**WorkshopPLUS – Power Automate – Power User 1 Day**

Module 3 - Labs

Follow along steps

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# Flow and SharePoint Integration

1. Open **FlowTraining** site and login with your account

[**https://YOURTENANTNAME.sharepoint.com/sites/FlowTraining**](https://YOURTENANTNAME.sharepoint.com/sites/FlowTraining)

1. Create Team for the site by clicking “**Add Microsoft Teams**” on bottom left corner if not already created

Graphical user interface, text, application

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1. Go to Site Content and click **CarsList**
2. Create new Flow by clicking Integrate > Power Automate > **Create a flow**

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1. Select “**Post a message to Microsoft Teams for selected item**” from template selection panel

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1. Press Continue to confirm required SharePoint and Teams connections

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1. Trigger of the Flow will be SharePoint “**For a selected item**” and you can see that **Site address** and **List name** parameters are already populated automatically

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1. ​For a “**Post message in a chat or channel**” action set
   * Team: **FlowTraining**
   * Channel: **General**

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1. Save the Flow and move back to SharePoint **CarsList**
2. Select 1 item and open **Automate** menu where you now should have the Flow you just created available to be executed

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1. Click the “**Post a message to Microsoft Teams for selected item**” you will see the Flow launch panel on the right side of the page. On first run you will see the list of connections the Flow has and sign-in status for each of them. Click **Continue**

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1. Provide a message which you want to post to a selected Teams channel and press **Run flow**

Text

Description automatically generated

1. Open <https://teams.microsoft.com> on browser and go to that Teams channel to verify that your message is posted

Graphical user interface, application, Word

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1. Click the name of the car brand you selected to see that you are directed to that item in SharePoint list

Graphical user interface, application, Word

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# Working with SharePoint lists

1. Create new Flow using “**Instant cloud flow**” option

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1. Name it “**List Items**“​ and choose “**Manually trigger a flow**”

Graphical user interface, application

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1. Add action “**Get items**” (SharePoint)
   * Site Address: **FlowTraining**
   * List Name: **LargeList**
   * Limit Entries to Folder: **/** (without this ‘query limitation’ you will receive warning in Flow Checker)

Graphical user interface, text, application, email

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1. Add **Compose** action with expression “**length(body('Get\_items')?['value'])”**

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1. Click **Save**​

Graphical user interface, application

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1. Click **Test** and select **Manually**

Graphical user interface, text, application, chat or text message

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1. Check the value of the Compose action which should be **100** even that list contains thousands of items. Get items action returns only 100 items by default but that can be changed in by setting “Top Count” value which can be maximum **5000** (SharePoint list view threshold)

Graphical user interface, application

Description automatically generated Graphical user interface, text, application, email

Description automatically generated

1. Test with Top Count 5000 and 5001 and see what happens

# Query SharePoint lists and libraries

1. Create new Flow using “**Instant cloud flow**” option

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1. Name it “**SharePoint List Query**“​ and choose “**Manually trigger a flow**”

Graphical user interface, diagram

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1. Create new Step - "**Get items​**" (SharePoint)
   * Site Address: **FlowTraining**​
   * List Name: **CarsList**
   * Filter query: **Brand eq** "**VW**"

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Description automatically generated

1. Click **Save**​

Graphical user interface, application

Description automatically generated

1. Click **Test** and select **Manually**

Graphical user interface, text, application, chat or text message

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1. Flow run should fail. Why? … because we used double quotes in filter and correct way is to use single quotes

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1. Fix the query like this **Brand eq ‘VW’** and test again  
   Also remember that the field name is case sensitive !!!

Graphical user interface, application

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**Documentation:**<https://docs.microsoft.com/en-us/sharepoint/dev/sp-add-ins/use-odata-query-operations-in-sharepoint-rest-requests>

# Copy files

1. Create new Flow using “**Instant cloud flow**” option

Graphical user interface, application

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1. Name it “**Copy files**“​ and choose “**Manually trigger a flow**”

Graphical user interface, diagram

Description automatically generated

1. Create new Step - "**Get files (properties only)​**" (SharePoint)
   * Site Address: **FlowTraining**​
   * Library Name: **Documents**
   * Limit Entries to Folder: **/**
   * Include Nested Items: **No**

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1. Create new step **Condition** and set condition to **IsFolder** “is equal to” **false** (Boolean value in this case **false** need to be all **lowercase**!)

Graphical user interface, application

Description automatically generated

**Notice** that **Apply to each** loop will be automatically added as we are working with collection of files and there could be more than 1 file to copy

1. Create new Step - "**Copy file**" to “**If yes**” branch
   * Site Address: **FlowTraining**​
   * File to Copy: **[Identifier]** (Dynamic content)
   * Destination Site Address: **FlowTraining**
   * Destination Folder: **/copydocuments**
   * If another file is already there: **Replace**

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Graphical user interface, text, application, email

Description automatically generated

1. After you have configured previous step the Flow should look like below

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1. Save and test the flow

Graphical user interface, text, application, chat or text message

Description automatically generated

1. Go to **CopyDocuments** library in **FlowTraining** SharePoint site and verify that all documents in root of the Documents library are copied

Graphical user interface, application

Description automatically generated

# Use variables (flow internal variables)

1. Create new Flow using “**Instant cloud flow**” option

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Description automatically generated

1. Name it “**Use variables**“​ and choose “**Manually trigger a flow**”

Graphical user interface

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1. Add new step “**Initialize variable**”
   * Name: **Cars**
   * Type: **Array**​

Graphical user interface, application

Description automatically generated

1. Create new Step - "**Get items​**" (SharePoint)
   * Site Address: **FlowTraining**​
   * Library Name: **CarsList**
   * Limit Entries to Folder: **/**

Graphical user interface, text, application, email

Description automatically generated

1. Add new step “**Append to array variable**”
   * Name: **Cars**
   * Value: **[Title]** (Dynamic content “Title” from previous step)
   * **Notice** that Apply to each is automatically added when you select Title dynamic content from previous step

Graphical user interface, application

Description automatically generated

1. Add new step “**Send an email (V2)**” after the Apply to each
   * To: *Your O365 account email address*
   * Subject: **Cars List**
   * Body: **variables(‘Cars’)**

Graphical user interface, text, application, email

Description automatically generated

1. Save and test the Flow

Graphical user interface, text, application, chat or text message

Description automatically generated

1. Open <https://outlook.office.com> and you should see email sent by your Flow including list of all cars (title) in **CarsList**

Graphical user interface, text, application, email

Description automatically generated

# Data operations

​

1. Create new Flow using “**Instant cloud flow**” option

Graphical user interface, application

Description automatically generated

1. Name it “**Data operations**“​ and choose “**Manually trigger a flow**”

Graphical user interface, application

Description automatically generated

1. Create new Step - "**Get Items (SharePoint)​”**
   * Site Address: **FlowTraining**​
   * List Name: **CarsList**
   * Limit Entries to Folder: **/**

Graphical user interface, text, application, email

Description automatically generated

1. Create a new step – “**Parse JSON (Data Operations)**”
   * Select **Body** dynamic property from previous action
   * Paste following schema to **Schema** field

{

    "type": "object",

    "properties": {

        "value": {

            "type": "array",

            "items": {

                "type": "object",

                "properties": {

                    "Brand": {

                        "type": "string"

                    },

                    "Price": {

                        "type": "integer"

                    }

                }

            }

        }

    }

}

Chart, scatter chart

Description automatically generated

1. Create a new step – “**Create CSV table (Data Operations)**”
   * In **From** add dynamic content – **value** from “**Parse JSON**”

Graphical user interface, application

Description automatically generated with medium confidence

1. Create a new step – “**Select (Data Operations)**”​
   * In **From** add dynamic content – **value** from “**Parse JSON**”​
   * Add e new key **Brand** and in value, add dynamic content – **Brand** from “**Parse JSON**”**​**
   * Add e new key **Name** and in value, add dynamic content – **Title** from “**Parse JSON**”

Graphical user interface, application, Teams

Description automatically generated

1. Create a new step – “**Create HTML table (Data Operations)**”​
   * In **From** add dynamic content – **Output** from **Select**​

Graphical user interface, application

Description automatically generated

1. Create a new step – “**Filter (Data Operations)**”​
   * In **From** add Dynamic content – **Output** from **Select**
   * In “**Choose value**” add expression – “**item()?['Brand']”**
   * Select “**is equal to**”​ and add **VW** to value​

Graphical user interface, text, application

Description automatically generated

1. Save and test the Flow​

Graphical user interface, text, application, chat or text message

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