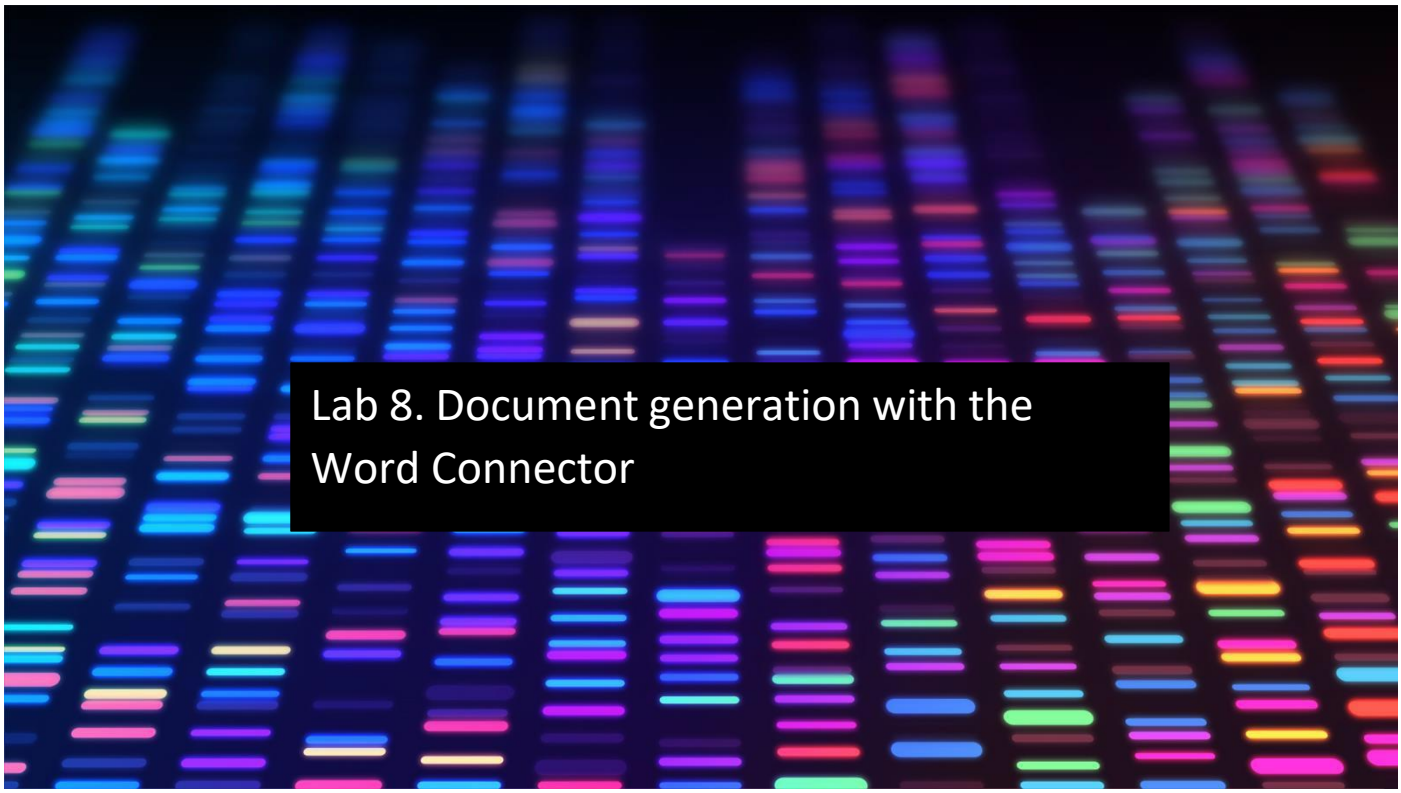

Lab 8. Document generation with the
Word Connector

Lab 8. Document generation with the Word Connector

Author: Serge Luca, aka "Doctor Flow".

Learning objective: create a Flow that will generate an invoice (in PDF) based on a Word template and on data stored in an Excel document.

Duration: 30 minutes

Scenario: Excel files containing invoice data are stored in OneDrive for Business. A Flow will read these data, parse the data, and generate an invoice based on a word document template. The invoice will be transformed into a PDF file.

Prerequisites: The Word Connector is a Premium connector. You need to test this lab with a trial premium subscription.

When using the Word Connector, the designer will ask you to start a premium trial or you must have activated the developer license (see lab 0).

The files for the lab can be downloaded from the folder "Resources for the labs", download the labv9.zip file: the files are "**Invoice.xlsx"** and "**Invoice Template start.docx"**

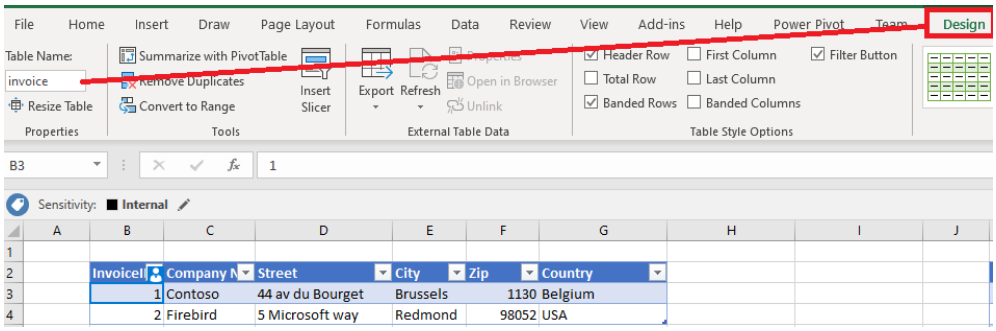
Tasks:

1. Upload the file **invoice.xlsx** provided by the trainer to the Documents folder of your OneDrive for Business
2. Look at this file: there are two tables:
    a. The table **invoice** consists of the invoice headers
    b. The table i**nvoicelines** consists of the invoice lines

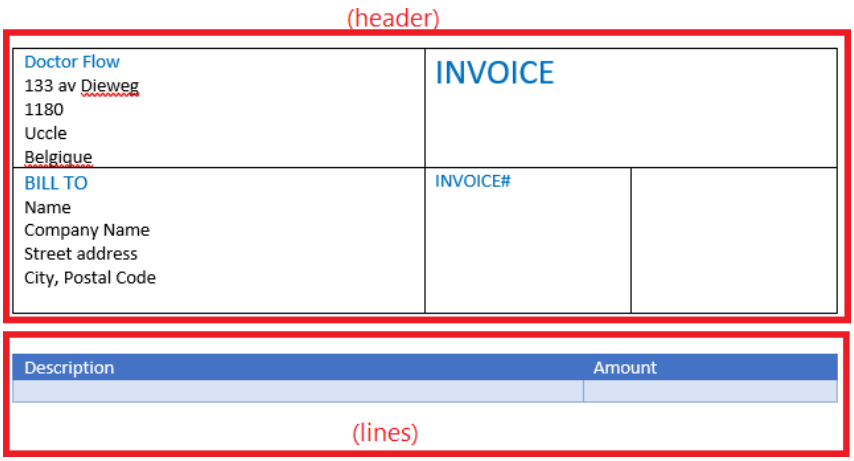
InvoiceID	Company N	Street	City	Zip	Country
1	Contoso	44 av du Bourget	Brussels	1130	Belgium
2	Firebird	5 Microsoft way	Redmond	98052	USA

Invoice	Product	Amount	Price	Total
1	Internal training PowerAp	5	1400	4200
1	Internal training Flow	4	1400	5600
2	Internal training PowerAp	3	1400	4200
2	Internal training PowerBI	2	1400	2800

3. Each table has a name that we will reference from our Flow; to find out the table name, open the file in Excel desktop, click the table, and select the menu Design as illustrated in the following picture:



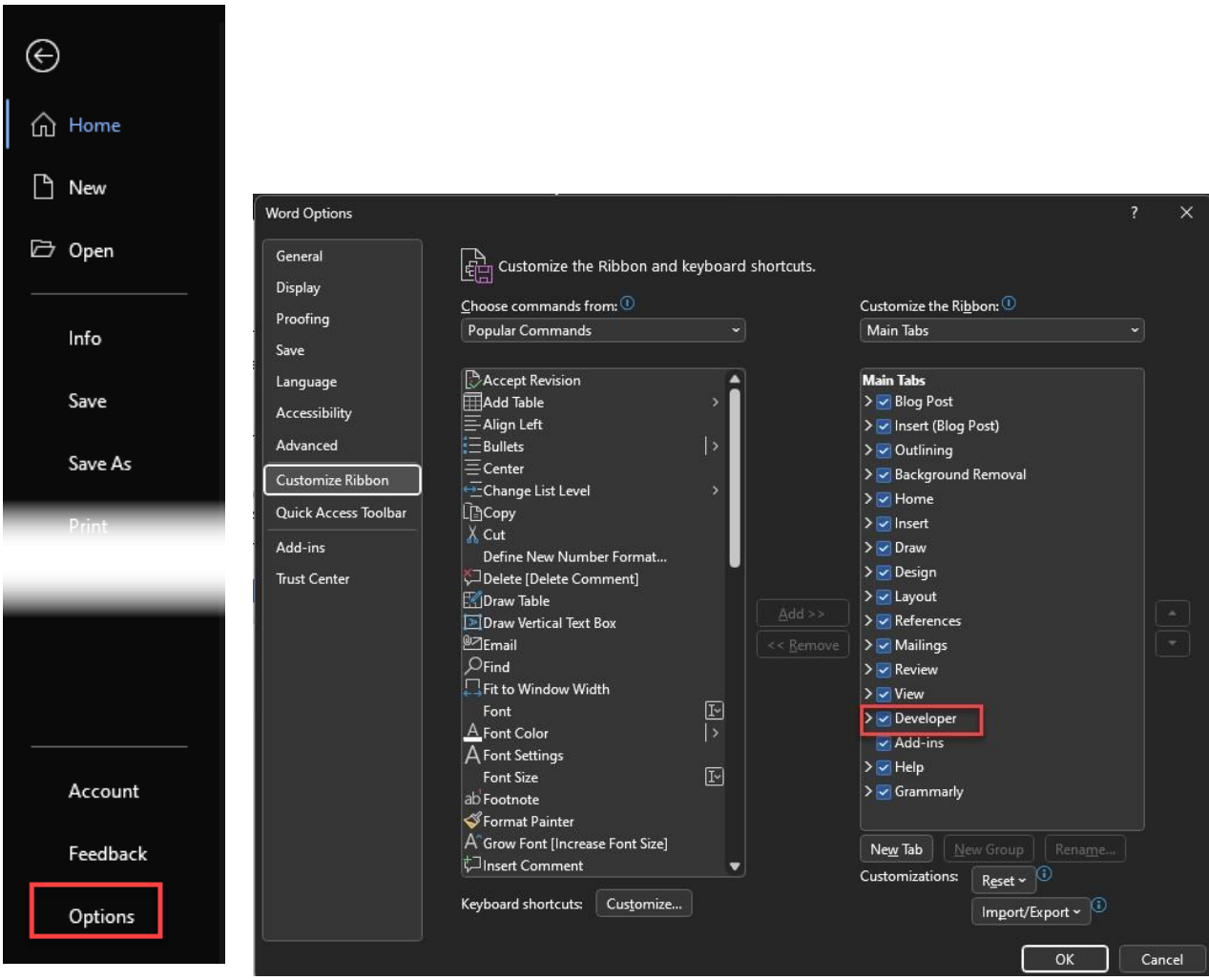
4. Each invoice can have several lines.
5. Upload the file **Invoice Template start.docx** provided by the trainer into the Documents folder of your OneDrive for Business and take a look at this file:

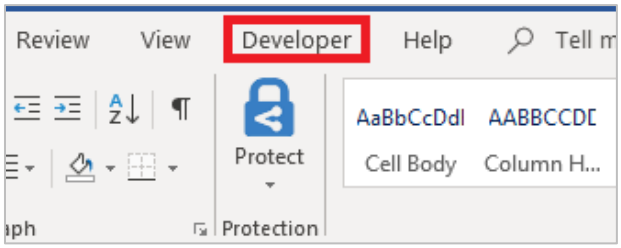


The section "header" and "lines" are two different tables. The lines section is a table with one row for the header and one row for the data.

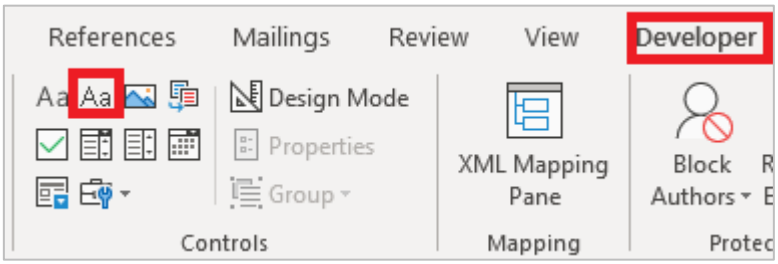
6. Go to the Word **Options**, select Customize Ribbon, select **Developer**, and click OK.

This will display the **Developer** tab in Word:





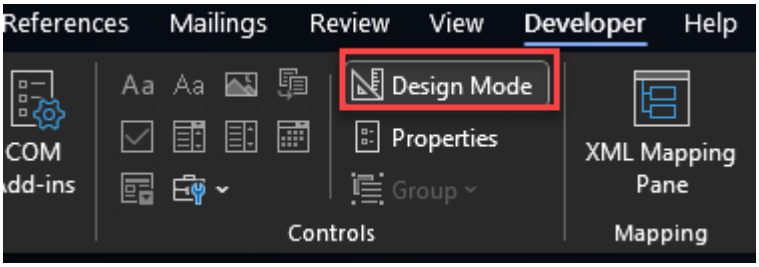
7. You will customize the word template/ next to each field of the template, you will add a **Word plain text content** control, and we will use the properties button to name them accordingly.



8. Add a control next to the following fields: **Company Name**, **Street address**, **City** (add 2 controls here, one for the city, one for the zip code) and one next to **invoice#;**

Doctor Flow 133 av Dieweg 1180 Uccle Belgique	INVOICE	
BILL TO Company Name: Click or tap here to enter text. Street address: Click or tap here to enter text. City: Click or tap here to enter text., Click or tap here to enter text.	INVOICE#	Click or tap here to enter text.

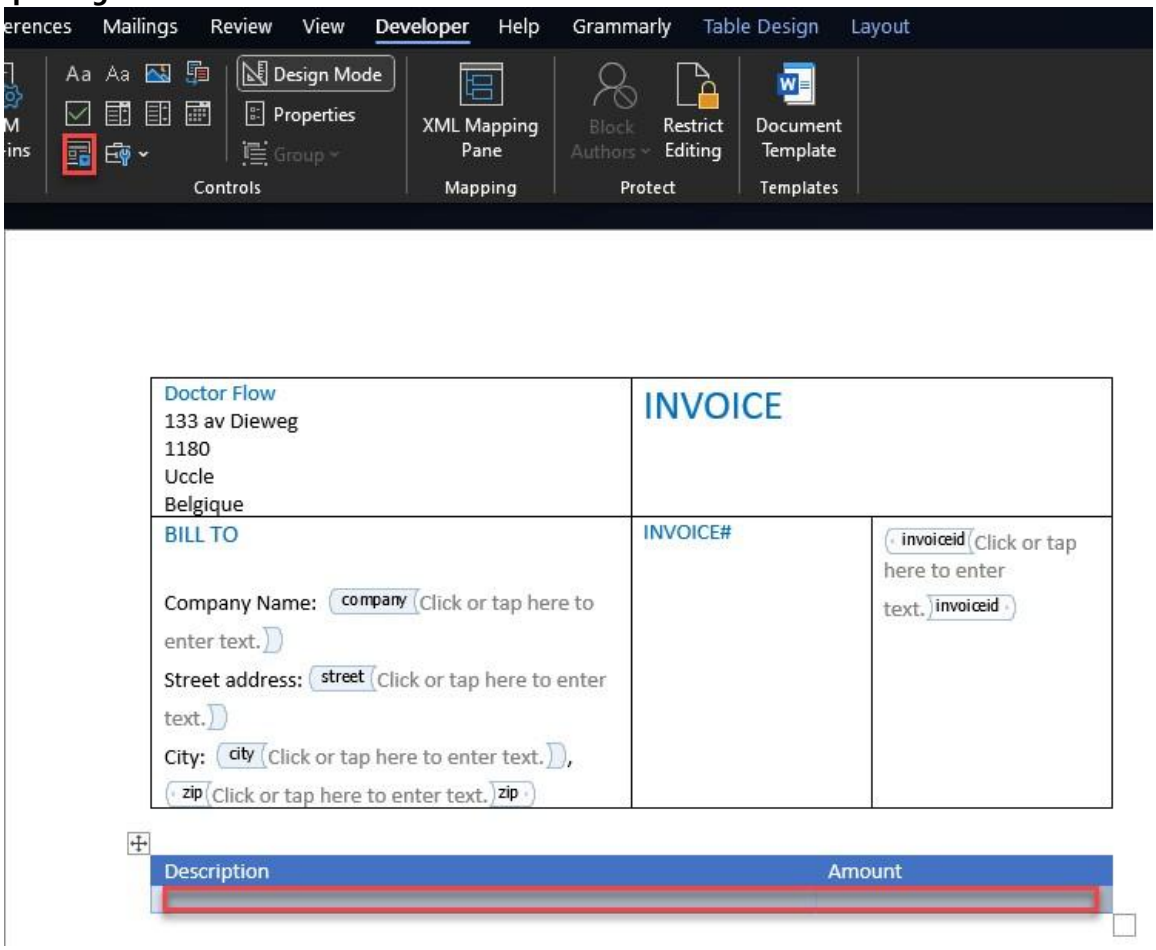
9. Click **Design Mode** to see where each control starts and ends:



10. With the **Properties** button, name (Title of Property) the controls **company**, **street**, **city**, **zip**, **invoiceid** as illustrated below:

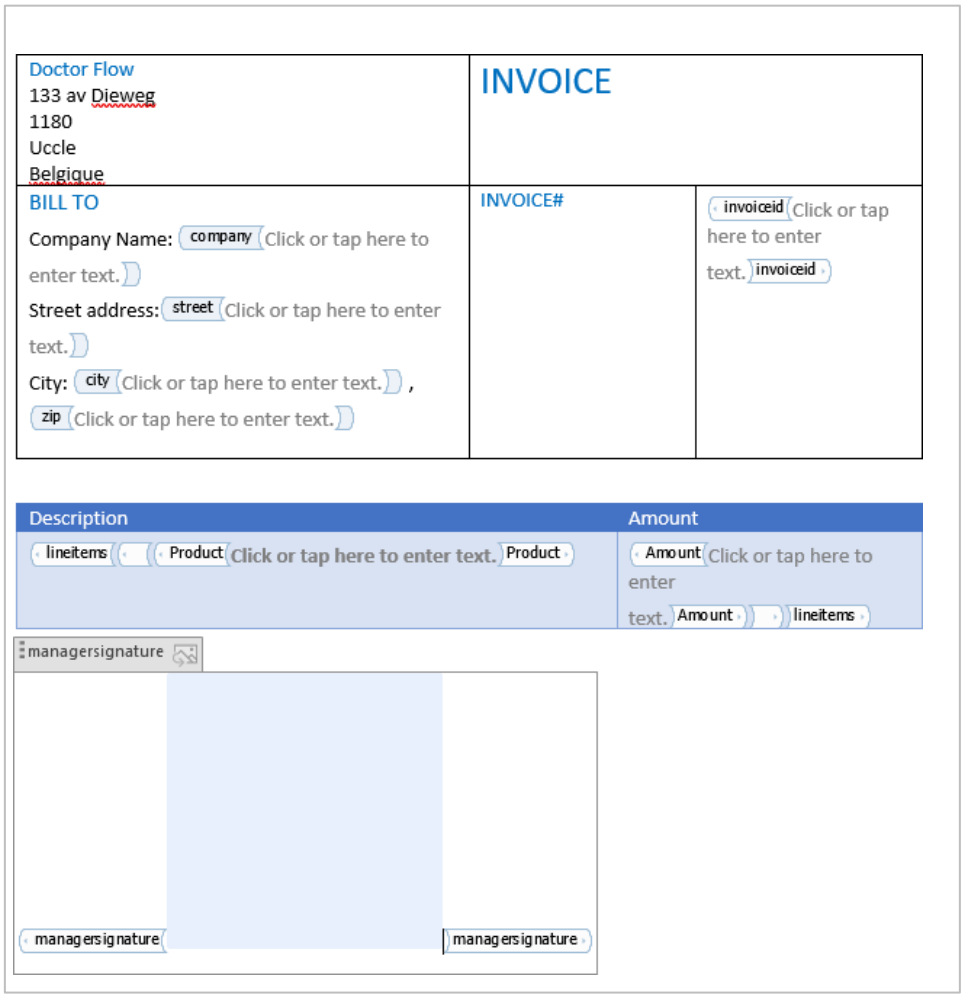
Doctor Flow 133 av Dieweg 1180 Uccle Belgique	INVOICE	
BILL TO Company Name: company Click or tap here to enter text. Street address: street Click or tap here to enter text. City: city Click or tap here to enter text. , zip Click or tap here to enter text.	INVOICE#	invoiceid Click or tap here to enter text. invoiceid

11. You will focus now on the invoice lines; select the second row of the table (the one with the empty data, not the row with the header); select the whole row (including the two columns) and add a **Repeating Section Content Control**:

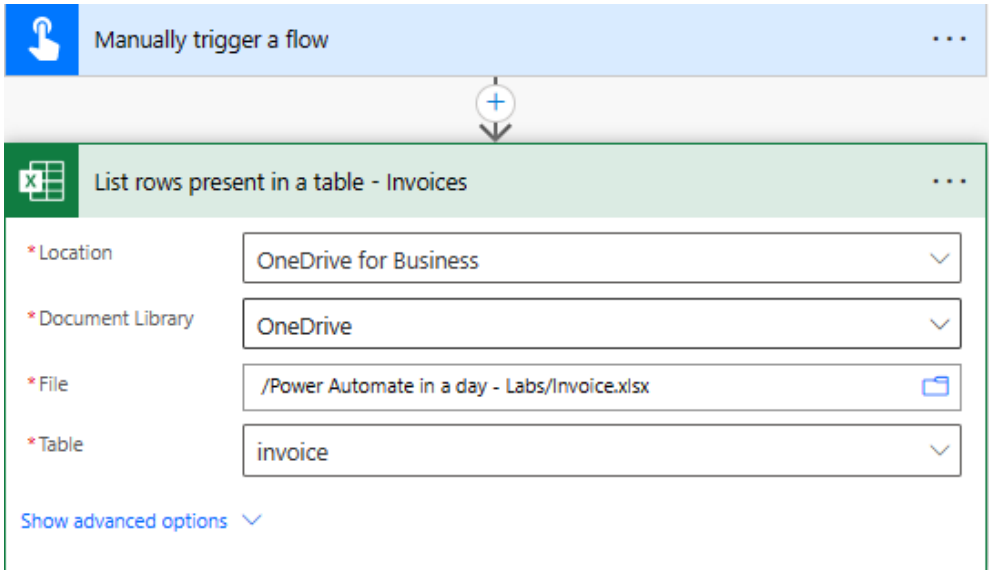


12. Rename the repeating section **lineitems**.
13. In this repeating section, content control, add 2 Plain text content controls and name them **Product** and **Amount**:

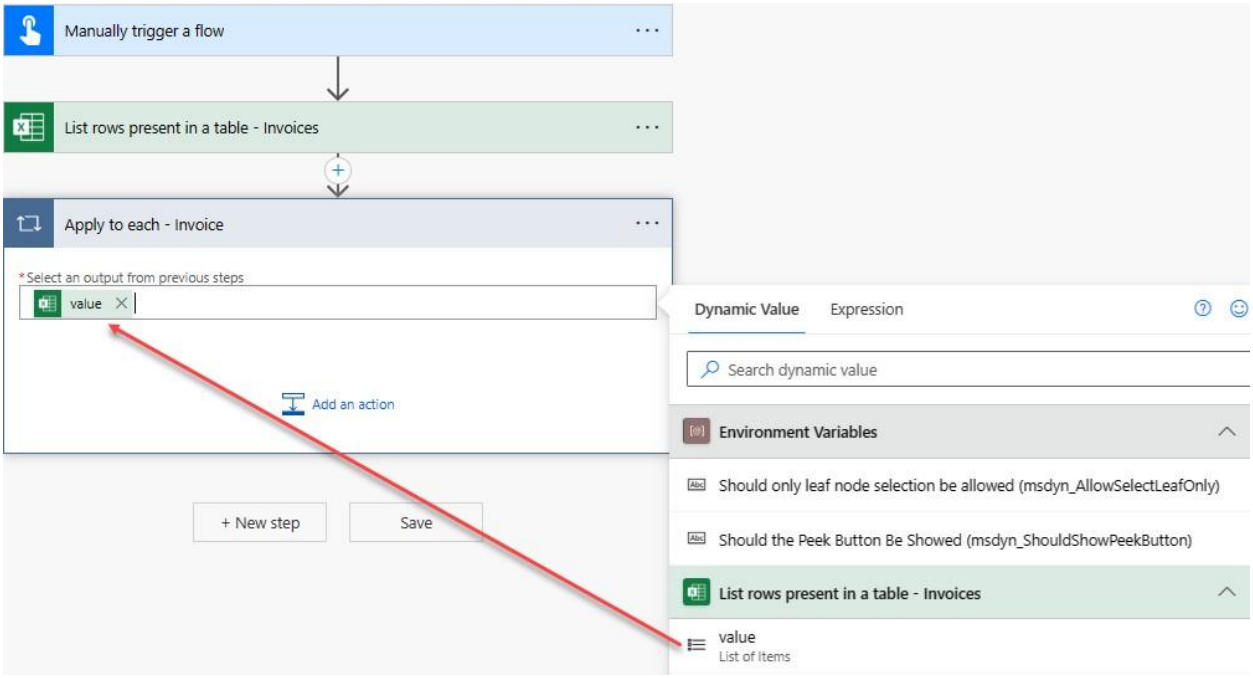
14. After the repeating section, adds a **Picture content control** that will display the manager signature. Name this control **managersignature**.
15. Eventually, the template should look like this:



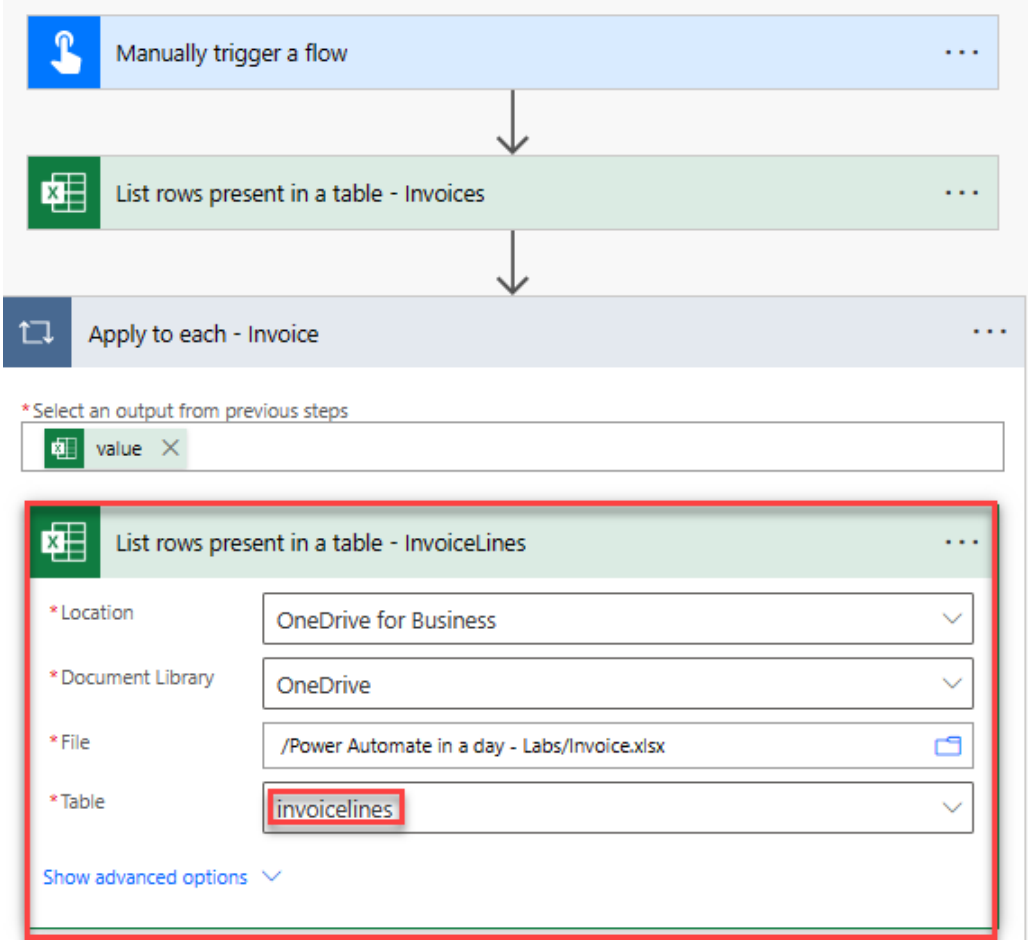
16. Rename the file to **invoice template**.docx
17. Let's create a Flow that starts from a button (Instant cloud flow > Manually trigger a flow).
18. Add an action **Excel Online (Business)- List rows present in a table**, and retrieve the **invoice table** of your **invoice.xlsx** documents:



19. Add an Apply to each action to get each invoice line, and rename it:

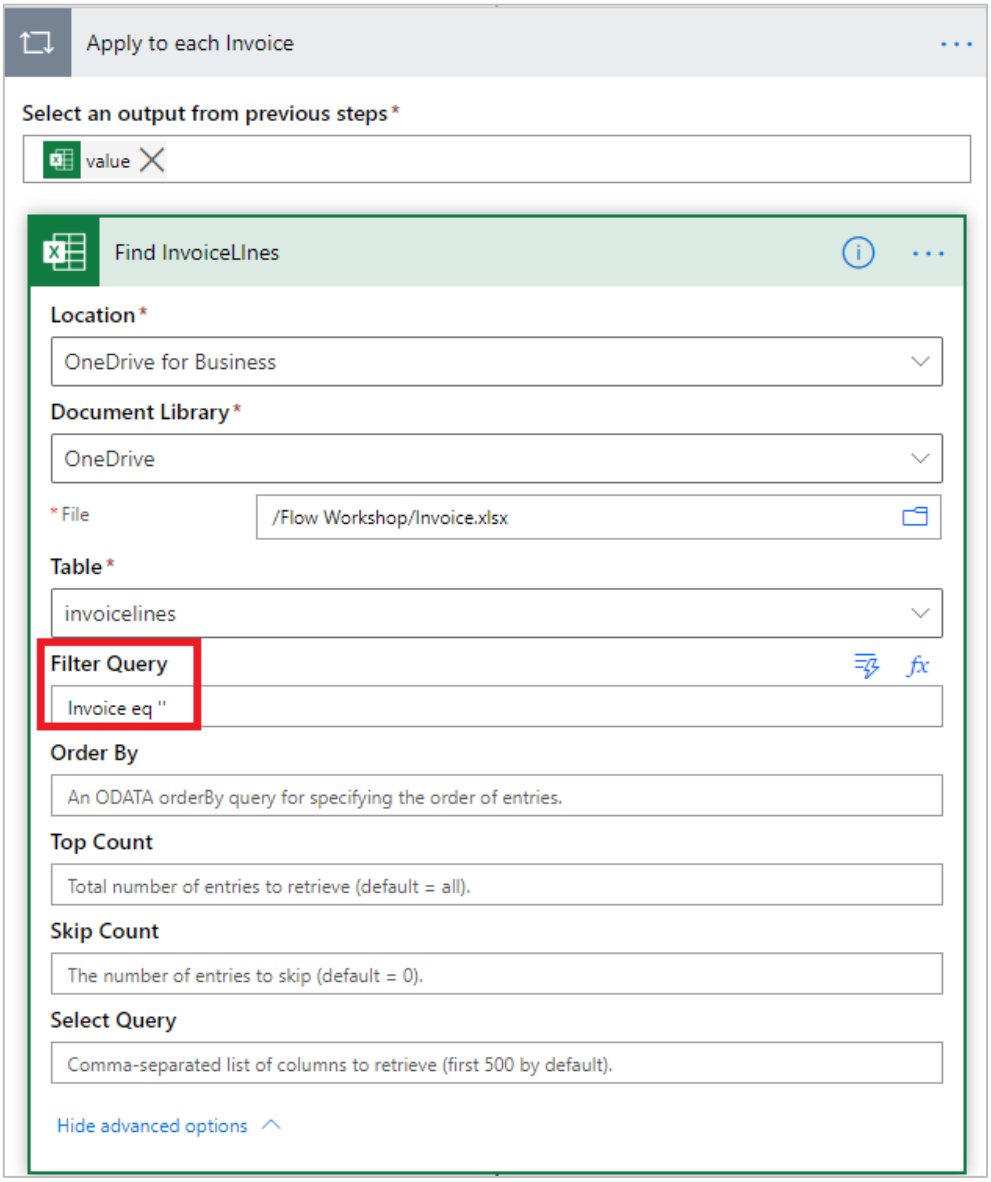


20. For each invoice, you will fetch the corresponding invoice lines: Add another Excel action that will retrieve the **invoicelines** table List rows present



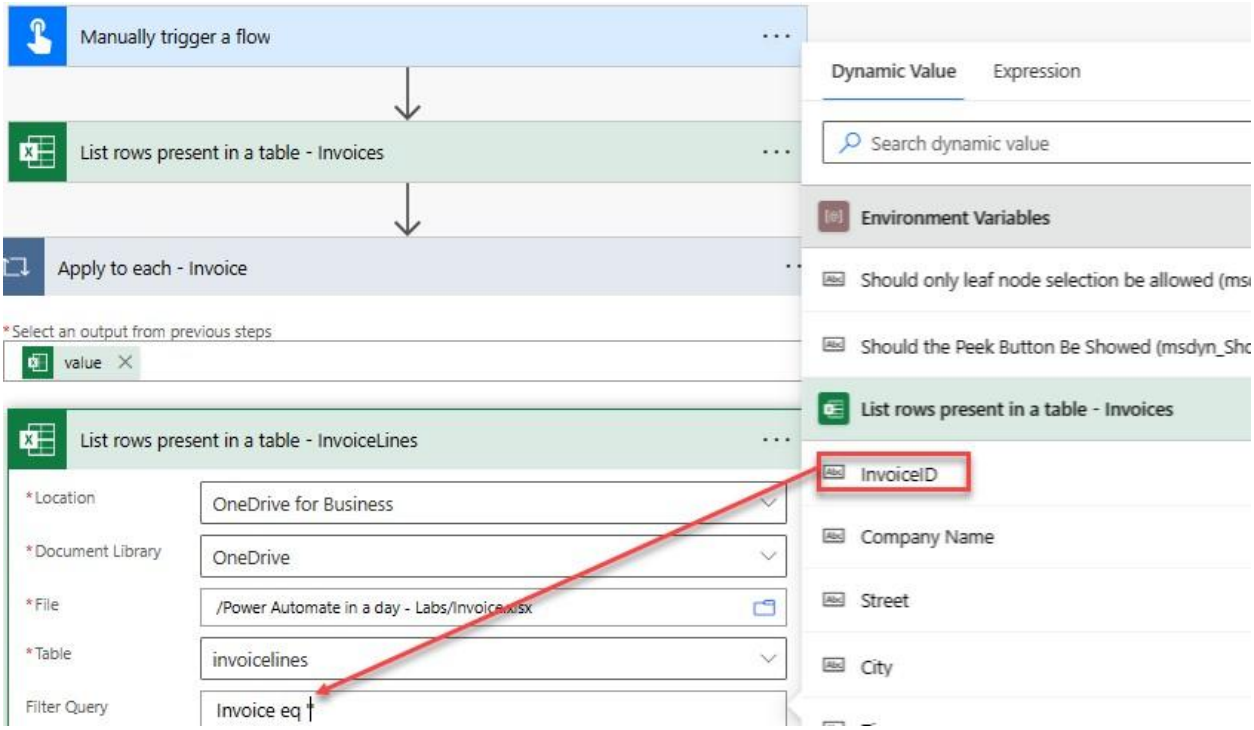
In the Excel for business action

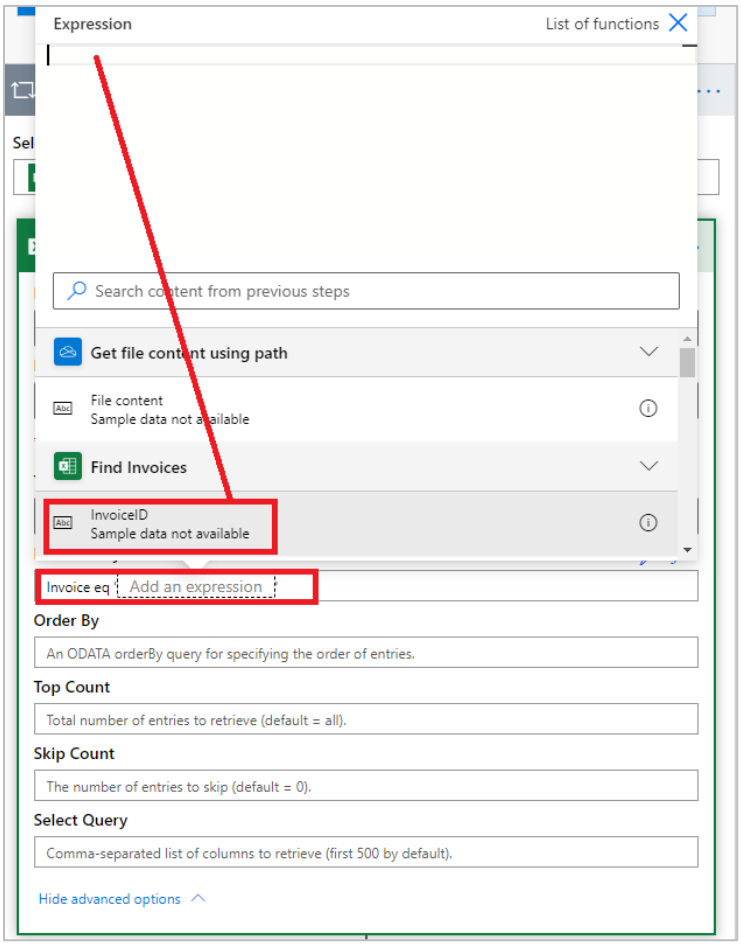
21. You need to filetr the retrieved lines. Click the **Show advanced options,** and in the **Filter Query** field, type **Invoice eq ' '** (2 single quotes). The filter query is case-sensitive, be careful here.



22. Move the cursor between the ' ' and add the field "InvoiceID" under the quotes:

23.

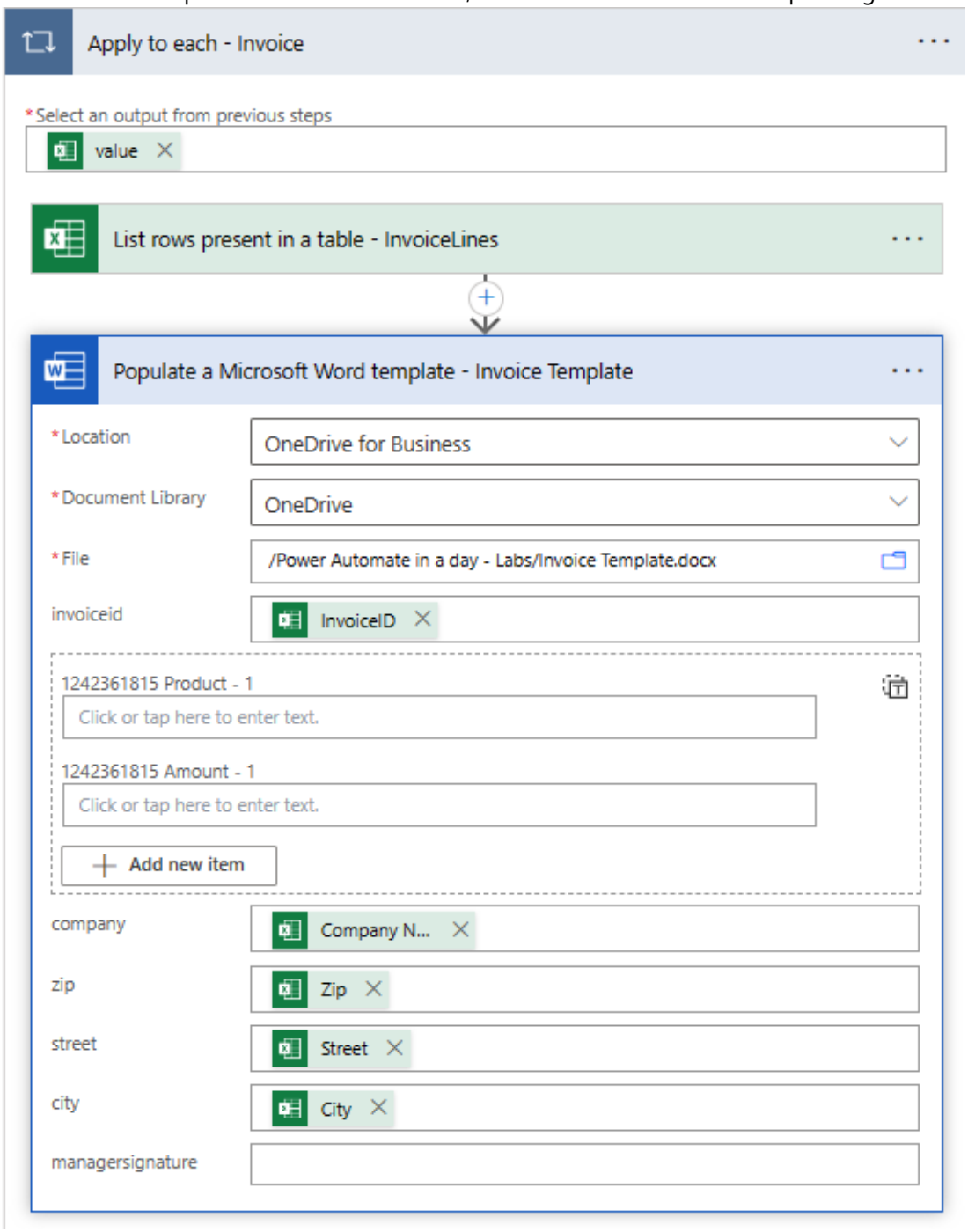

Manually trigger a flow
List rows present in a table - Invoices
Apply to each - Invoice
*Select an output from previous steps
value
List rows present in a table - InvoiceLines
*Location
OneDrive for Business
*Document Library
OneDrive
*File
/Power Automate in a day - Labs/Invoice.xlsx
*Table
invoicelines
Filter Query
Invoice eq
Dynamic Value
Expression
Search dynamic value
Environment Variables
Should only leaf node selection be allowed (ms
Should the Peek Button Be Showed (msdyn_Sho
List rows present in a table - Invoices
InvoiceID
Company Name
Street
City


Expression
List of functions
Search content from previous steps
Get file content using path
File content
Sample data not available
Find Invoices
InvoiceID
Sample data not available
Invoice eq
Add an expression
Order By
An ODATA orderBy query for specifying the order of entries.
Top Count
Total number of entries to retrieve (default = all).
Skip Count
The number of entries to skip (default = 0).
Select Query
Comma-separated list of columns to retrieve (first 500 by default).
Hide advanced options

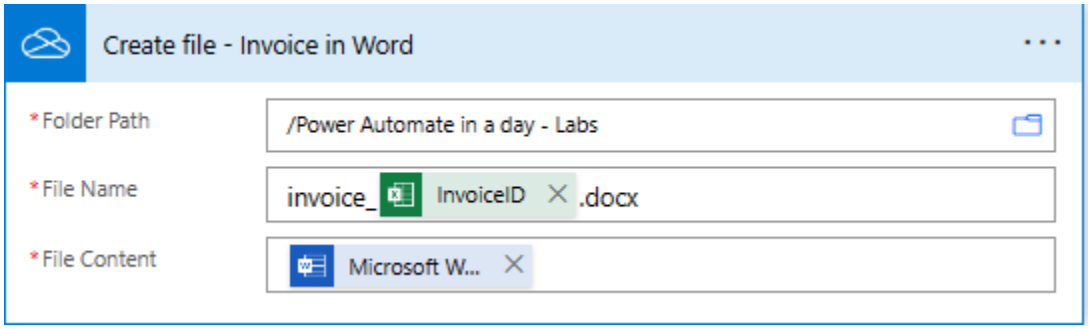
List rowspresent in a table - Invoicelines

*Location	OneDrive for Business v
• Document library	OneDrive v
*file	/PowerAutomate inaday · labs/Invoice.xtsx
*Table	invoicelines v
Filter Query	invoiceeq 1!1 InvoiceID X•

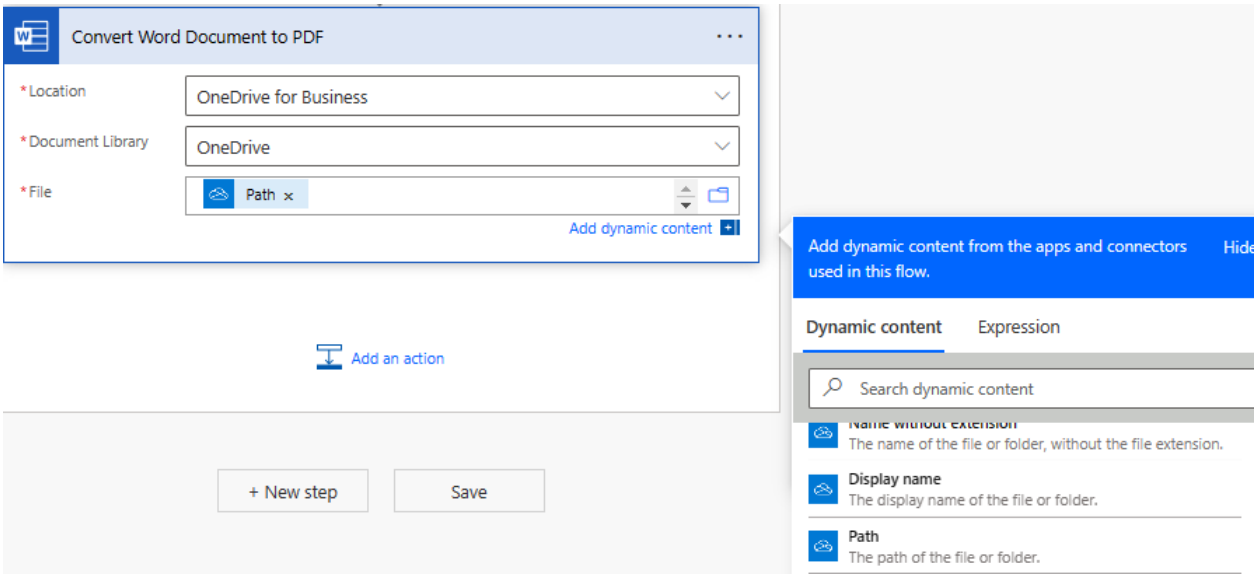
24. Add an action **Populate a Microsoft Word template,** and you will notice that the Word content controls show up as fields in this connector; fill in the fields with the corresponding Excel values:

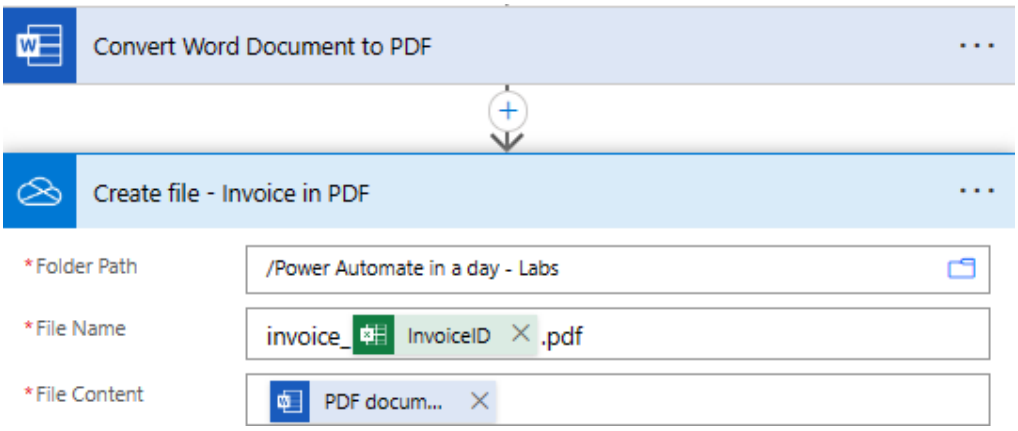


25. You still have to generate a file in OneDrive for Business with the content of the previous action output content: add a **OneDrive for Business Create file** action and rename
26. Fill in the File Content from with the output of the previous action and dynamically generate the file name:

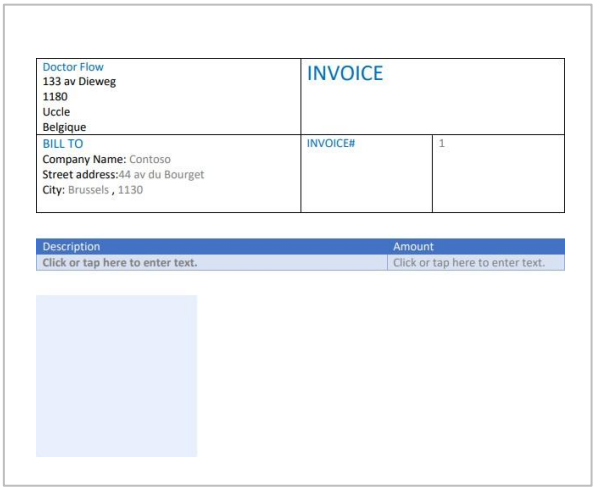


27. Add an action **Convert Word Document to PDF** and grab the path of the generated file
28. Add a **OneDrive for Business Create file action** to create the pdf file and pass the body of the previous action. The next two actions should look like this:

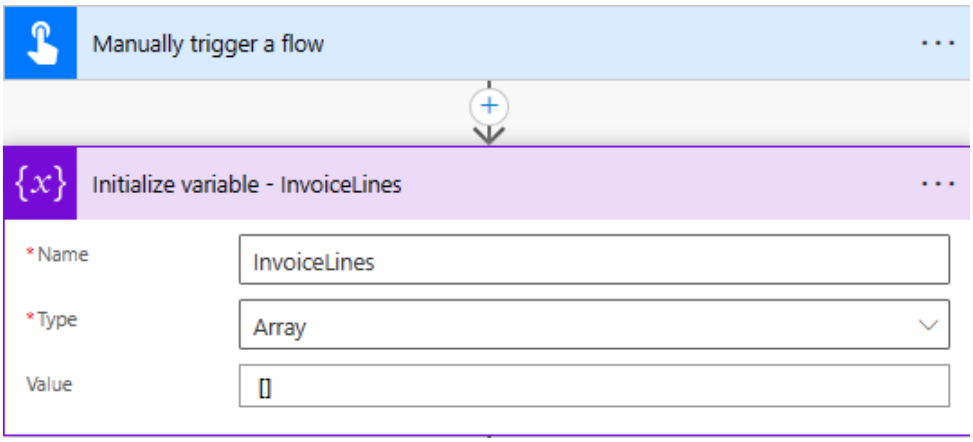




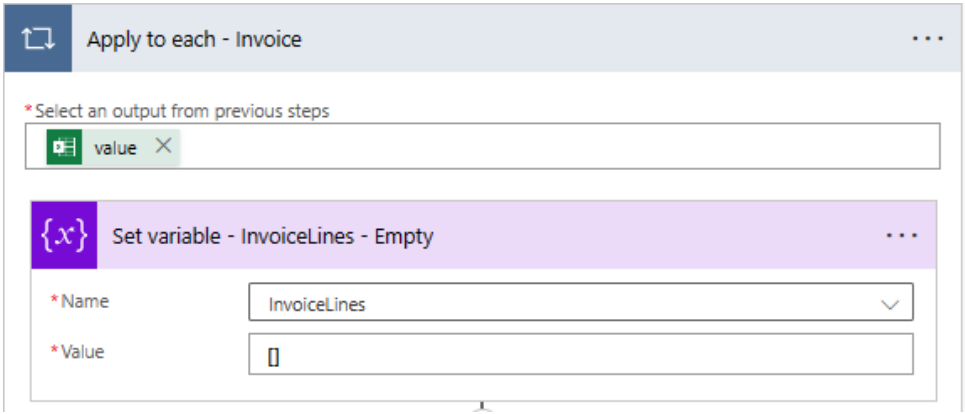
29. Run the Flow and check the generated PDF files. The first file should look like this:



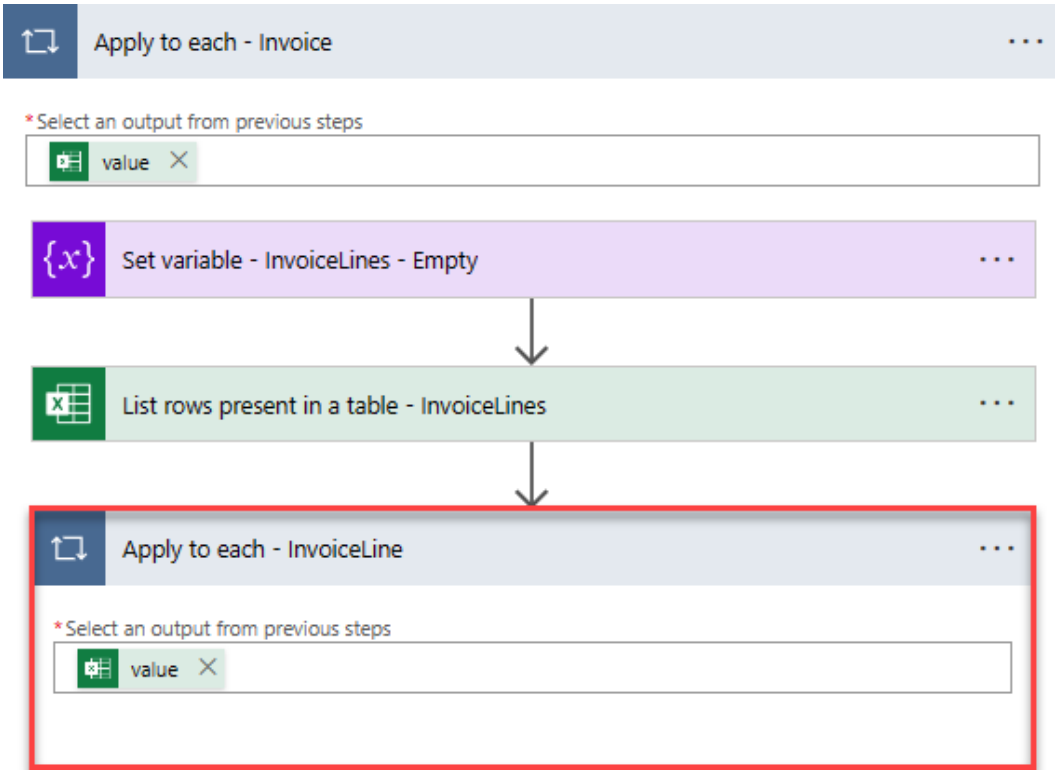
30. You will now update the Flow to implement the line items. First, edit the Flow and define an array variable called **invoiceLines** and initialize it as an empty array:



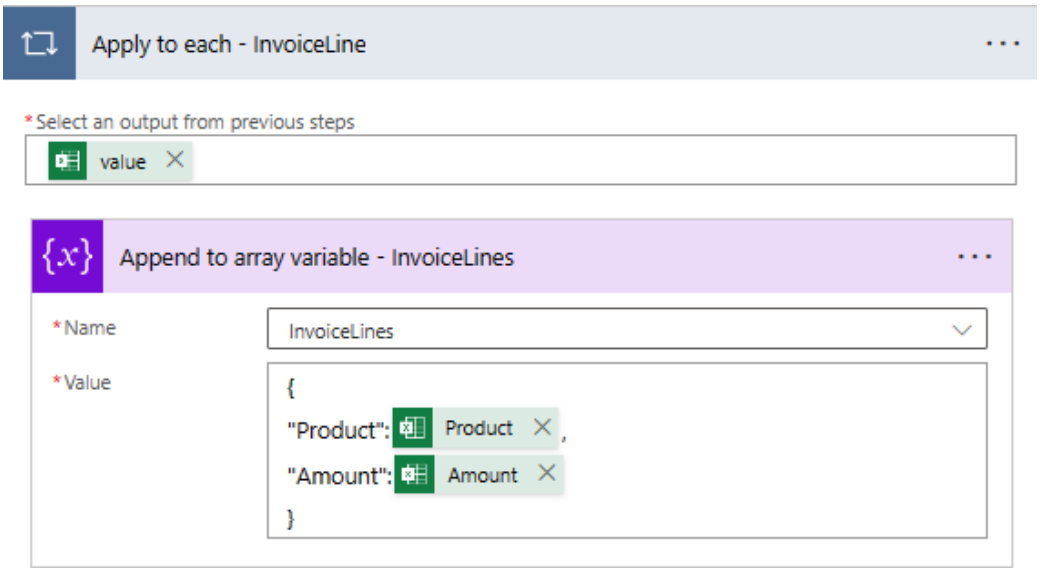
31. Add a Set variable action at the start of Apply to each to clean up this variable again:



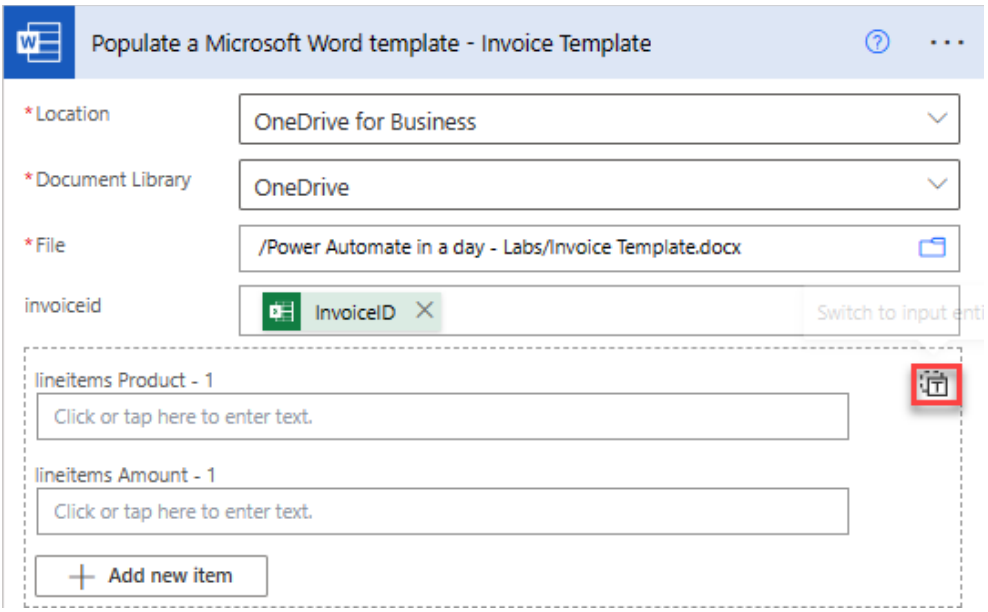
32. After the **List rows present in a table - InvoicesLines** action, **add an Apply to each invoice** to go through every invoice lines:



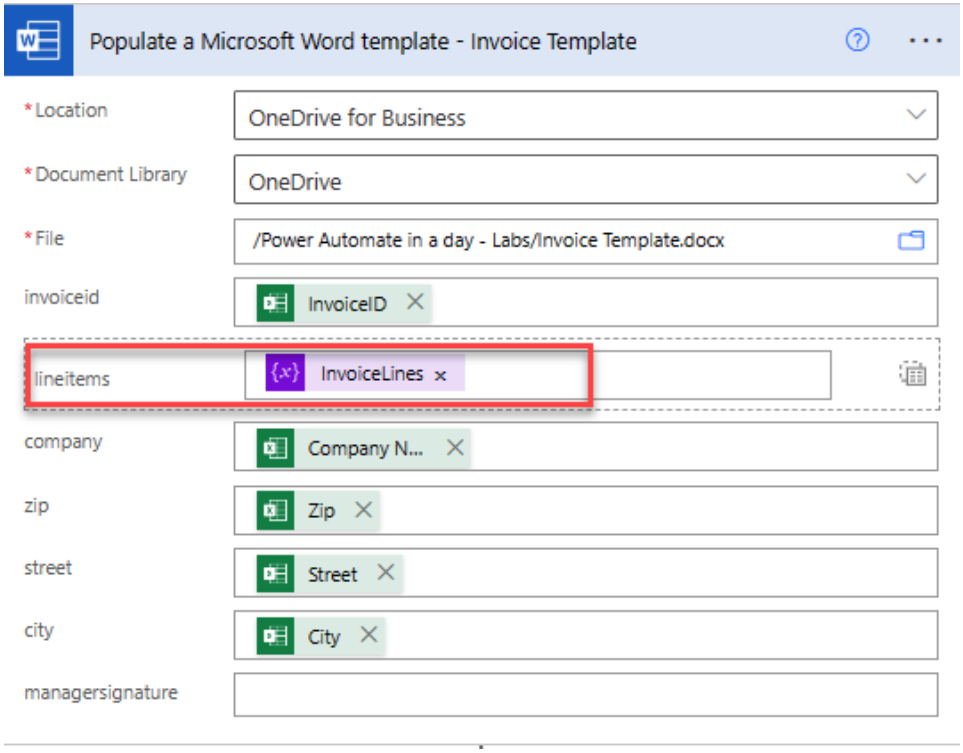
33. In this Apply to each, you will create a JSON array containing the **Invoice Lines** information; add an **Append to array variable** action:



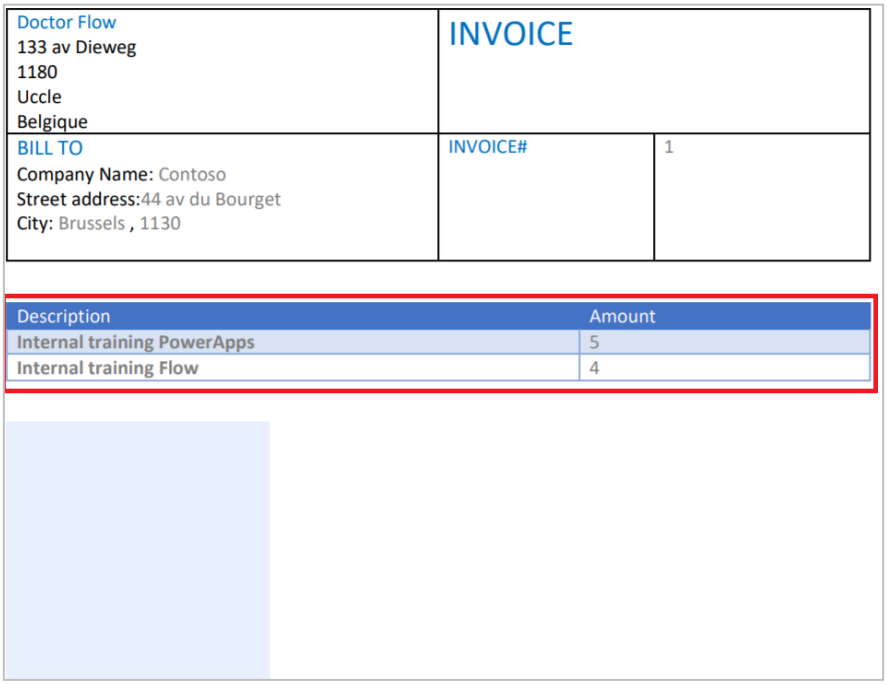
34. You will now update **the Populate a Microsoft Word template** action with this array. Select this action and click on the **Switch to input entire array** button:



35. Store your array in this area:

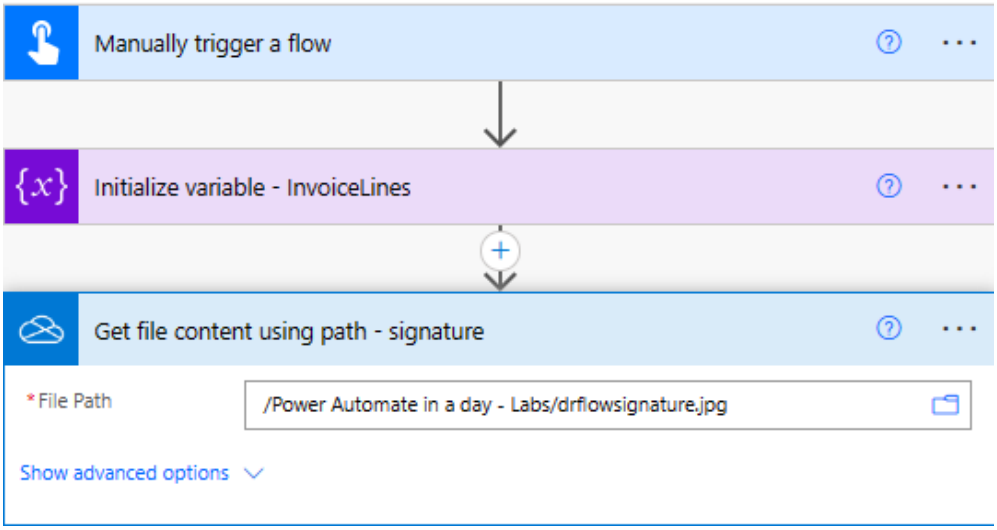


36. Run the Flow and check the generated documents. You should now see the invoice line items:

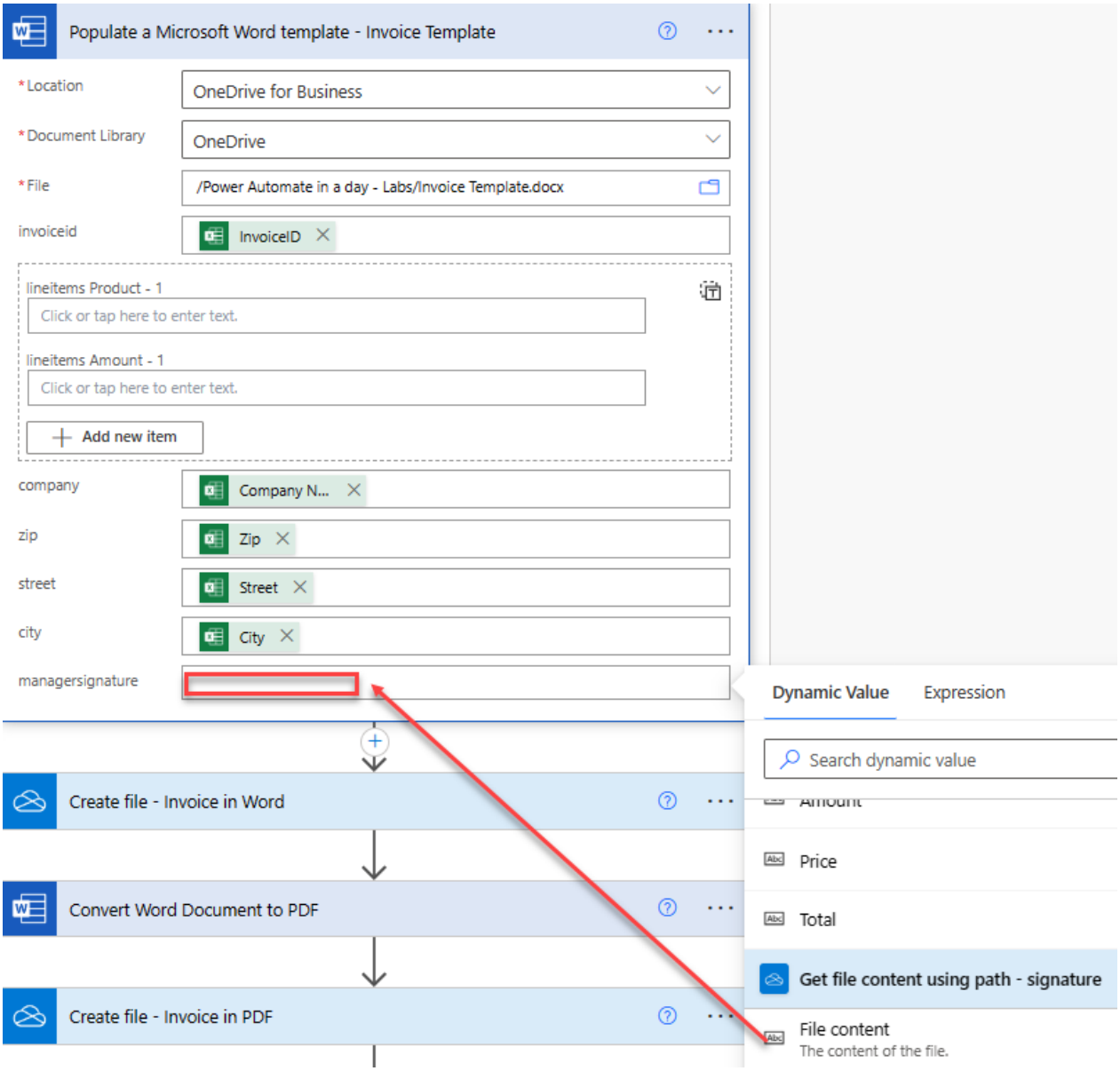


37. We will now display the signature portion of the document. Create a jpeg file with your name and signature, and upload it to the Documents folder of your OneDrive for business. For instance, our signature looks like this:

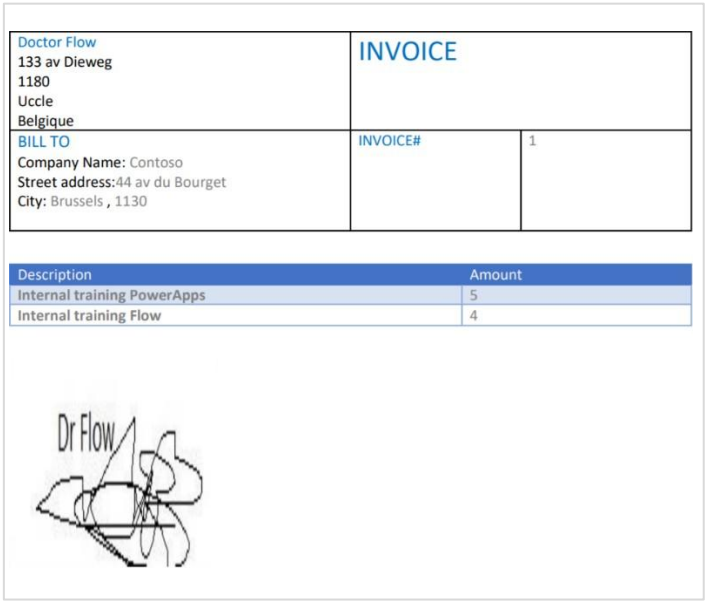
38. In the beginning section of the Flow, add a **OneDrive for business** action **Get file content using path** and pass your signature file path:



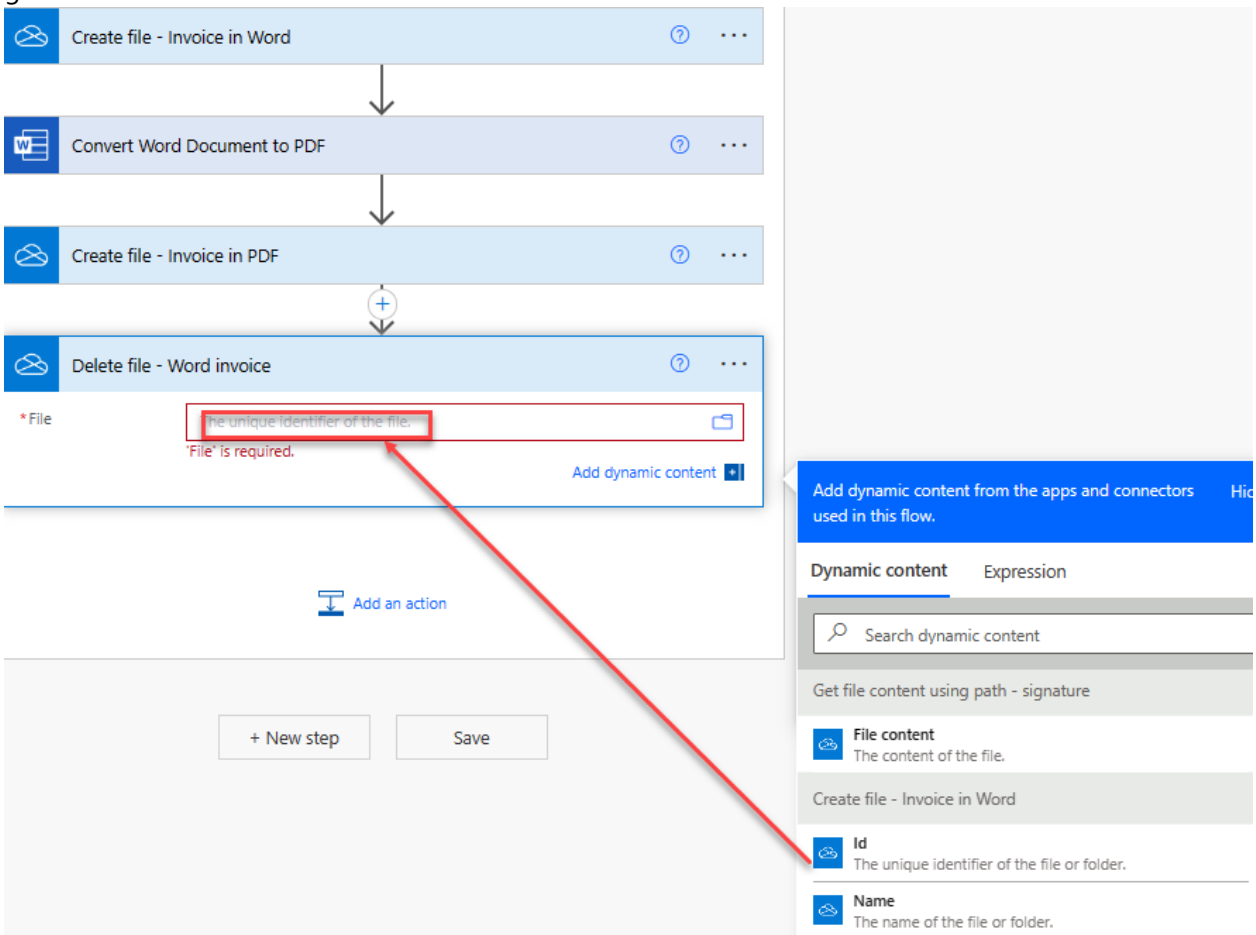
39. Edit the existing action **Populate a Microsoft Word template** action and in the **managersignature** field, pass your signature content:



40. Test your Flow and check one of the generated documents; the signature should now be visible:



41. After the **Create file – Invoice in PDF action**, add a Delete file action to remove the Word generated file:

42. 

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