Word Cloud for Power Apps

Overview

A word cloud visually represents recurring words to highlight trends in your text data. Word clouds are used to understand general audience perception from textual feedback. The more often a word appears, the larger it is in the word cloud.

Usage

- Visual representation of word frequency in text
- Aids in text analysis and summarization
- Helps identify key topics or themes.
- Useful for keyword generation and sentiment analysis
- Enhances presentation and visualization of textual data.

Installation

1. Download the "Word Cloud" component solution file.

2. Go to the Power Apps Admin Center and open your environment (Note: you need admin access to the environment)
3. Navigate to Environment > Settings > Features.
4. Set Allow publishing of canvas apps with code components to On.

5. Navigate to Menu > Insert > Custom > Import components.
6. In the Import Components menu, navigate to the Code tab.
7. To import Word cloud component to your Power App, click on the downloaded Word cloud component.
8. Now, the new component will be visible under Code Components in the Insert menu. Rename the component with a recognizable name such as MAQWordcloud.
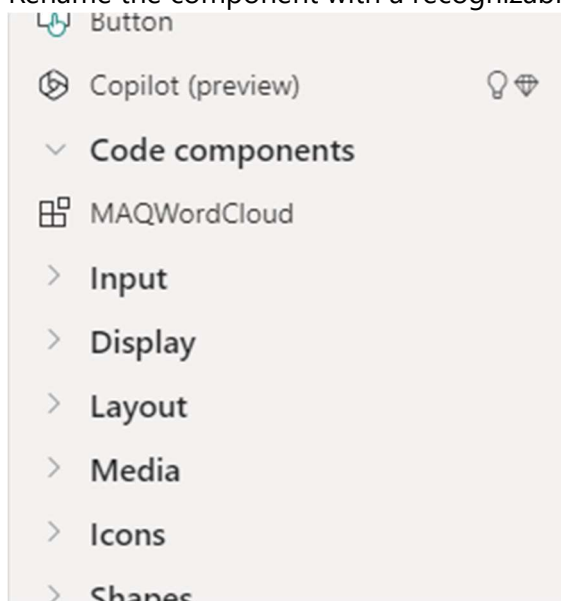
Implementation:

1. Insert the "Word Cloud by MAQ Software" control into your Power App.

2. Go to the Insert tab, under code components you will find the Word Cloud component. Drag the component onto the screen. Adjust the size and position of the part accordingly.

3. Go to the Data tab, click add data.

4. Go to the tree view in the left menu, to generate the word cloud use On Visible property of the screen or OnStart for the app. Copy and paste code that present below.


```
// Extract all words from the FeedbackText column
ClearCollect(
    WordCollection,
    Split(
        Concat(
            Table1,
            Substitute(
                Substitute(
                    Feedback,
                    ".",
                    ""
                ),
                ",",
                ""
            ) & " "
        ),
        " "
    )
);
// Count the frequency of words
ClearCollect(
    WordCountCollection,
    AddColumns(
        GroupBy(
            WordCollection,
            "Value",
            "Grouped"
        ),
        "WordCount",
        CountRows(Grouped)
    )
);
// Create an empty variable
Set(
    outputDynamicString,
```

```
// Extract all words from the FeedbackText column
ClearCollect(
    WordCollection,
    Split(
        Concat(
            Table1,
            Substitute(
                Substitute(
                    Feedback,
                    ".",
                    ""
                ),
                ",",
                ""
            ) & " "
        ),
        " "
    )
);
// Count the frequency of words
ClearCollect(
    WordCountCollection,
    AddColumns(
        GroupBy(
            WordCollection,
            "Value",
            "Grouped"
        ),
        "WordCount",
        CountRows(Grouped)
    )
);
// Create an empty variable
Set(
    outputDynamicString,
    ""
);
// Create a table with word and it's count using key value separators
Clear(outputDynamicTable);
ForAll(
    WordCountCollection,
    Collect(
        outputDynamicTable,
        Value & "|" & WordCount & "***"
    )
```
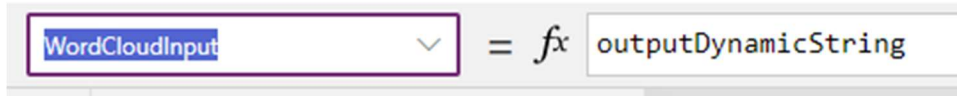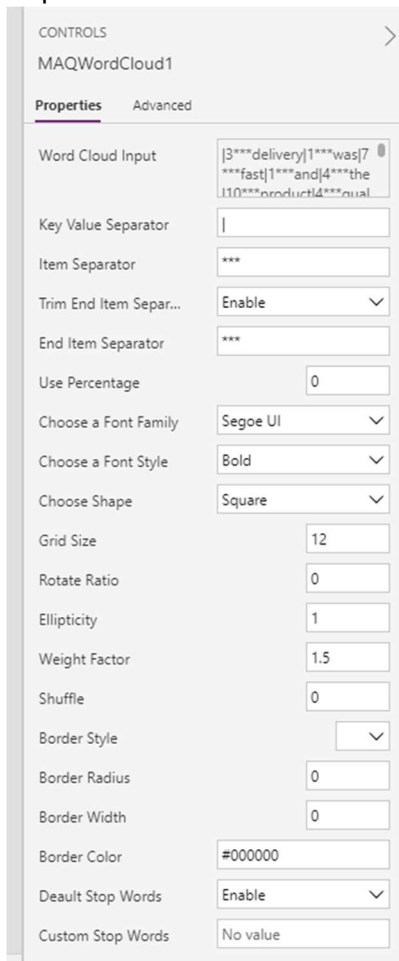
```
);
// Add the table WordCountCollection into string
Set(
    outputDynamicString,
    Concat(
        outputDynamicTable,
        Value
    )
);
```

5. Add the outputDynamicString in the Word Cloud Input property of the component.

6. Set the Key Value Separator = |, Item Separator = *** and set Trim End Item Separator enable.

7. Right click on App and triggered onStart for running the App.
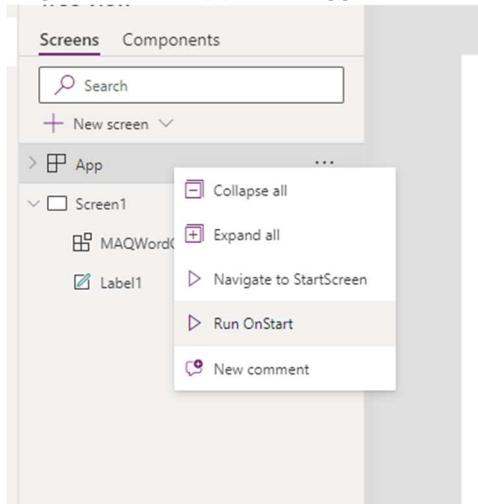
Example:

Output

The Word Cloud PCF component generates an interactive visualization of the provided textual data, representing word frequencies with varying font sizes and colors.

Properties

Property Name	What it Does	Required Input
Word Cloud Input	Defines which words appear in the word cloud	The **outputDynamicString** field generates information about your table in a format that is readable by-Word Cloud. It specifies each word and its weightage (the number of times the word repeated). To customize which words, appear in your word cloud, copy, and paste the information from the **outputDynamicString** that is relevant to you. Example: demo|6***test|3***present|2***
Key Value Separator	Separates your key from your value	For example, in the case of demo|6, demo is the key, while 6 is the value. Default value: |
Item Separator	Separates your items	For example, demo|6 is an item and test|3 is an item, so *** is used to separate them. Default value: ,
Trim End Item Separator	If there is an item Separator at the end of your word Cloud Input, add a 1 to trim/remove that.	0 or 1 Default: 0
Font Family	Defines the font used in your Word Cloud	Word Cloud supports all font families.
Font Weight	Defines the font weight in your Word Cloud	normal, bold, or 600 Default: normal
Shape	Defines the shape of your Word Cloud	circle, cardioid, diamond, triangle, pentagon, or star. Default: circle
Rotate Ratio	The "Rotate Ratio" in a word cloud determines the likelihood of words being displayed at different angles for visual variety.	Take integer as input.
Background Color	Add the background color of your word cloud display screen.	Accept all types of background color in both format text and hex code.

Grid Size	Add the space between the words in word cloud	Take integer as input
Weight Factor	Increase the weight of words.	Take integer as input
Border Style	Give the distinctive style of your word cloud border.	Example- Dashed, Dotted, Solid
Border Radius	rounds the corners of Border of word cloud.	Take integer as input
Border Width	Using this we can control the width of word cloud border.	Take integer as input
Border Color	Control the border color of Word Cloud.	Accept all types of background color in both format text and hex code.
Default Stop Words	We have added default stop words which is standard, whenever these words come in the word cloud they will not be shown on the display.	We can control these stop words using drop down property Enable or Disable.
Custom Stop Words	Users can enter dynamic stop words and can remove those words by making them stop words if those words are on the screen.	Take string as input with comma separated example-> Hello,how,hey