

Power Automate for health and care

Brendan Clarke, NHS Education for Scotland, brendan.clarke2@nhs.scot

08/08/2024

Welcome

- this session is 🍷 - for beginners
- we'll get going properly at 13.05
- if you can't access the chat, you might need to join our Teams channel:
tinyurl.com/kindnetwork
- you can find session materials at tinyurl.com/kindtrp

The KIND network

- a social learning space for staff working with knowledge, information, and data across health, social care, and housing in Scotland
- we offer social support, free training, mentoring, community events, ...
- Teams channel / mailing list

KIND training sessions

Session	Date	Area	Level
Power automate for health and care	13:00-14:00 Thu 8th August 2024	Data	🔪 :beginner-level
Relative, absolute, mixed, structured, and R1C1 references in Excel	15:00-16:00 Thu 8th August 2024	Excel	🔪🔪 : intermediate-level
Neural nets made ridiculously simple	13:00-14:00 Mon 12th August 2024	AI/ML	🔪 :beginner-level

Session outline

- a warning
- an introduction
- scope of the possible
- three example tasks
- free play

A word of warning

Warning

Do not use Power Automate for anything unless you're absolutely sure that your organisational policies permit it

Quick introduction to Power Automate

- Power Automate is a set of low-code automation tools
- allows users to automate tasks
- lots of options
 - web and desktop versions
 - several different subscription levels
 - hundreds of add-ons

Scope of the possible

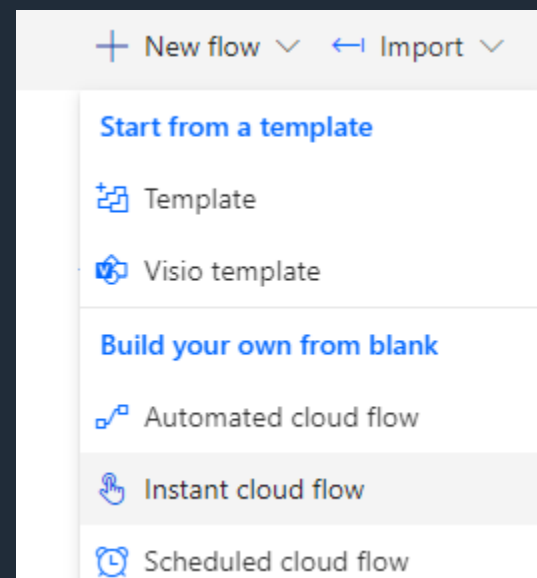
- Power Automate is an extremely useful tool for H&SC
- but you should be aware of some complicating factors for people like us:
 - massive and confusing range of different templates and use-cases, often with a business-focus
 - a thick layer of promotional AI talk over everything at present (late 2024)
 - unexpected cost/IG barriers to using parts of the platform
 - glitchy, and often requiring more coding skills than you might expect
 - generally shockingly poor documentation

This session = honest, application-focused, introduction

- we'll build three example flows that will:
 1. take an Excel workbook, extract some parts of it, and save as a new Excel file
 2. turn a response to Microsoft Forms into a Teams post
 3. turn an Excel workbook into a simple mailing list

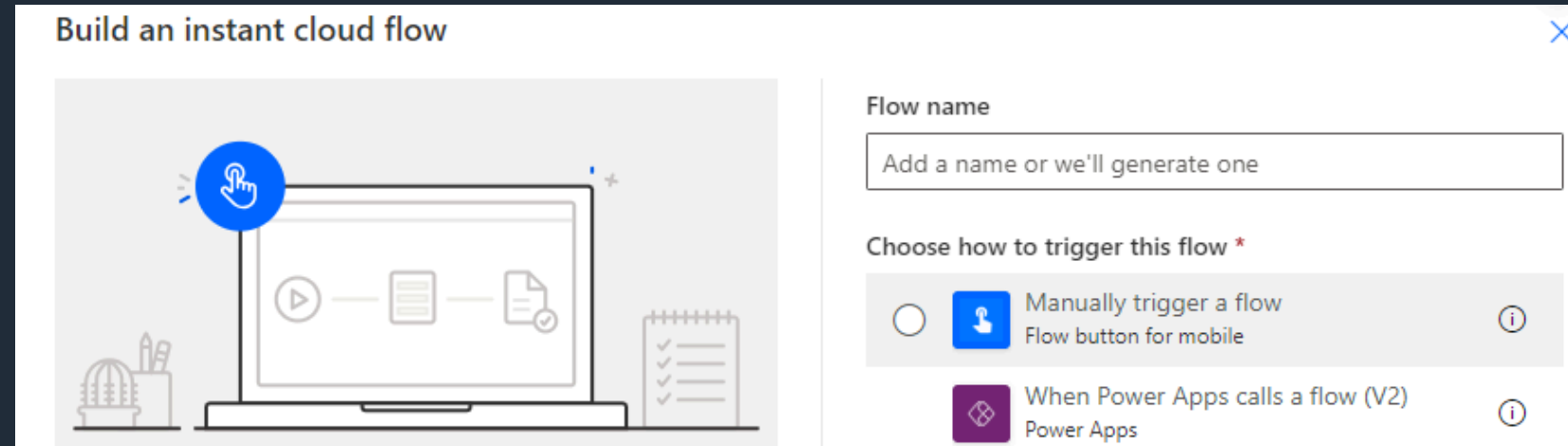
Subset an Excel file

- you'll need a sample data file - I used [this open data about council assets from Falkirk](#)
- I converted the data to a table, then saved the workbook to OneDrive
- **New flow > Instant cloud flow**



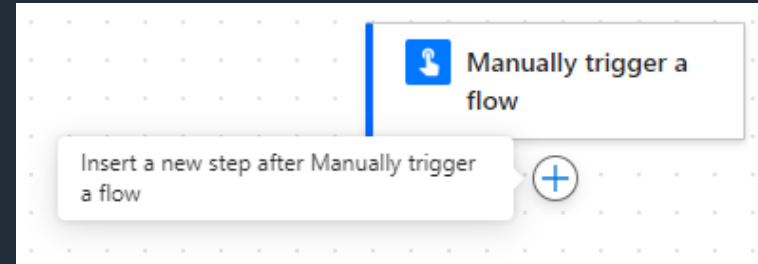
Subset an Excel file

- Manually trigger a flow



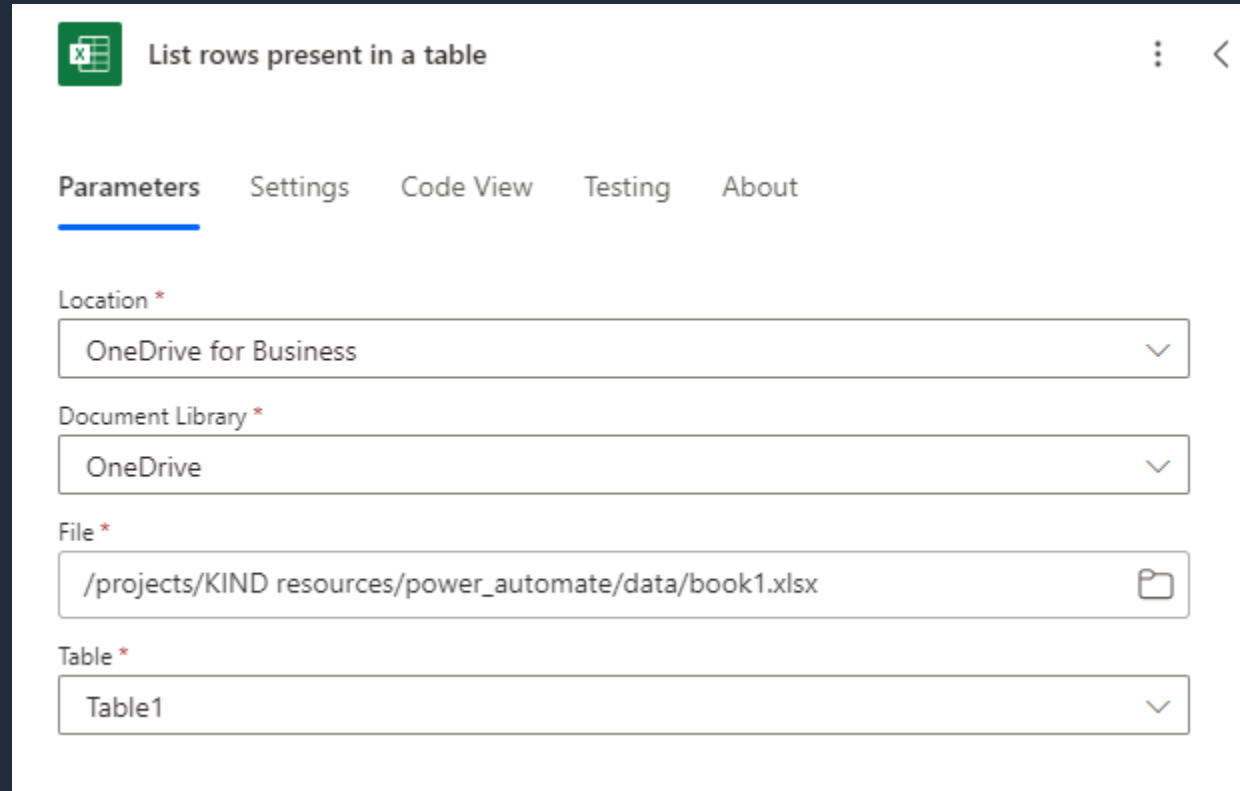
Subset an Excel file

- Add a step



Subset an Excel file

- Excel online > List rows present in a table and populate



List rows present in a table

Parameters Settings Code View Testing About

Location *
OneDrive for Business

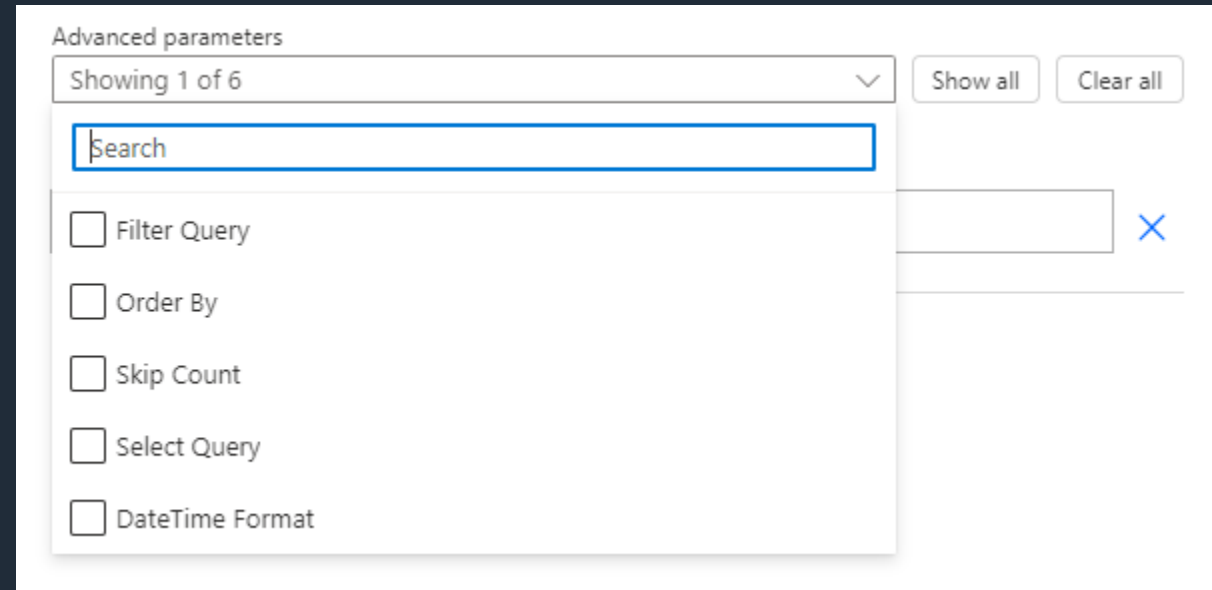
Document Library *
OneDrive

File *
/projects/KIND resources/power_automate/data/book1.xlsx

Table *
Table1

Subset an Excel file

- there are several ways we could subset the data



The image shows a screenshot of a software interface titled "Advanced parameters". At the top, it says "Showing 1 of 6" with a dropdown arrow, and two buttons labeled "Show all" and "Clear all". Below this is a search input field with the placeholder text "Search". Underneath the search field is a list of five options, each with an unchecked checkbox:

- Filter Query
- Order By
- Skip Count
- Select Query
- DateTime Format

To the right of the "Filter Query" option, there is a text input field with a blue "X" icon to its right, likely for clearing the filter. The entire dialog box is set against a dark background.

Subset an Excel file

- we'll demonstrate by taking the first 20 rows

Top Count

Subset an Excel file

- Create csv table

Create CSV table

Parameters **●** Settings Code View About

From *

Array to create table from

'From' is required.

Advanced parameters

Showing 0 of 1 Show all Clear all

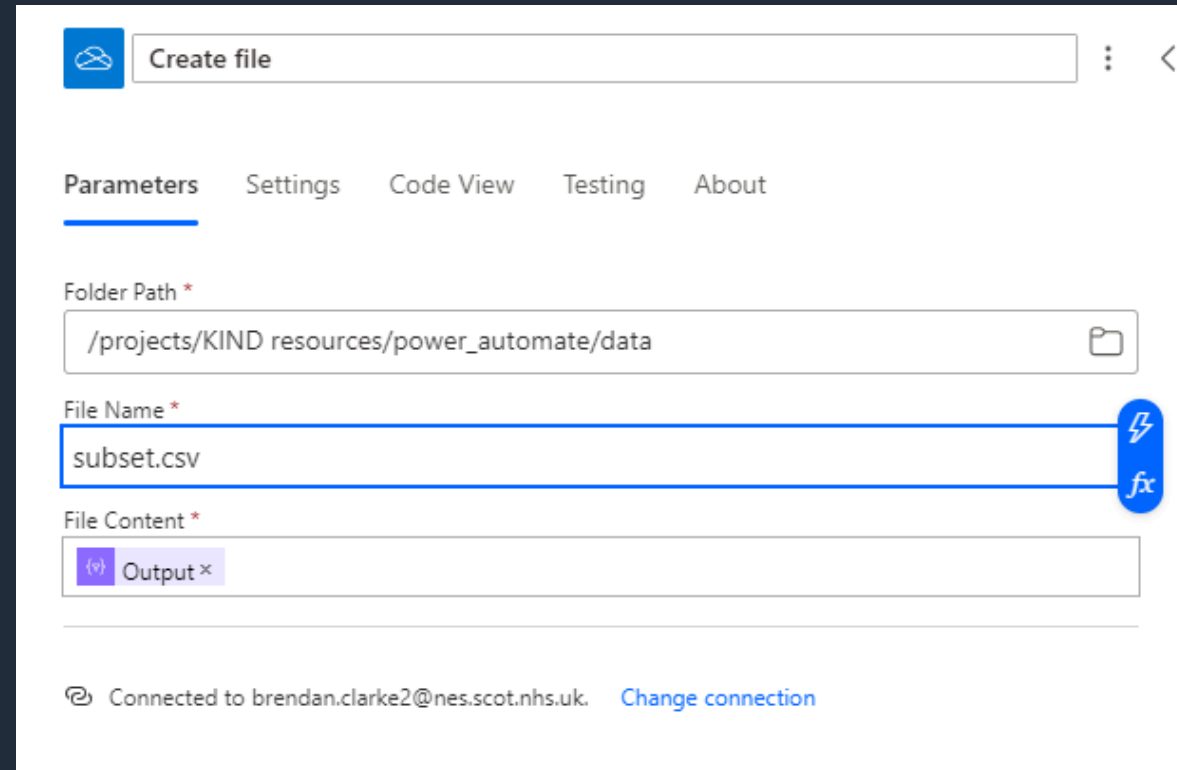
Search

List rows present in a table

body/value
List of Items

Subset an Excel file

- Create file



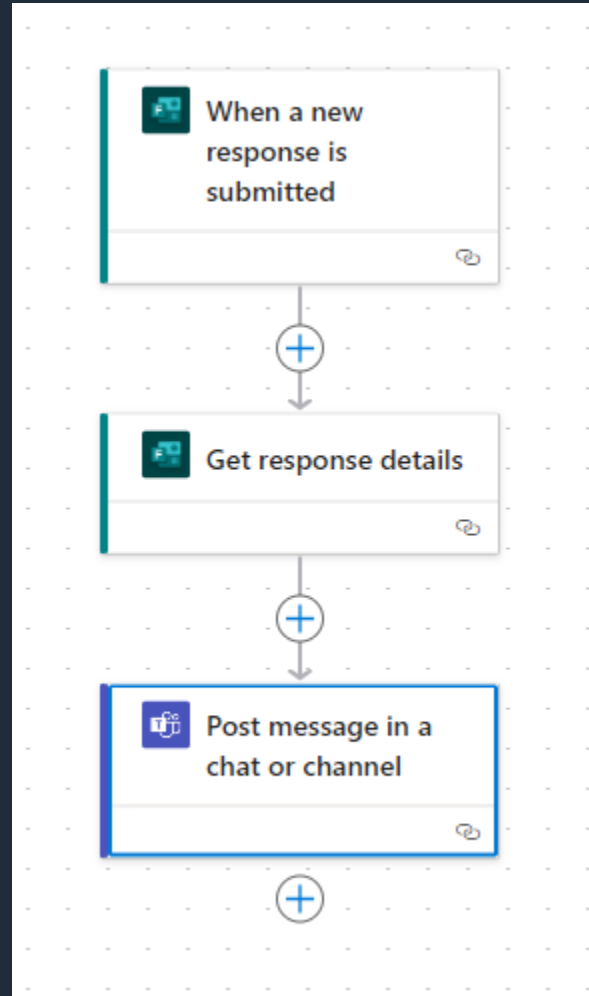
The screenshot shows a 'Create file' dialog box with the following fields and options:

- Folder Path ***: `/projects/KIND resources/power_automate/data`
- File Name ***: `subset.csv`
- File Content ***: `Output`

At the bottom, it indicates the user is connected to `brendan.clarke2@nes.scot.nhs.uk` with a [Change connection](#) link.

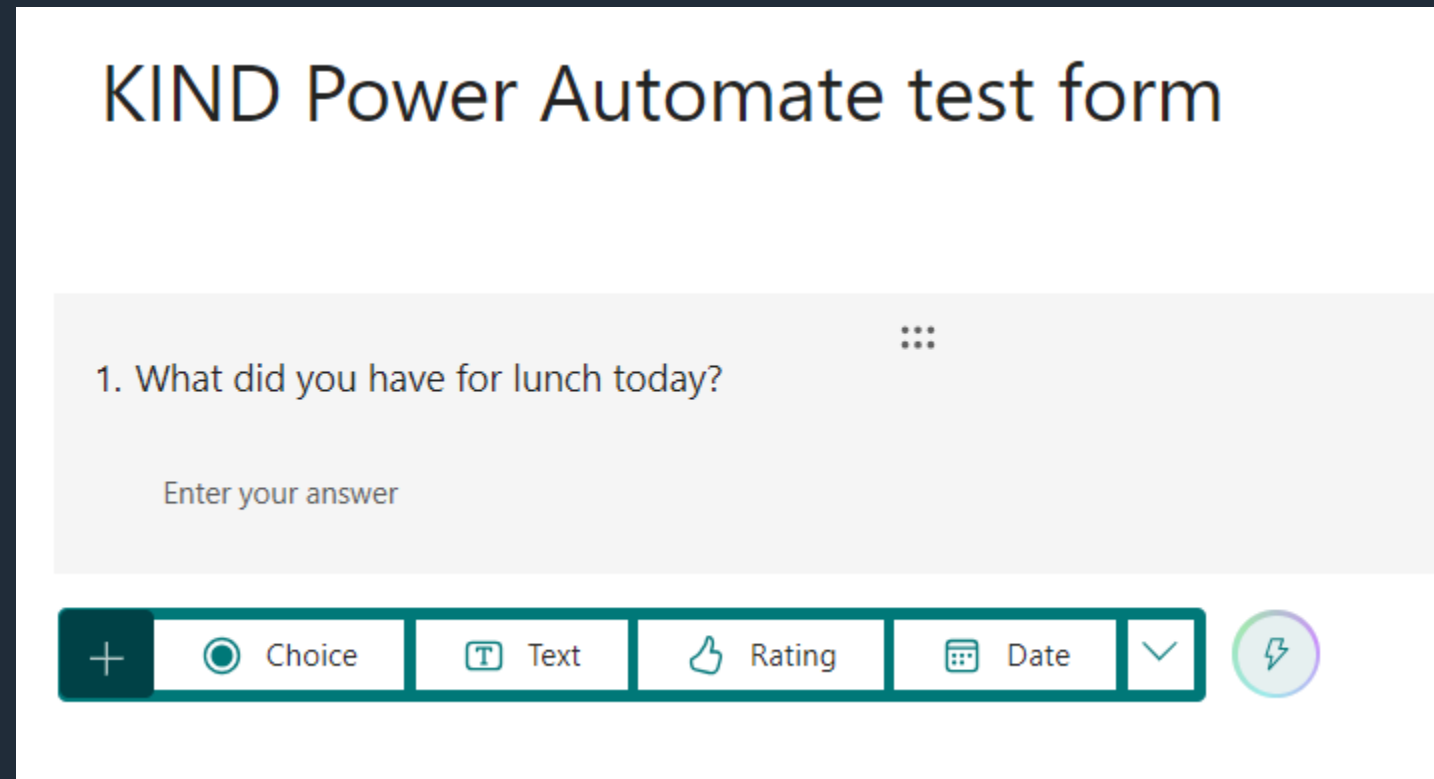
Microsoft Forms to Teams

- here's an overview



Microsoft Forms to Teams

- create a simple form (ours is at <https://forms.office.com/e/8Zds2aTS5c>)



KIND Power Automate test form

1. What did you have for lunch today?

Enter your answer

+ Choice Text Rating Date

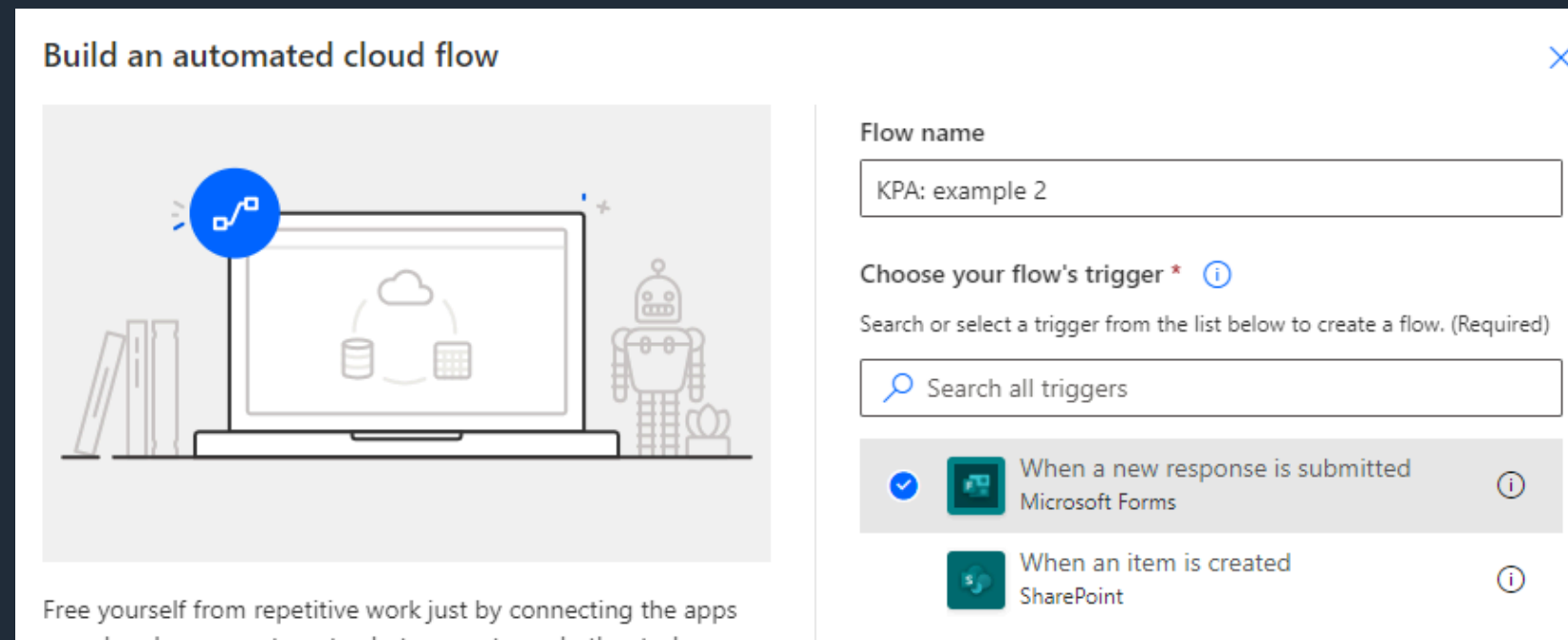
⚡

Microsoft Forms to Teams

- grab the form id

`=design&id=veDvEDCgykuAnLXmdF5Jmn79kl25VpJlq3eErXXCYKBUMU9LWURaUUhUT0xYOUtNQVY1UFpURTQ1Vi4u`

- create an **Build an automated cloud flow** -



Build an automated cloud flow

Flow name
KPA: example 2

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

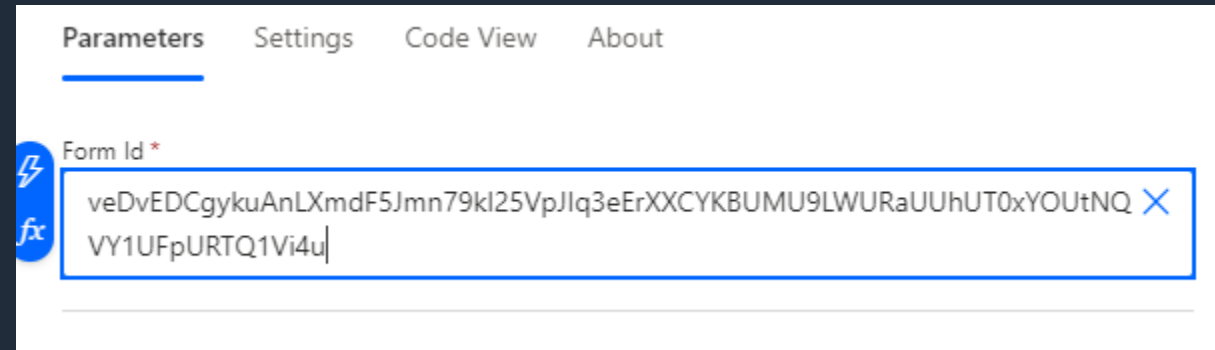
Search all triggers

- When a new response is submitted
Microsoft Forms ⓘ
- When an item is created
SharePoint ⓘ

Free yourself from repetitive work just by connecting the apps

Microsoft Forms to Teams

- Enter your form ID

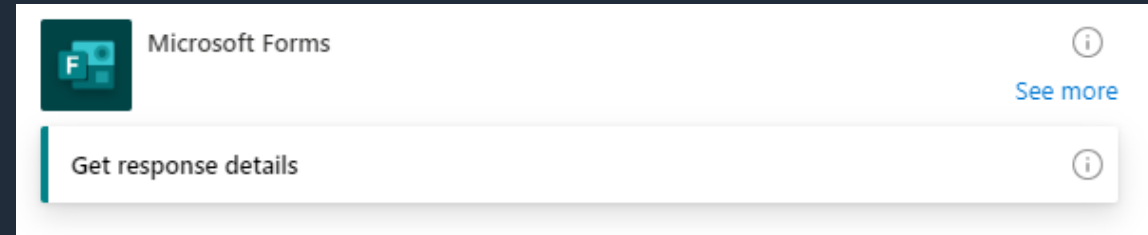


The screenshot shows the 'Parameters' tab of a Microsoft Forms configuration window. The 'Form Id' field is highlighted with a blue border and contains the alphanumeric string: veDvEDCgykuAnLXmdF5Jmn79kl25VpJlq3eErXXCYKBUMU9LWURaUUhUT0xYOUtNQ VY1UFpURTQ1Vi4u. A blue lightning bolt icon and a blue 'fx' icon are visible on the left side of the input field.

(veDvEDCgykuAnLXmdF5Jmn79kl25VpJlq3eErXXCYKBUMU9LWURaUUhUT0xYOUtNQVY1UFpURTQ1Vi4u)

Microsoft Forms to Teams

- Get response details



Microsoft Forms to Teams

- Populate with the form and step details

Get response details

Parameters Settings Code View Testing About

Form Id *

veDvEDCgykuAnLXmdF5Jmn79kl25VpJlq3eErXXCYKBUMU9LWURaUUhUT0xYOUtNQ
VY1UFpURTQ1Vi4u

Response Id *

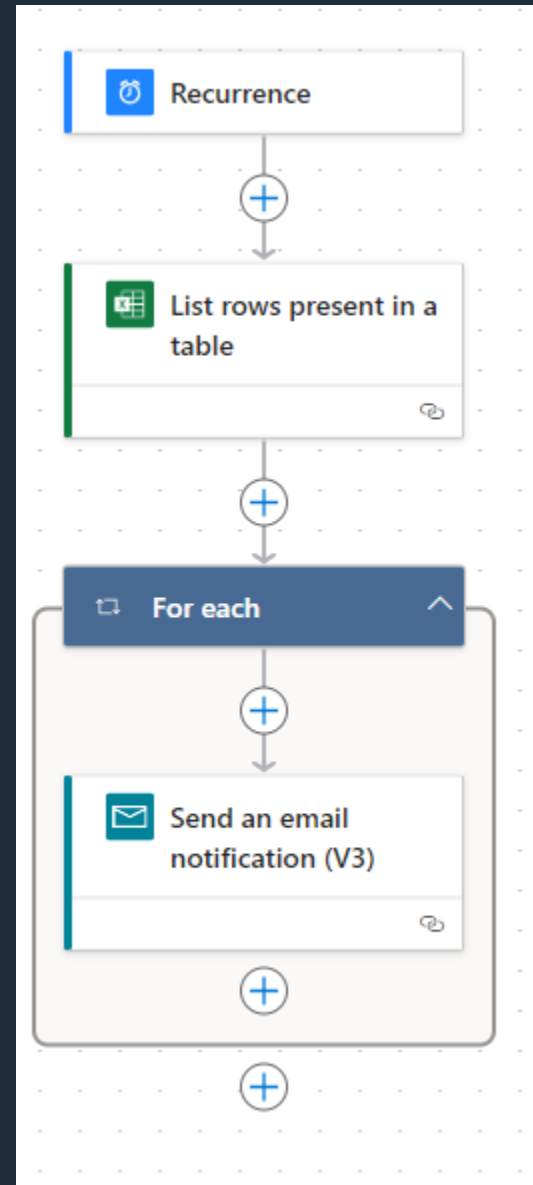
Response Id ×

Connected to brendan.clarke2@nes.scot.nhs.uk [Change connection](#)

Microsoft Forms to Teams

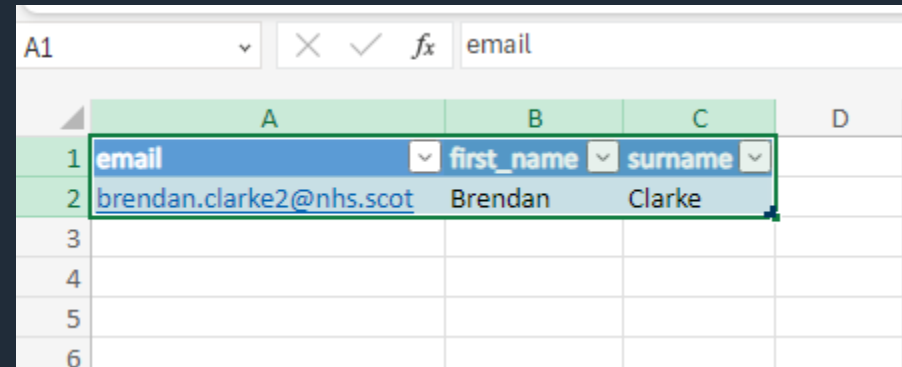
Excel workbook to mailing list

- here's an overview



Excel workbook to mailing list

- start with a simple .xlsx. Again, that will need to be on Sharepoint or Onedrive

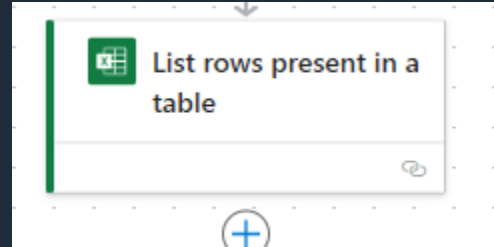


The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D
1	email	first_name	surname	
2	brendan.clarke2@nhs.scot	Brendan	Clarke	
3				
4				
5				
6				

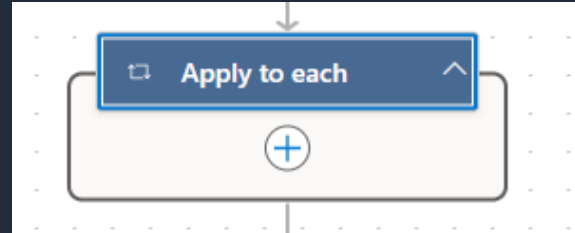
Excel workbook to mailing list

- List rows present in a table



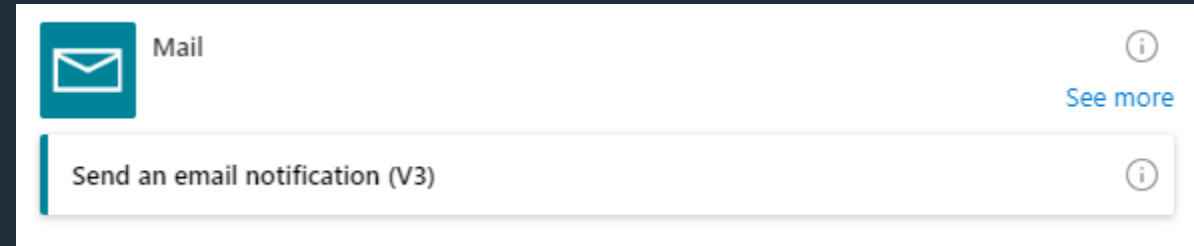
Excel workbook to mailing list

- Apply to each



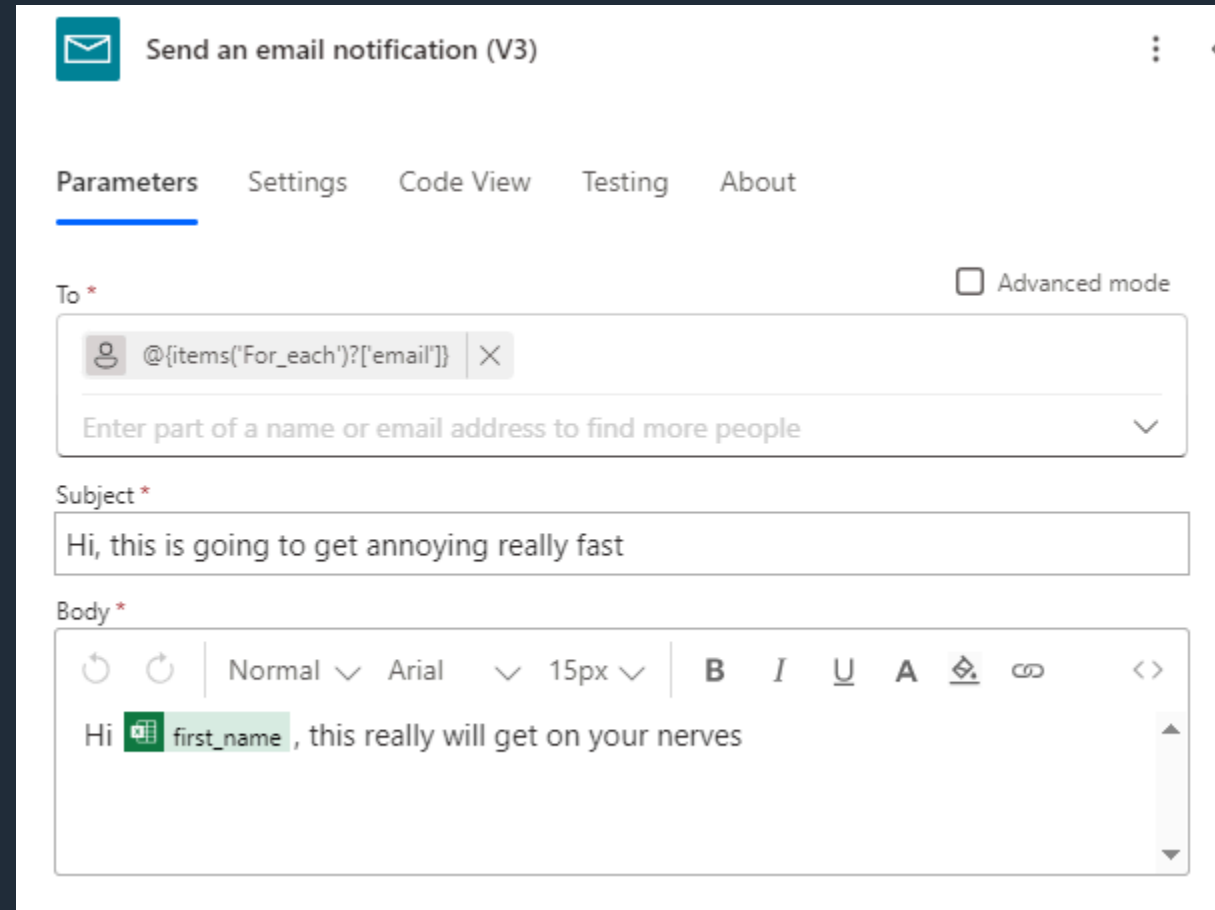
Excel workbook to mailing list

- Send an email notification (V3) nested inside the Apply to each



Excel workbook to mailing list

- add the expression `items('For_each')?['email']`



The screenshot shows an email composition window titled "Send an email notification (V3)". The "Parameters" tab is selected. The "To" field is populated with the expression `@{items('For_each')?['email']}`. The "Subject" field contains the text "Hi, this is going to get annoying really fast". The "Body" field contains the text "Hi `first_name`, this really will get on your nerves".

Send an email notification (V3)

Parameters Settings Code View Testing About

To * Advanced mode

`@{items('For_each')?['email']}` X

Enter part of a name or email address to find more people

Subject *

Hi, this is going to get annoying really fast

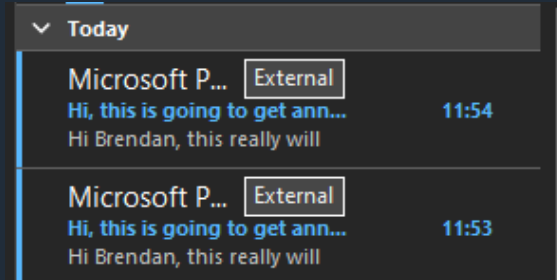
Body *

Normal Arial 15px B I U A

Hi `first_name`, this really will get on your nerves

Excel workbook to mailing list

- enjoy the result



Feedback and resources

- please can I ask for some feedback - takes less than a minute, completely anonymous, helps people like you find the right training for them

Session	Date	Area	Level
Power automate for health and care	13:00-14:00 Thu 8th August 2024	Data	📌 :beginner-level
Relative, absolute, mixed, structured, and R1C1 references in Excel	15:00-16:00 Thu 8th August 2024	Excel	📌📌 : intermediate-level

Session	Date	Area	Level
Neural nets made ridiculously simple	13:00-14:00 Mon 12th August 2024	AI/ML	🌶️ : beginner-level
Hacker Stats (AKA Resampling Methods)	14:00-15:00 Wed 14th August 2024	R	🌶️🌶️🌶️ : advanced-level