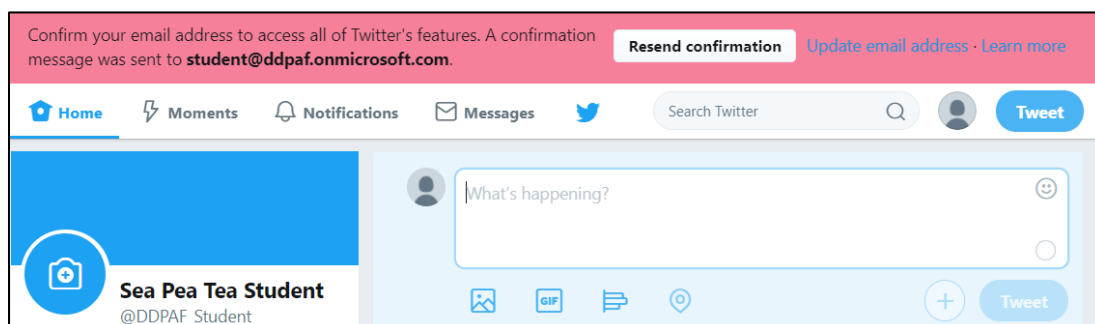
- g) On the page with the caption **What are you interested in?**, click **Continue**.
- h) On the page with the caption **Want to find friends and see who they follow?**, click **No Thanks**.
- i) On the page which prompts you about Twitter notifications, click the **Not now** link at the bottom.



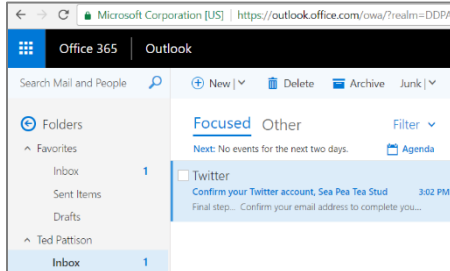
- j) On the **Welcome home!** page, click **SKIP ALL**.



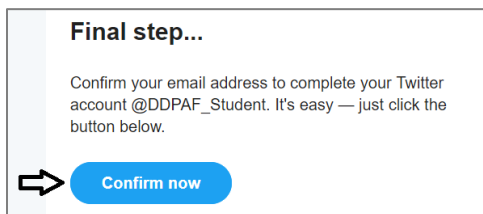
- k) You have now created the new Twitter account. However, you will notice that your new Twitter account is not yet ready for use because you must first respond to the confirmation email that has been sent to your Office 365 trial account.



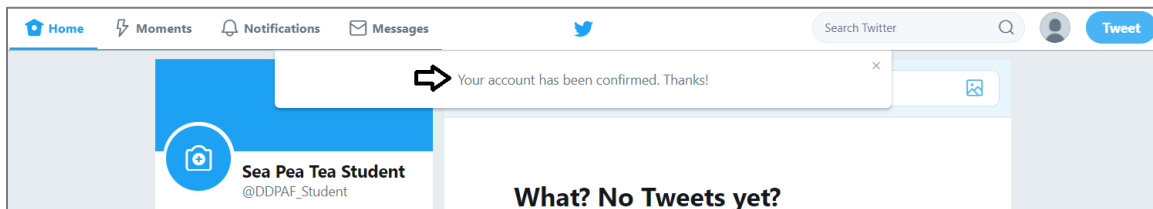
3. Respond to the confirmation email sent by Twitter to activate your new Twitter account.
  - a) Navigate to the Outlook inbox for your Office 365 trial account at <https://outlook.office.com>.
  - b) Sign in using your Office 365 trial account.
  - c) Locate and open the confirmation email message sent to you by Twitter.



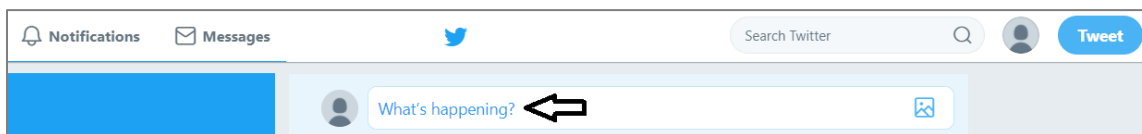
- d) Inside the body of the confirmation email, locate and click on the Confirm now button.



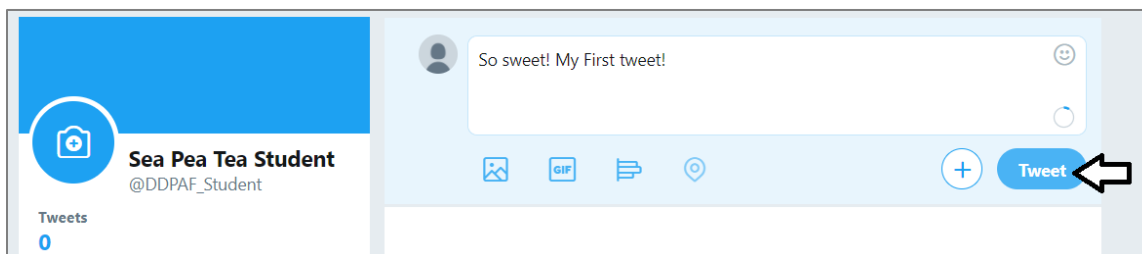
- e) You should be redirected to Twitter and you should also see a message indicating your account has been confirmed.



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 2: Creating a Flow from a Template

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.

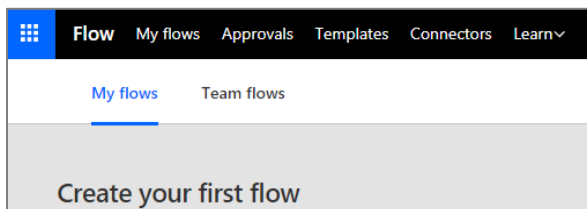
1. Sign in to Microsoft Flow.
  - a) Navigate to <http://flow.microsoft.com>.
  - b) Sign in using your Office 365 trial account.

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

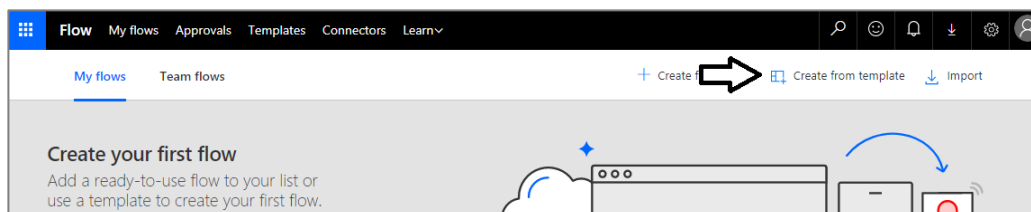
2. Create a new flow using a template.
  - a) Click on the **My flows** link.



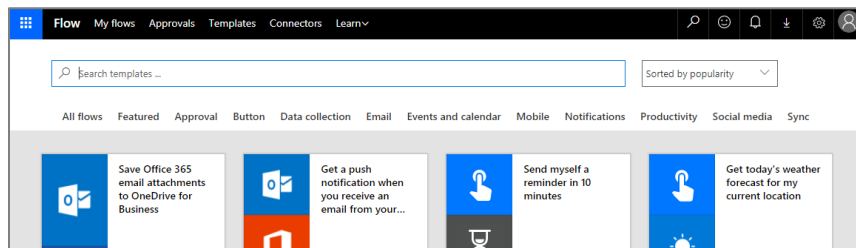
- b) If you haven't created any flows yet, you should see a message prompting you to **Create your first flow**.



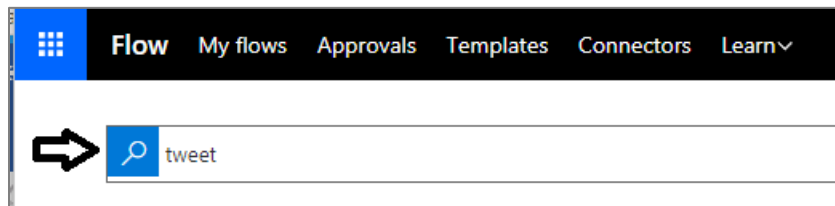
- c) Click the **Create from template** link to begin the process of creating a new flow.



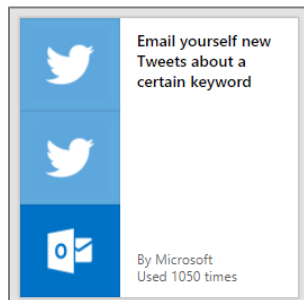
d) You should now see a page containing templates.



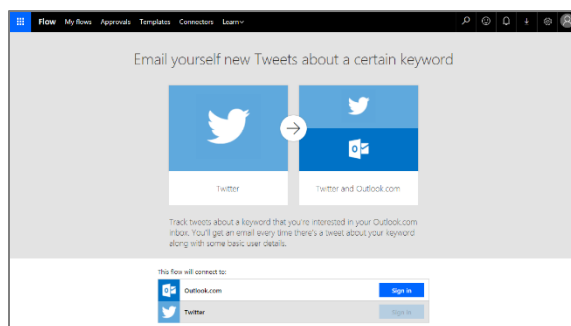
e) Enter the word "Tweet" into the search box and then click the button with the search icon.



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.



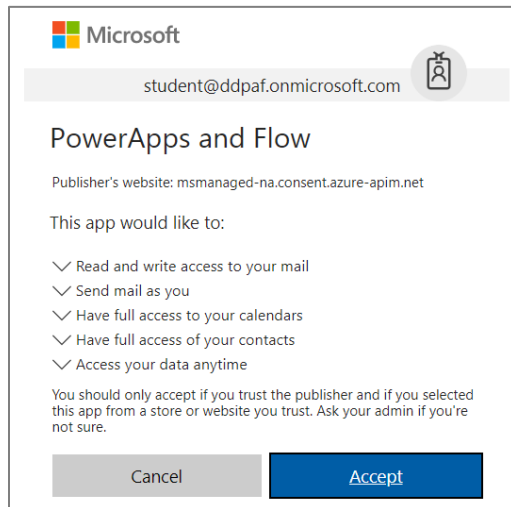
h) Click the **Sign in** button for **Outlook.com**.



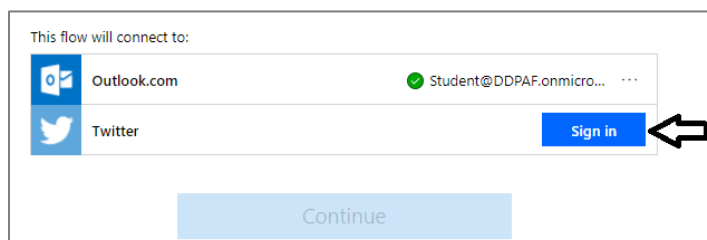
- i) Sign in with your Office 365 trial account.



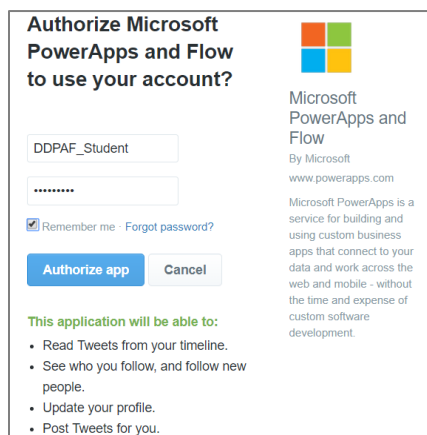
- j) You should be prompted to grant permissions to the new flow. Click the **Accept** button to grant these permissions.



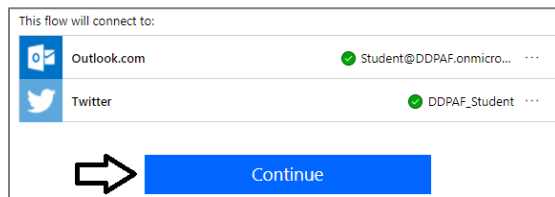
- k) Click the **Sign in** button for Twitter.



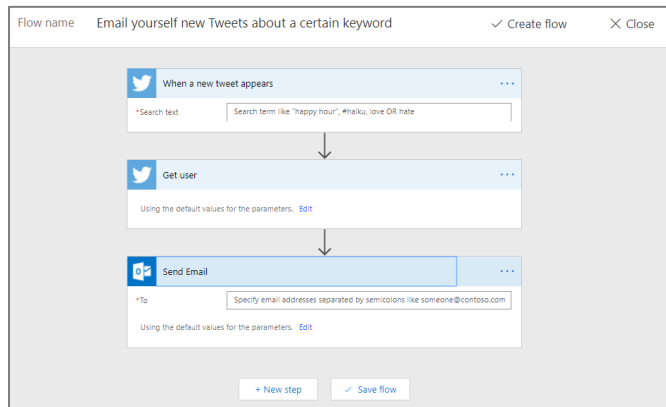
- l) On the **Authorize** page, enter your Twitter user account screen name and password. Then click the **Authorize app** button.



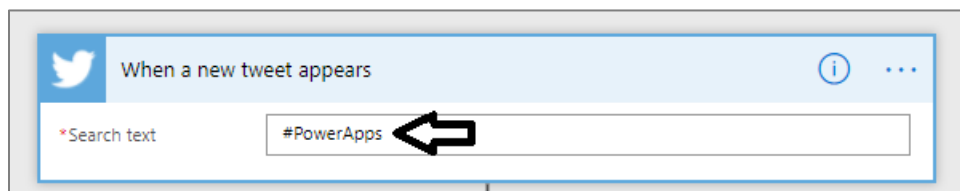
- m) Once you have configured permissions, click the **Continue** button.



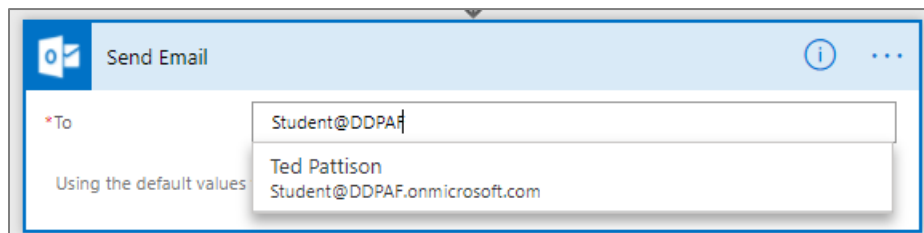
- n) You should now see your new flow in the Flow Designer.



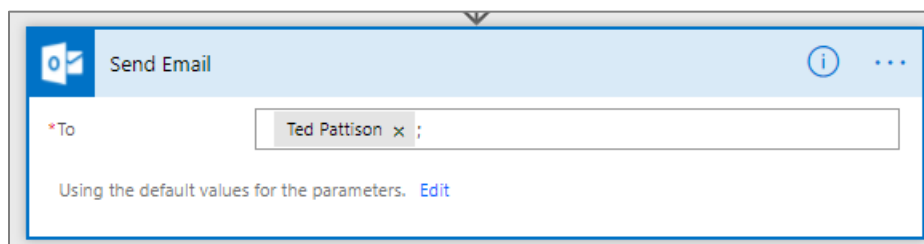
- o) In the **When a new tweet appears** trigger, enter a text value of **#PowerApps** in the **Search text** input control.



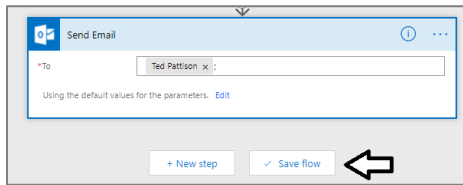
- p) In the **Send email** action, enter the email address for your Office 365 trial account.



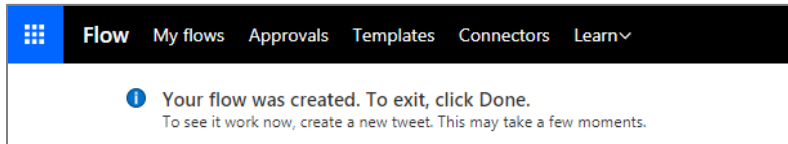
- q) Once you add your email address, the Flow Designer should resolve it to the display name of your Office 365 user account.



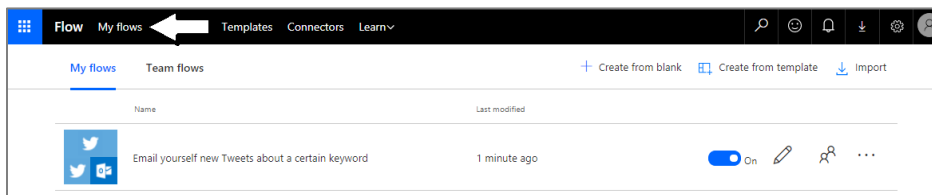
- r) Click the **Save Flow** button to save your work.



- s) You should see a confirmation that your flow has been created.

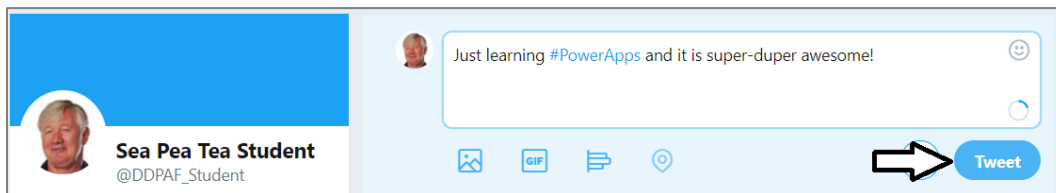


- t) Click on the **My flows** link. You should see your new flow in the list of your flows.



3. Send a tweet with the #PowerApps hashtag.

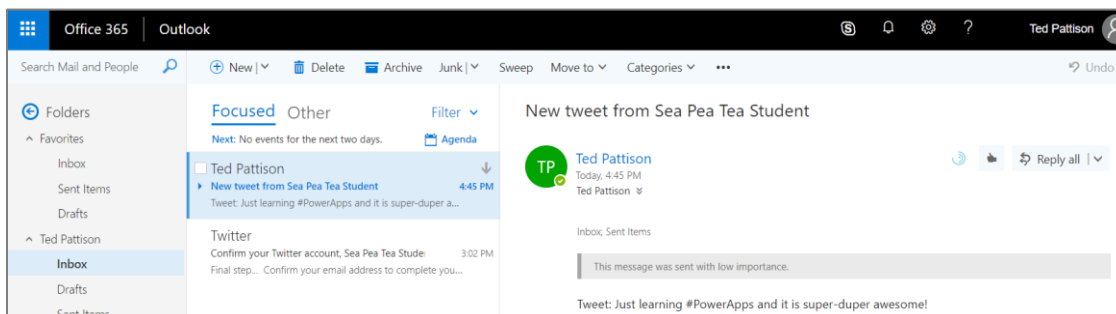
- a) Return to Twitter.com inside the browser.  
b) Enter a new message containing the hashtag **#PowerApps** and click the **Tweet** button to send it.



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

4. Check your email.

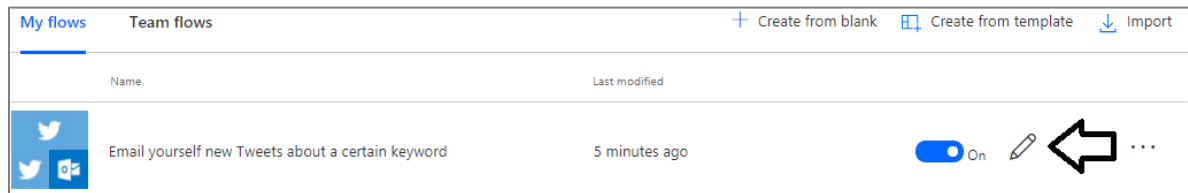
- a) Return to the Outlook inbox for your Office 365 user account.  
b) Confirm that you received an email about the new tweet containing the **#PowerApps** hashtag.



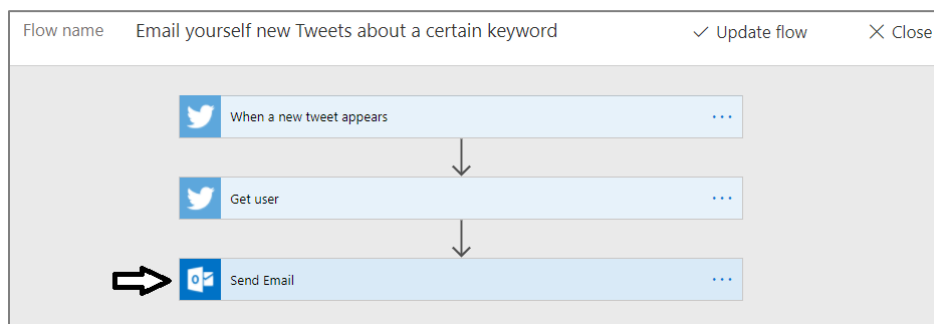


Note that your Office 365 trial user account is the sender of the message.

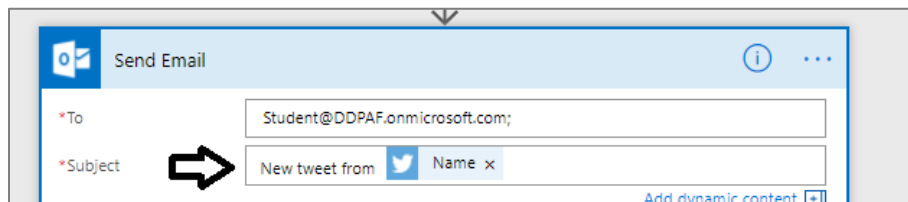
5. Make an edit to the flow that you just created.
- Return to the **My flows** list in Microsoft Flow and find the **Email yourself new Tweets about a certain keyword** flow..
  - Click the button with the pen icon to open the flow in edit mode.



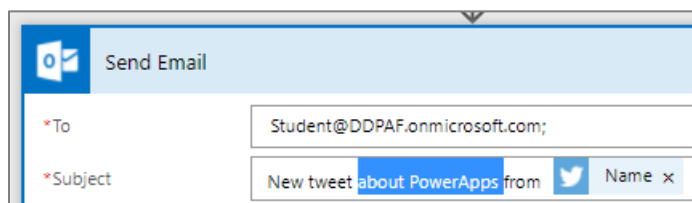
- c) Click on the header for the **Send Email** action to open it up for editing.



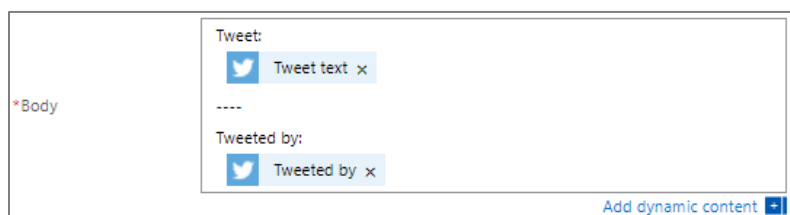
- d) Locate the text input control with the email **Subject**.



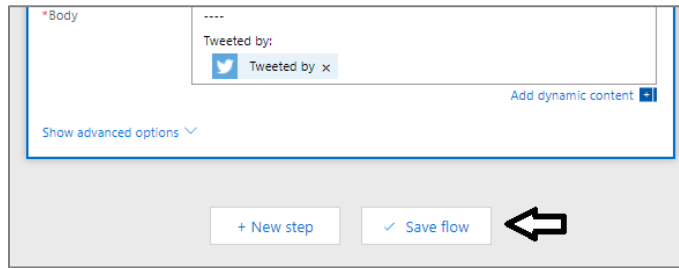
- e) Update the **Subject** value by adding the text **about PowerApps** as shown in the following screenshot.



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

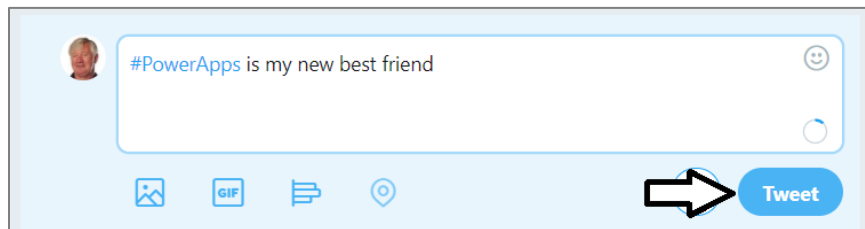


- g) Click the **Save flow** button to save your changes to the flow.



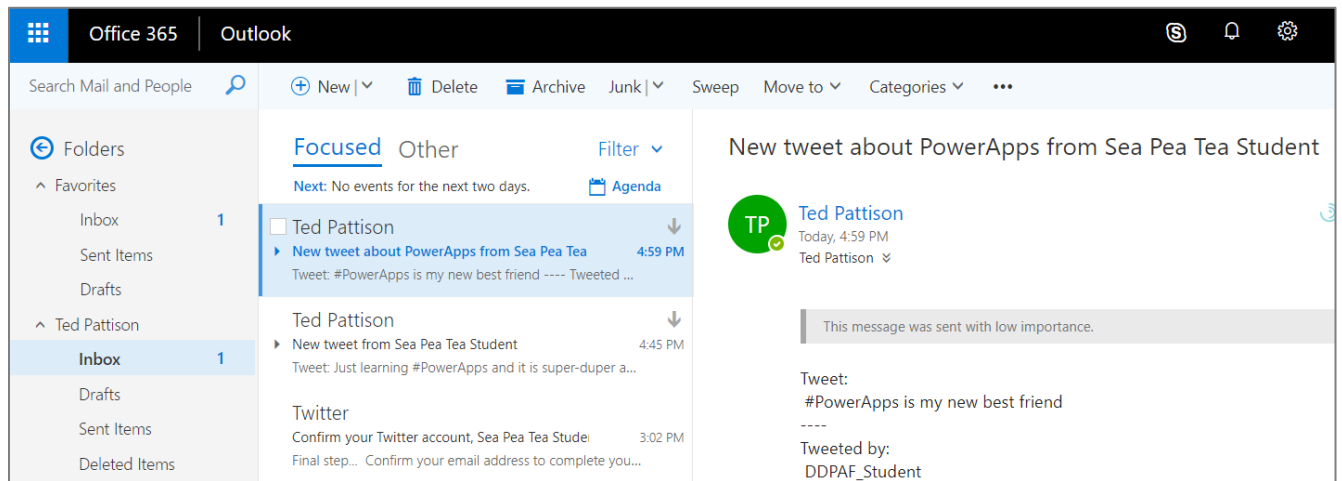
6. Send out a new tweet with the **#PowerApps** hashtag.

- 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.



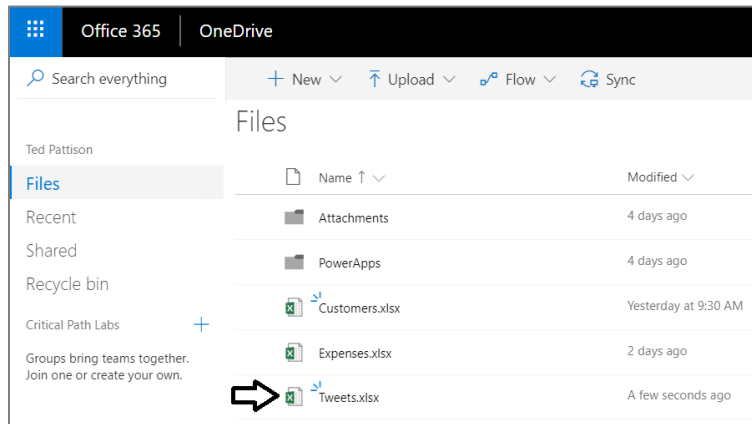
### Exercise 3: Extend a Flow to Track Twitter Data in an Excel Workbook

In this exercise, you will extend the flow you created in the previous exercise by adding tweets into an Excel workbook.

1. Upload the Excel workbook named **Tweets.xlsx** to OneDrive for Business.  
a) Using Windows Explorer, verify that there is an Excel book named **Tweets.xlsx** located at the following path.

**C:\Student\Modules\03\_DesigningFlows\Lab\Tweets.xlsx**

- 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.xlsx** to upload this file to OneDrive for Business.

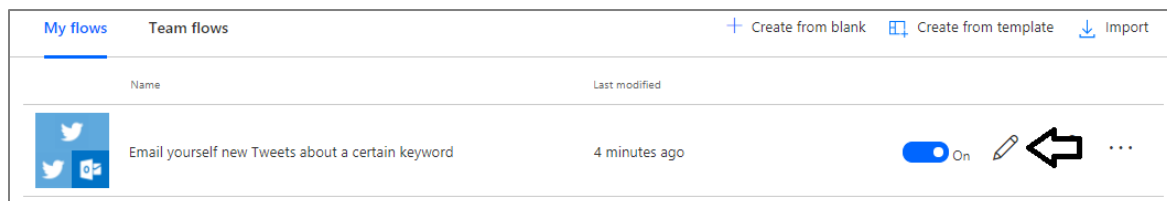


- a) Click on **Tweets.xlsx** to inspect the contents of this workbook.
- b) You should see that this workbook contains a single worksheet with a table for tracking tweets.

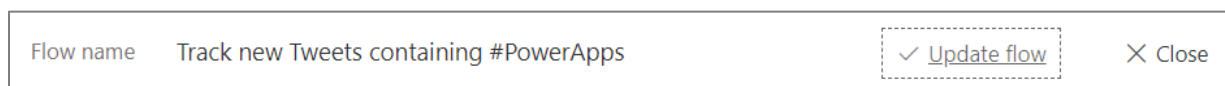
	A	B	C	D
1	Time	Tweeter	ScreenName	RetweetCount
2				
3				
4				
5				

## 2. Update the title of your flow.

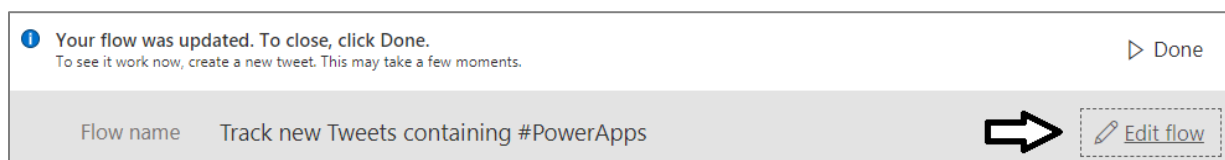
- a) Return to the **My flows** list in Microsoft Flow and find the **Email yourself new Tweets about a certain keyword** flow.
- b) Click the button with the pen icon to open the flow in edit mode.



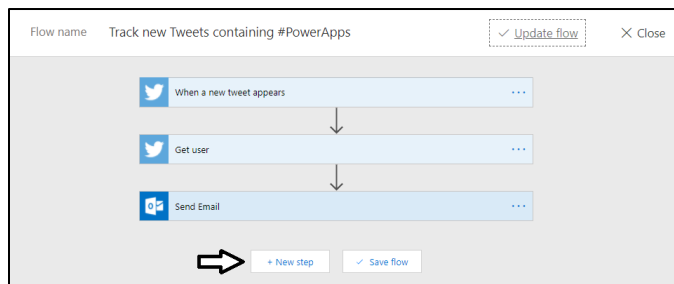
- c) Update the flow name to **Track new Tweets containing #PowerApp** and click **Update flow**.



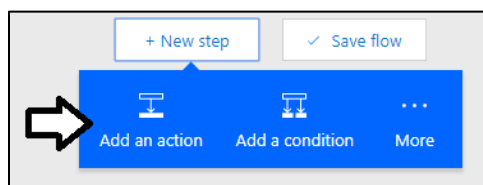
- d) Once the flow has been updated with the new name, click the **Edit flow** button.



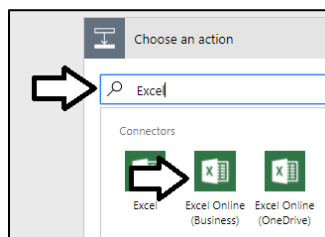
3. Modify your flow to write tweets into this workbook.
- a) Click the **New step** button to add a new step at the end of the flow.



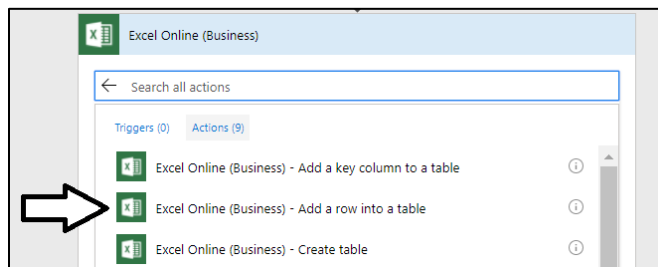
- b) Click the **Add an action** button.



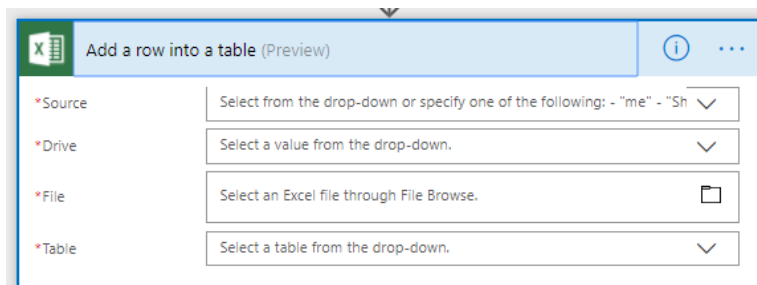
- c) Type **“Excel”** into the action search box and then click **Excel Online (Business)** to further filter the available actions..



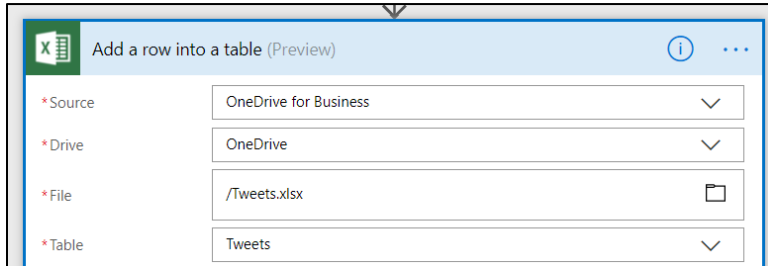
- d) Select the **Excel Online (Business) – Add a row into a table** action.



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



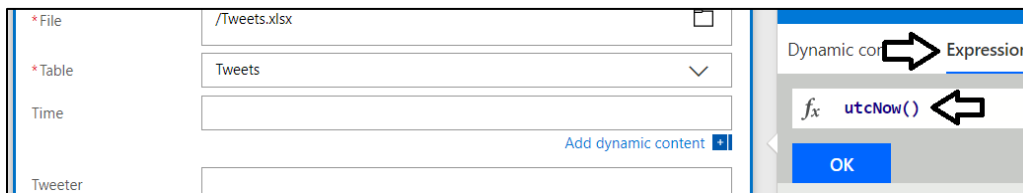
- f) Set the **Source** property to **OneDrive for Business**.
- g) Set the **Drive** property to **OneDrive**.
- h) Set the **File** property to **/Tweets.xlsx**.
- i) Set the **Table** property to **Tweets**.



Add a row into a table (Preview)	
* Source	OneDrive for Business
* Drive	OneDrive
* File	/Tweets.xlsx
* Table	Tweets

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

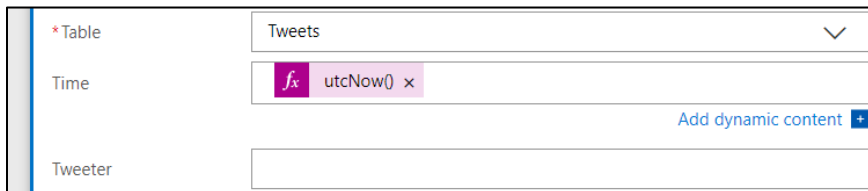
- j) Place your cursor in the Time input box and then add an expressions of **utcNow()** as shown in the following screenshot.



* File	/Tweets.xlsx
* Table	Tweets
Time	<input type="text"/>
Tweeter	<input type="text"/>

Dynamic content → Expression  
fx utcNow() ←  
OK

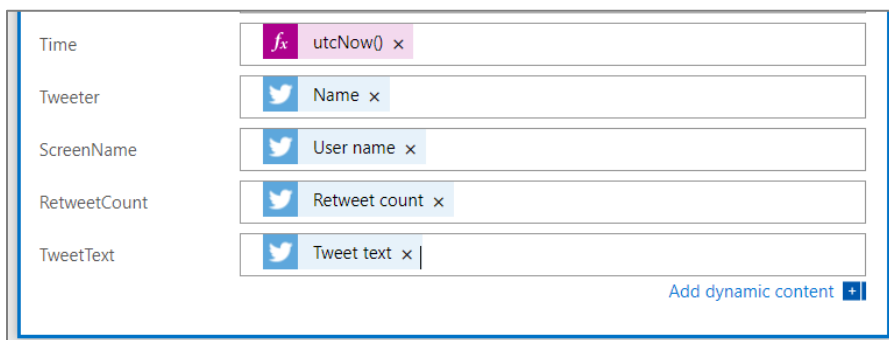
- k) Once you have added the expression for Time property, it should match the following screenshot.



* Table	Tweets
Time	fx utcNow() x
Tweeter	<input type="text"/>

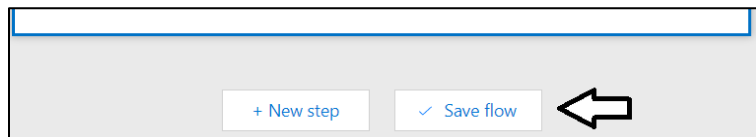
You can set the remaining properties by placing the cursor inside the input control you want to update and then by selecting the value you want from the flow data properties view on the right-hand side.

- l) Set the **Tweeter** property to **Name**.
- m) Set the **ScreenName** property to **User name**.
- n) Set the **RetweetCount** property to **Retweet Count**.
- o) Set the **TweetText** property to **Tweet text**.

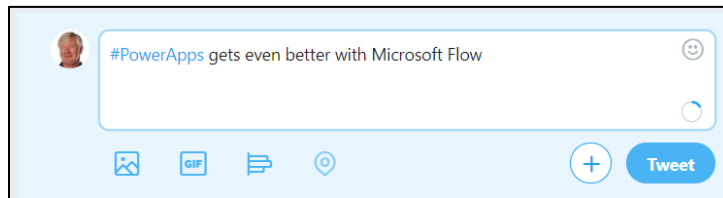


Time	fx utcNow() x
Tweeter	Twitter Name x
ScreenName	Twitter User name x
RetweetCount	Twitter Retweet count x
TweetText	Twitter Tweet text x

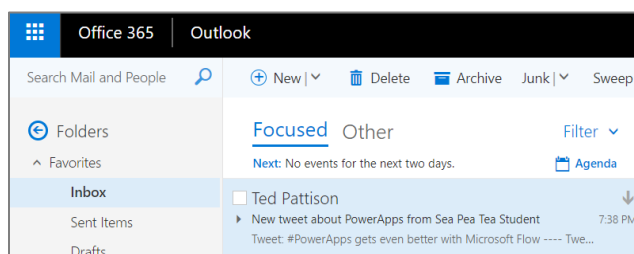
- p) Click the Save flow button at the bottom of the Flow Designer to save your work.



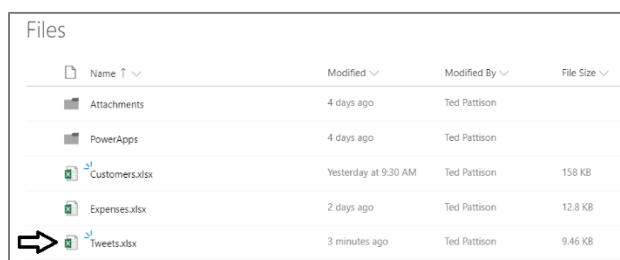
4. Send out a new tweet with the **#PowerApps** hashtag.
- Return to Twitter.com inside the browser.
  - Enter a new message containing the hashtag **#PowerApps** and click the **Tweet** button to send it.



5. Check your email.
- Return to the Outlook inbox for your Office 365 user account.
  - Confirm that you received an email about the new tweet containing the **#PowerApps** hashtag.



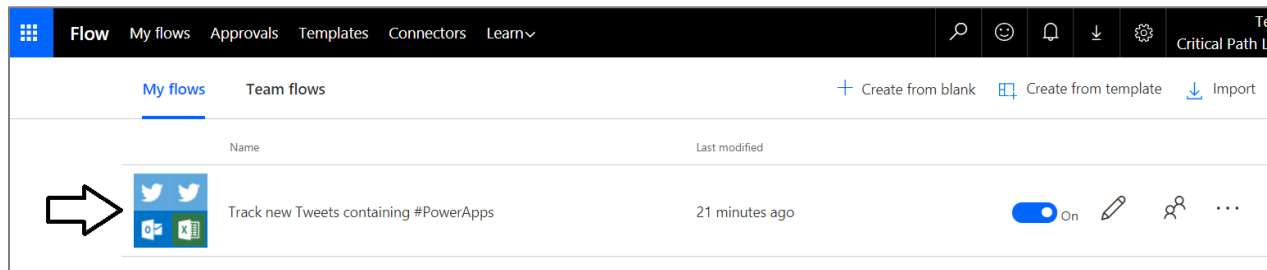
6. Inspect the Excel workbook named **Tweets.xlsx**.
- Return to OneDrive for Business and click on **Tweets.xlsx** to open it.



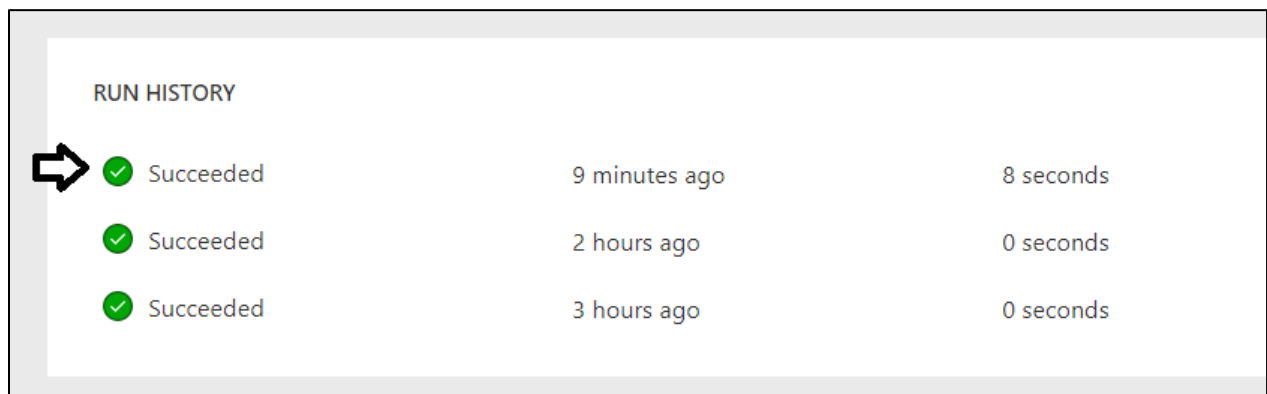
- b) Verify that the table in the workbook contains a new row for the tweet you just sent.

Excel Online					
Ted Pattison ▸ Documents			Tweets		
	A	B	C	D	
1	Time	Tweeter	ScreenName	RetweetCount	TweetText
2	2018-03-25T23:38:	Sea Pea Tea Student	DDPAF_Student	0	#PowerApps gets even better with Microsoft Flow
3					
4					
5					

7. Inspect the run history for your flow.
- Return to Microsoft Flow and click the **My flows** link.
  - Click on your flow named **Track new Tweets containing #PowerApps**.

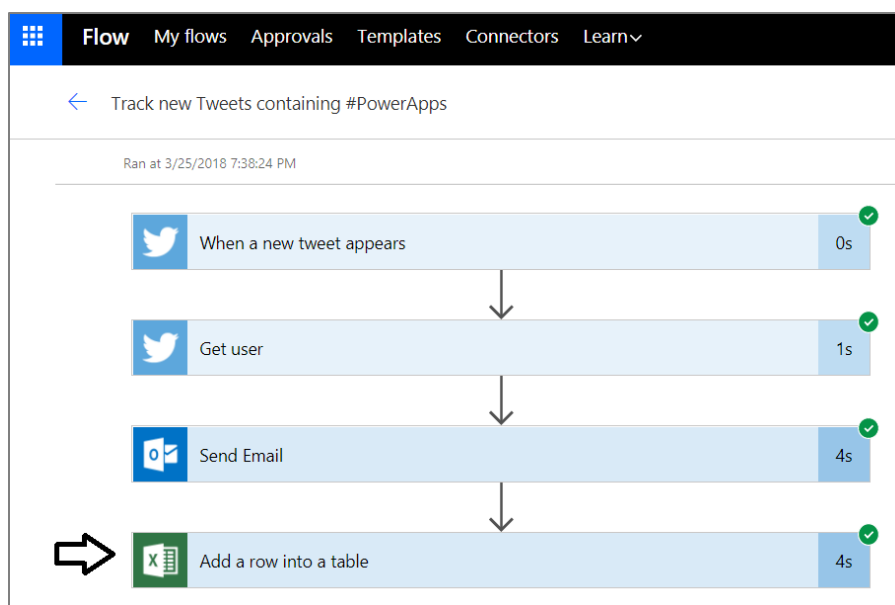


- You should now see a list of the flow's **RUN HISTORY**.
- Click the top row in the **RUN HISTORY** list.

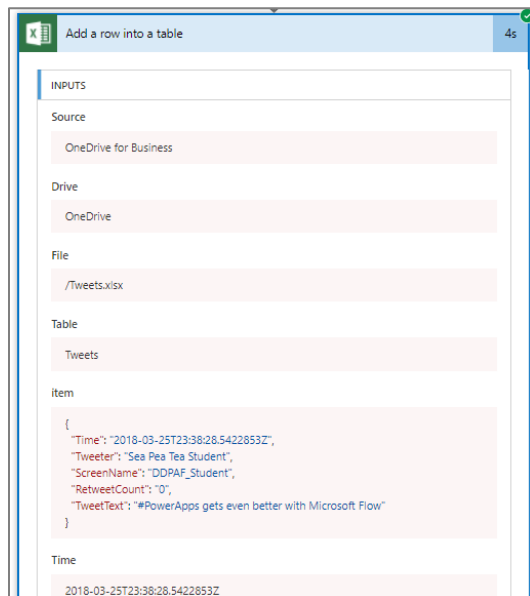


You should now see a view that looks like the Flow Designer. However, the run history view is different because it is read-only.

- Click on the **Add a row into a table** action.

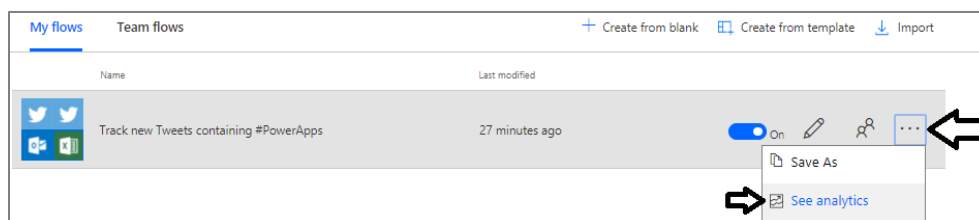


- f) Inspect the view for the run history for this action.

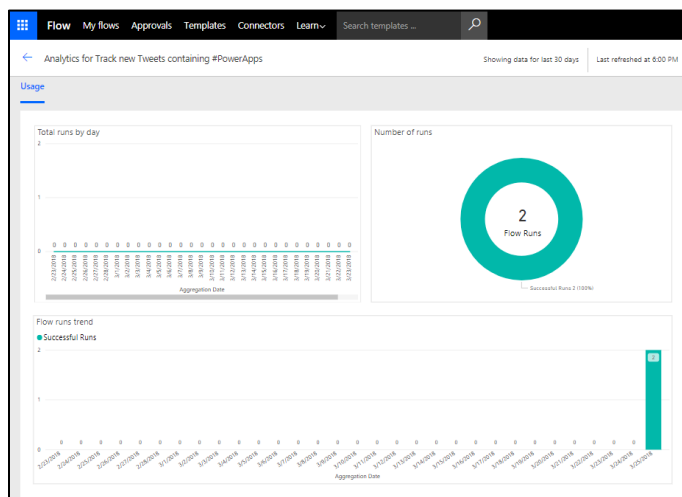


8. Inspect the analytics for your flow.

- a) Return to the **My flows** list.  
b) Use the ellipse (...) dropdown menu on the left of your flow to select the **See analytics** menu command.



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



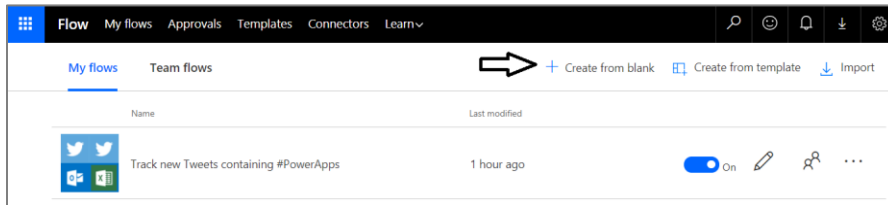
This analytics view will be much more valuable when a flow in production is running many times per day.



## Exercise 4: Create a Flow that is Manually Triggered by a Button

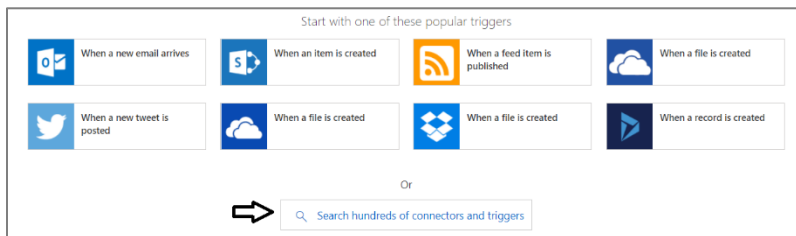
In this exercise, you will create a new flow from blank without using a template. This will give you a chance to see how to build a flow from the ground up. In this specific case, you will create a new flow that uses the Flow button for mobile trigger which allows a user to easily kick off a flow from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

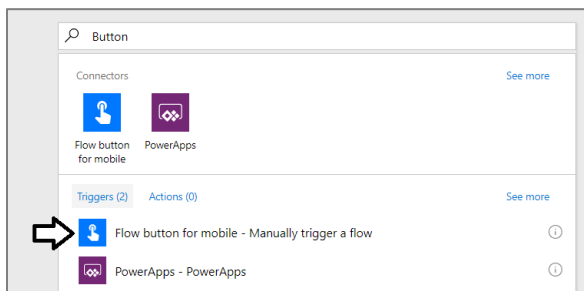


Since you have created a new flow without using a template, the flow is empty and you are prompted to select a trigger.

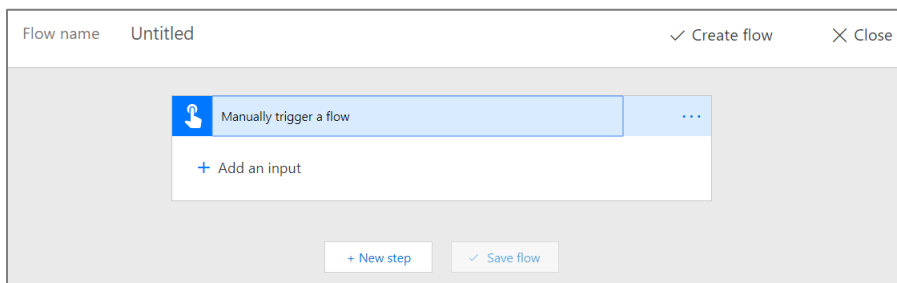
- c) Click the **Search hundreds of connections and triggers** link to search for a trigger.



- 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.



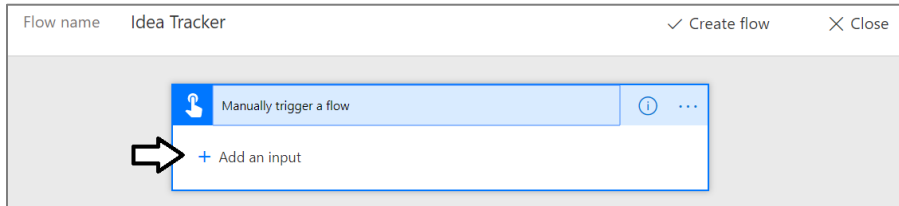
- g) Give the new flow a name of **Idea Tracker** as shown in the following screenshot.



A dialog box titled 'Idea Tracker' with a 'Flow name' field containing 'Idea Tracker'. To the right are two buttons: '✓ Create flow' and '✕ Close'.

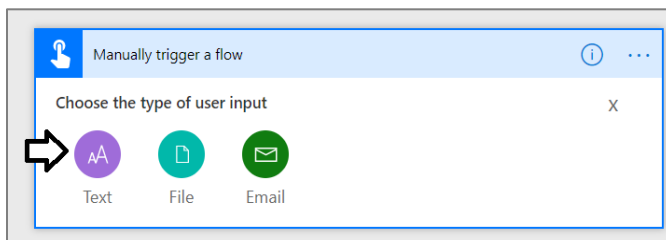
The Flow button trigger allows you to add input values. This makes it possible to prompt the user who is manually running the flow for input data that will be passed to the flow. In this flow, you will prompt the user for an idea and a value that indicates the idea quality.

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



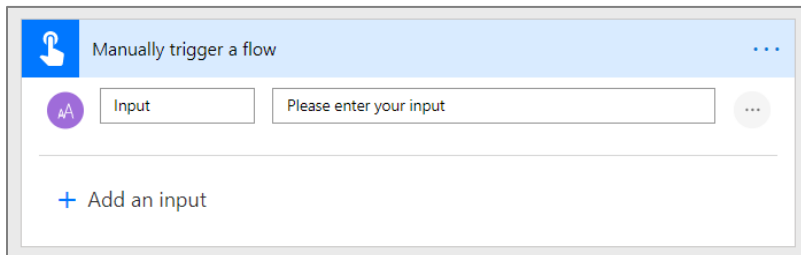
The 'Idea Tracker' flow editor shows a 'Manually trigger a flow' trigger. Below it is a box with a '+ Add an input' link. An arrow points to this link.

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



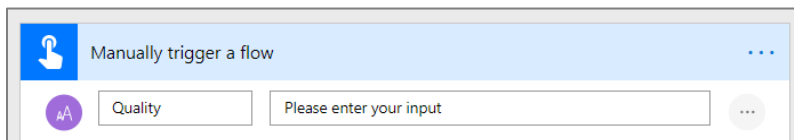
A dialog box titled 'Choose the type of user input' with a close button 'X'. It shows three options: 'Text' (selected with a purple icon), 'File' (green icon), and 'Email' (green icon). An arrow points to the 'Text' option.

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



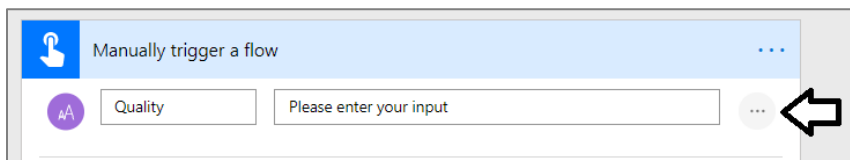
The 'Idea Tracker' flow editor shows the 'Manually trigger a flow' trigger. Below it is a text input field labeled 'Input' with a placeholder 'Please enter your input'. Below the field is a '+ Add an input' link.

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



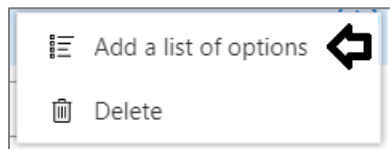
The 'Idea Tracker' flow editor shows the 'Manually trigger a flow' trigger. Below it is a text input field labeled 'Quality' with a placeholder 'Please enter your input'.

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

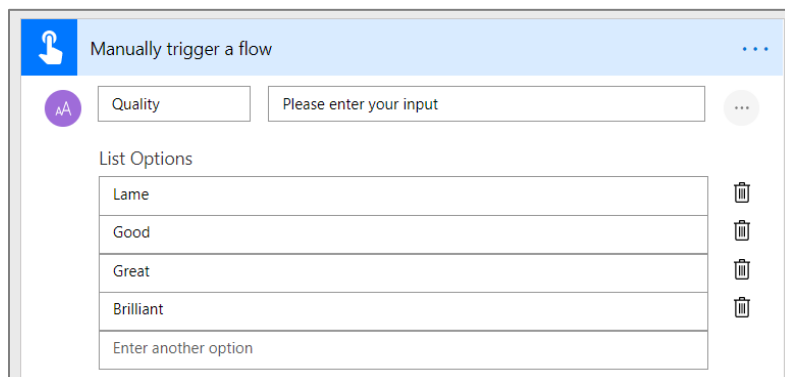


The 'Idea Tracker' flow editor shows the 'Manually trigger a flow' trigger. Below it is a text input field labeled 'Quality' with a placeholder 'Please enter your input'. To the right of the field is an ellipse (...) drop menu. An arrow points to this menu.

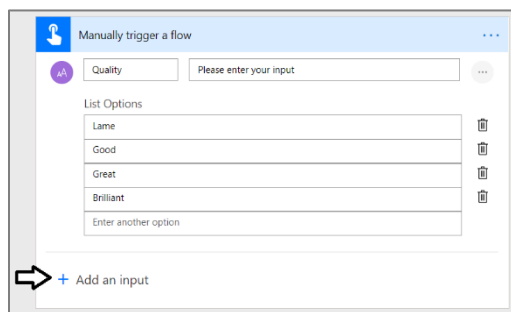
- m) Select the option for **Add a list of options** from the dropdown menu.



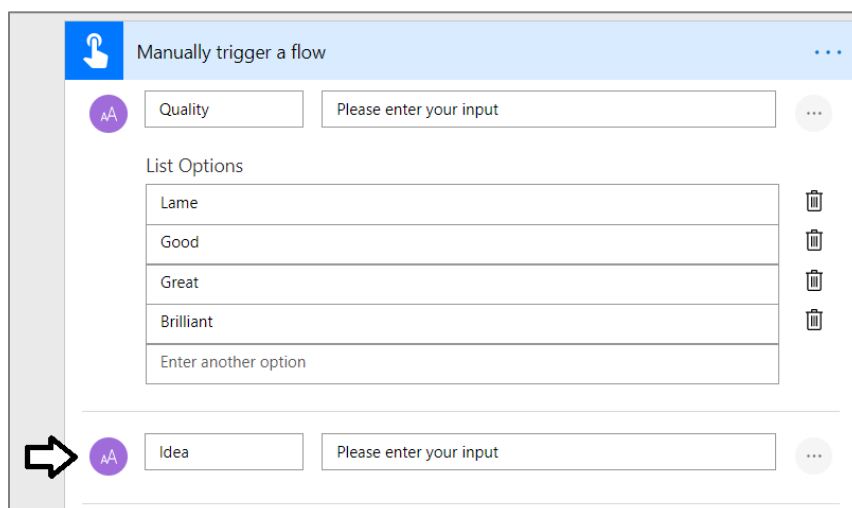
- n) Under **List Options**, add four choices which include **Lame**, **Good**, **Great** and **Brilliant** as shown in the following screenshot.



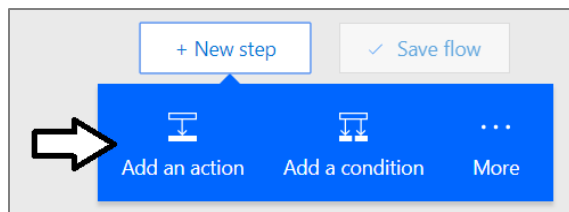
- o) Click **Add an input** to add a second input field.



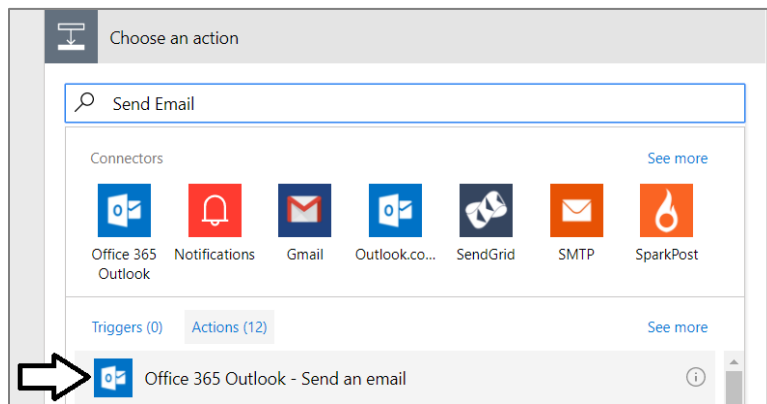
- p) When prompted to **Choose the type of user input**, click **Text**.  
q) Change the name of the second input field to **Idea**.



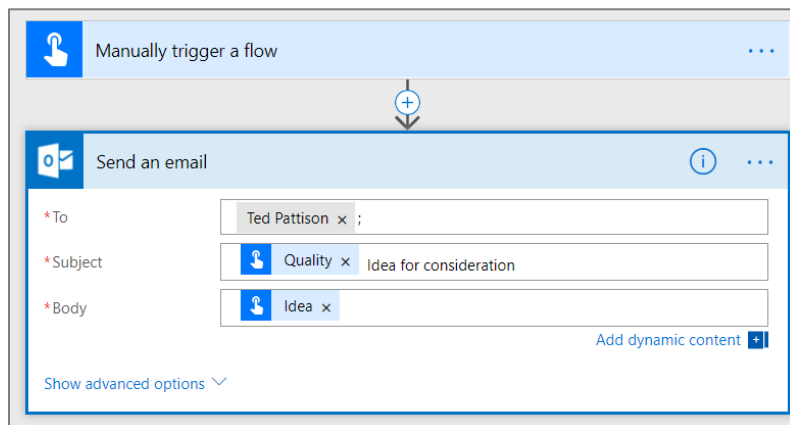
2. Add an action to send an email message every time the flow is triggered.
  - a) Click **New Step > Add an action** at the bottom of the Flow Designer to add a new action.



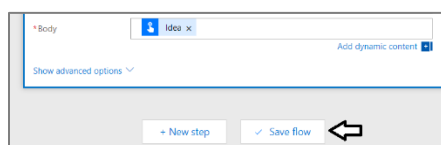
- b) Type **"Send Email"** into the search box to search for the **Send an email** action.
  - c) Select the **Office 365 Outlook – Send an email** action.



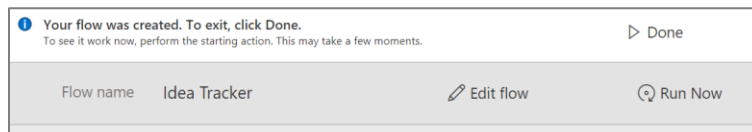
- d) In the **Send an email** action, add your Office 365 trial account email address to the **To** field.
  - e) In the **Subject** field, add the **Quality** field from flow data followed by the text **" Idea for consideration"**.
  - f) In the **Body** field, add the **Idea** field from flow data.
  - g) When you are done, the **Send an email** action should match the following screenshot.



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



- i) You should receive a confirmation that your flow has been created.

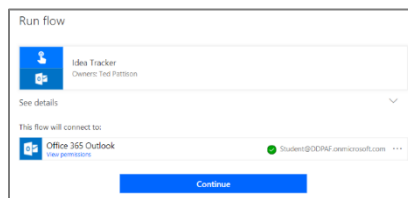


3. Test the **Idea Tracker** flow by running it from the browser.

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



- b) If prompted, sign in with your Office 365 trial account and grant permissions to the Office 365 Outlook connector.  
c) Click the **Continue** button.



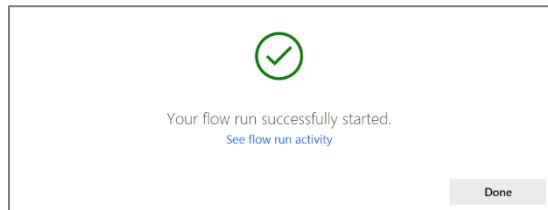
- d) You should now be prompted with a page that allows you to enter values for the two input fields named **Quality** and **Idea**.

A "Run flow" dialog box. It shows the "Idea Tracker" flow by "Owners: Ted Pattison". Below, it says "See details" with a dropdown arrow. Then, there are two input fields: "Quality" and "Idea", both with a red asterisk and a placeholder "Please enter your input". At the bottom right are "Run flow" and "Cancel" buttons. At the bottom left is a link "Edit connections".

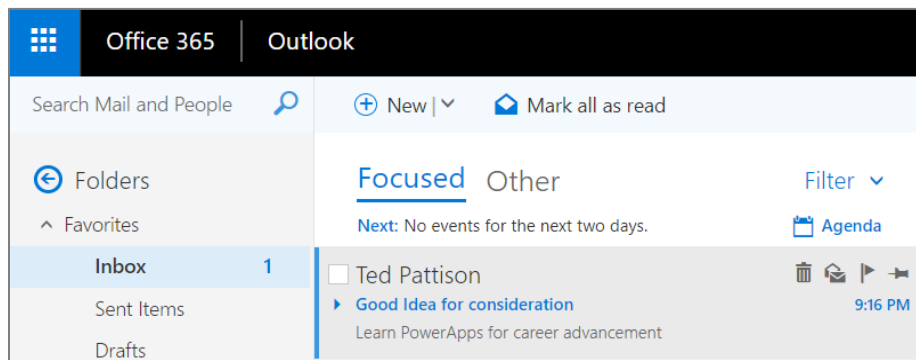
- e) Enter some sample test values for the input fields named **Quantity** and **Idea** and then click **Run flow**.

A "Run flow" dialog box. It shows the "Idea Tracker" flow by "Owners: Ted Pattison". Below, it says "See details" with a dropdown arrow. Then, there are two input fields: "Quality" with the value "Good" and "Idea" with the value "Learn PowerApps for career advancement". At the bottom right are "Run flow" and "Cancel" buttons, with a right arrow icon next to the "Run flow" button. At the bottom left is a link "Edit connections".

- f) 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.



Congratulations. You have now completed this lab.