Lab 2. Approvals (Part 1) - Travel Approval

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Learning objectives: Approvals and conditions.

Duration: 20 minutes.

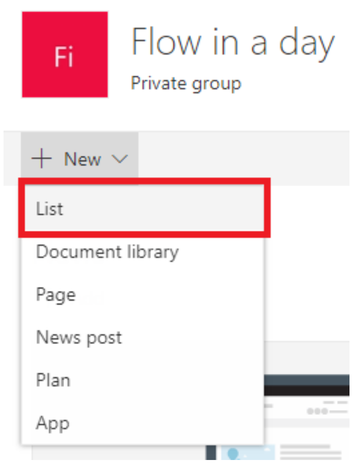
Scenario: A user stores travel information in a SharePoint list named **Travels**. When a new travel request is created, a flow is triggered and asks a manager to Approve/Reject.

Prerequisites: Each student must have a dedicated custom SharePoint list named **Travels_<name>.** The list must have three fields: **Title**, **Amount** (currency), and **Status** (single line of text). The student will create this list in the first task of this lab.

Remarks: the first time approval is created in an environment, the system provisions the infrastructure (approval system tables are made in the internal database, which is Dataverse) needed for the approvals. Therefore, the first approval may take some time to appear.

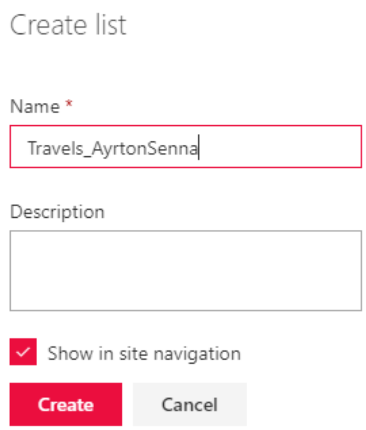
Task 2.1: Create a SharePoint list

1. Create your own custom SharePoint list using the following steps:
   a. Go to your SharePoint site. The site URL is:**<tenant URL>sites/Flowinaday.**
   b. Click **New** > **List**:

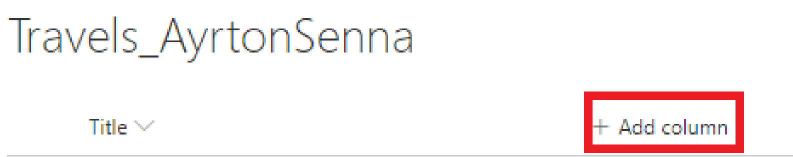


   c. In the **Name** text box type something similar to, **Travels_<YourFirstnameYourLastname>.** Ensure the list name is unique.

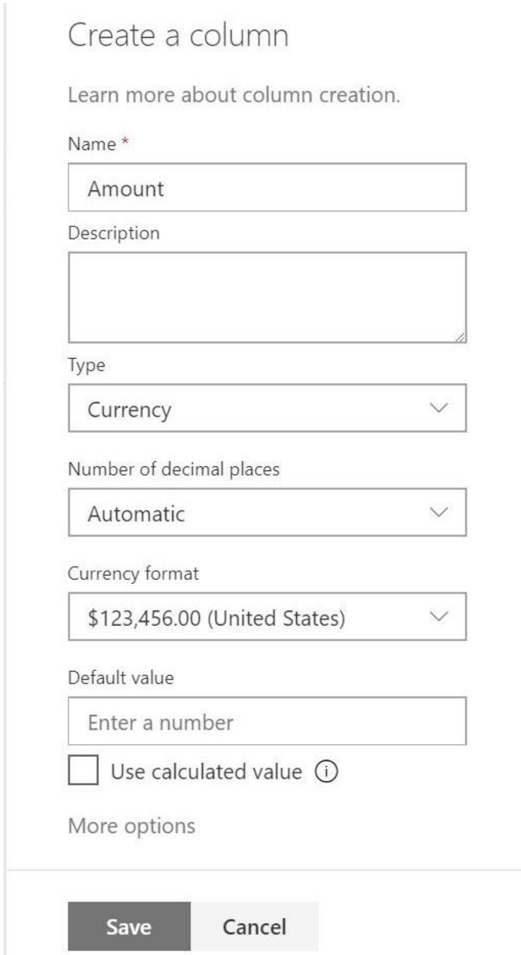
d. Click **Create**.



2. Add two columns, **Amount**, and **Status** using the following steps:
   a. Click **Add column** > **Currency**.



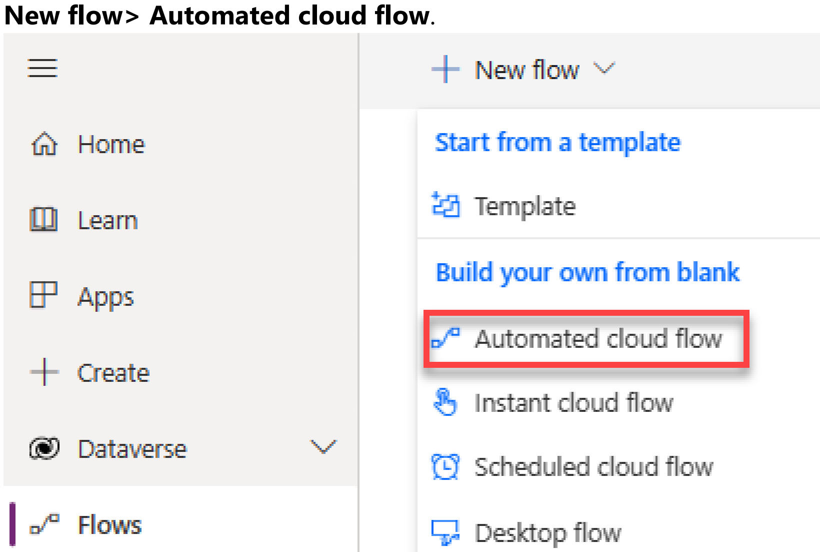
   b. Provide the following information, and then click **Save**.



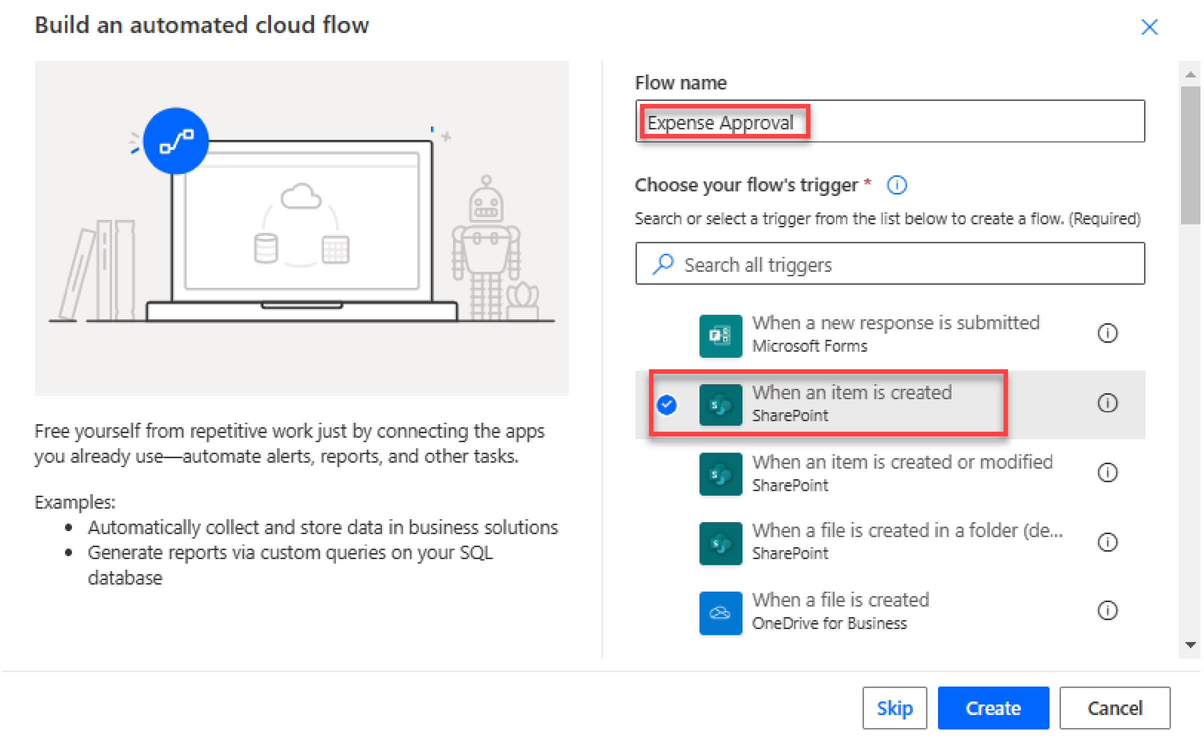
3. Add a **Single line of text** column named **Status**.

Task 2.2: Create an approval flow

1. Create a new Automated flow triggered when an item is created in a SharePoint list, using the following steps:
    a. **New flow> Automated cloud flow**.

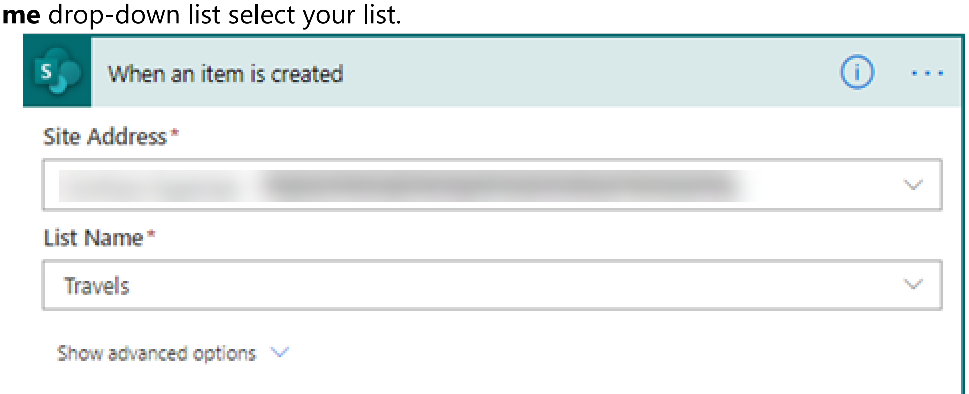


b. In the **Flow name** text box, type **Expense Approval** and select the SharePoint trigger **When an item is created.**

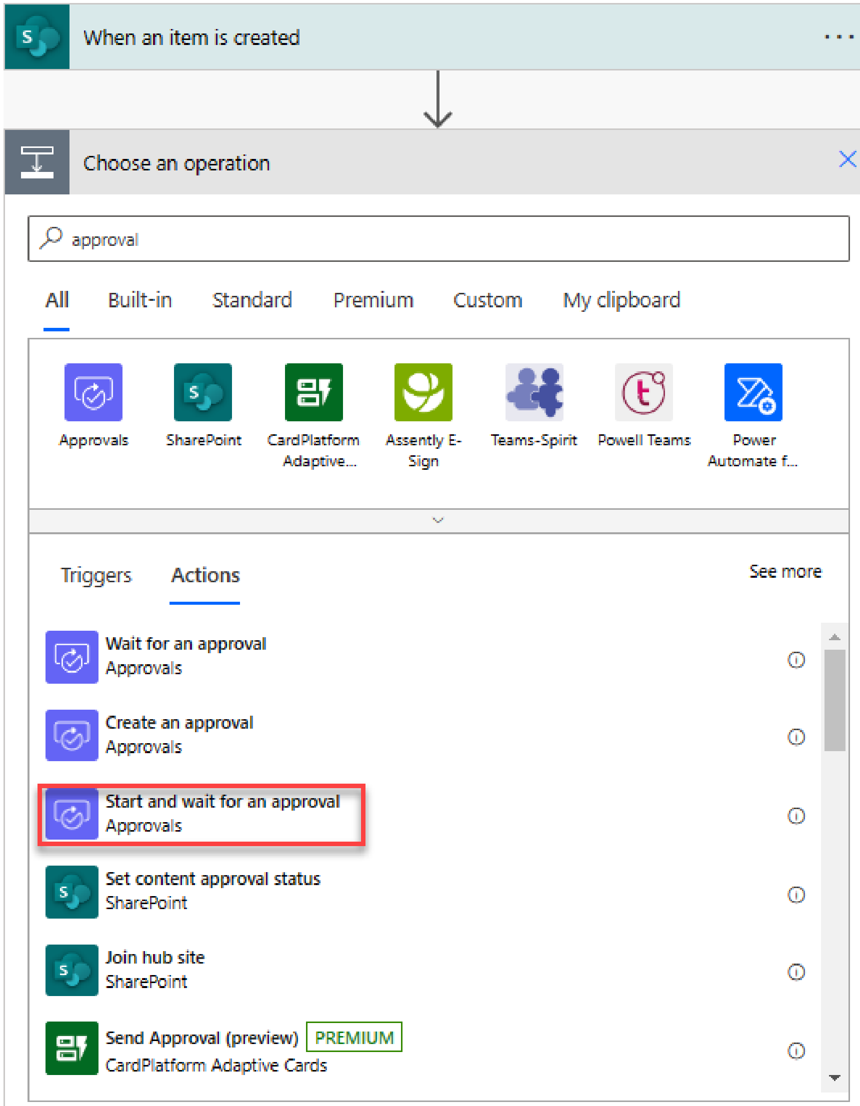


c. Click **Create**.
Note: If you have not connected to Office 365, SharePoint, or Approvals before, you will need to provide your credentials to create connections to these services.

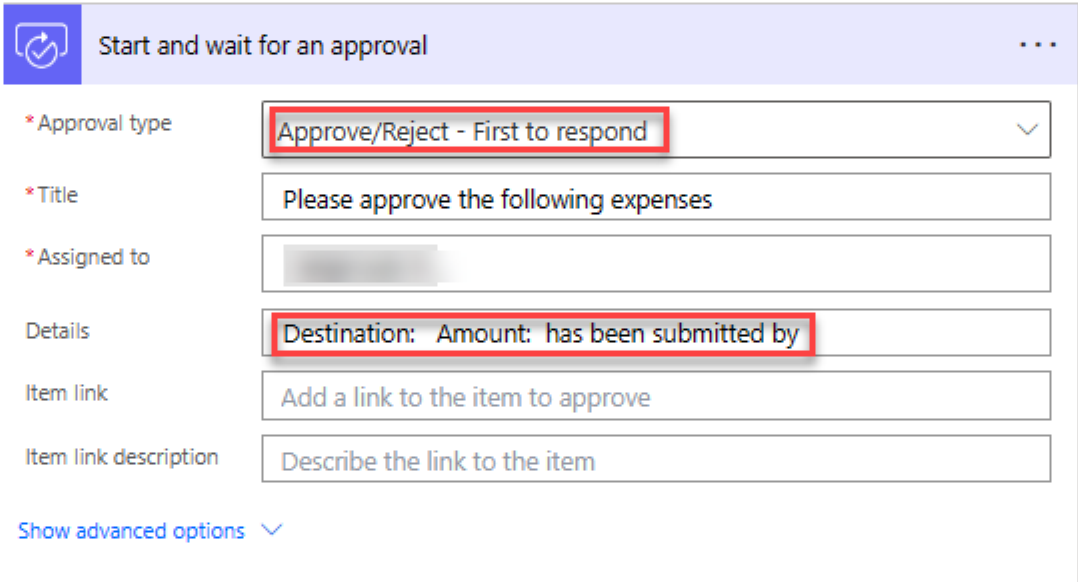
d. From the **Site Address** drop-down list, select your SharePoint site, and then from the **List Name** drop-down list select your list.



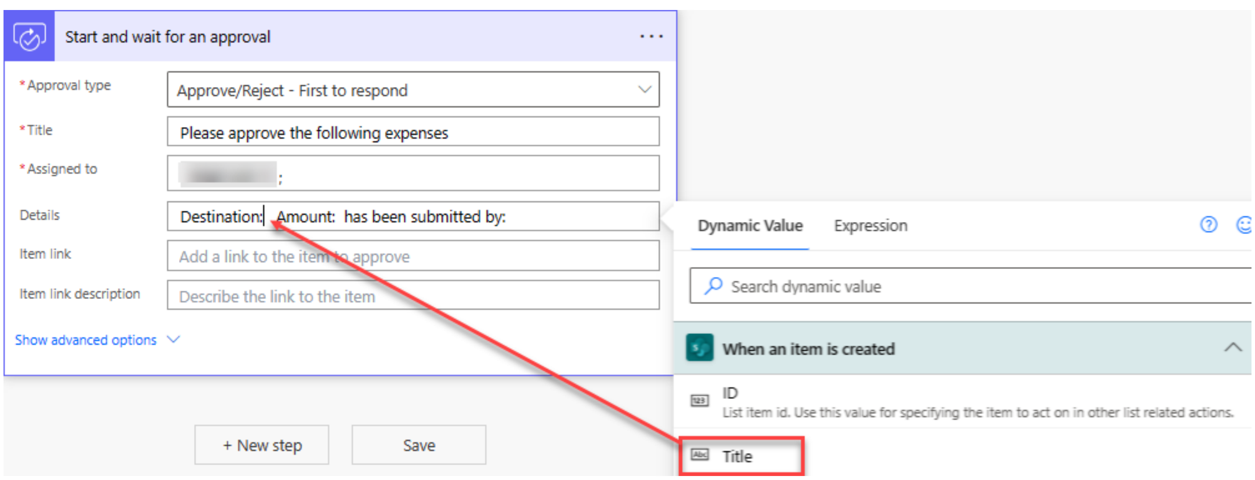
2. Add am approvals action
   a. **New step** > **Start and wait for an approval**.
   Hint: search for approval.



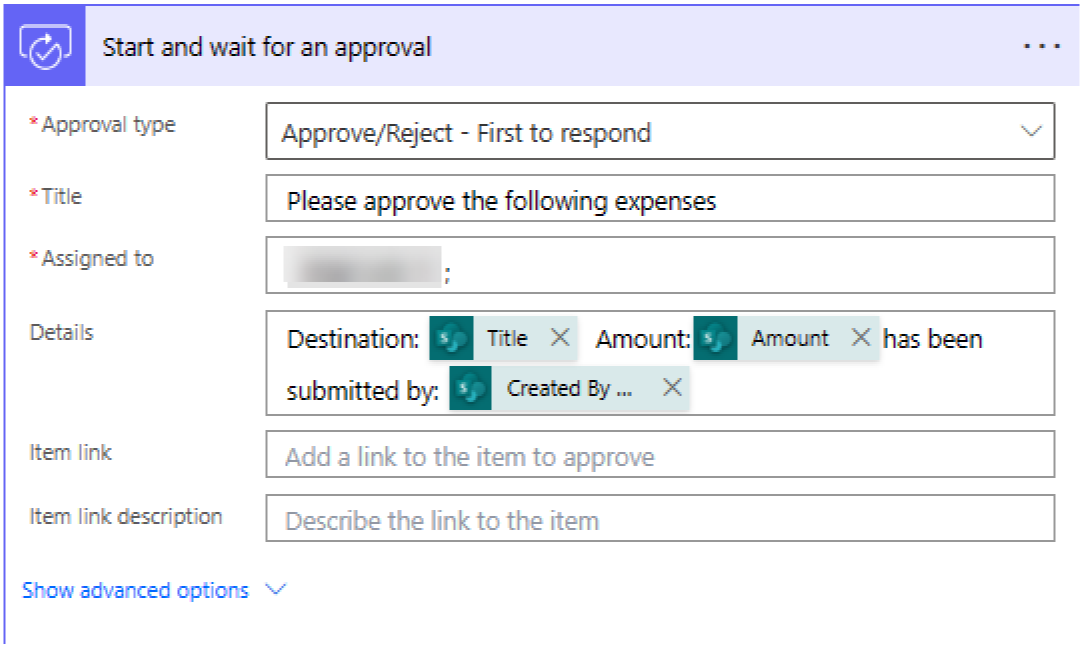
b. **Approval type** > **Approve/Reject -First to respond**
c. **Title >** type **Please approve the following expense**
d. **Assigned to** > type the e-mail address (the one provided by the trainer in the training tenant)
e. **Details** > type the text as per the following screenshot:



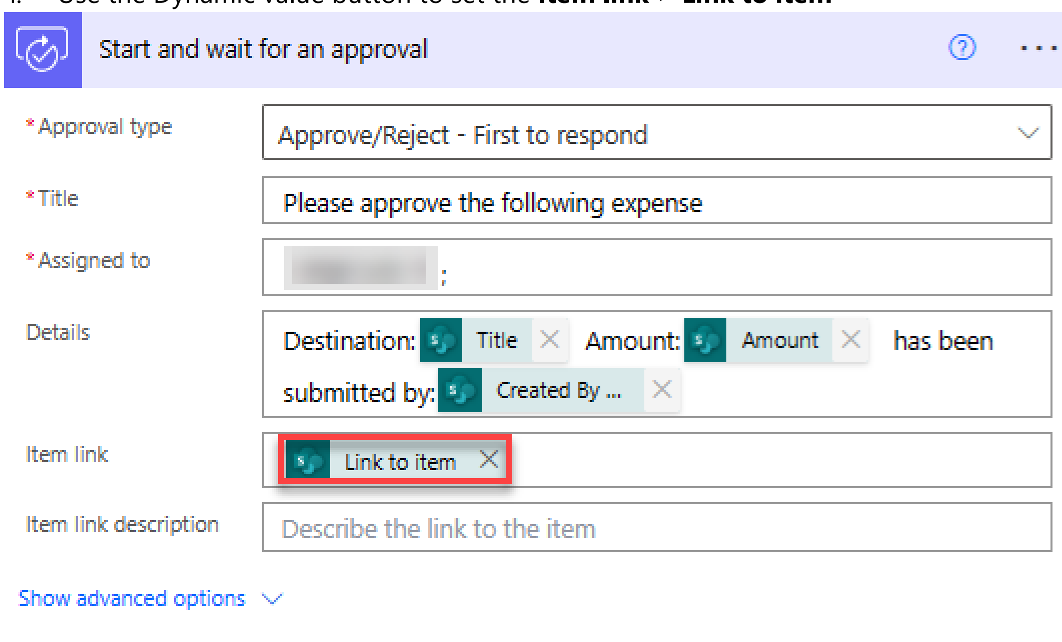
f. To define the destination, place the cursor to the right of **Destination;** in the action panel, click the **Add a dynamic value** button.
g. Scroll down to dialog and select **Title** from the trigger **When an item is created**:



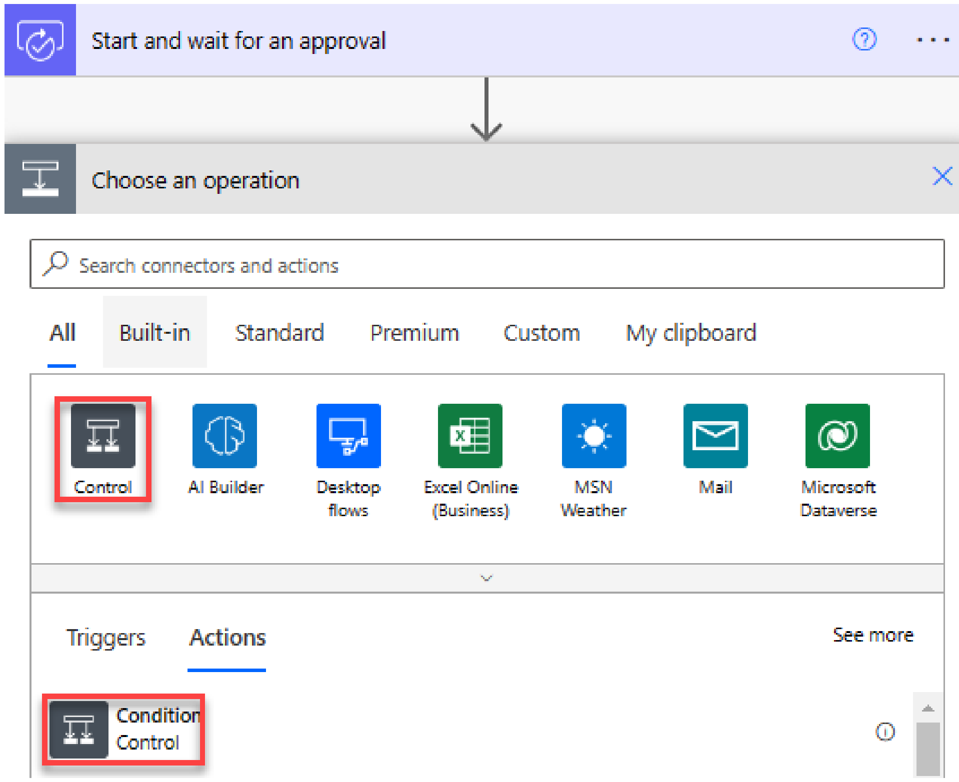
h. Repeat the step above to select **Amount** and for the submitter: **Created By Display Name** properties.



i. Use the Dynamic value button to set the **Item link** > **Link to item**

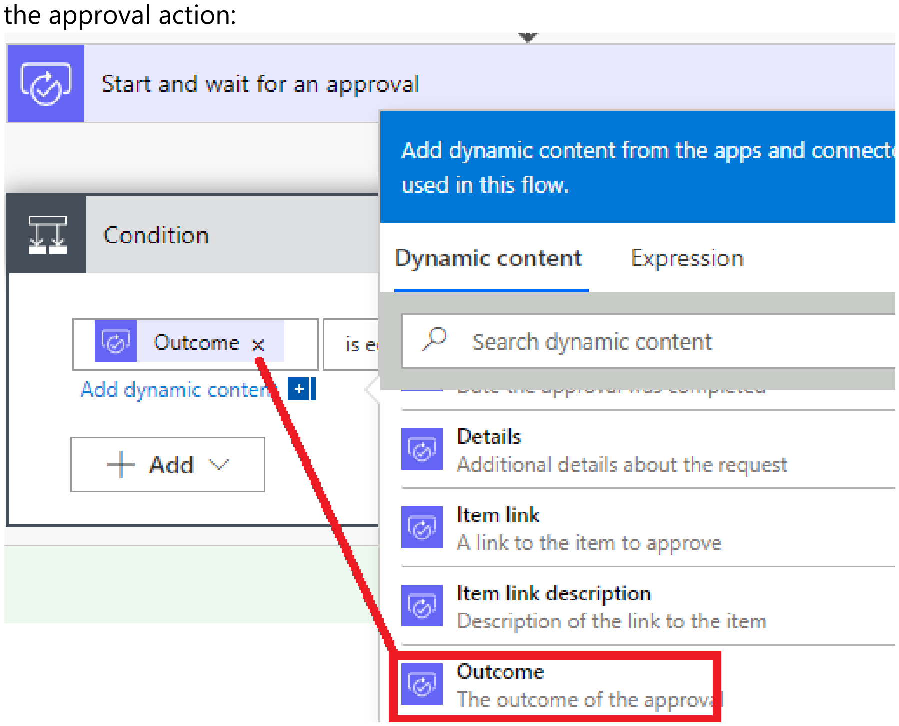


3. Add a condition action using the following steps:
   a. After the **Start and wait for approval** action, select **New step** > **Condition control**

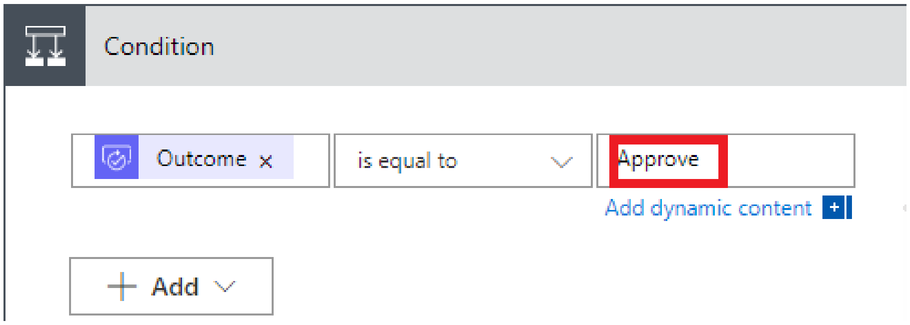


A condition is added to the flow containing three boxes, **Choose a value**, **is equal to** and **Choose a value**.

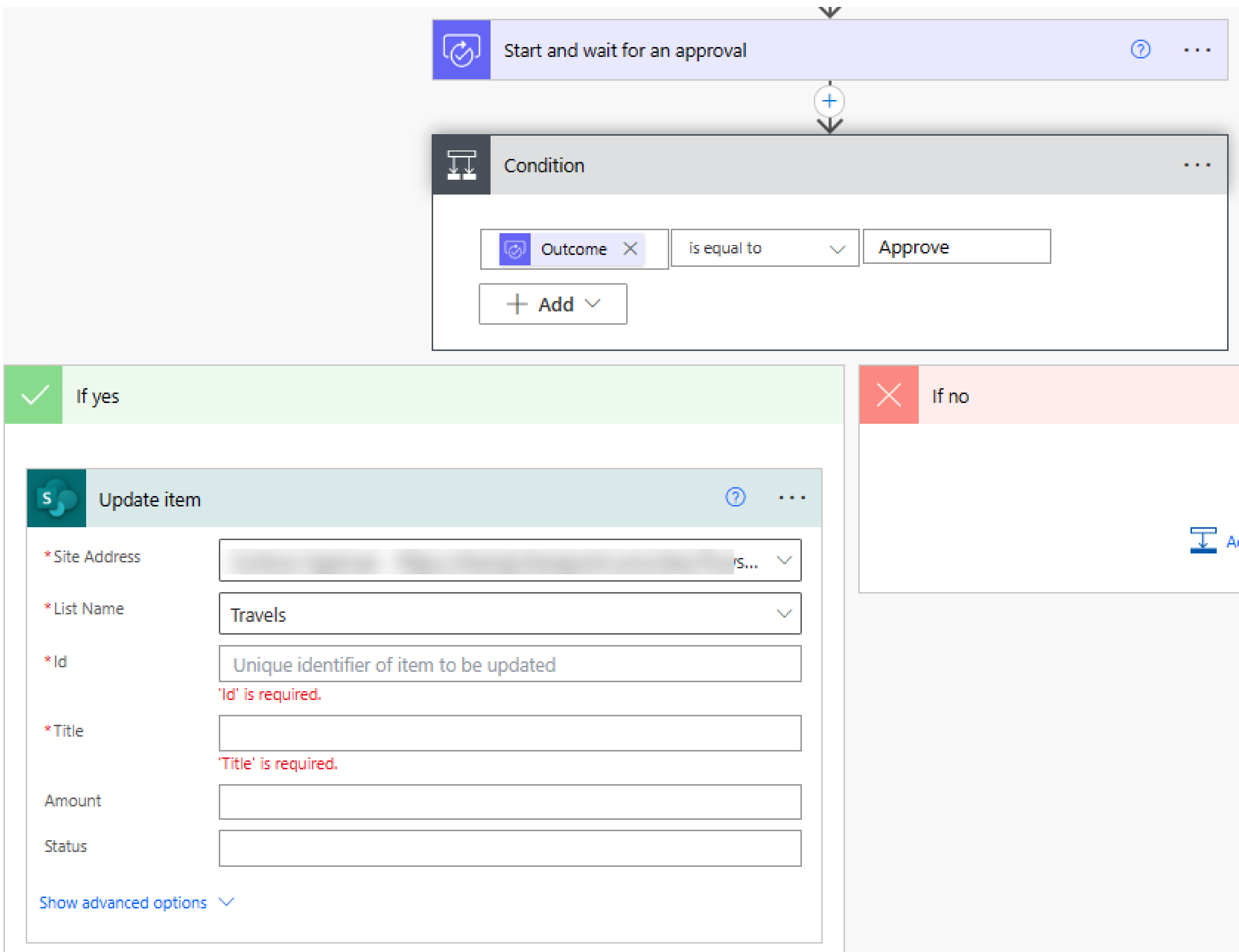
b. In the left **Choose a value** text box, use the Dynamic content tab to select **Outcome** from the approval action:



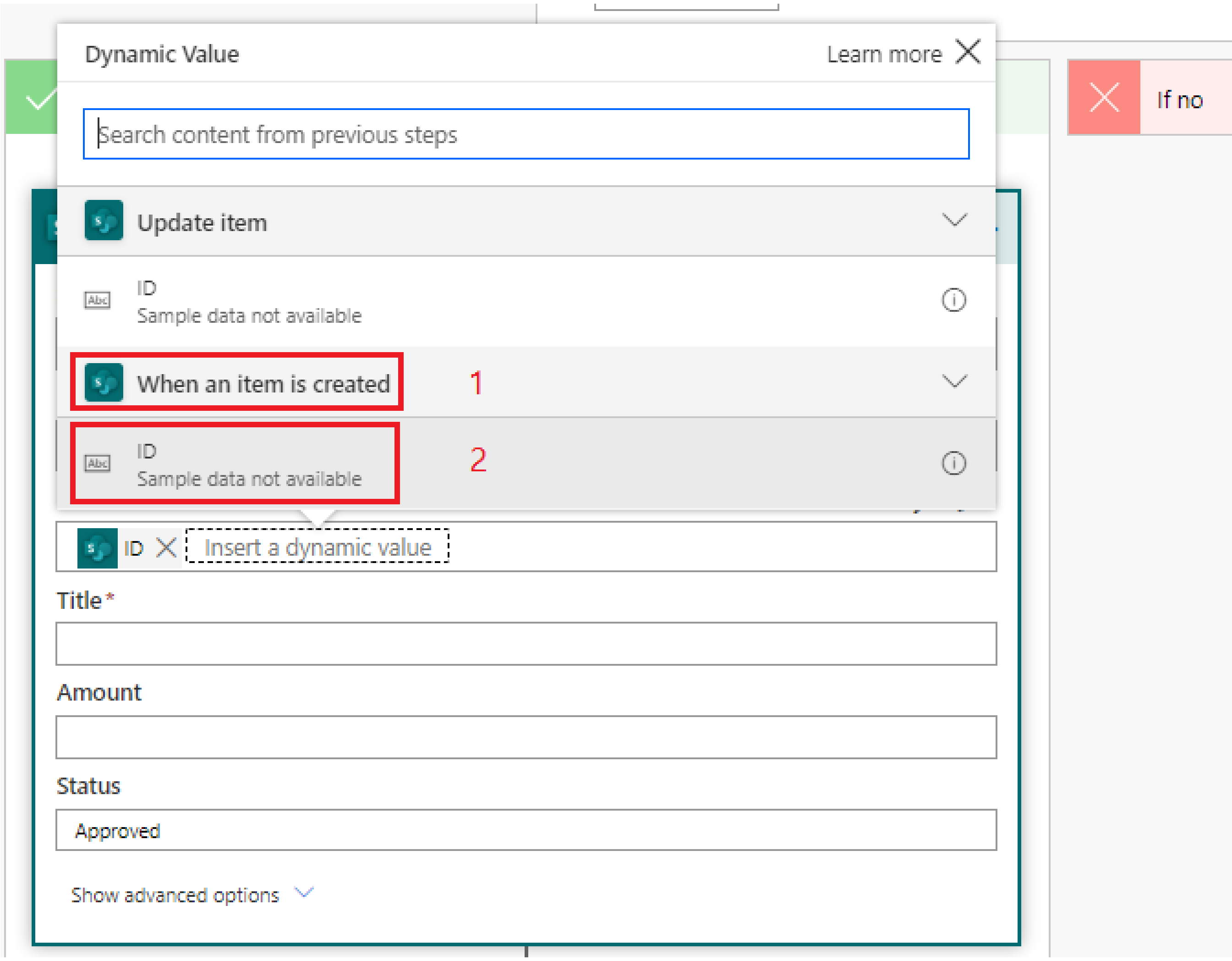
c. In the right **Choose a value** text box, type **Approve**: (don't type Approved)



4. Add a SharePoint Update item action to the *If yes* branch of the condition using the following steps:
    a. In the **if yes** branch, click **Add an action**, and select the SharePoint **Update item** action:

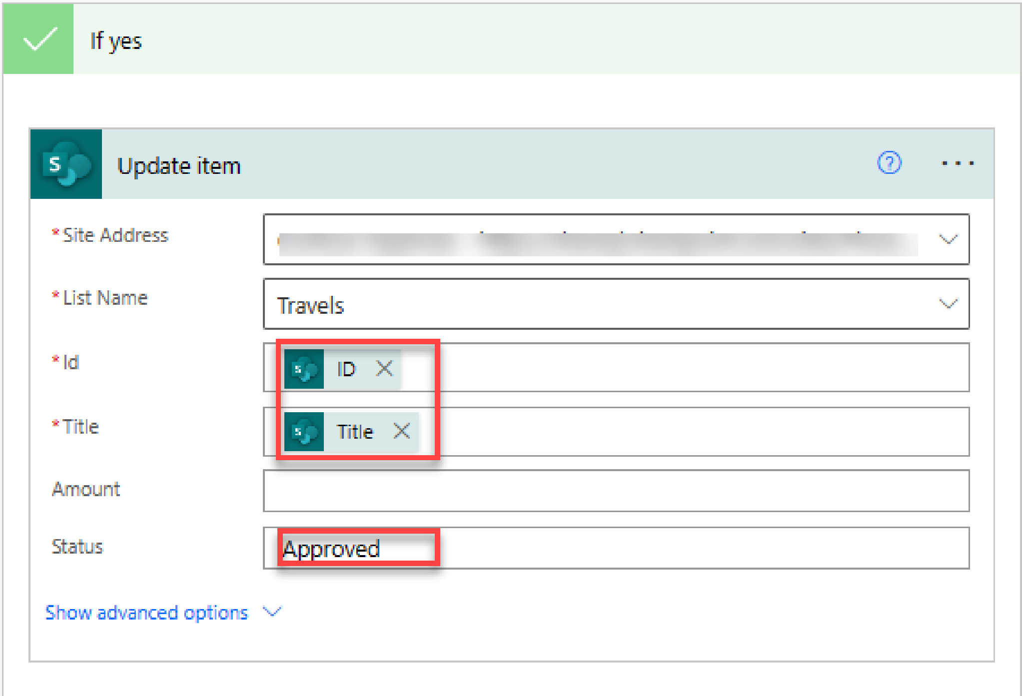


    b. Use the **dynamic value** tab to set **Id** > **ID** from the trigger:

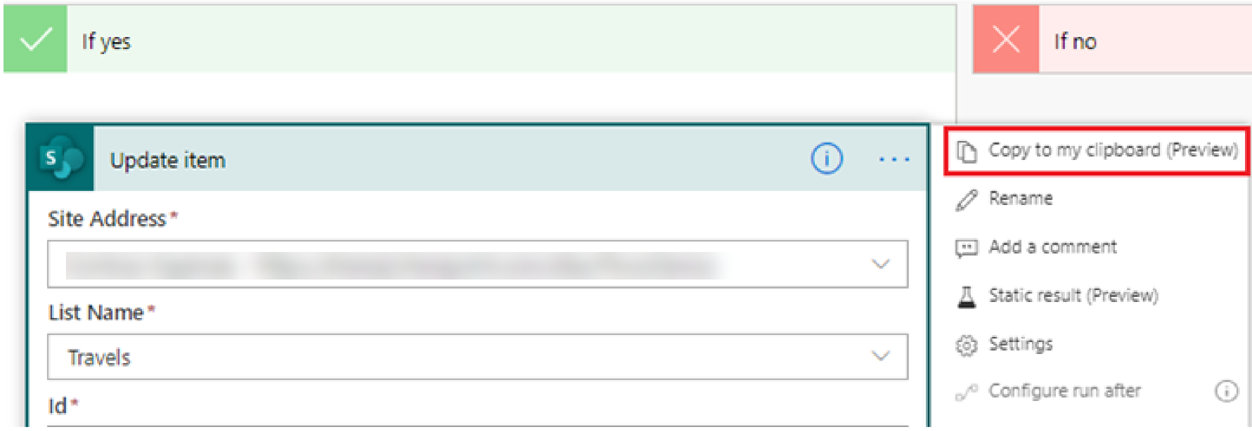


c. Use the **Dynamic value** button to set **Title** > **Title** from the trigger.

d. **Status** > type **Approved:**

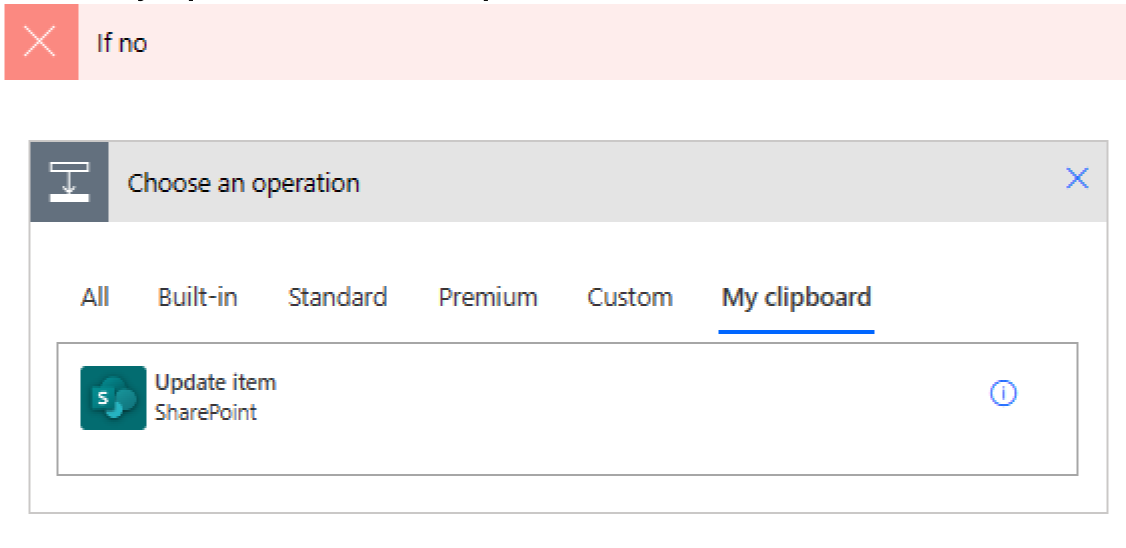


5. Complete the *If no* branch of the condition using as a starting point the SharePoint action from the If Yes branch.
   a. On the **Update item** heading, click the three dots and select **Copy to my clipboard**.

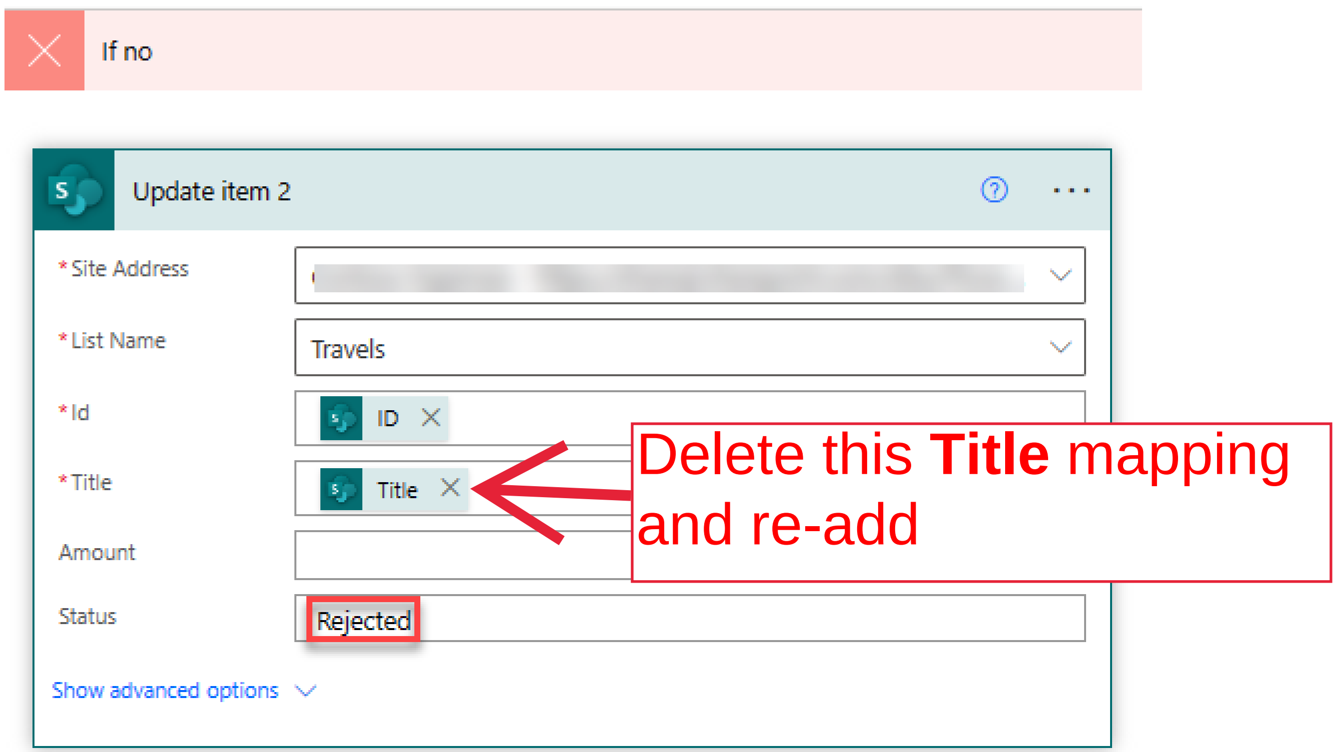


   b. In the **If no** branch, click **Add an action**.

c. Click the **My clipboard** tab, and select **Update item**.

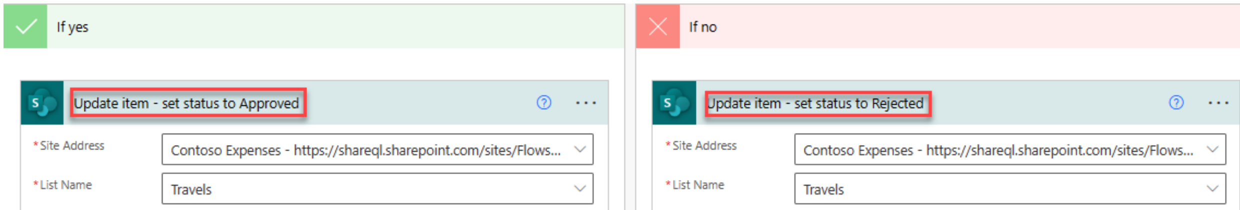


d. Change **Status** to **Rejected**:

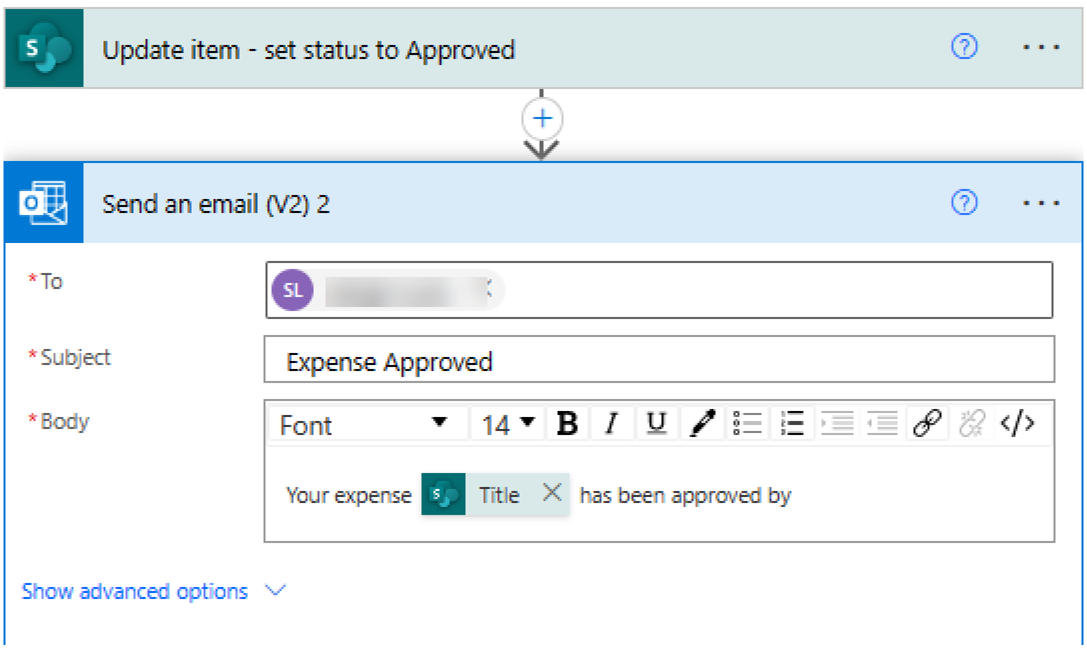


Rename the condition and the two update item actions as shown in the following screenshot: It is recommended to keep the default action name and to append additional details; if the original action name is **Update item**, then rename it “**Update item – set status to approved**” or “**Update item – set status to rejected**”:

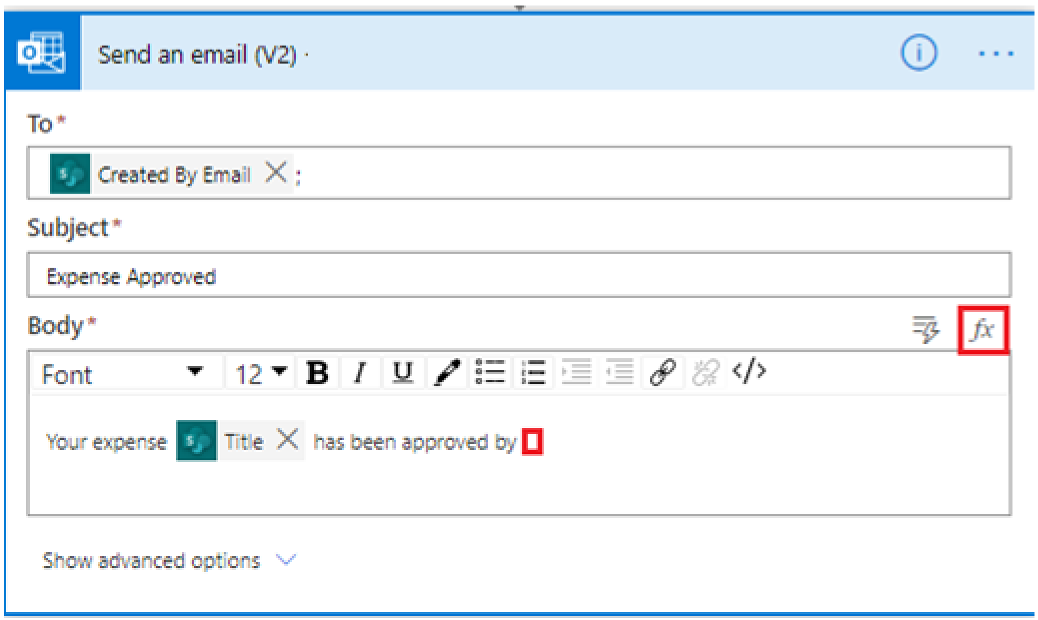
e.



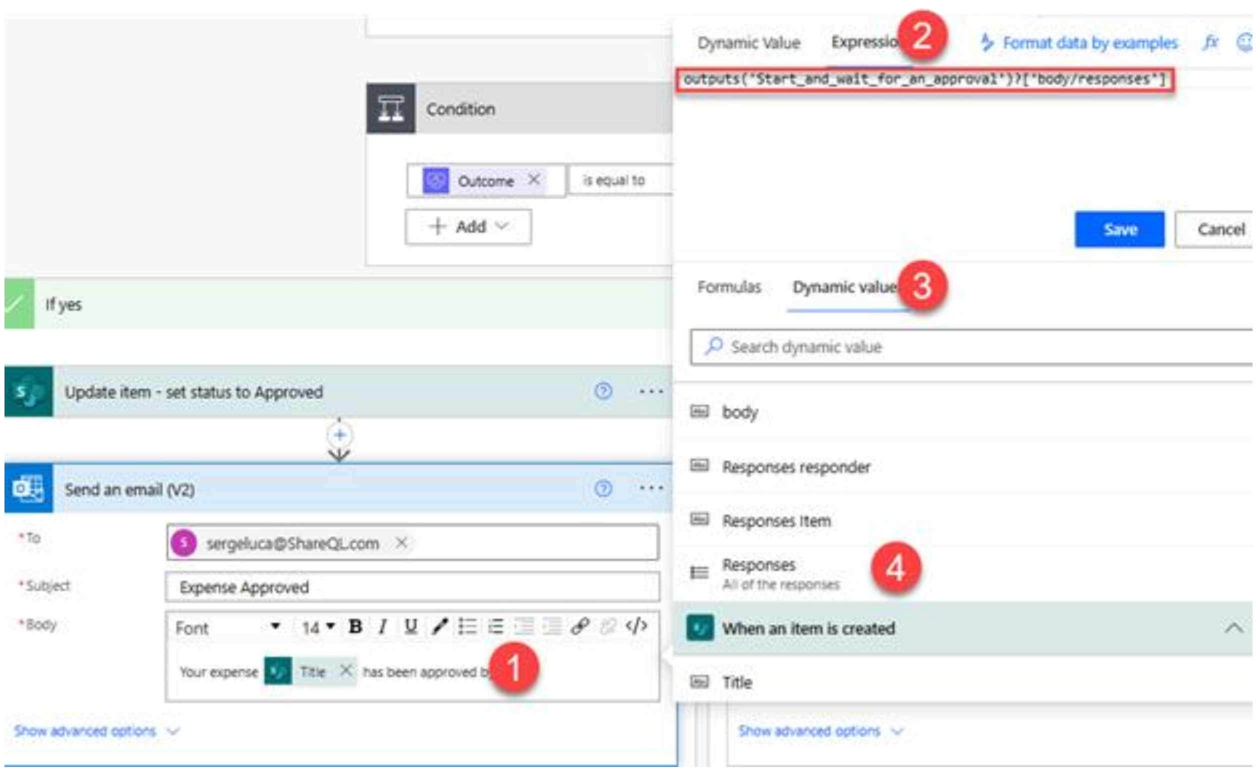
6. Send an e-mail if the expense is approved or rejected by using the following steps:
    a. In the **If Yes** branch, **Add an action** > **Send an e-mail (V2)** action (Office 365 Outlook).
    b. Complete like the following screenshot (include the Title field from the trigger)



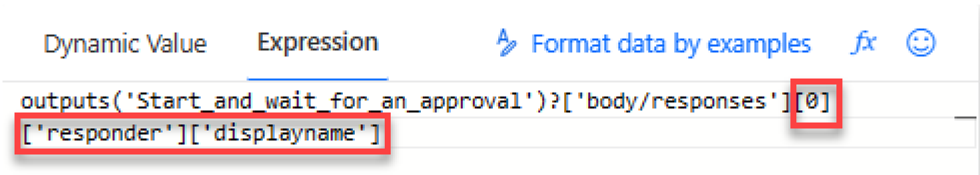
    Rename the action name.
    c. Place the cursor to the right of **approved by**; in the dialog pane, click the **Add an expression** button,



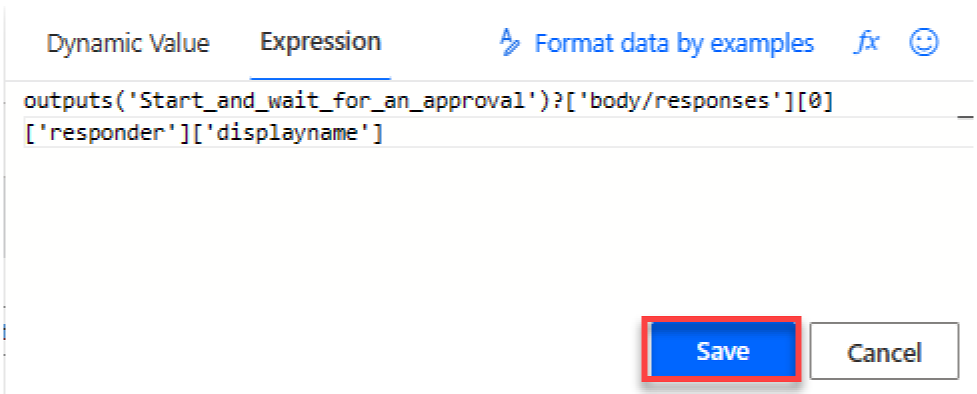
d. You will now add the name of the approver, and you will have to rely on code (expression) that we will fully explain in a subsequent lab; 1° move the cursor next to approved by, 2 °click **Expression**, 3° **Dynamic values** , 4° select **Responses** (click see more if you don't see Responses) . This will generate an expression as illustrated here:



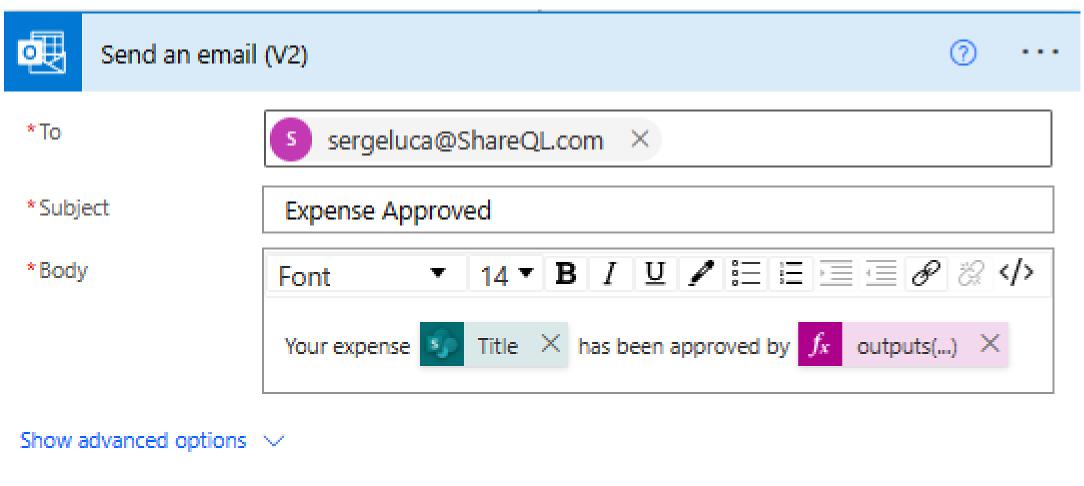
But you still need to add some code to this expression:



...and click **Save**:

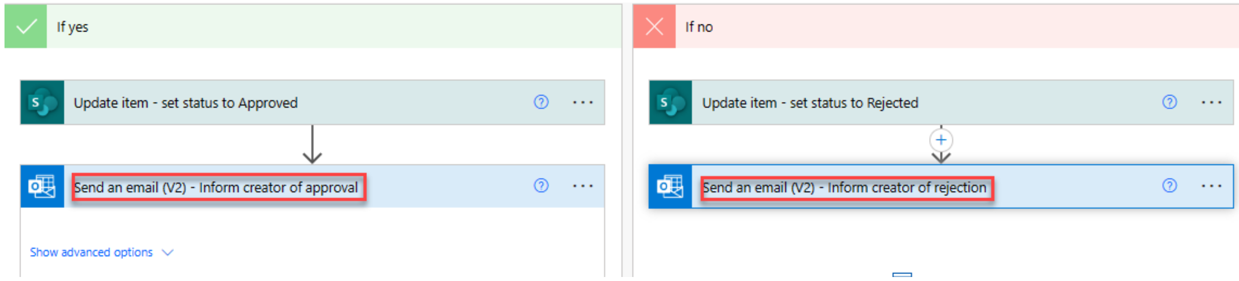


Your **Send an e-mail** action should look like the following screenshot.

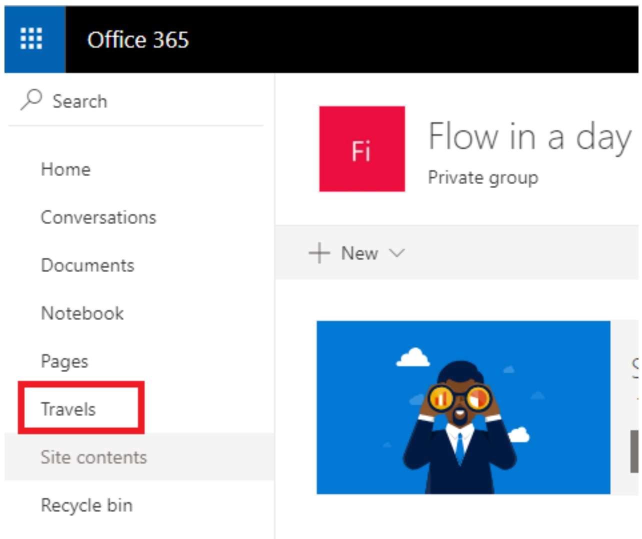


e. Update the "Send an e-mail action in the other branch with this expression.

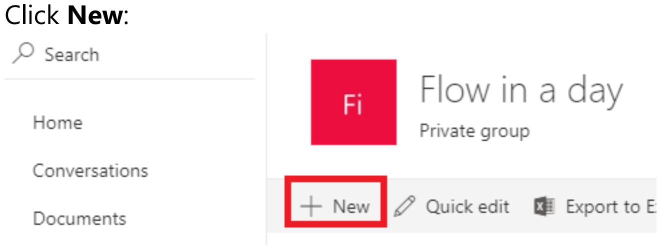
f. Rename the **Send an e-mail** actions in both branches as illustrated here:



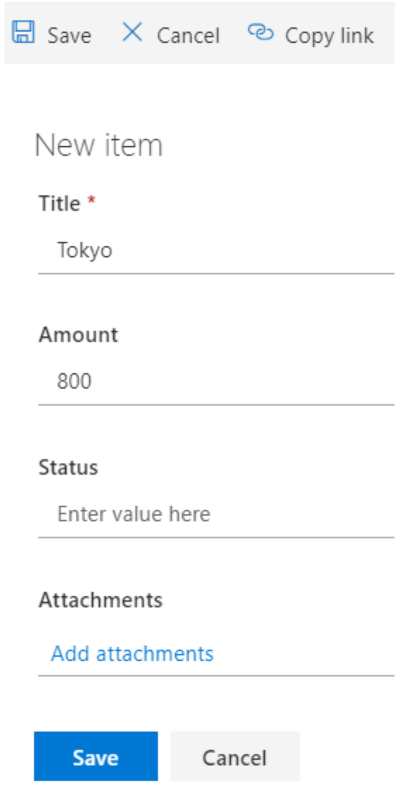
7. Save the flow.
8. Test the flow by adding an expense item to the SharePoint list using the following steps:
   a. Navigate to your SharePoint list, for example, by clicking on the list name on the Quick Launch bar.



   b. Click **New**:

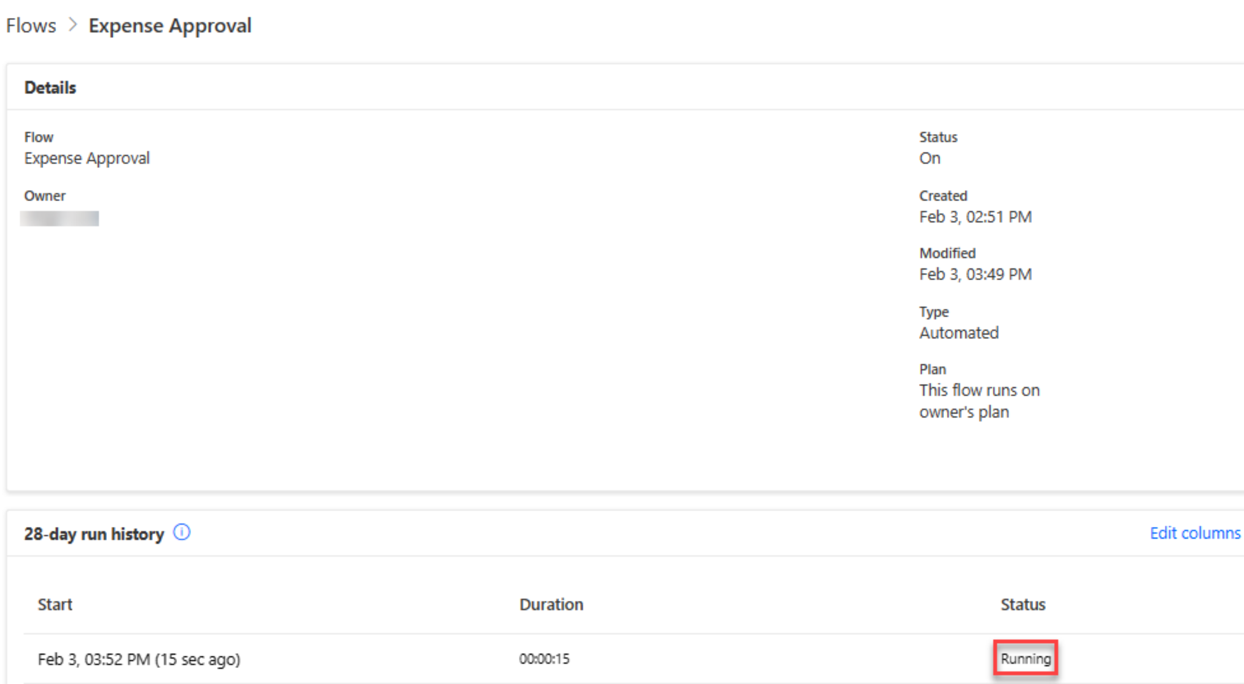


c. Complete the form similar to the following screenshot (keep the **Status** field empty):

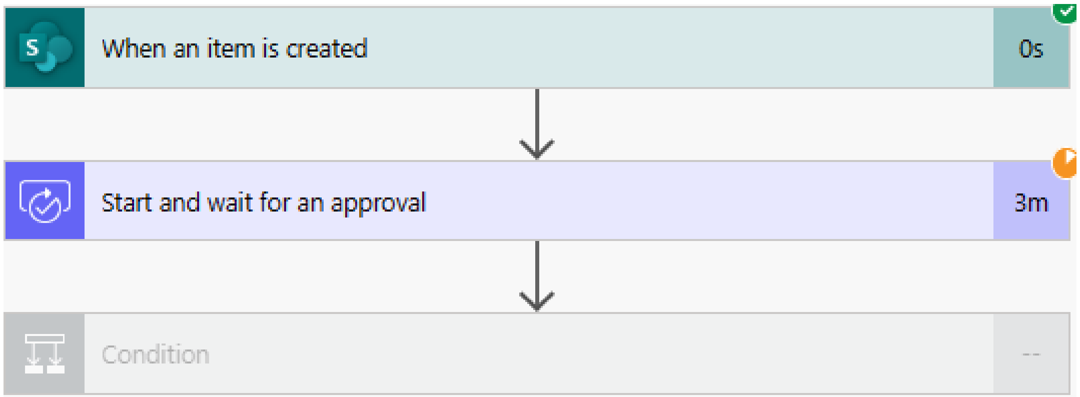


d. Save the new record, which will automatically trigger the flow.

e. Check the flow status. It should be **running**:

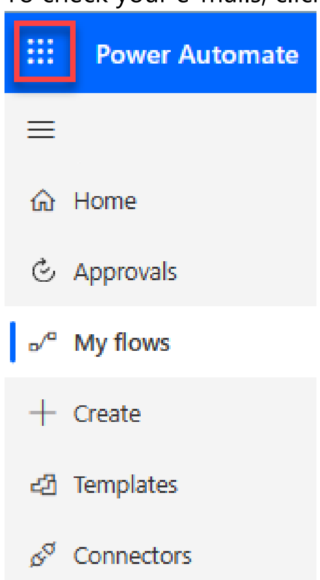


f. Click the running flow to see the progress of this instance of the flow:

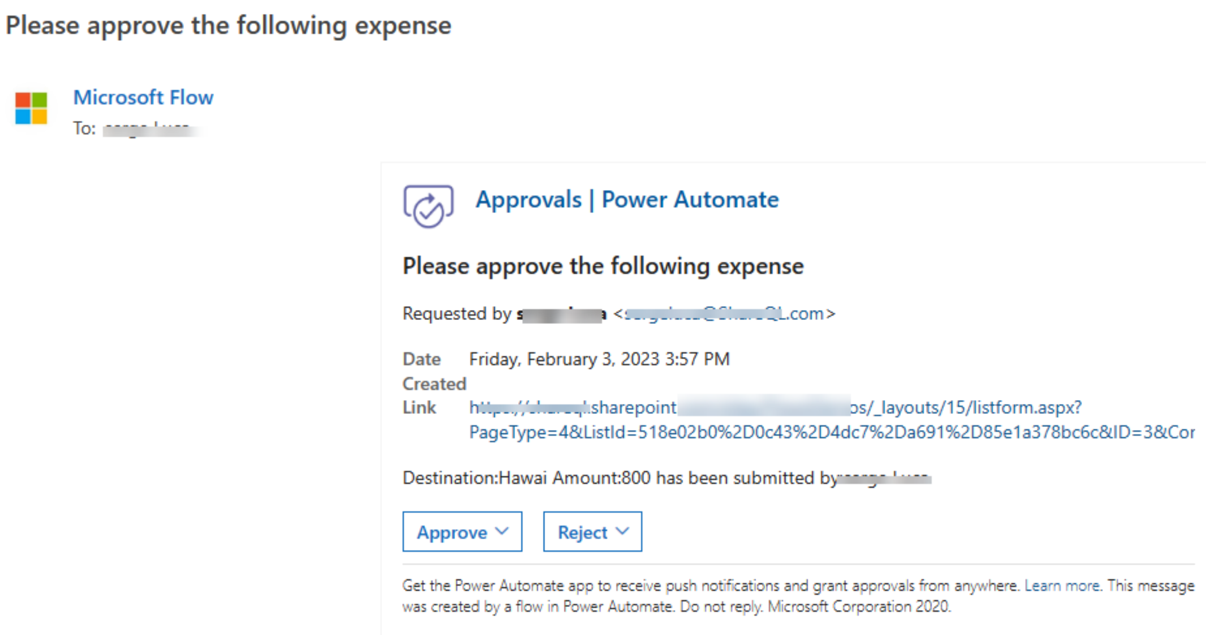


In this screenshot, the flow is waiting for approval. Approvals send an e-mail to the person(s) in charge of the approval.

g. Check your e-mail to display your approval e-mail:
   i. To check your e-mails, click the app launcher (the waffle).

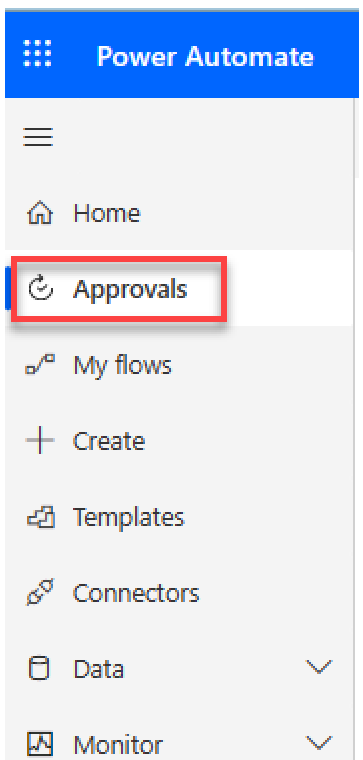


   ii. In the list of Apps, right-click **Outlook**, and select **Open in new tab**.
   iii. In the Focused tab or the Other tab you should see your Flow approval e-mail:

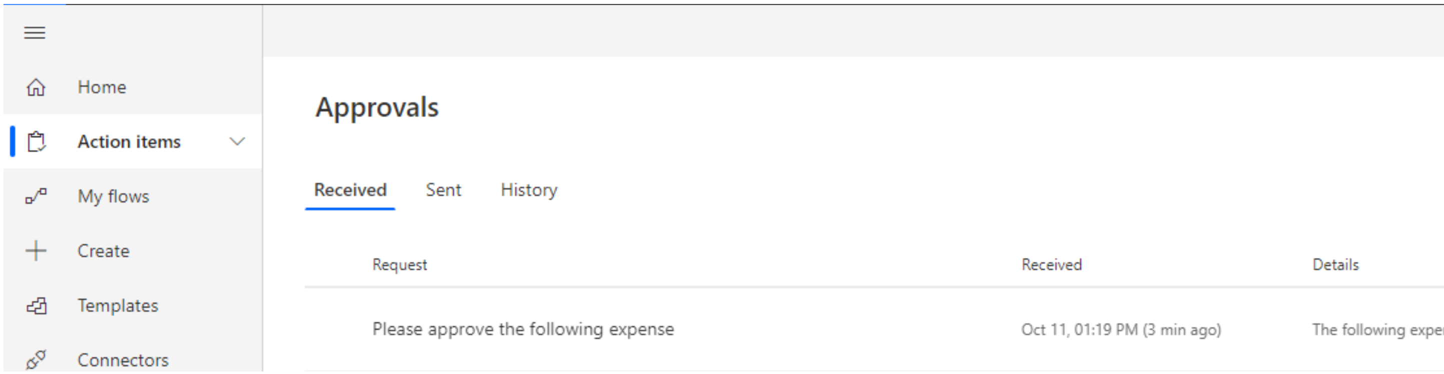


h. Approvers can also find the pending approvals in the **Approvals center**:

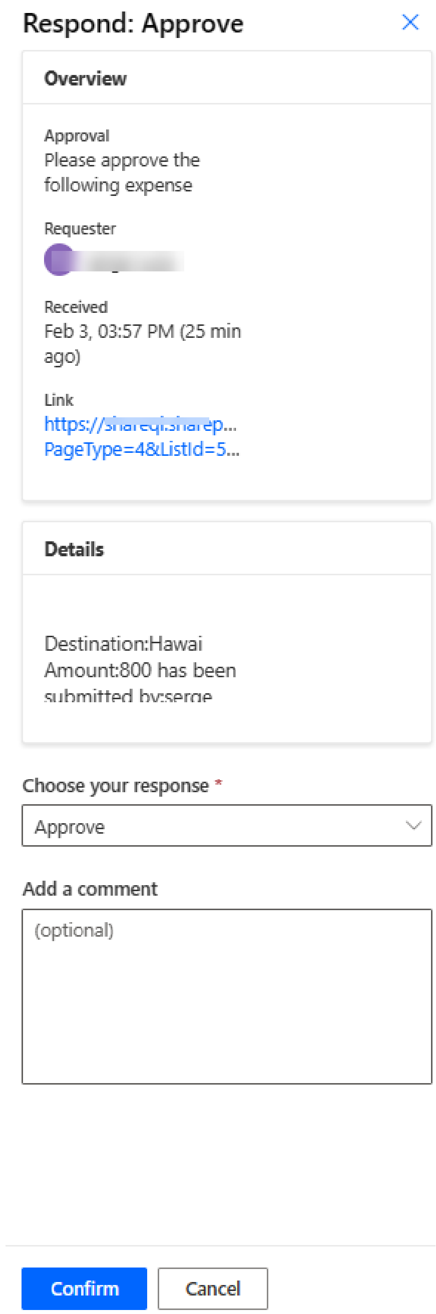
i. Expand **Action items**, and then click **Approvals**.



The Approvals center is displayed.

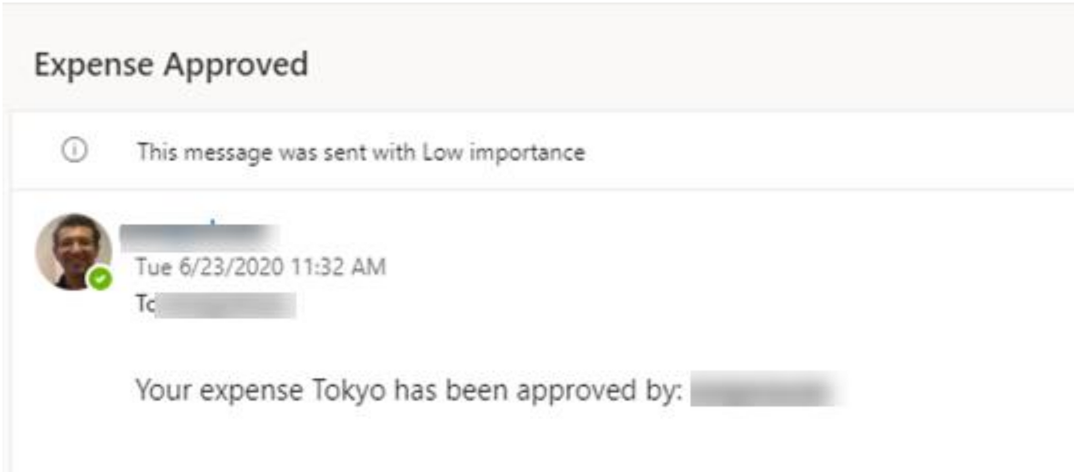

Home
Action items
My flows
Create
Templates
Connectors
Approvals
Received
Sent
History
Request
Received
Details
Please approve the following expense
Oct 11, 01:19 PM (3 min ago)
The following expe

ii. On the **Received** tab, click the item to be approved/rejected to display an information pane.



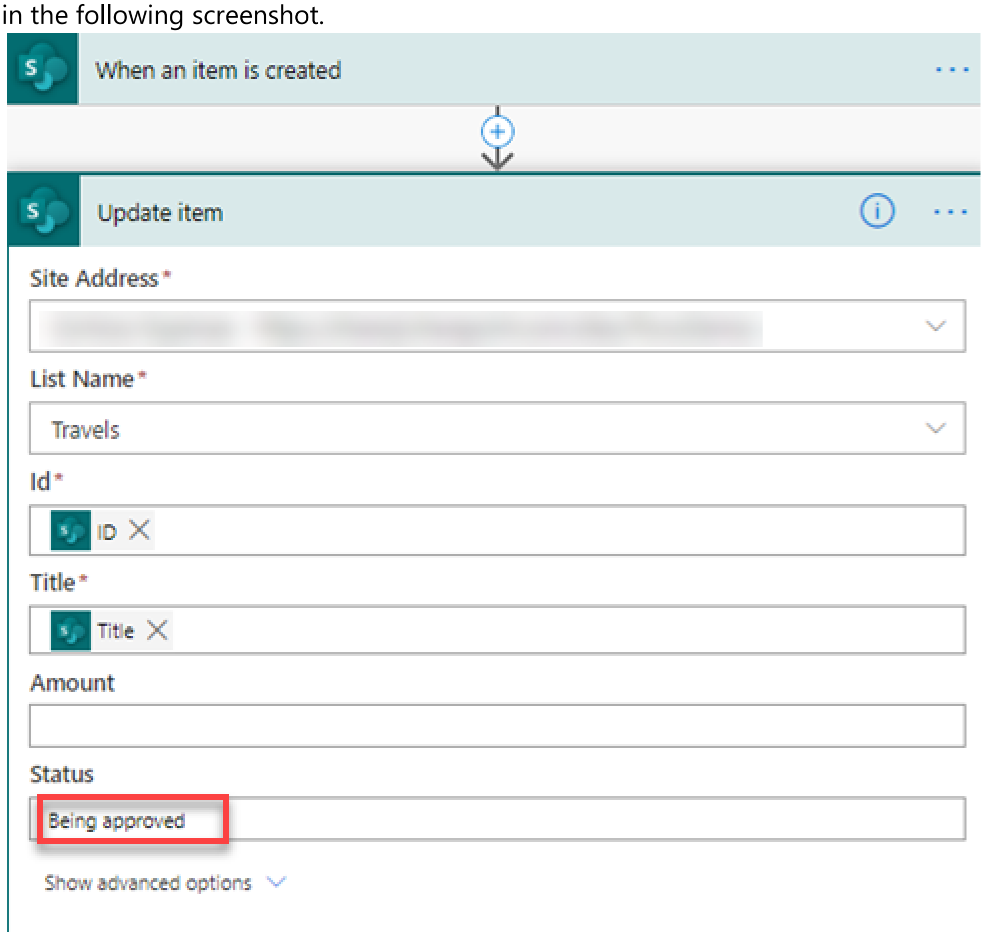
iii. Select **Approve**, and then click **Confirm**.

The flow will send you a notification by e-mail:



Task 2.3: Extending the flow by adding a new status when the flow is waiting

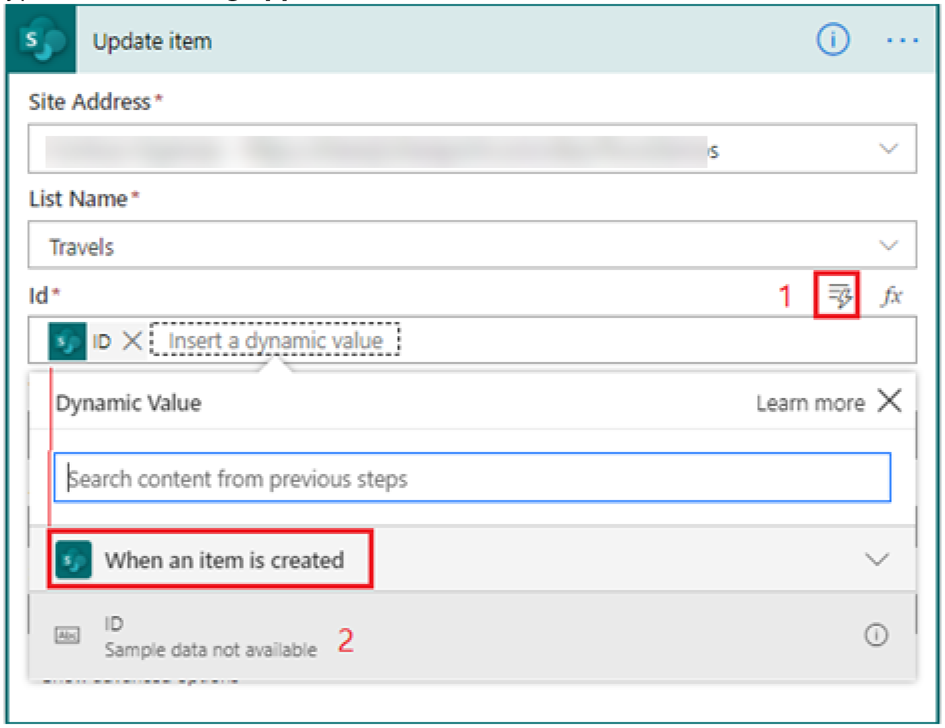
1. Click **Edit** on your flow's details page.
2. Add a SharePoint **Update item** action between the trigger and the condition, and complete it as shown in the following screenshot.



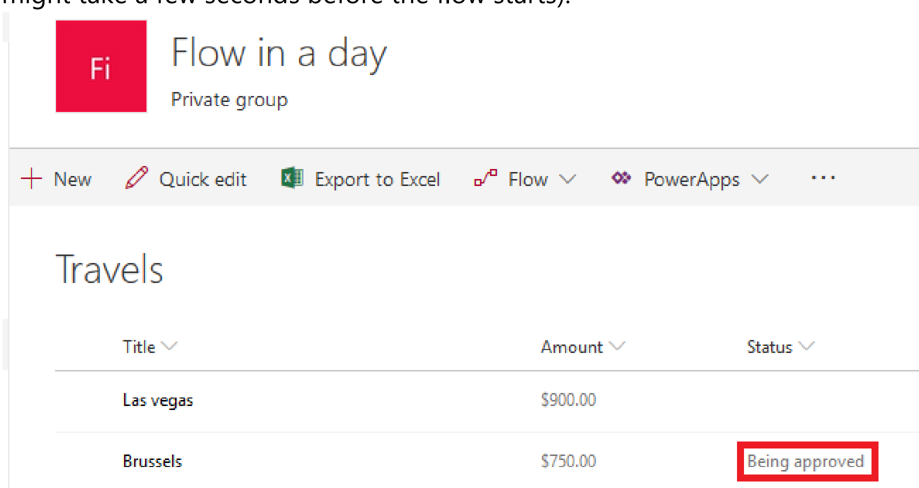
Hint:

- The **ID** Dynamic value comes from the trigger and identifies the corresponding SharePoint list item.

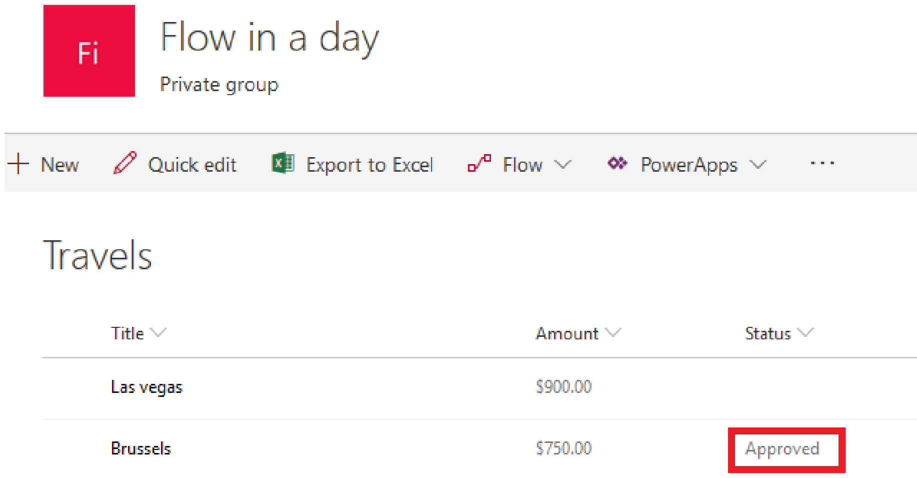
- **Title** also comes from the trigger,
- Type the value **Being approved** in the **Status** field:



3. Apply the same logic to display Approved or Rejected in the SharePoint list
4. Add a new travel expense item to the SharePoint list and check the value in its status column (it might take a few seconds before the flow starts):



2. Approve, and once the approval is completed, check the status value in the list.



Optional exercise if time permits:
Amend the flow to automatically approve the expense If the amount is smaller than $500; otherwise, the expense item will progress through the approval process.

We need your feedback

Do you want to report an issue or suggest something? We need your feedback:
https://github.com/Power-Automate-in-a-day/Training-by-the-community/issues