

## Lab 2. Approvals (Part 1) - Travel Approval

**Author:** Serge Luca aka "Doctor Flow."

**Learning objectives:** Approvals and conditions.

**Duration:** 20 minutes.

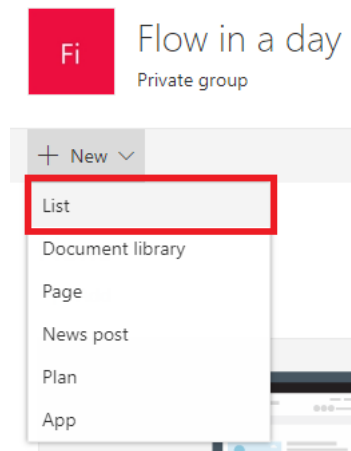
**Scenario:** A user stores travel information in a SharePoint list named **Travels**. When a new travel request is created, a flow is triggered and asks a manager to Approve/Reject.

**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**.

Create list

Name \*

Travels\_AyrtonSenna

Description

☒ Show in site navigation

Create

Cancel

2. Add two columns, **Amount**, and **Status** using the following steps:

- a. Click **Add column** > **Currency**.

Travels\_AyrtonSenna

Title ▾

+ Add column

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

Create a column

Learn more about column creation.

Name \*

Amount

Description

Type

Currency

Number of decimal places

Automatic

Currency format

\$123,456.00 (United States)

Default value

Enter a number

☐ Use calculated value ⓘ

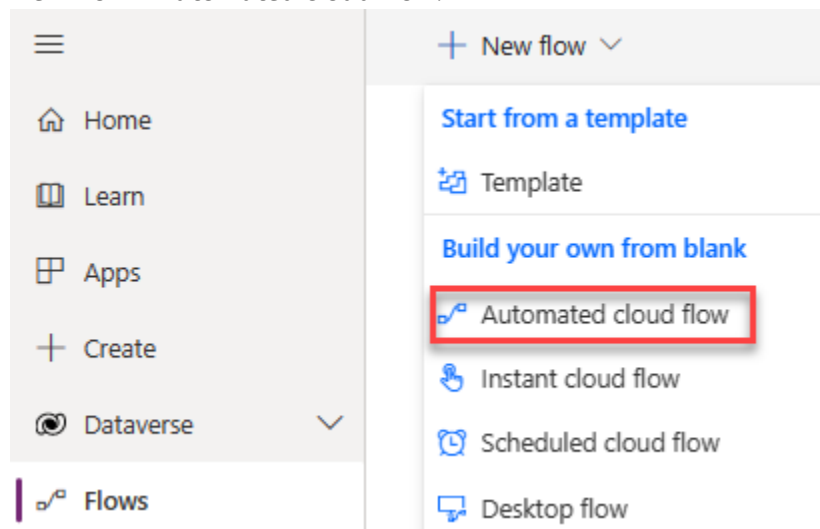
More options

Save Cancel

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

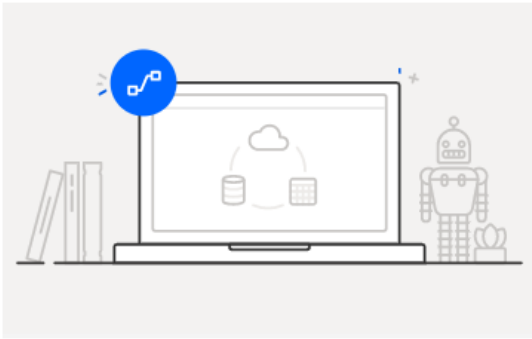
## Task 2.2: Create an approval flow

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**.

Build an automated cloud flow



Free yourself from repetitive work just by connecting the apps you already use—automate alerts, reports, and other tasks.






Examples:

- Automatically collect and store data in business solutions
- Generate reports via custom queries on your SQL database

Flow name  
Expense Approval


Choose your flow's trigger \* ⓘ  
Search or select a trigger from the list below to create a flow. (Required)

Search all triggers

	When a new response is submitted Microsoft Forms ⓘ
	When an item is created SharePoint ⓘ
	When an item is created or modified SharePoint ⓘ
	When a file is created in a folder (de... SharePoint ⓘ
	When a file is created OneDrive for Business ⓘ

Skip Create Cancel

- 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.

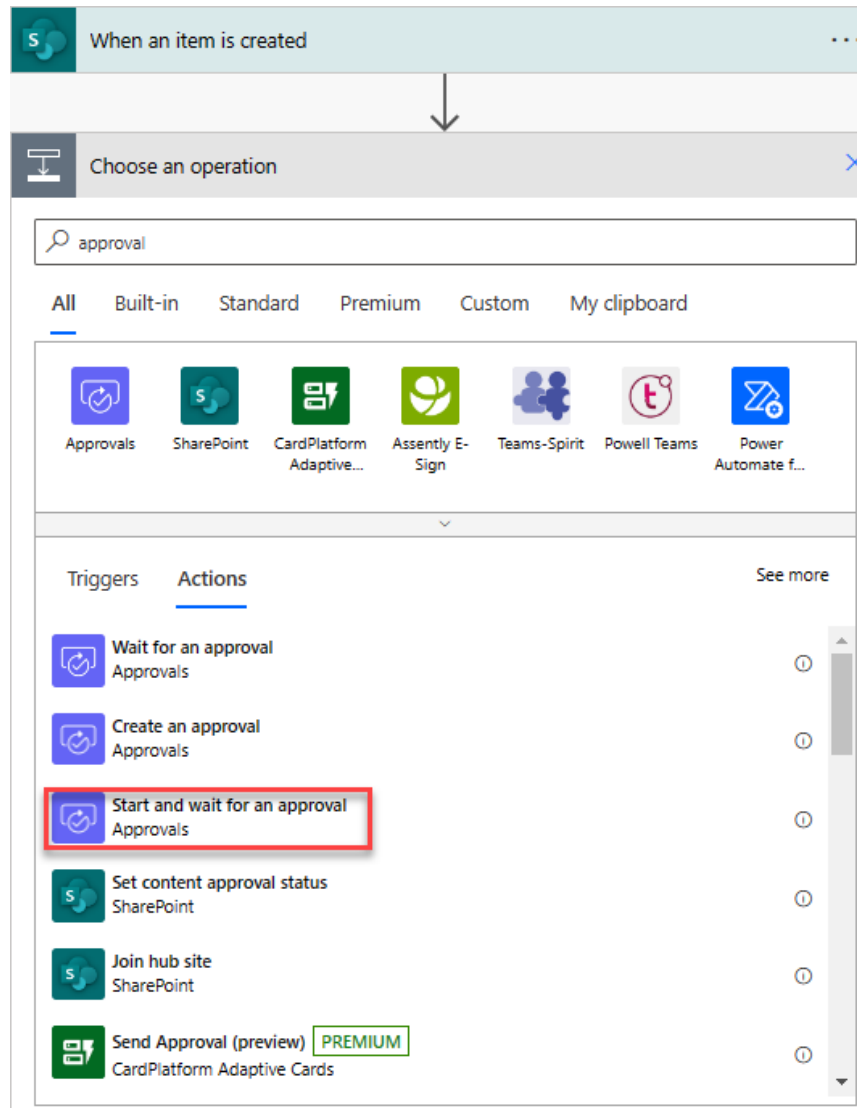
 When an item is created ⓘ ...

Site Address \*

List Name \*  
Travels

Show advanced options ▾

2. Add an 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:

**Start and wait for an approval** ...

\* Approval type: **Approve/Reject - First to respond**

\* Title: Please approve the following expenses

\* Assigned to: [Redacted]

Details: **Destination: Amount: has been submitted by**

Item link: Add a link to the item to approve

Item link description: Describe the link to the item

[Show advanced options](#) ▾

- 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**:

**Start and wait for an approval** ...

\* Approval type: Approve/Reject - First to respond

\* Title: Please approve the following expenses

\* Assigned to: [Redacted];

Details: Destination; Amount: has been submitted by:

Item link: Add a link to the item to approve

Item link description: Describe the link to the item

[Show advanced options](#) ▾

+ New step   Save

**Dynamic Value**   Expression


Search dynamic value

**When an item is created**

ID  
List item id. Use this value for specifying the item to act on in other list related actions.

**Title**

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


**Start and wait for an approval**
...

\* Approval type







Approve/Reject - First to respond

\* Title

Please approve the following expenses

\* Assigned to

Details

Destination:  Title  Amount:  Amount  has been submitted by:  Created By ... 

Item link


Add a link to the item to approve

Item link description

Describe the link to the item

[Show advanced options](#)

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


**Start and wait for an approval**
?
...

\* Approval type







Approve/Reject - First to respond

\* Title



Please approve the following expense

\* Assigned to

Details

Destination:  Title  Amount:  Amount  has been submitted by:  Created By ... 

Item link

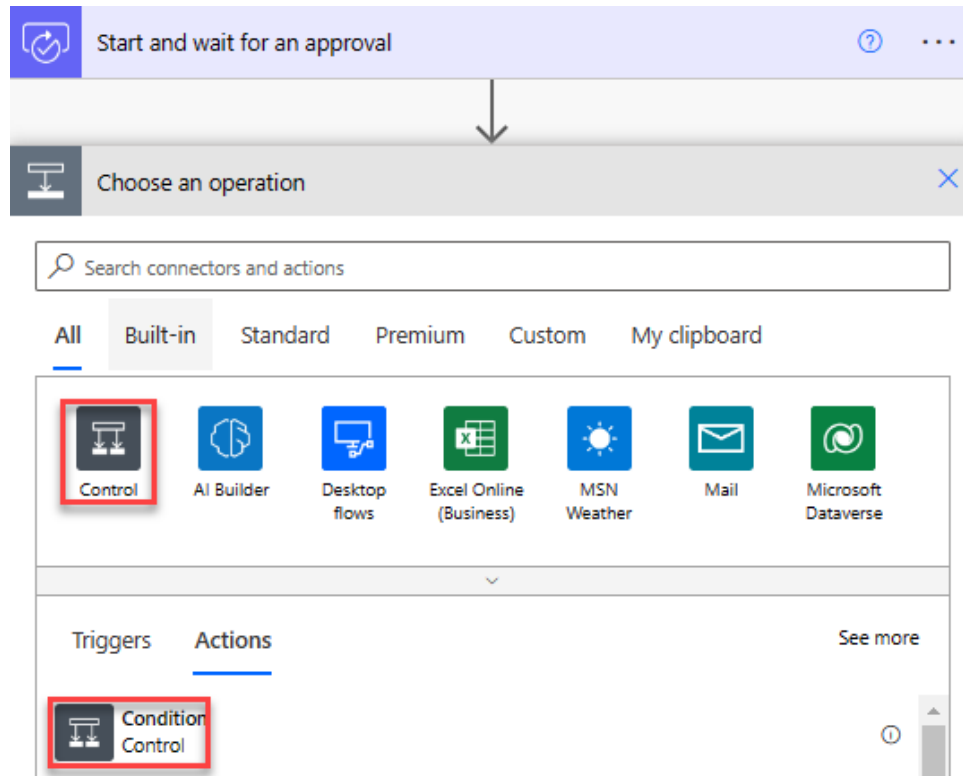
 Link to item 

Item link description

Describe the link to the item

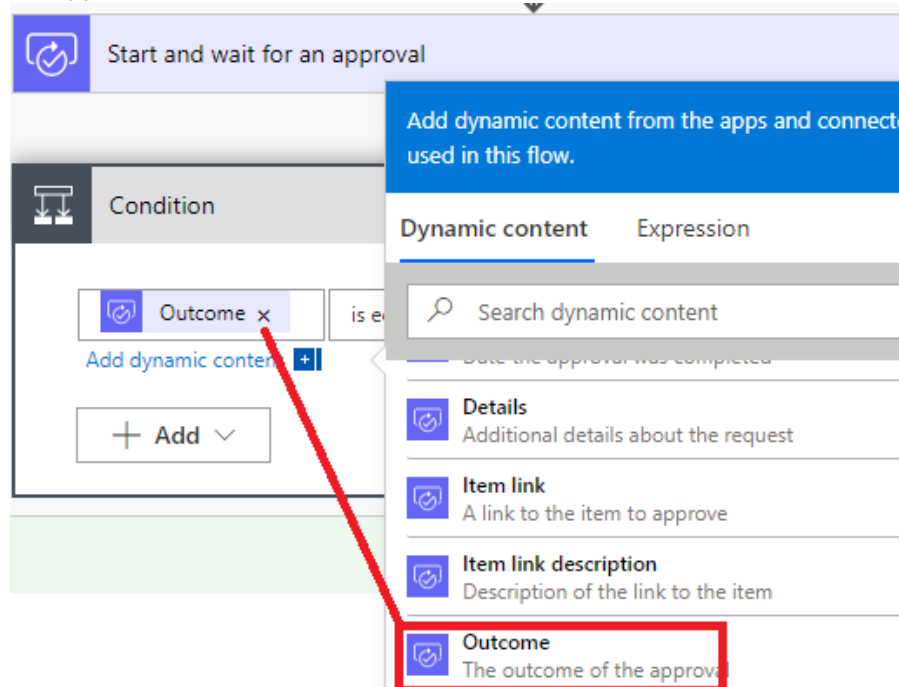
[Show advanced options](#)

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)



Condition

Outcome × is equal to Approve

Add dynamic content +

+ Add ▾

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:

Start and wait for an approval

Condition

Outcome × is equal to Approve

+ Add ▾

✓ If yes

✗ If no

Update item

\* Site Address

\* List Name Travels

\* Id Unique identifier of item to be updated  
'Id' is required.

\* Title  
'Title' is required.

Amount

Status

Show advanced options ▾

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

Dynamic Value

Learn more X

Search content from previous steps

Update item

ID  
Sample data not available

1

When an item is created

ID  
Sample data not available

2

ID X

Insert a dynamic value

Title\*

Amount

Status

Approved

Show advanced options

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

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

✓ If yes

**Update item**

\* Site Address

\* List Name: Travels

\* Id: ID

\* Title: Title

Amount

Status: Approved

Show advanced options

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**.

✓ If yes

✗ If no

**Update item**

Site Address\*

List Name\*: Travels

Id\*

Copy to my clipboard (Preview)

Rename

Add a comment

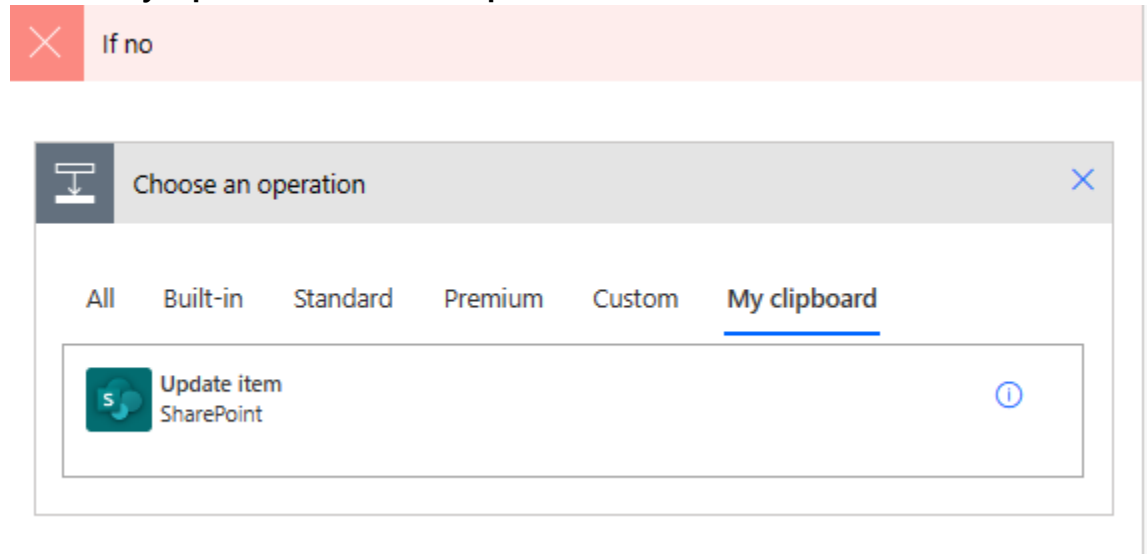
Static result (Preview)

Settings

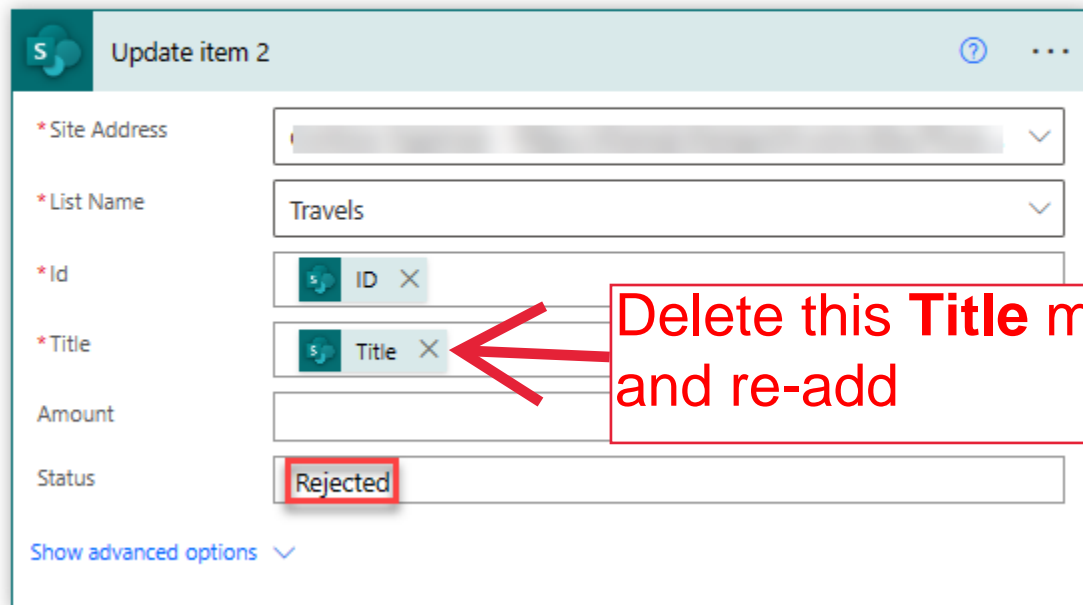
Configure run after

- 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.

The image shows two side-by-side screenshots of a Power Automate flow. The left screenshot is for the 'If yes' branch, featuring a green header bar. Below it, an action card titled 'Update item - set status to Approved' is highlighted with a red box. The card shows 'Site Address' as 'Contoso Expenses - https://shareql.sharepoint.com/sites/Flows...' and 'List Name' as 'Travels'. The right screenshot is for the 'If no' branch, featuring a red header bar. It shows a similar action card titled 'Update item - set status to Rejected' with the same site address and list name.

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)

The image shows a screenshot of the 'Send an email (V2) 2' action configuration in Power Automate. The action is connected to the 'Update item - set status to Approved' action above it. The configuration fields are: 'To' (a contact with initials 'SL'), 'Subject' (Expense Approved), and 'Body' (Your expense [Title] has been approved by). The body text includes a dynamic content placeholder for 'Title'. Below the body field, there is a 'Show advanced options' link.

Rename the action name.

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

**To\***

Created By Email X

**Subject\***

Expense Approved

**Body\***

Font 12 B I U [icons] </>

Your expense Title X has been approved by

Show advanced options

- 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:

Dynamic Value Expression **2** Format data by examples fx

`outputs('Start_and_wait_for_an_approval')['body/responses*']`

Save Cancel

Formulas **Dynamic values** **3**

Search dynamic value

- body
- Responses responder
- Responses Item
- Responses** **4** All of the responses
- When an item is created
- Title

Show advanced options

**1**

**Condition**

Outcome X is equal to

+ Add

If yes

Update item - set status to Approved

**Send an email (V2)**

To sergeluca@ShareQL.com X

Subject Expense Approved

Body Font 14 B I U [icons] </>

Your expense Title X has been approved by

Show advanced options

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

Dynamic Value   Expression   [Format data by examples](#)   *fx*   😊

```
outputs('Start_and_wait_for_an_approval')?['body/responses']  
['responder']['displayname']
```


...and click **Save**:


Dynamic Value   Expression   [Format data by examples](#)   *fx*   😊

```
outputs('Start_and_wait_for_an_approval')?['body/responses']  
['responder']['displayname']
```

**Save**   Cancel









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



 Send an email (V2)   ?   ...

\*To    sergeluca@ShareQL.com   X

\*Subject   Expense Approved

\*Body

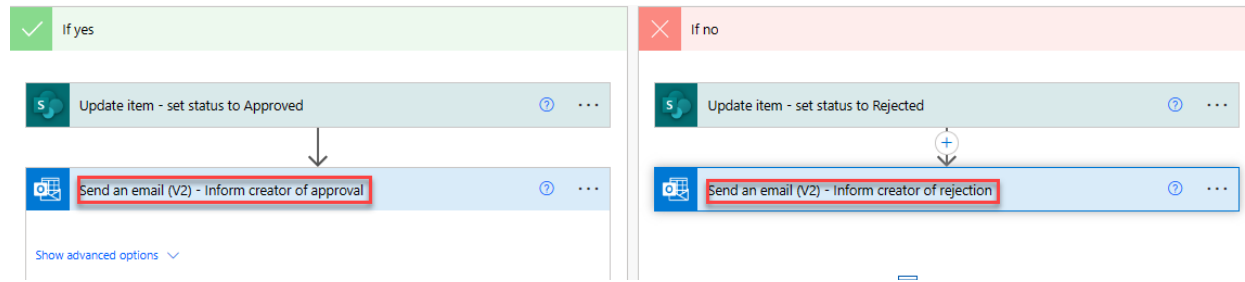
Font   14   **B**   *I*   U                        

Your expense    Title   X   has been approved by    outputs(...)   X

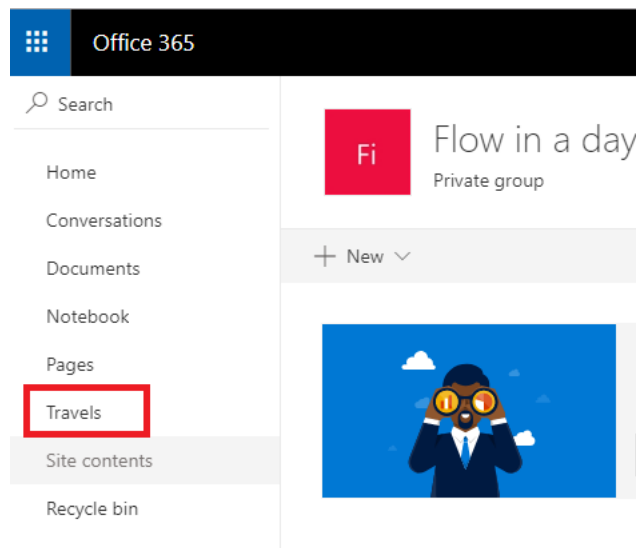
[Show advanced options](#)   ▾

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

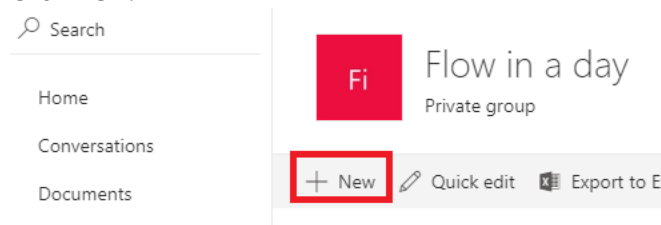
- f. Rename the **Send an e-mail** actions in both branches as illustrated here:



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):

 Save  Cancel  Copy link

New item

**Title \***  
Tokyo

**Amount**  
800


**Status**  
Enter value here

**Attachments**  
[Add attachments](#)

**Save** Cancel

- d. Save the new record, which will automatically trigger the flow.  
e. Check the flow status. It should be **running**:

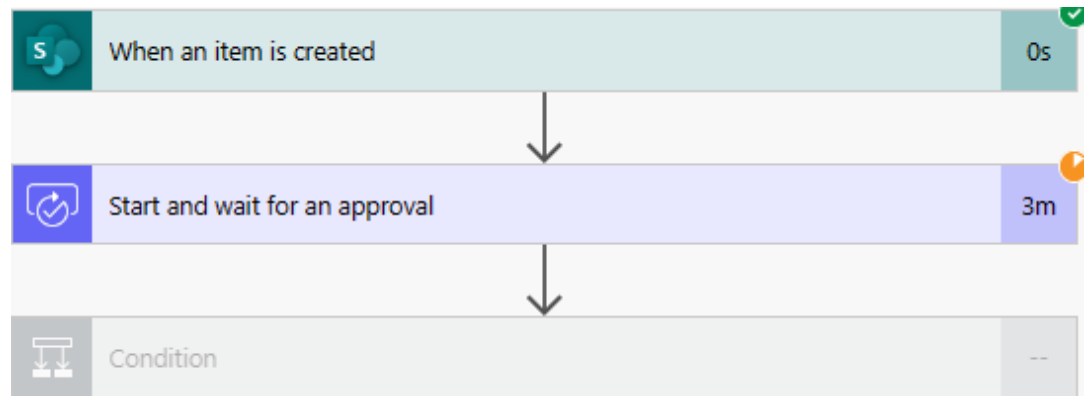
Flows > Expense Approval

Details		
Flow Expense Approval	Status On	
Owner 	Created Feb 3, 02:51 PM	
	Modified Feb 3, 03:49 PM	
	Type Automated	
	Plan This flow runs on owner's plan	

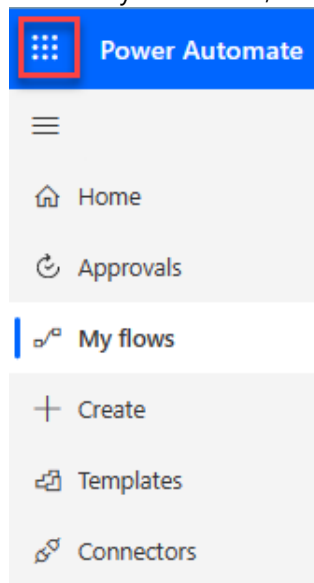
28-day run history ⓘ			<a href="#">Edit columns</a>
Start	Duration	Status	
Feb 3, 03:52 PM (15 sec ago)	00:00:15	Running	

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



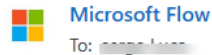
In this screenshot, the flow is waiting for approval. Approvals send an e-mail to the person(s) in charge of the approval.


- 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:

Please approve the following expense



 **Approvals | Power Automate**

**Please approve the following expense**

Requested by [redacted] <[redacted]@ShareQL.com>

Date Friday, February 3, 2023 3:57 PM

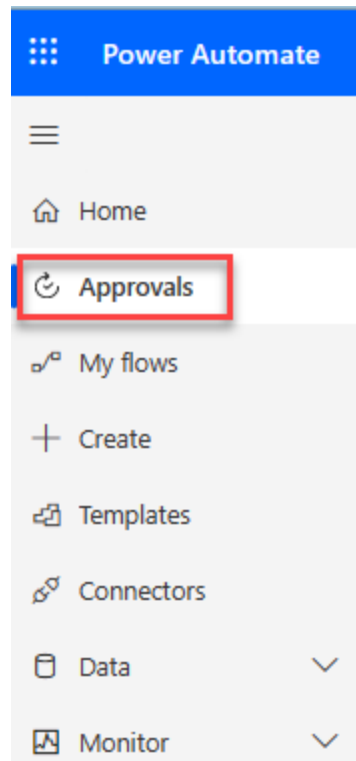
Created [redacted]

Link [https://shareql.sharepoint.com/\\_layouts/15/listform.aspx?PageType=4&ListId=518e02b0%2D0c43%2D4dc7%2Da691%2D85e1a378bc6c&ID=3&Cor](https://shareql.sharepoint.com/_layouts/15/listform.aspx?PageType=4&ListId=518e02b0%2D0c43%2D4dc7%2Da691%2D85e1a378bc6c&ID=3&Cor)


Destination:Hawai Amount:800 has been submitted by [redacted]


Get the Power Automate app to receive push notifications and grant approvals from anywhere. Learn more. This message was created by a flow in Power Automate. Do not reply. Microsoft Corporation 2020.


- 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 expense

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

**Respond: Approve** ✕

**Overview**  
Approval  
Please approve the following expense  
Requester  
  
Received  
Feb 3, 03:57 PM (25 min ago)  
Link  
<https://sharepoint.com/SharePoint/Forms/Response.aspx?PageType=4&ListId=5...>

**Details**  
Destination:Hawai  
Amount:800 has been submitted by:serge

Choose your response \*

Approve ▼

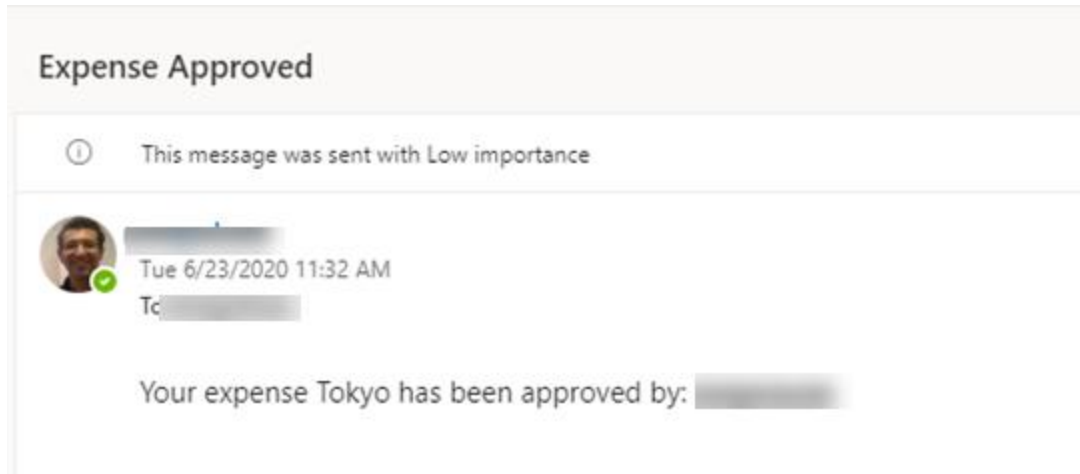
Add a comment  
(optional)

Confirm

Cancel

- 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.

A screenshot of the "Update item" action configuration in a flow. The action is preceded by a trigger "When an item is created". The configuration fields are: "Site Address" (a dropdown menu), "List Name" (a dropdown menu with "Travels" selected), "Id" (a text box containing a SharePoint ID with a delete icon), "Title" (a text box containing a SharePoint title with a delete icon), "Amount" (an empty text box), and "Status" (a dropdown menu with "Being approved" selected and highlighted by a red rectangle). At the bottom, there is a link "Show advanced options" with a downward arrow.

**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:

Update item

Site Address\*

List Name\*

Travels

Id\*

1

fx

Insert a dynamic value

Dynamic Value

Learn more X

Search content from previous steps

When an item is created

ID

Sample data not available 2

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):

**Fi** Flow in a day  
Private group

+ New   Quick edit   Export to Excel   Flow   PowerApps   ...

Travels

Title	Amount	Status
Las vegas	\$900.00	
Brussels	\$750.00	Being approved

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



## Flow in a day

Private group

+ New   Quick edit   Export to Excel   Flow ▾   PowerApps ▾   ...

### Travels

Title ▾	Amount ▾	Status ▾
Las vegas	\$900.00	
Brussels	\$750.00	Approved

#### 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>