

# Getting Started with Flow

**Lab Time:** 60 minutes

**Lab Folder:** C:\Student\Modules\05\_Flow\Lab

**Lab Overview:** In this lab you will continue to work on the app you created in the previous lab using PowerApps which can be used to order a device. In this lab you will use Flow to add an approval process to the device ordering process.

## Exercise 1: Create the Approval Flow

In this exercise, you'll use Microsoft Flow to create a Device Approval workflow associated with the device order that was added to the SharePoint list. You will begin by creating the flow to approve device orders. The flow will be configured to trigger whenever a new device order is added to the SharePoint list.

1. Navigate to <http://flow.microsoft.com>
2. Sign in with your work or school account, the same account you used for the earlier exercises
3. Create a new blank Flow
  - a) Go to My flows.



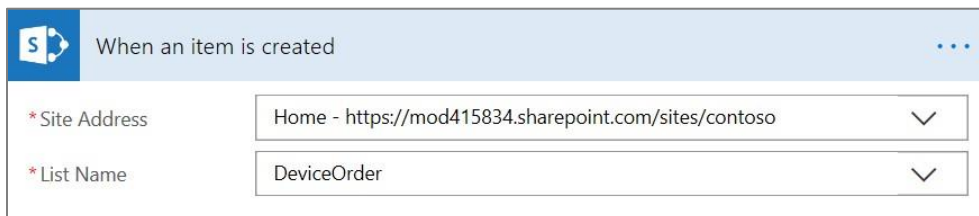
- b) Click + Create from blank



- c) Add "SharePoint – When an item is created" to your Flow as a trigger
- d) In this scenario we will configure the flow to trigger when a new item is added to the Device Order list in the SharePoint.
- e) On the screen to select a trigger, click on "SharePoint – When an item is created" option.



- f) Select your site URL from the **Site Address** dropdown then Select "**Device Order**" from the list

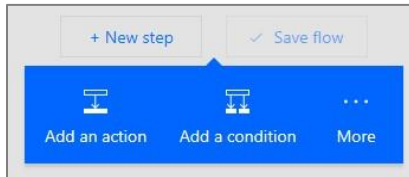


This will set the trigger and now you're ready to add actions.

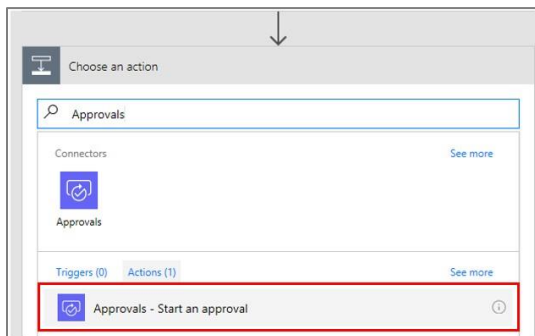
## Configure the Approval Action

The first thing we want to do is sent an approval request. Then we can take appropriate action on the results of the approval request.

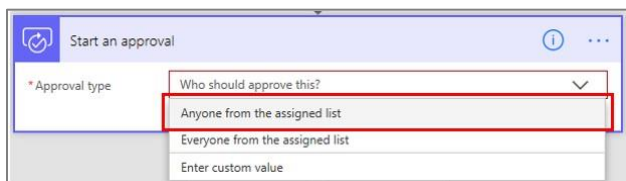
4. Add an Approvals action
  - a) Click **+New step** and then **Add an action**.



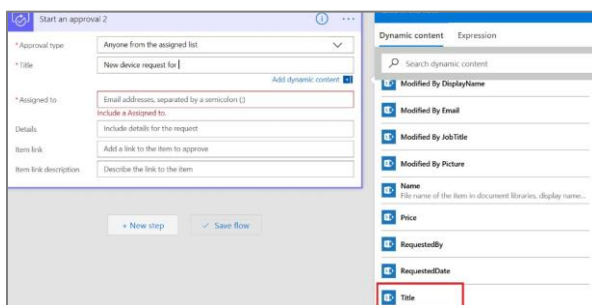
- b) Search for: **Approvals**
  - c) Select the action: **Approvals – Start an approval**.



5. Anyone from the assigned list should be able to approve the request
  - a) Select the **Approval type**. For this lab, there is only one approver so both these options will effectively be the same. Select the option: **Anyone from the assigned list**.



6. Set the title of the request, you might consider including the "Device Title" in the request Title
  - a) Click on the **Title** edit box and type "**New device request for** ". **Do not** type quotation marks "", but add a space at the end.
  - b) In the Dynamic content box on the right, select **Title**



- c) Your screen should match the following screenshot.



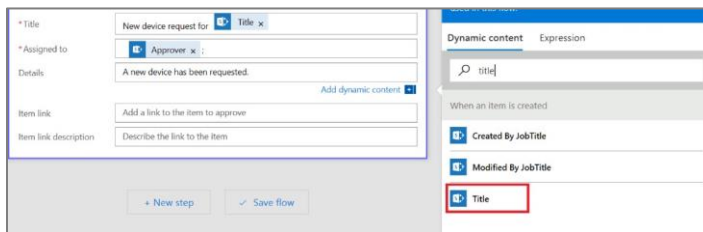
7. Assign the request to the Approver

- a) Click on the Assigned To edit box.  
b) In the dynamic content box on the right, select **Approver**. (You might get a warning message about this field being optional. Ignore it and ignore similar warnings in future)

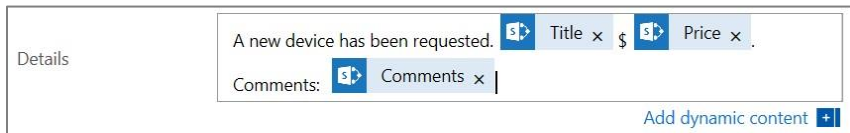


8. Customize the Details to include the Device Title, the Price and any comments from the requester

- a) In the **Details** edit box type "A new device has been requested ". Hit <Return>  
b) Next, select **Title** from the dynamic content pane. You can use the Search box to search for it.



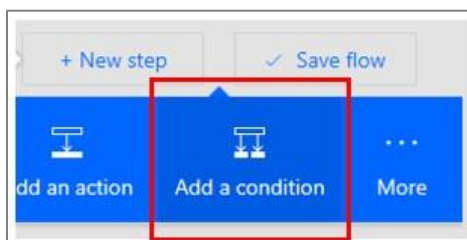
- c) Type ", \$" and select **Price** from the dynamic content pane. Hit <Return>. Type "**Comments:** ", and select Comments from the dynamic content pane.  
d) The **Details** box might look like the image below



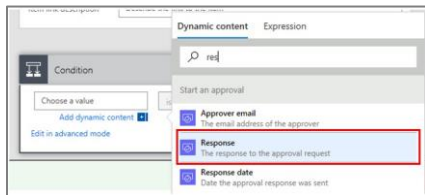
## Create the Approved = Yes branch

Now that we have an approval, we can customize the actions to take based on the result of the approval. It could be accepted or rejected, this task will create the condition branch and set up the "Approved" side of the branch.

9. Add a condition to the Flow for if the response is approved  
a) Select + New Step -> Add a condition



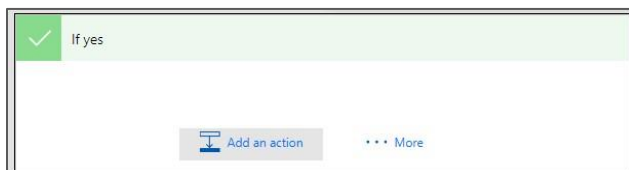
- b) Click in the left edit box that says “Choose a value” and select **Response** from the dynamic content pane.
- c) You may need to press the “+” icon below the edit box to hide the dynamic content pane.



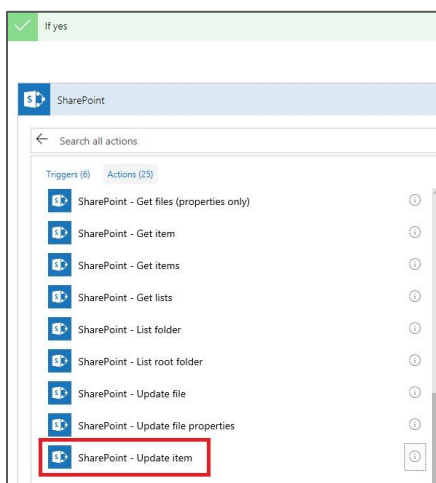
- d) The dropdown in the middle should say “is equal to”
- e) Click in the right edit box and type: **Approve**



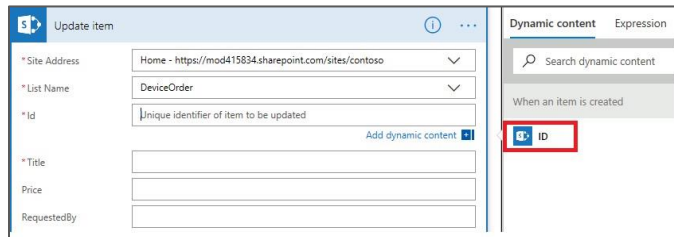
- f) In the “If Yes” branch, add an action to update the record in the SharePoint list
  - i) You will update the same record, based on the record ID
  - ii) Also update the Approval Status to Approved
  - iii) Set the comments to [Comments] | Approvers Comment's: [Comments] so we don't overwrite the comments from the initial submission.
- g) In the left “If yes” box, click **Add an action**



- h) Search for “**SharePoint**”
- i) Select: SharePoint – Update item



- j) Set the Site Address to your SharePoint URL.
- k) Set the List Name to: **DeviceOrder**
- l) For the **Id** value, select **ID** from the dynamic content pane

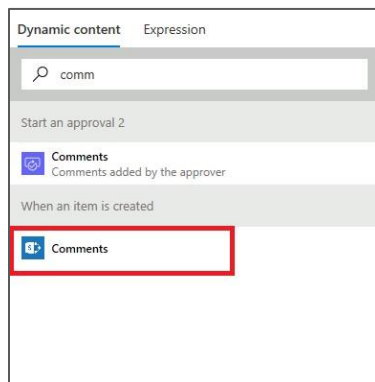


This is the unique lookup Id for the record that was created.

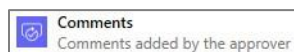
- m) In the **Approval Status** field select **Approved** from the dropdown



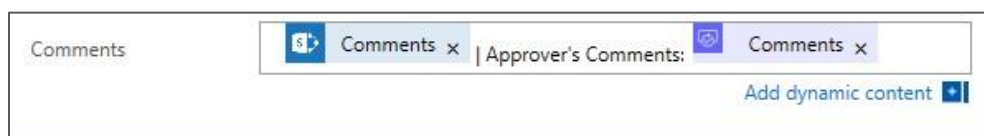
- n) In the Comments field, we want to preserve the earlier comments and append on the comments from the approver.
- o) Click on the **Comments** text box
- p) In the dynamic pane search for "**comments**"
- q) You'll see two results, pick the Comments variable from the "When a record is created" section (bottom one in the picture). This is the original comments that were in the list.



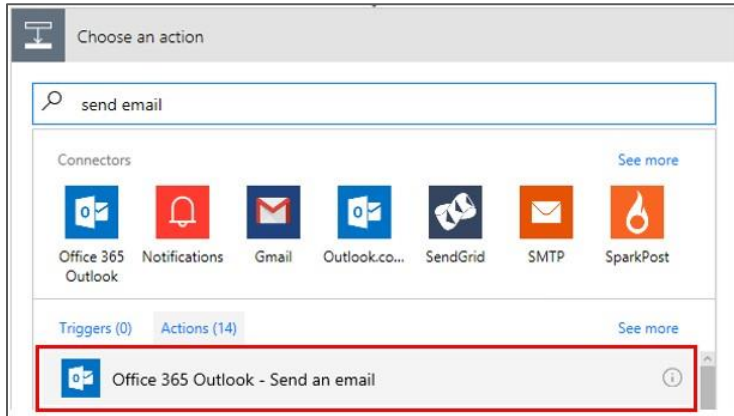
- r) Add "**| Approver's comments: "** (without quotes)
- s) Now add the other **Comments** from the **approver**



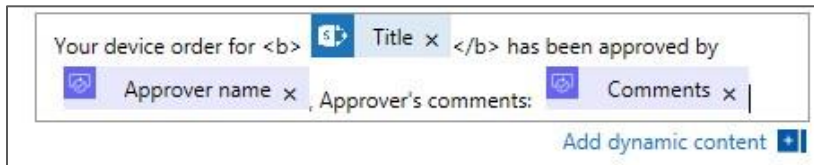
- t) This is the comments from the approver.
- u) The result should look like this:



10. Add an action to send an email from Office 365 back to the requestor letting them know their request was approved. You may want to include things like who approved the request and any comments from the approver.
- In the same **If yes** branch, below the update record action, click **Add an action**.
  - Search for "send email"
  - Select the action – Office 365 Outlook – Send an email

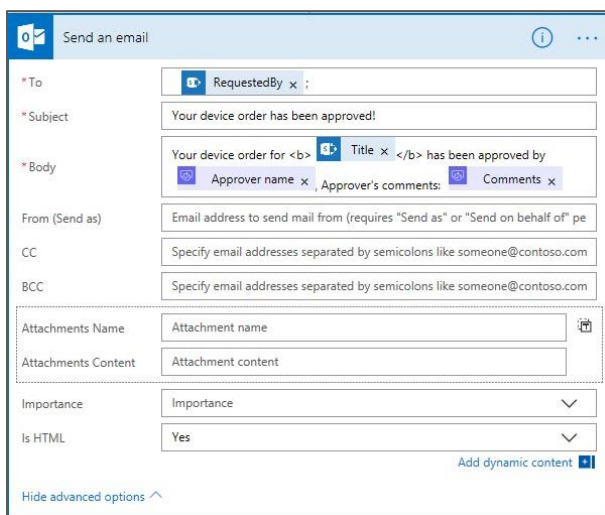


- Set the **To** field to: **Requested By** from the dynamic content pane (see bottom image)
- Set the **Subject** to: **"Your device order has been approved!"** (see bottom image)
- Set the **Body** to:



(The Comments above is the approver's comments)

- Select the **Show advanced options** link (see bottom image)
- Set **Is HTML** to: **Yes** (see bottom image)



## Create the Approved = No branch

Now that we have a branch created for if a device is approved, we need one for if a device is rejected

11. In the “If No” branch you can pretty much mimic what was done for If Yes.
12. Update the list in the SharePoint the same way. Just set the Approval Status to Rejected
  - a) In the If no branch, click Add an action.
  - b) Like **Task 3, Step 2** above, add an action for: **SharePoint – Update item**.
  - c) Configure the action as shown in the image below. The only difference from earlier is the **Approval Status** is set to **Rejected**.

The screenshot shows the 'Update item 2' configuration window. The 'Site Address' is 'Home - https://mod415834.sharepoint.com/sites/contoso'. The 'List Name' is 'DeviceOrder'. The 'Id' is 'ID'. The 'Title' is 'Device request for [Title] is rejected'. The 'ApprovalStatus Value' is 'Rejected'. The 'Comments' field is populated with 'Comments' and 'Approver's comments: Comments'.

13. Send an email to the requester that their request has been rejected
  - a) Again, include things like who rejected it, maybe their email if the requester has questions and any comments from the “approver” to let the requester know why their request was rejected
  - b) Create an email just like we did in Task 3, Step 3 above, the only differences are:
  - c) Update verbiage to rejected instead of accepted
  - d) The Approver's email was added to the email body ii. You can use the image below as a guide for the email configuration for the rejection email

The screenshot shows the 'Send an email 2' configuration window. The 'To' field is '[RequestedBy]'. The 'Subject' is 'Your device request was not approved!'. The 'Body' is 'Sorry, your request for device [Title] was NOT APPROVED by [Approver name] (email [Approver email]), REASON: [Comments]'. The 'From (Send as)' field is 'Email address to send mail from (requires "Send as" or "Send on behalf of" pe'. The 'CC' and 'BCC' fields are 'Specify email addresses separated by semicolons like someone@contoso.com'. The 'Attachments Name' is 'Attachment name'. The 'Attachments Content' is 'Attachment content'. The 'Importance' is 'Importance'. The 'Is HTML' is 'Yes'. The 'Add dynamic content' button is visible.

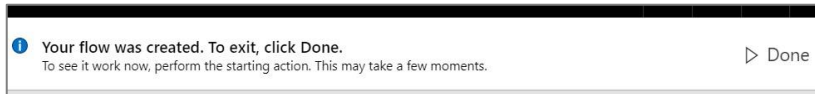
## Name and Save

Now that the entire flow has been created, go ahead and name and save the flow

14. Type a name for the Flow at the top. Let's call it – **Device approval request**



15. Click Create Flow



## Test your Flow

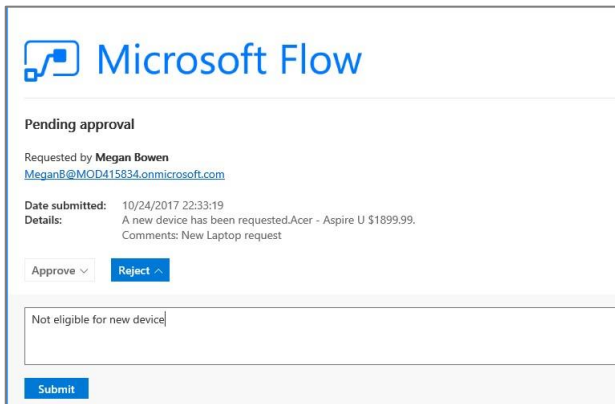
Now that the entire flow has been created, go ahead and test it. To test the flow, run the app that you created the PowerApps lab.

16. If you have not completed the PowerApps lab, you can use a pre-built app package **DeviceOrderApp-final-SPO.msapp**.
- Sign-in at <http://web.powerapps.com>
  - Select **Apps** in the left hand menu
  - Select **Create an app** in the top right of the screen
  - Select **Open -> Browse**
  - Navigate to the folder with the lab package and open: **DeviceOrderApp-final-SPO.msapp**
  - After the app is opened in the studio, change the SharePoint connection to point to your list i. **Select View -> Data sources**
    - Click the three dots next to the **SharePoint connection** and select **Remove**
    - Select **+Add data source** and add a connection to your SharePoint list, see Exercise 2, task 2 for detailed instructions.
  - Select **File -> Save As** and save the app to the cloud under your tenant account.

## Test steps

- Run the app, select a few devices and click Compare
- Create a device request. Make sure to change the approver email to your own email for test purposes, you don't want a real approver request going to your manager.
- Watch for the email in your Inbox, or the notification in the Flow mobile app
- Approve the request (add some comments)
- Look for the return email to the requester
- Create another device request
- This time, reject the request
- Look for the return email to the requester





**Microsoft Flow**

**Pending approval**

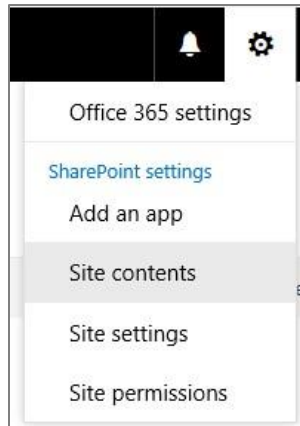
Requested by **Megan Bowen**  
[MeganB@MOD415834.onmicrosoft.com](mailto:MeganB@MOD415834.onmicrosoft.com)

**Date submitted:** 10/24/2017 22:33:19  
**Details:** A new device has been requested. Acer - Aspire U \$1899.99.  
Comments: New Laptop request

Approve

Not eligible for new device

25. If you look at the **DeviceOrder** SharePoint list, you should see the approval status as well as any comments from the approver added to the device request
- Go to your SharePoint URL
  - On the top right-hand corner, select the gear icon and then select **Site contents** from the menu.



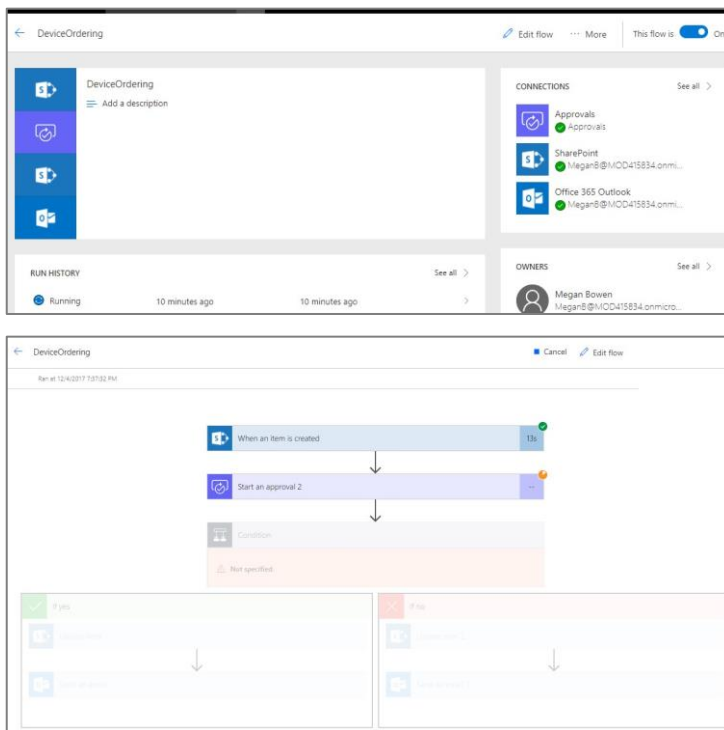
- Click on the **DeviceOrder** list from the left-hand navigation section.
- Check the row for the device your just requested and approved – the **Approval Status** should say “Rejected” and the **Comments** field should include the requestor’s and approver’s comments

Title	Price	RequestedBy	RequestedDate	Approver	ApprovalStatus	Comments
Acer - Aspire U	\$1,899.99	MeganB@MOD415834.c	10/24/2017	v-harrig@microsoft.com	New	New Laptop
Device request for New device request for Acer - Aspire U is rejected	\$1,899.99	MeganB@MOD415834.c		DiegoS@MOD415834.or	Rejected	New Laptop request(Approver's comments: Not eligible for new device)
Acer - Aspire M	\$699.99	MeganB@MOD415834.c		DiegoS@MOD415834.or	New	New Laptop Request

## View the flow dashboard

On the flow site, select My Flows and click on the flow you just created.

- You can view the dashboard that will show a run history along with additional details such as the connections the flow and the owners. You can use this dashboard to view details on any specific run, as well as manage owners that will have access to edit the flow.
- Your flow will be marked as “Running” since it is waiting for the approver to approve the request. Once the request is approved, the flow will complete running and be marked as “Succeeded”.



### Visit the flow Approvals Center on the web and mobile

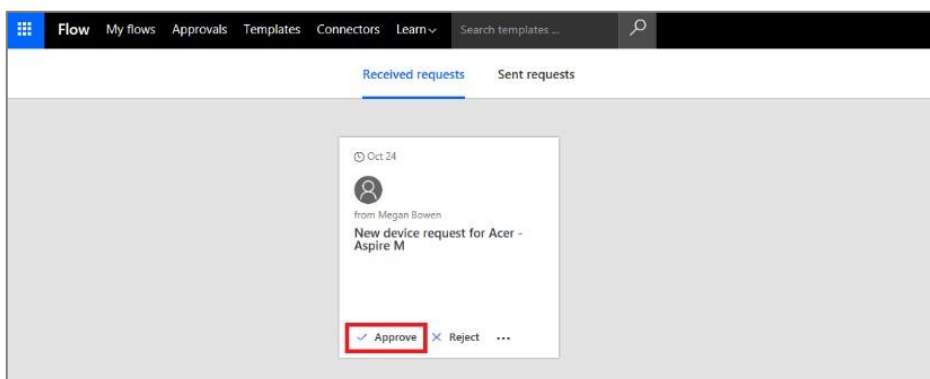
Use the Device Ordering App to submit a few more approval requests.

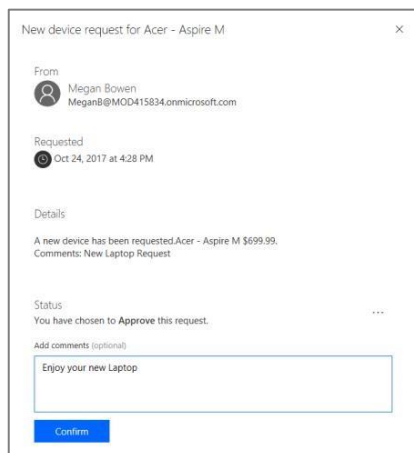
28. Go to the flow portal, sign-in and select **Approvals** in the top navigation bar.



29. Notice that all pending approval requests are visible.

30. Go ahead and approve or reject a request from this screen. The details are displayed in the right pane where you can **enter comments** and **Confirm**.



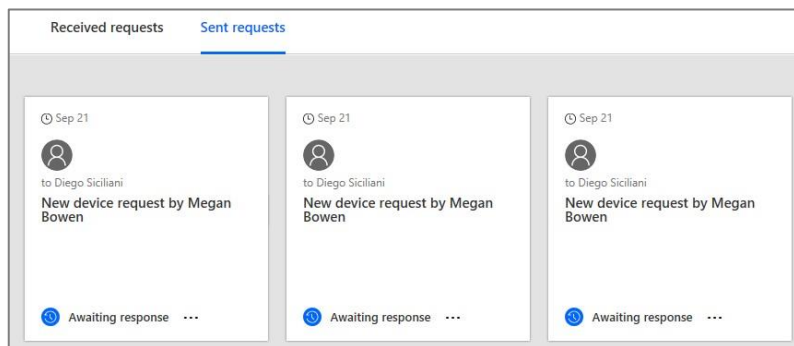


- a) The request will no longer be visible as it has been processed.

**Note:** All approval requests sent to the current logged on user will be visible in the Approvals Center. This includes approvals sent from any app or flow.

31. You can also use the Approvals Center to view all requests that you have sent and are Awaiting response from the approver.

- a) 1. Select the Sent requests tab at the top to view all requests that you have sent.



32. Open the **Microsoft Flow mobile app** on your mobile device.
33. Login and switch to the environment where the flow is deployed.
34. Select **Approvals** in the top right and view all pending approvals. You can quickly approve or reject these pending requests from this screen.
35. Also, if you have push notifications turned on and are signed into the Flow mobile app -- if you receive a new Approval request it will trigger a push notification on your phone. You can give this a shot.

Congratulations! You have successfully completed the device ordering lab. You created a PowerApps app, connected it to a SharePoint list to store device requests, and used Microsoft Flow to trigger an approval request.