Commands Power Automate

Assignment module 1

a) Login to the learning
environment b) Open the flow website within the
learning environment c) Download the Microsoft Power Automate (Flow) app
to your phone d) Log in to the flow app with your username and password for the learning environment

Assignment module 2 – Excel

We have an excel sheet with planned outings. In our Outlook calendar, all these outings should appear as an event on the correct day when the flow is started

a) Create an Excel sheet in Excel Online (in OneDrive for Business location)

b) Make at least three columns:

   a. Title
   b. Description
   c. Start date
   d. End date

c) Fill the table with at least three rows. Make sure that the start date and end date columns are structured according to this format (and therefore also contain a time): 2022-06-23T12:00:00.

d) Select your entire table (all cells of the table) and choose on the 'Insert' tab for 'Table' and indicate that the table contains column headings

e) Create a flow based on an Instant trigger that runs through the Excel sheet

f) Use the Flow to create a new event in your Outlook calendar for each item in the Excel sheet with Subject the title of your outing from the Excel sheet. Do this for the start and end times as well. There is no need to check whether it already exists.

NB! An 'Apply to each' step is automatically created. This will be discussed in a subsequent chapter. You may add the data -in- the apply to each step to create the Agenda item.

Assignment module 3 – Teams

Workday unsubscribes are sometimes put in the chat via Teams, but not always read by a manager. It has been agreed with the employees that they always mention the word 'Absent' and the relevant day/ time. These Teams chat messages should be picked up automatically become.

a) Go to Teams (https://teams.microsoft.com)

b) Create a new Team

c) Create a new channel within the team

d) Create a Flow that ensures that:

- ÿ As soon as a message is posted in a Teams channel ('When a new channel message has been added')
- ÿ A condition is used to check whether the word 'Absent' is in the message text state ('Message body content')
- ÿ An email is then sent to a predefined email address with as subject: user X (fill in) will be absent soon. The entire team message may be placed in the body of the email.

Assignment module 3 – Dataverse

We want to know which customers have not ordered anything for more than a year. We must first register these customers in a Dataverse table. For the overview we now choose to register both the customers and the last order date in the same table.

a) In the Dataverse (tab 'Data' > 'Tables'), create a new table to store customer data store.

b) Name the table 'Customer', if necessary adjust the plural name to 'Customers'.

c) You can change the primary column (tab two) to 'customer code'

d) Add a column (<New><Column>); named 'First name' of type 'Single line of text' with format 'Text' and make it 'business required'

e) Add a column 'Last name', also of type 'Text'

f) Add a column 'Email address' of type 'Single line of text' with type 'Email' and make this also 'business required'

g) Add a column 'last ordered' with the data type 'Date and time' and the format 'Date only'

h) Click on 'Save table'

i) Go to your table specification overview of the table Customer (if you weren't there already)

j) Now choose 'Edit' at the bottom half of the screen, you are now in a screen for adding and editing rows

k) Make sure you see all the columns you just created in the table by adding them here add.

l) Now add at least 3 rows to the table by clicking 'New row' at the top left, fill in the data, with at least one of the rows a date from more than a year ago.

m) Now in Power Automate create a new flow that contains all rows from the newly created table continues and at every row with a date in the column 'Last ordered' that is greater than: now minus 365 days an email that sends you (in real life to that person of course).

Tip: Use the utcNow() function to get 'now'.

Bonus:

n) Try the same exercise again, but use your own Excel sheet (on OneDrive for example). Note: make sure that after you have created the table, you actually define it as a 'table' in Excel under 'Insert' > 'table'

Optional Command Module 4 – Data Gateway

We have a database of sensitive information, which is therefore not publicly linked to the Internet. In order to be able to talk to it via the Power Platform, a data gateway must be created. The SQL Server practice database will also have to be created yourself.

a) This is a bonus assignment and can be done at the end of the training if there time for it.

b) Download SQL Server Developer edition from: https://go.microsoft.com/fwlink/?linkid=866662
(google: SQL Server download, first hit, scroll down slightly 'Download now')

c) Download SQL Management Studio if not already installed

d) Install the SQL Server Developer edition (next, next, etc)

e) Install the data gateway:
- ÿ Visit: https://make.powerapps.com ÿ Navigate to: 'Data->Gateways' and click on 'New Gateway'

f) Open SQL Server Management Studio:
- ÿ When logging in, choose 'Windows authentication' and then click on 'Connect'
- ÿ Click through to: 'Databases'>'System Databases'>'Master'

g) Create a new table in the database:
- ÿ Click on 'Tables'
- ÿ Right click on 'Tables' and choose 'New'>'Table'
- ÿ Columns:
  - • Sender (nchar(100))
  - • Subject (nchar(100))
- ÿ Click on the 'save button' at the top or press <ctrl>-<s>
- ÿ Choose as table name: emails

h) Create a Flow that:
- ÿ After receiving an email, the sender and subject in the just created table in the database.
- ÿ The login details may be local, i.e. from the host machine

Optional Command Module 4 – Custom Connector

a) This is a bonus assignment and can be done at the end of the training if there time for it.

b) Create a custom connector and choose an API from the list:
https://github.com/TeacherStijn/public-apis

Assignment module 5 - Forms

We want to export and import a simple survey flow, but we accidentally deleted the Forms connection in the meantime. Is the import still OK?

a) Go to Forms (https://forms.microsoft.com)

b) Create a new Form (a kind of survey), with two questions in it (one open question and a question where one can give a score)

c) Create a Flow that:

a. Start as soon as a response is received to filling in the Form

b. You retrieve the entered data (by means of a 'get response details' action)

c. A notification will be sent to your Flow App and an email will be sent to you at the same time is being sent

d) Test the flow. Can this be done automatically the first time?

e) Export the flow, delete the existing flow

f) In the menu go to 'Data' > 'Connections' and remove the Microsoft Forms connection

g) Import the flow, is this okay? Why / why not?

Assignment module 6 – Environments and solutions

For our sales database in which we want to create a Products table, we want to make use of updating Solutions through Patches. For this we want to export a solution unmanaged, then add a layer and then merge it again into a new solution.

a) (If your license allows it): Create a new development (trial for now, otherwise sandbox) environment, make sure a new database (Dataverse) is also created

b) (If step a) was successful): Go to the solutions screen, refresh (F5) and make sure your new environment is selected.

c) Create a new solution and a suitable Publisher for yourself. Only the prefix is important for recognizing your created objects.

d) Add all your created flows (that can) to this solution.

e) Create a table in your Dataverse. Do this via the 'solutions' screen (choose 'Solutions' in the left menu). Select your solution there, choose 'Objects' in the menu and then in the drop-down menu called '+New' for 'Table'

f) Name the table 'Product' (plural = Products). Leave the settings as default if it goes to the primary column.

g) Now create a new column called 'Price' in the newly created table.

h) Go to: https://make.powerapps.com this is the home page where we can build apps. We're going to try that now.

i) Make sure you are on the 'home' page

j) Under 'Start from data' in the middle of the screen, choose the option 'Dataverse' and click on 'Create' if you are asked to create a Dataverse connection.

k) Then select your table 'Products' and click on 'Connect'

l) When the app is created, go to the top left of the 'File' menu and choose 'Save' (the app is now called 'App'

m) Go back to the make.powerapps.com site and add the newly created table and App to your Solution by choosing 'Solution' in the left menu, your relevant solution and choosing 'Add existing' in the top menu .

n) Choose 'Publish all customizations'

o) Now go back to the Flow portal (https://flow.microsoft.com) and navigate to your table
(menu item 'Dataverse'->'Tables')

p) Try to delete your created table 'Products'. Why does this work or not?

q) Now go to the solutions page and click on your solution

r) Check if your solution is OK through the solution checker, the topics that the solution checker checks are:

ÿ Dataverse plugins (extensions through code)
ÿ Dataverse custom workflows
ÿ Dataverse web resources
ÿ Dataverse configurations (also with regard to access labels, etc. in apps)

It is possible that there are only 'medium' or 'low' severity reports regarding the Canvas app.
You can now ignore this.

s) Now export your solution as an unmanaged solution

t) Create a new Patch for the current solution. You do this by:
ÿ Select your current solution with the 'ball' in front of it
ÿ In the menu choose the option 'Clone'>'Clone a patch'
ÿ If necessary, choose a clear name and leave the version number as it is (this will change automatically)

u) Add one of your existing 'Products' table to this Patch as well.

v) Now change this table by adding a column with a special name such as #special_column.

w) Merge this patch with the original solution by:
ÿ Select your original solution with the 'ball' in front of it
ÿ In the menu choose the option 'Clone'>'Clone solution'
ÿ Leave the version number like this

x) Now check in your updated solution whether the new column in the table has been added.

Assignment module 7

The commercial department too often places offers in Sharepoint that do not meet the amounts set by managers. A notification that a quotation has been prepared would also be nice for the managers.

a) Make a Sharepoint list in which we will keep track of the quotations. For now these only need to be names, numbers and prices. Navigate to Sharepoint, and choose a Site (or create one if you don't already have one).

b) Create a new list/list and ensure at least the following columns:
   a. Customer name (text)
   b. Product Quantity (Integer)
   c. Quotation price (decimal number)

c) Create a flow that starts as soon as a new row is added to the Sharepoint list.

d) Add an approval requesting approval from the manager of the user who added the item to Sharepoint. For now just choose your own email address, or go 'for the bonus points' and create at https://admin.microsoft.com add an additional user and let this be your manager (configurable via Active Directory). Use the following site to get the user's UPN: https://medium.com/@klaas365/how-to-get-the-upn of-a-sharepoint-list-person-field-in-power- automate-b845ad3eeb66 and finally the step/action 'Get Manager' in the flow.

e) If not agreed, an email should be sent to the person who left the row Sharepoint list added

f) Optional! (only at the end of the course): a. Instead of separate columns in Sharepoint, create a file upload for a PDF file.
   b. Create a few sample invoices in Word and save them as PDF files to OneDrive for Business
   c. Use an AI Model functionality to read in the file during upload via OCR and only send the approval based on an amount > 2000

g) Now open your flow app

h) Look up the approval in the flow app and see the difference with how this is done via the website

i) See to what extent you can change the flow. Apply a new last step and make sure that if the quote is approved, a notification is sent to the person who put the quote in Sharepoint