

Lab 1. Building a time-tracking flow

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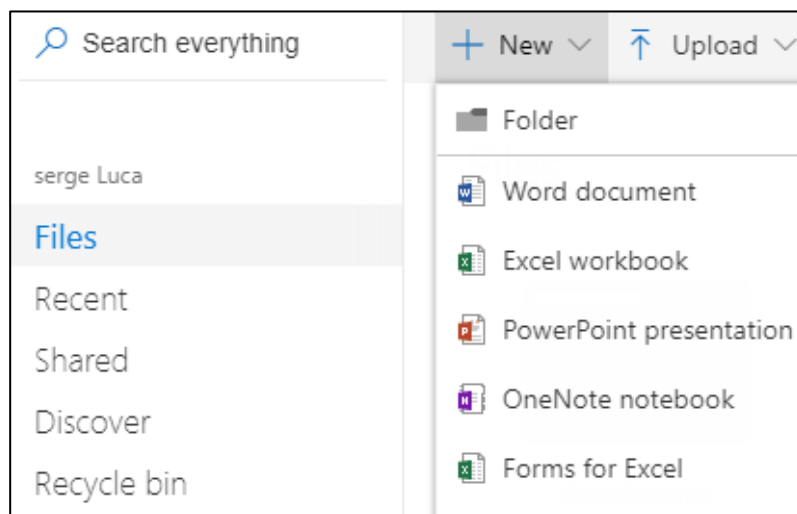
Learning objectives: Building a Flow, hello world, button, time.

Duration: 30 minutes

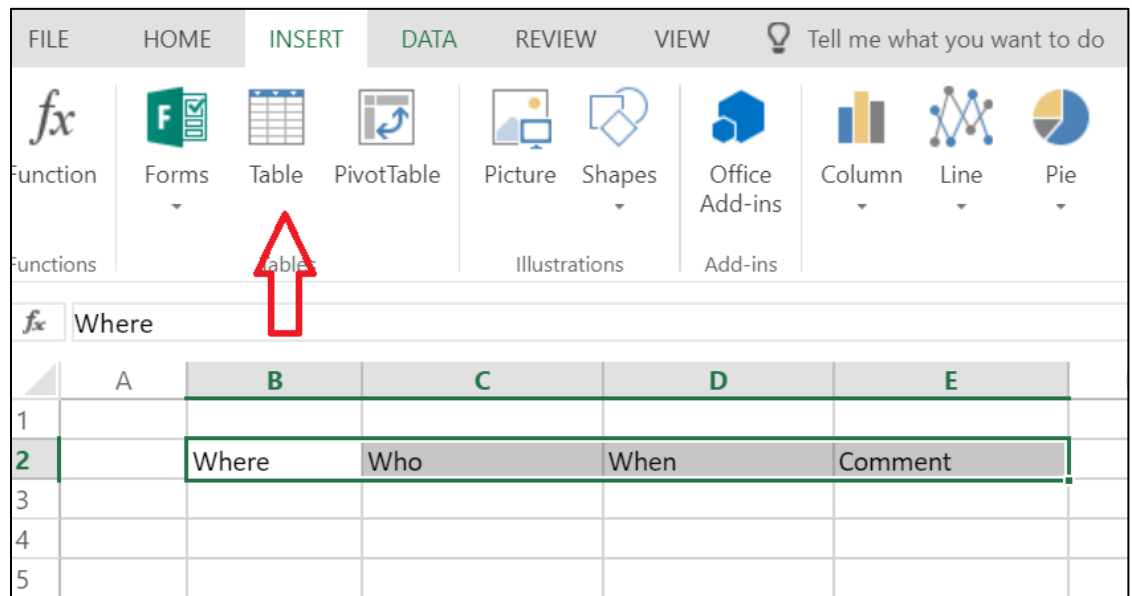
Scenario: When a user pushes a button, the current time and the current location will be saved in an Excel document stored in OneDrive for Business.

Task 1.1: Build an instant flow from blank

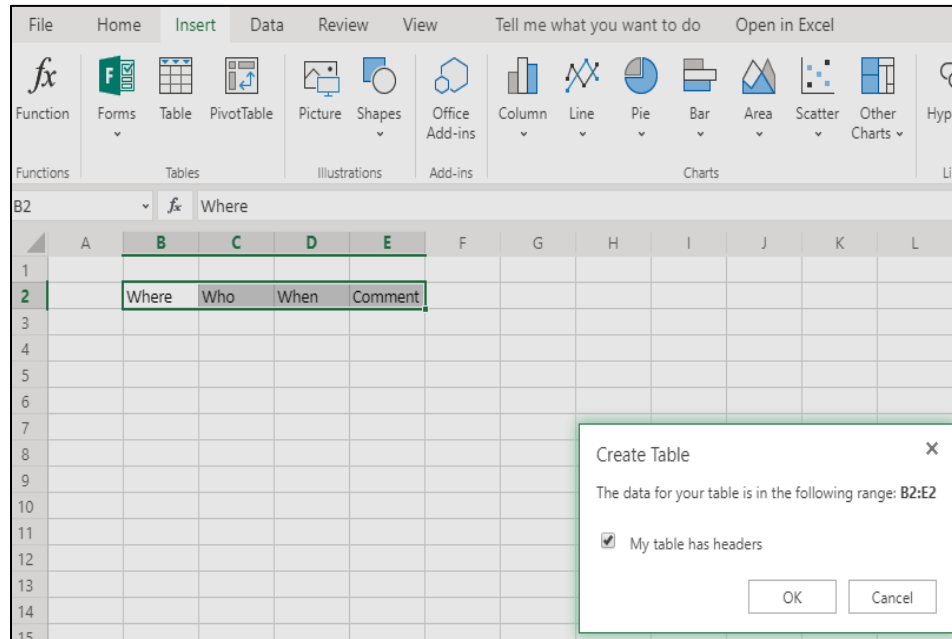
1. Navigate to **OneDrive** (for Business), and create a new Excel workbook:
 - a. Click **New** and select **Excel workbook**.



- b. Create **four** columns, **where, who, when, comment**. Then, click the "Insert" Menu and select "Table".

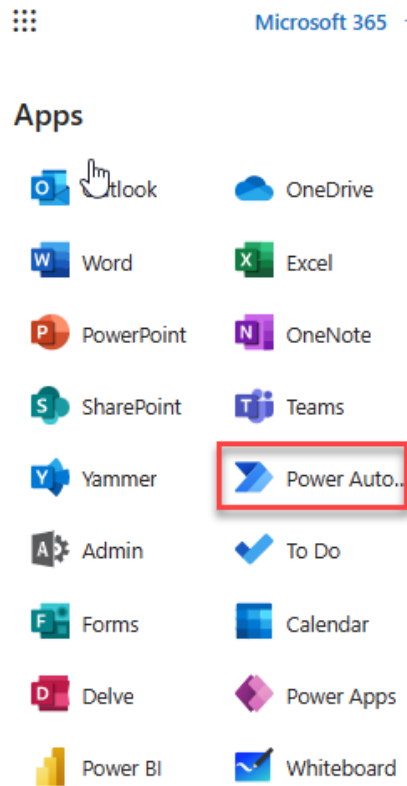


- c. Format as a table (check the box, has headers)

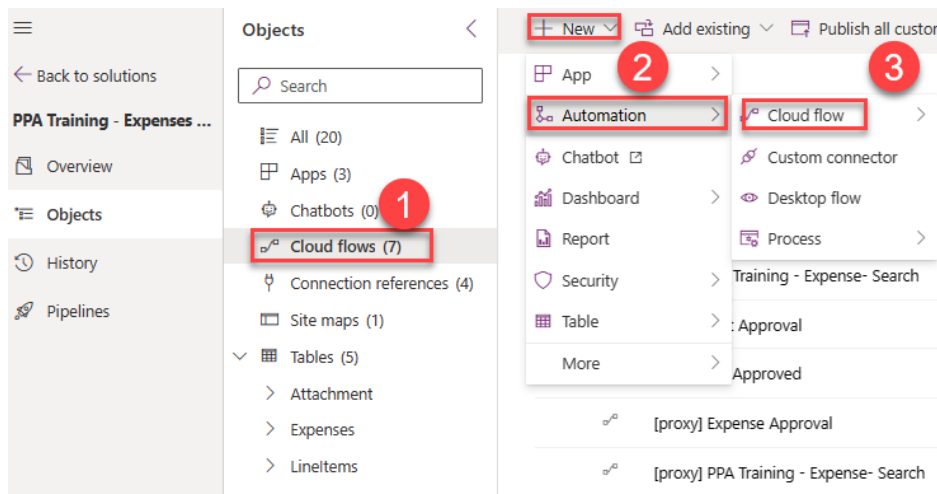


- d. Save the file (**File > Save as - Rename**) with the name **Timesheet.xlsx**.

2. Create a flow named **Track Time** using the following steps:
- Navigate to <https://make.powerautomate.com> or click the Power Automate icon in the Microsoft 365 app launcher (and if requested, sign-in) :



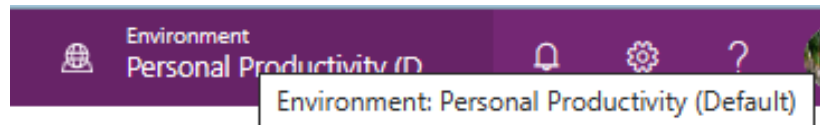
- If you are already familiar with the concept of "Solution", creating the flows of all labs in a dedicated solution is a better practice. Create a Solution, or use an existing Solution, and select the folder cloud flows as illustrated below:



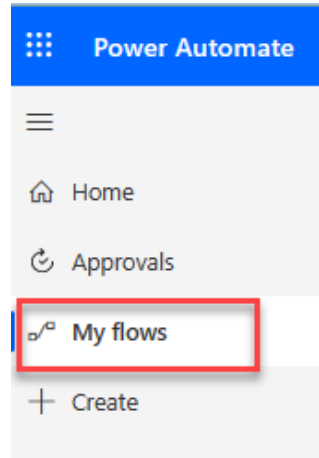
If you are not familiar with the concept of Solution, move to the next step.

- Now that you are in Power Automate Studio, you have to select an environment to create your flows; for these labs, you can create your flows in the **default environment**: on the top-right side of the Power Automate site, select the environment with a name containing

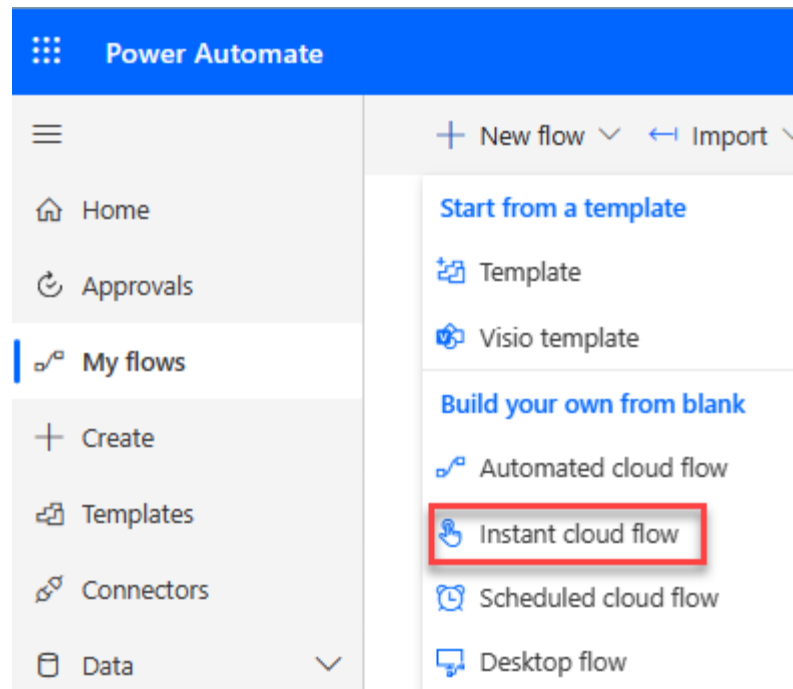
(default) . The environment name varies from tenant to tenant because most companies rename it, but **(default)** must be part of the name. This is your private space :



- d. Select **My flows** :



- e. On the left side of the screen (unless you work in a Solution), select **New flow > Instant cloud flow**.



- f. On the **Build an instant cloud flow** dialog, in the **Flow name** text box, type **Track time**, and select the trigger **Manually trigger a flow**.

Build an instant cloud flow

Flow name
Track time

Choose how to trigger this flow *

- ☒ Manually trigger a flow
Flow button for mobile
- ☐ PowerApps
PowerApps
- ☐ When Power Virtual Agents calls a fl...
Power Virtual Agents
- ☐ When a flow step is executed
Common Data Service (current environment)
- ☐ For a selected message
Microsoft Teams
- ☐ For a selected file
OneDrive for Business
- ☐ For a selected file

Triggers manually from any device, easy-to-share instant flows automate tasks so you don't have to repeat yourself.

Examples:

- Get an automatic mobile alert whenever a VIP client emails you
- Save all your email attachments to a folder automatically

Skip Create Cancel

- g. Click **"Create"** button.
A flow is generated with the trigger "Manually trigger a flow".

Manually trigger a flow

Note: This trigger will start the flow when the user presses a button. The button is also visible in the Flow mobile app, including on the home screen of a smartphone. A form can be displayed when the user selects the button if needed. In any case, default information such as the current user's coordinates (Latitude & Longitude), current time, and much more are captured automatically from the device by flow when the button is pressed.

3. In the flow, add an action to create a row in the Excel table by completing the following steps:
- Click on **"New step"** button:

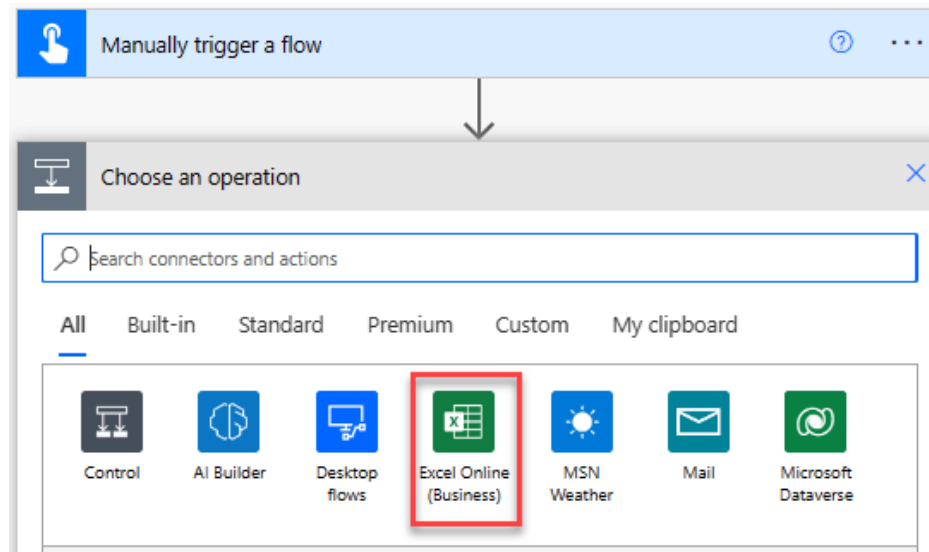
Manually trigger a flow

+ Add an input

+ New step Save

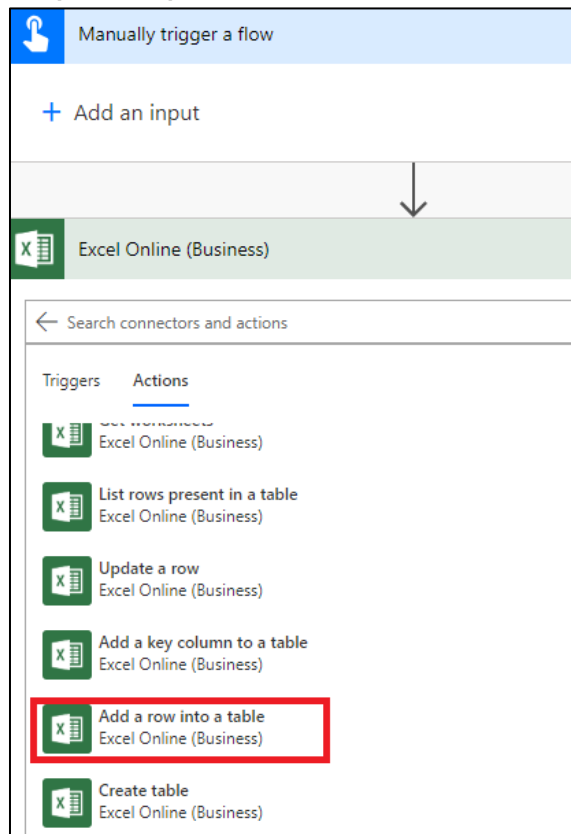
- In the **Choose an action** text box, type **Excel** and select **Excel Online (Business)** connector.

DO NOT select Excel Online OneDrive; be careful here, as many users choose the wrong connector.



Once you select the Option, this will prompt you to choose an associated action.

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



Your flow should look similar to the following screenshot:

Manually trigger a flow

Add a row into a table

* Location

* Document Library

* File

* Table

Show advanced options

4. Configure the action, add a row into a table, input properties to add the current user's location and time stamp to the spreadsheet, using the following steps:
 - a. From the **Location** drop down select **OneDrive for Business**, and in the **Document Library** drop down choose **OneDrive**.
 - b. To the far right of the **File** text box, select the folder icon, browse and select the spreadsheet you created earlier, **Timesheet.xlsx**.
5. When the spreadsheet has been selected, the fields will automatically be visible:

Manually trigger a flow

Add a row into a table

* Location

* Document Library

* File

* Table

Who

Where

When

Comment

Show advanced options

6. In this step, we are going to map the fields to the actual values

- a. Move the cursor to the Where field and a panel with Dynamic Value and Expression will be visible:

The screenshot shows the Microsoft Flow Designer interface. At the top, there is a blue bar with a hand icon and the text "Manually trigger a flow". Below this, a green bar indicates the current step: "Add a row into a table". The step configuration panel shows the following fields: Location (OneDrive for Business), Document Library (OneDrive), File (/timesheet.xlsx), Table (Table1), Who (empty), Where (empty), When (empty), and Comment (empty). A "Show advanced options" link is visible at the bottom of the configuration panel. To the right, a "Dynamic Value" panel is open, displaying a search bar and a list of dynamic values: "User name" (The display name of the user who triggered the flow.), "User email" (The email address of the user who triggered the flow.), "Date", "Timestamp" (The time the flow was triggered.), and "Full address".

b.

Select and map the properties as follows :

| Excel Column Name | Dynamic Value Selection |
|-------------------|-------------------------|
| Where | Full address |
| Who | User name |
| When | Timestamp |

Important Note : To retrieve your location service, your computer must have the location service activated, and this is not the case in most organizations. So do not use the Full address

dynamic value but write your address directly in the field.

Manually trigger a flow

Add a row into a table

* Location: OneDrive for Business

* Document Library: OneDrive

* File: /Timesheet.xlsx

* Table: Table1

Where: Full address

Who: User name

When: Timestamp

Comment:

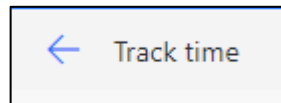
Show advanced options

+ New step Save

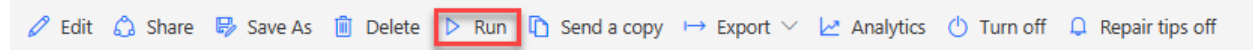
7. Click **Save**.

8. Run the Flow using the following steps:

a. Click the back arrow to return to the flow page



b. then click Run now (you could also use the Test button from the designer).



Flows > Track time

Note: If needed, click **Allow** to allow the flow to access your device to obtain your location, and if required, "Sign In" right side slider panel.

c. Ensure the flow runs successfully by checking your Excel sheet. You should see a new row with the requested information

| where | who | when |
|---|-------------|----------------------------|
| Jean en Pierre Carsoellaan 243, 1180 Ukkel, Belgium | Paul Pieter | 2018-06-28T07:17:51.35413Z |

Note: You might have to refresh the spreadsheet to see the updated values.

9. If you see the message "Location services must be enabled for this flow", that means it is not activated, and many organizations deactivate it on their corporate computers:

Run flow



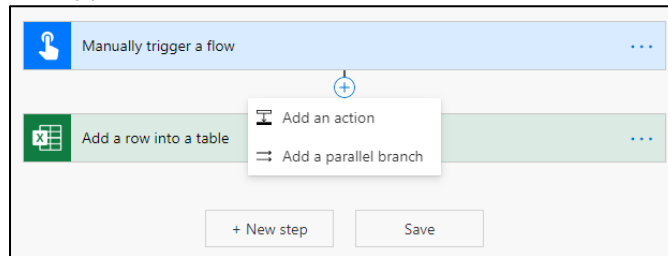
Location services must be enabled to run this flow.

So, write your address directly in the field (do not use the dynamic value).

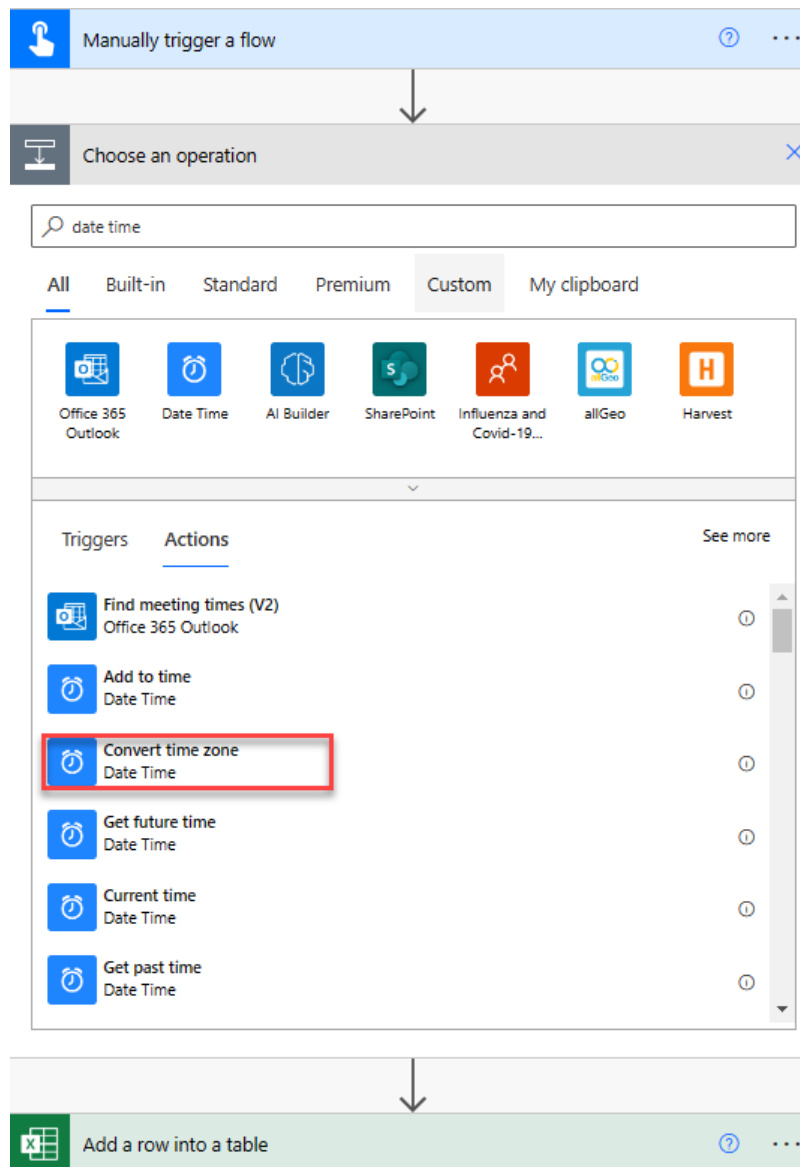
If you still get the same message even though you don't use the dynamic value, **remove** the trigger **Manually trigger a flow** and add a new one.

Task 1.2: Convert the timestamp to a more user-friendly date/time format

1. By default, Power Automate uses UTC as its default time zone. Use the following steps to display the timestamp that matches your time zone. Click on the edit button and follow the below steps :
 - a. Hover over the arrow joining the Manual trigger and the Excel action and click the **+** icon that appears and click **Add an action**.



- b. In the **Search** text box, type **Date Time** and select **Convert time zone**.



- c. In the **Base time** property, select the trigger's output property, **timestamp**.
- d. Use the drop-down list to select an appropriate time zone for the **Source time zone** and **Destination time zone** properties.
- e. In the **Format string** property, scroll to the bottom of the drop-down list and select **add a custom item** and then type **dd/MM/yyyy-T-hh:mm:ss**.
Notice there are several predefined Date & Time formats. Your Convert time zone action should look similar to the following screenshot.

Manually trigger a flow

Convert time zone

- * Base time: Timestamp
- * Source time zone: (UTC) Coordinated Universal Time
- * Destination time zone: (UTC+01:00) Brussels, Copenhagen, Madrid, Paris
- Format string: dd/MM/yyyy-T-hh:mm:ss

Add a row into a table

- Update the **Add a row into a table** action with the **Converted time** value:

Manually trigger a flow

Convert time zone

- * Base time: Timestamp
- * Source time zone: (UTC) Coordinated Universal Time
- * Destination time zone: (UTC+01:00) Brussels, Copenhagen, Madrid, Paris
- Format string: dd/MM/yyyy-T-hh:mm:ss

Add a row into a table

- * Location: OneDrive for Business
- * Document Library: OneDrive
- * File: /timesheet.xlsx
- * Table: Table1
- Who: User name
- Where: Full address
- When:

Dynamic Value Expression

Search dynamic value

- Convert time zone
 - Converted time
- Manually trigger a flow
 - User name
 - User email
 - Date
 - Timestamp
 - Full address
 - Country/Region
 - City
 - State

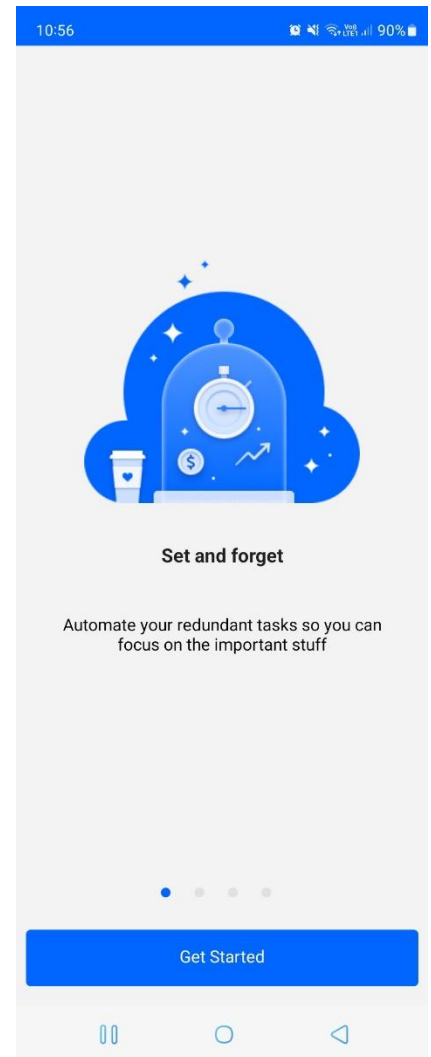
- Save the Flow, rerun it, and check your Excel sheet:

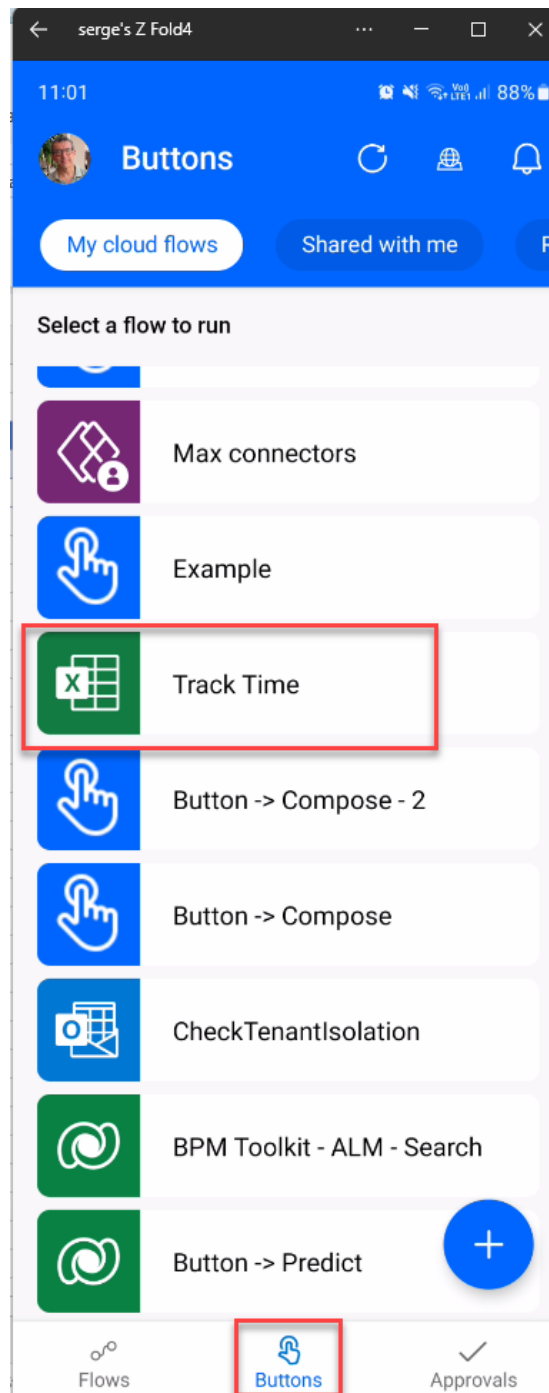
| where | who | when |
|---|-------------|----------------------------|
| Jean en Pierre Carsoellaan 243, 1180 Ukkel, Belgium | Paul Pieter | 2018-06-28T07:17:51.35413Z |
| Jean en Pierre Carsoellaan 243, 1180 Ukkel, Belgium | Paul Pieter | 28/06/2018-T-09:42:51 |
| | | |

Task 1.3: Optional, interact with your flow on your mobile

Note: This task has been tested using an Android phone and iPhone; Screenshots are taken from the Android phone. On iPhone, the look and feel might be slightly different than on Android phones.

1. Prepare the mobile app on your phone.
 - a. If you do not already have the mobile app on your phone, download the **Power Automate** mobile application from the store (Android/iOS).
2. Sign-in
3. Start the flow from your phone by completing the following steps:
 - a. Click **Buttons** (to filter the flows that can be triggered by a button), and run the Track Time flow:





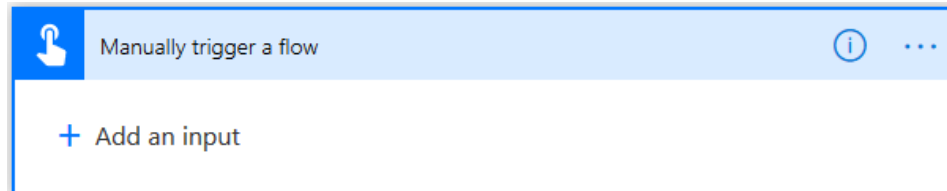
- b. Ensure that the flow ran successfully by checking that a new line was added to the Excel spreadsheet.

Task 1.4: Amend the flow to update the comment field in the spreadsheet

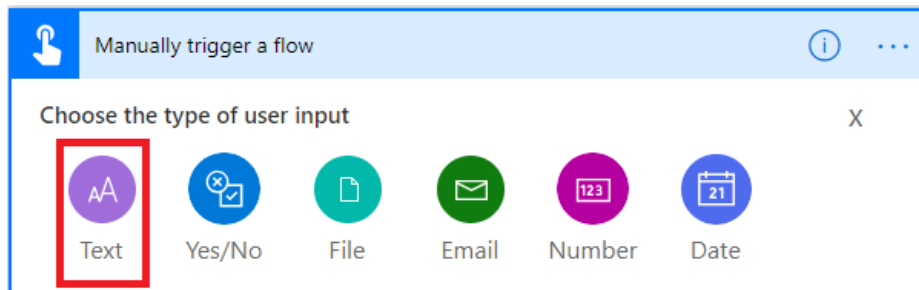
Now you are going to get the flow to update the **comment** field within your spreadsheet:

| when | comment |
|----------------------------|---------|
| 2018-06-28T07:17:51.35413Z | |

1. Add an input parameter to the flow button trigger using the following steps:
 - a. Edit the Flow, click on trigger heading (**Manually trigger a Flow**) and then click **Add an input**:

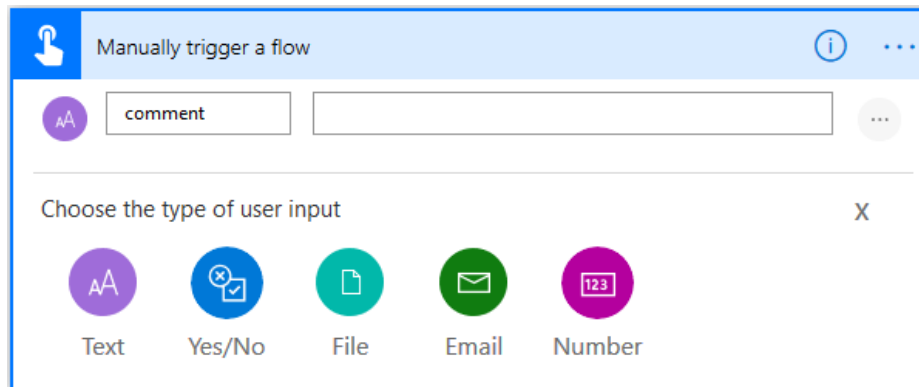


- b. Click **Text** to add a text parameter, named input.



Notice: There are many parameter types to assist the interaction with users when they click on a Flow button. Use these data input types to improve the data integrity of the information provided by the users.

- c. Delete **Input** and type **comment** and in the text box to the right of comment, press the space bar to use the space character as the default value:



2. Modify the Excel action to update the comment value
 - a. Click the action **Add row into a table**.
 - b. Add a **dynamic value** to update the Excel action **comment** property with the trigger **comment** output property:

Add a row into a table

Location*
OneDrive for Business

Document Library*
OneDrive

* File: /Flow Workshop/Timesheet.xlsx

Table*
Table1

Where
Full address

Who
User name

When
Timestamp

Comment
comment

3. Save, run and check.
 - a. Save the Flow and return to the flow details page.
 - b. Then click Run now (you could also use the Test button).

Note: If needed, click **Allow** to allow the flow to access your device to obtain your location, and if required, "Sign In" right side slider panel.

Run flow

Track time
Owner: serge Luca

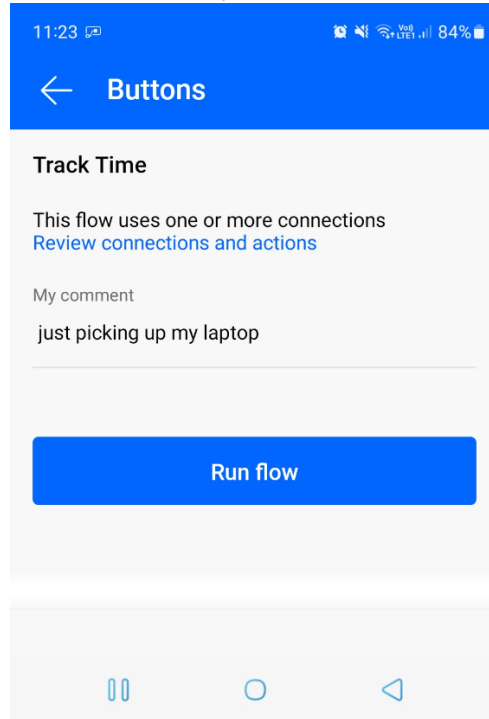
comment *

Please enter your input

This flow uses Excel Online (Business).
[Review connections and actions](#)

Run flow **Cancel**

- c. Type some text in the comment parameter in the form.
- d. If you run it from your mobile, you will see something similar to the following screenshot after the button is pushed:



- 4. Check the spreadsheet, and you should see a new row with your comment:

| where | who | when | comment |
|---|-------------|----------------------------|---------------------------|
| Jean en Pierre Carsoellaan 243, 1180 Ukkel, Belgium | Paul Pieter | 2018-06-28T07:17:51.35413Z | |
| Jean en Pierre Carsoellaan 133, 1180 Ukkel, Belgium | Paul Pieter | 29/06/2018-T-08:52:42 | just picking up my laptop |

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>