

A Christmas Hack@Speed



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Introduction

Welcome to the Hack@speed masterclass walkthrough. This document will take you through the Sleigh Sightings christmas hack.

How to Hack?

The key part of this Hack is the data supplied in the excel sheet. The ability to get the data into Dataverse is of vital importance, Therefore Lab number 1 is Mandatory. After that you are able to select the Labs you would like to do as there is not always an interdependency between labs, OR you may build whatever you would like on top of the data, as long as it solves the business problem. Any lab that has a title with a * means that it can be done independently of the others (based on the completion of Lab 1). The below table will help you understand the dependencies.

Lab Title	Technology	Dependencies
Lab 1: Dataverse	Dataverse & Dataflows	Lab 1
Lab 2: Forms, Views Charts	Dataverse	Lab 1
Lab 3: Business Process Flow, Model Apps & Dashboards	Flow & Model-Driven Power Apps	Lab 1 & Charts from Lab 2
Lab 4: Microsoft Flow	Power Automate Flow	Lab 1
Lab 5: Power Apps	Power Apps Canvas Apps	Lab 1
Lab 6: Basic Power BI	Power BI	Lab 1 & Power BI Dashboard from Lab 5

There are a number of ways that you could approach this hack. These are as follows:

All or Nothing

Go right ahead and try and knock out this entire hack in the time allocated. This whole build can be achieved in less than 90 min by an experienced Maker.

Go Rogue

Get the data into the Common Data Service in Lab 1 and then build something completely unique on top of it. Do what works for you...

Double or Nothing

Couple up and split the work. Get someone to do the CDS & Model driven related configuration and the someone else to do the Power BI, Flow and Canvas App build. This has proven to work very well as both areas do not conflict.

Dream Team

Get a team together, knock out the first lab and then allocate each lab to a different person. This is also totally doable as various areas do not intersect but work well together.

Lab 1: Data & Dataverse - Mandatory

We will start off by bringing in the Excel data structure into the Common Data service (CDS) by leveraging Data Flows within the CDS and Power Query.

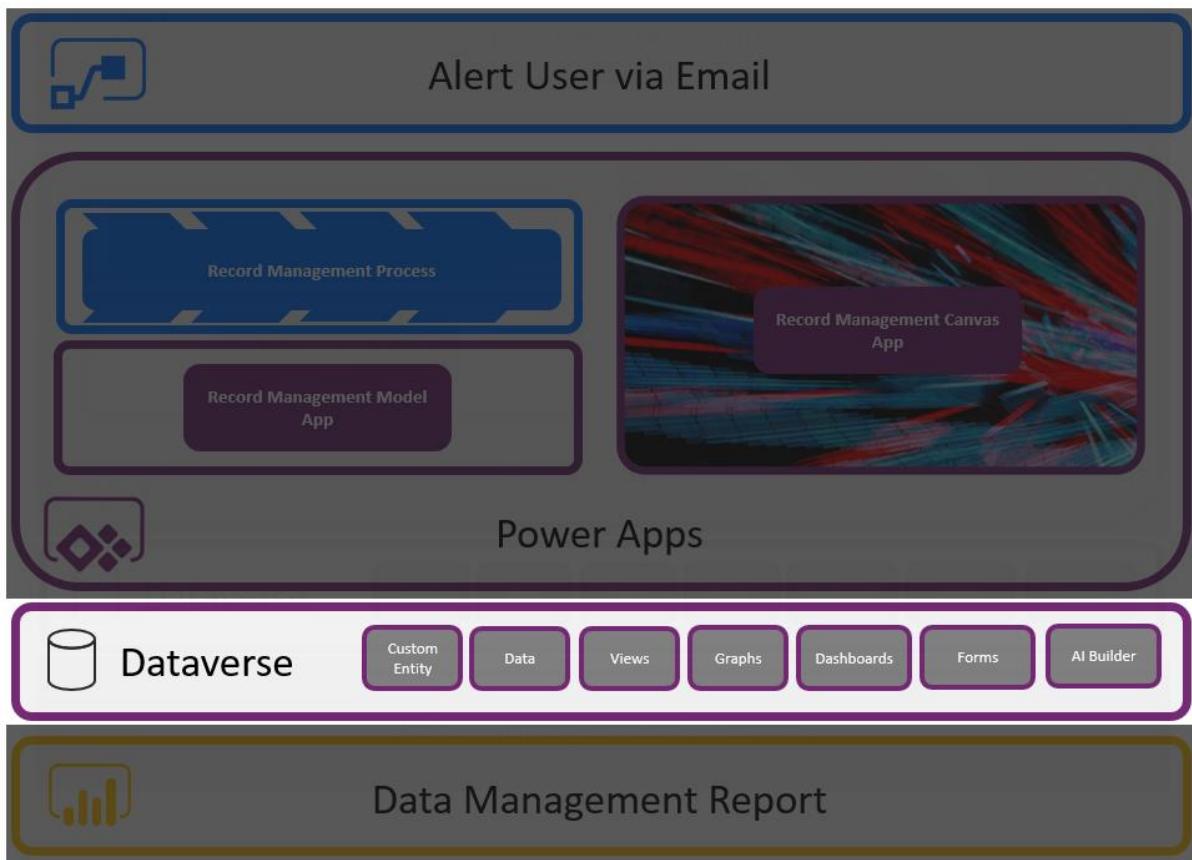
Please Note:

This Part of the Hackathon is mandatory as all other elements of the solution rely on the data being in the Dataverse

Solution Components

Microsoft Power Query

Dataverse



Let's Begin

Navigate to [make.PowerApps.Com](https://make.powerapps.com) and make sure you are in the environment that you created in the Prerequisites. You MUST NOT be in the “Default Environment”, you must be in the environment that you added.

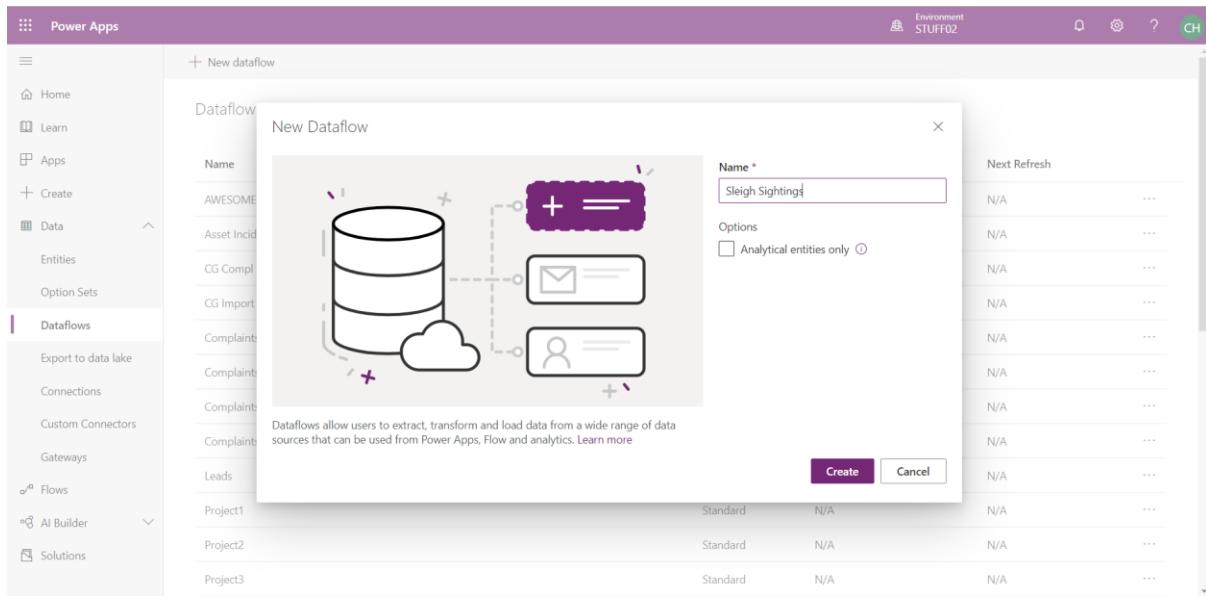
The screenshot shows the Microsoft Power Apps home page. At the top, there's a navigation bar with 'Power Apps' on the left and 'Environment STUFF02' on the right. A red arrow points upwards from the bottom of the page towards the header. The main content area has a heading 'Build business apps, fast' and a sub-section 'Create apps that connect to your data and work across web and mobile. Learn about Power Apps'. Below this, there are three sections: 'Make your own app' (with 'Canvas app from blank', 'Model-driven app from blank', and 'Portal from blank' options), 'Start from data' (with icons for SharePoint, Excel Online, SQL Server, Common Data Services, and Other data sources), and 'Your apps' (a list of existing applications). A link 'All templates →' is located at the bottom right of the 'Start from data' section.

Select DataFlows

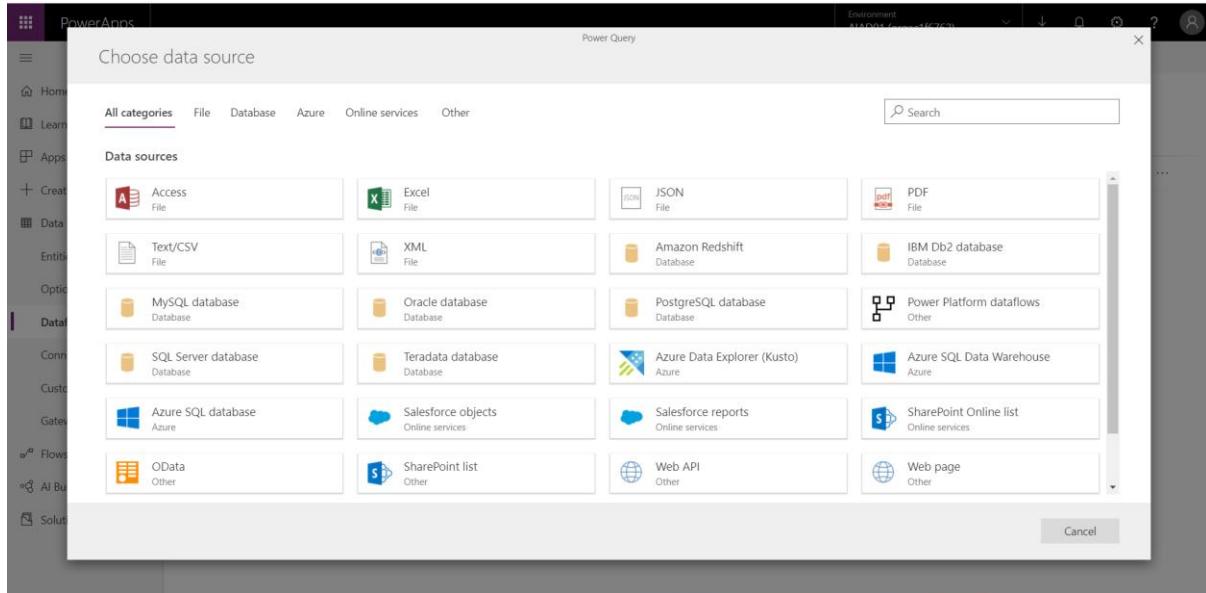
The screenshot shows the 'Dataflows' page within the Microsoft Power Apps interface. The top navigation bar includes 'Power Apps', 'Environment STUFF02', and a 'CH' icon. On the left, a sidebar menu is open under the 'Data' category, with 'Dataflows' selected. The main content area displays a table titled 'Dataflows' with columns for 'Name', 'Type', 'Last Refresh', and 'Next Refresh'. The table lists various dataflows, each with a 'More' (three dots) button. The dataflows listed are: AWESOMENESS, Asset Incident Management, CG Compl, CG Import, Complaints, Complaints Main, ComplaintsV3, ComplaintsV6, Leads, Project1, Project2, and Project3.

Name	Type	Last Refresh	Next Refresh
AWESOMENESS	Standard	N/A	N/A
Asset Incident Management	Standard	N/A	N/A
CG Compl	Standard	N/A	N/A
CG Import	Standard	N/A	N/A
Complaints	Standard	N/A	N/A
Complaints Main	Standard	N/A	N/A
ComplaintsV3	Standard	N/A	N/A
ComplaintsV6	Standard	N/A	N/A
Leads	Standard	N/A	N/A
Project1	Standard	N/A	N/A
Project2	Standard	N/A	N/A
Project3	Standard	N/A	N/A

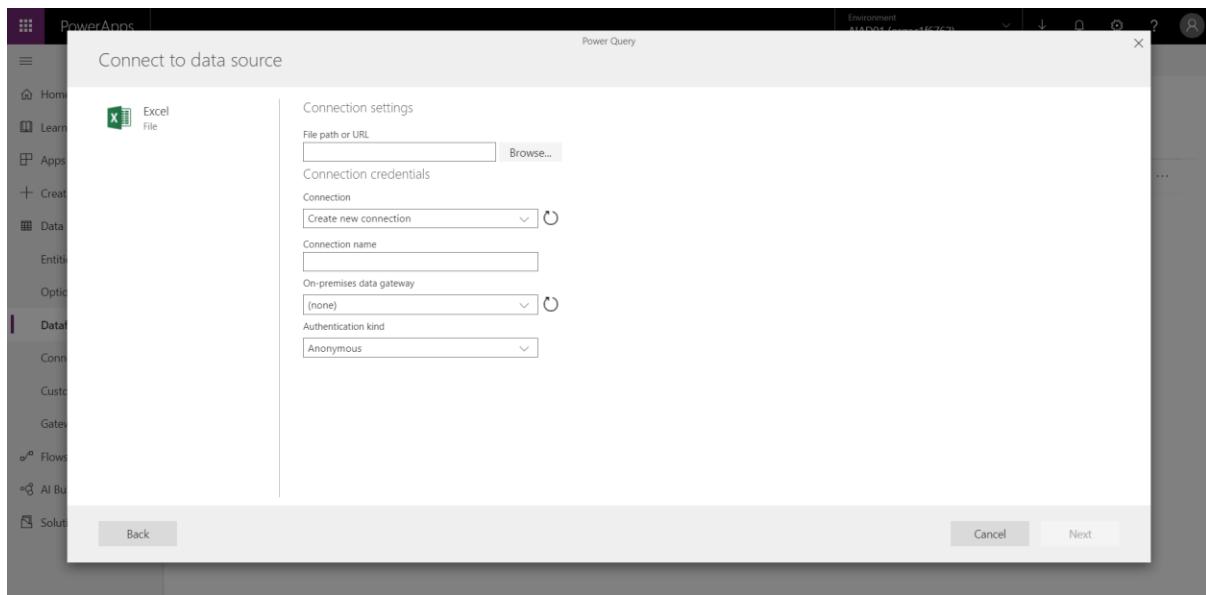
Create a New Dataflow and call it “Sleigh Sightings”.



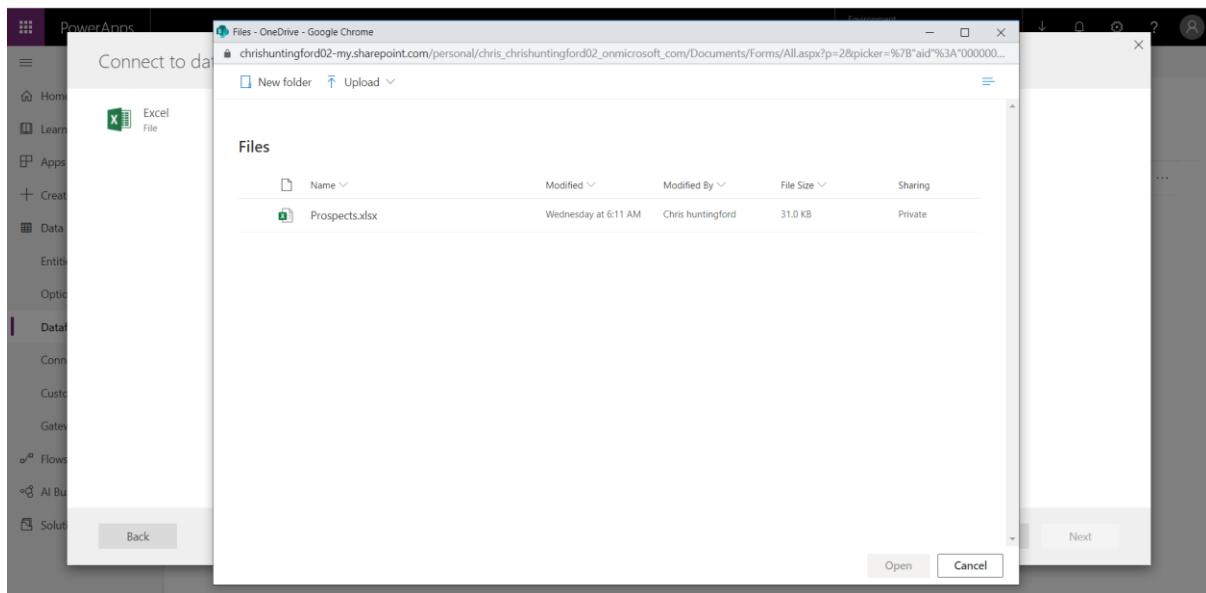
There are a load of options / Data Sources you could select from. Pick “Excel” in this scenario.



You will now be taken to a page where you need to specify the location of the Excel Document.



Click **Browse** and another OneDrive window will open. Assuming you have not done this exercise before, you will see no files in the OneDrive repository.



Click **Upload** and navigate to the location where you saved the “Sleigh Sighting” Excel file, Select the file and select Open.

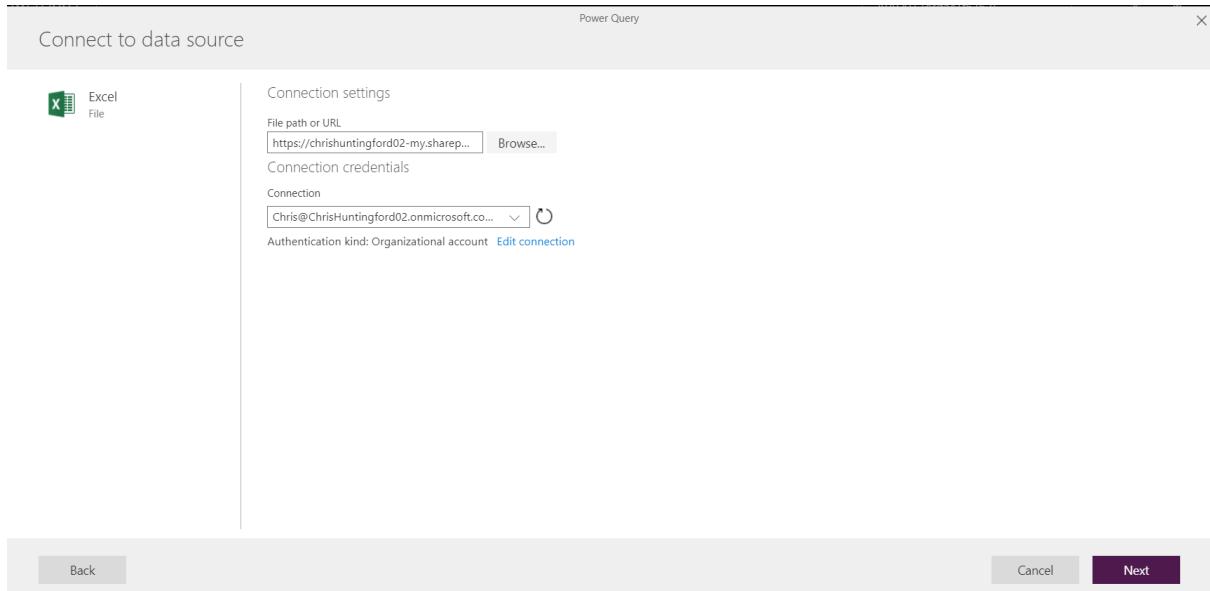
📁 Artwork	🕒	17/12/2019 13:23	File folder
WORD A Christmas Hack@Speed	🕒	17/12/2019 15:27	Microsoft Word Document 21,356 KB
CSV Central Gov Complaints	🕒	21/11/2019 16:36	Microsoft Power BI... 1,909 KB
CSV CG PowerBI	🕒	21/11/2019 14:12	Microsoft Power BI... 366 KB
CSV Power Platform Hackathon@Speed	🕒	17/12/2019 14:04	Microsoft PowerPoint... 3,964 KB
EXCEL Santa Spotter	🕒	17/12/2019 12:00	Microsoft Excel Workbook 14,762 KB
EXCEL Santa Spotter	🕒	17/12/2019 13:15	Microsoft Excel Workbook 10,205 KB
CSV Sleigh Spotting	🕒	17/12/2019 12:04	Microsoft Power BI... 7,642 KB

Once the file has been uploaded you will see it in the OneDrive repository.

	Complaints02.xlsx	October 20	Chris Huntingford	16.3 MB	Private
	Complaints1000.xlsx	November 5	Chris Huntingford	201 KB	Private
	ComplaintsTags.xlsx	October 21	Chris Huntingford	2.64 MB	Private
	Leads05.xlsx	November 5	Chris Huntingford	165 KB	Private
	LeadsDataExcel.xlsx	August 27	Chris Huntingford	15.7 KB	Private
	Prospects.xlsx	September 4	Chris Huntingford	31.0 KB	Private
	Santa Spotter.xlsx	3 hours ago	Chris Huntingford	9.97 MB	Private
	scrubbed03.xlsx	November 20	Chris Huntingford	1.18 MB	Private
	scrubbed04.xlsx	November 20	Chris Huntingford	1.18 MB	Private
	Sleigh Sighting.xlsx	A few seconds ...	Chris Huntingford	10.1 MB	Private
	UFO Spotting.xlsx	September 5	Chris Huntingford	20.2 KB	Private
	UFO Spotting02.xlsx	September 28	Chris Huntingford	19.5 KB	Private

Select the file and click **Open**. This will load the file path into the Power Query Data Source connection settings.

Check the file location and click **Next** to progress to the next step.



View the Excel dataset in Power query and select **Transform Data** to continue.

Choose data

Search

Display options

Excel [1] Santa Spotter

ABC Column1	ABC Column2	ABC Column3	ABC Column4	ABC Column5	ABC Column6	ABC Column7
Unique ID	Date Spotted	city	country	duration	shape	comm
71,111	6/6/1958, 6:45:00 PM	sydney (nsw australia)	au	2,700	Sleigh	In the
14,562	7/1/1967, 9:30:00 PM	woy woy (australia)	au	300	Sleigh	Repea
26,830	1/6/1968, 12:00:00 AM	brisbane (australia)	au	300	Sleigh	The S
51,898	5/2/1972, 7:00:00 PM	hoppers crossing (australia)	au	600	Sleigh	three
10,558	7/1/1974, 7:45:00 PM	melbourne (100 mi. south of...)	au	0	Sleigh	Ffylin
9,297	10/1/1977, 11:00:00 AM	adelaide (south australia)	au	30	Sleigh	Sever
75,967	1/1/1980, 7:00:00 PM	yorkeys knob (north of cairns) (qld australia)	au	600	Sleigh	1 slov
54,990	1/6/1983, 12:00:00 PM	gold coast (australia)	au	0	Sleigh	Photc
46,559	6/12/1987, 2:00:00 AM	newcastle (australia)	au	300	Sleigh	stop l
5,237	12/12/1991, 11:30:00 PM	wollongong (nsw australia)	au	240	Sleigh	two s
55,646	9/10/1992, 12:00:00 PM	perth (western australia)	au	30	Sleigh	I saw
60,618	11/6/1992, 4:26:00 PM	nowra (australia)	au	989	Sleigh	On or
2,820	9/1/1999, 9:20:00 PM	melbourne (vic australia)	au	5	Sleigh	Sleig
80,847	3/6/2001, 8:00:00 PM	melbourne (vic australia)	au	60	Sleigh	3 Rep
51,851	3/11/2001, 10:00:00 PM	melbourne (vic australia)	au	0	Sleigh	Sleig
51,610	10/10/2001, 4:33:00 AM	sydney (nsw australia)	au	180	Sleigh	sleigh
6,378	12/11/2001, 7:00:00 AM	sydney (nsw australia)	au	23	Sleigh	It was
72,033	2/5/2002, 11:00:00 PM	melbourne (vic australia)	au	300	Sleigh	Three
69,321	8/4/2002, 8:30:00 PM	adelaide (south australia)	au	600	Sleigh	6 Brig
7,866	8/4/2002, 10:00:00 PM	wodonga (australia)	au	480	Sleigh	three

Back Cancel

Select use first Rows as Headers from the Transform Table.

Edit queries

Get data Manage parameters Refresh Options Manage columns Transform table Reduce rows Add column Go to column Combine tables

Queries Santa Spotter

ABC Column1	ABC Column2	ABC Column3	ABC Column4	ABC Column5	ABC Column6	ABC Column7
1 Unique ID	Date Spotted	city	country	duration	shape	comments
2 71,111	6/6/1958, 6:45:00 PM	sydney (nsw australia)	au	2,700	Sleigh	In the winter months of 1958 on a
3 14,562	7/1/1967, 9:30:00 PM	woy woy (australia)	au	300	Sleigh	Repeated sightings of similar Sleigh
4 26,830	1/6/1968, 12:00:00 AM	brisbane (australia)	au	300	Sleigh	The Sleigh was black with red light
5 51,898	5/2/1972, 7:00:00 PM	hoppers crossing (australia)	au	600	Sleigh	three ufo in triangular sleigh 500
6 10,558	7/1/1974, 7:45:00 PM	melbourne (100 mi. south of...)	au	0	Sleigh	Flying sleigh shaped craft sighted
7 9,297	10/1/1977, 11:00:00 AM	adelaide (south australia)	au	30	Sleigh	Several people witnessed positive
8 75,967	1/1/1980, 7:00:00 PM	yorkeys knob (north of cairns) (qld australia)	au	600	Sleigh	1 slow moving Sleigh rising from E
9 54,990	1/6/1983, 12:00:00 PM	gold coast (australia)	au	0	Sleigh	Photo of a very large complex

Query settings Name Santa Spotter

Applied steps Source Navigation

You will see that the new header names are now visible in the table.

Edit queries

Get data Manage parameters Refresh Options Manage columns Transform table Reduce rows Add column Go to column Combine tables

Queries Santa Spotter

ABC Unique ID	ABC Date Spotted	ABC city	ABC country	ABC duration	ABC shape	ABC comments
1 71,111	6/6/1958, 6:45:00 PM	sydney (nsw australia)	au	2,700	Sleigh	In the winter months of 1958 on a
2 14,562	7/1/1967, 9:30:00 PM	woy woy (australia)	au	300	Sleigh	Repeated sightings of similar Sleigh
3 26,830	1/6/1968, 12:00:00 AM	brisbane (australia)	au	300	Sleigh	The Sleigh was black with red light
4 51,898	5/2/1972, 7:00:00 PM	hoppers crossing (australia)	au	600	Sleigh	three ufo in triangular sleigh 500
5 10,558	7/1/1974, 7:45:00 PM	melbourne (100 mi. south of...)	au	0	Sleigh	Flying sleigh shaped craft sighted
6 9,297	10/1/1977, 11:00:00 AM	adelaide (south australia)	au	30	Sleigh	Several people witnessed positive
7 75,967	1/1/1980, 7:00:00 PM	yorkeys knob (north of cairns) (qld australia)	au	600	Sleigh	1 slow moving Sleigh rising from E

Query settings Name Santa Spotter

Applied steps Source Navigation Promoted headers Changed column type

Change Unique ID to a text value

Edit queries

Get data Manage parameters Refresh Options Manage columns Transform column Transform table Reduce rows Add column Go to column ...

Queries Santa Spotter

ABC Unique ID	ABC Date Spotted	ABC city	ABC country	ABC duration	ABC shape	ABC comments
1 12 Decimal number	00 PM	sydney (nsw australia)	au	2,700	Sleigh	In the winter months of 1958 on a
2 \$ Currency	00 PM	woy woy (australia)	au	300	Sleigh	Repeated sightings of similar Sleigh
3 % Whole number	0:00 AM	brisbane (australia)	au	300	Sleigh	The Sleigh was black with red light
4 # Percentage	00 PM	hoppers crossing (australia)	au	600	Sleigh	three ufo in triangular sleigh 500
5 # Date/Time	0:00 PM	melbourne (100 mi. south of...)	au	0	Sleigh	Flying sleigh shaped craft sighted
6 # Date	10:00 AM	adelaide (south australia)	au	30	Sleigh	Several people witnessed positive
7 # Time	00 PM	yorkeys knob (north of cairns) (qld australia)	au	600	Sleigh	1 slow moving Sleigh rising from E
8 # Date/Time/Zone	10:00 PM	gold coast (australia)	au	0	Sleigh	Photo of a very large complex flyi
9 # Duration	10:00 AM	newcastle (australia)	au	300	Sleigh	stop up hill in car take photo of ca
10 # Text	10:00 PM	wollongong (nsw australia)	au	240	Sleigh	two star light Sleights travelling wil
11 # True/False	10:00 PM	perth (western australia)	au	30	Sleigh	I saw three traingular Sleights the
12 # Binary	10:00 PM	nowra (australia)	au	989	Sleigh	On one sunday afternoon an obje
13 # Text	10:00 PM	melbourne (vic australia)	au	5	Sleigh	Sleight object sighting report
14 # Binary	10:00 PM	melbourne (vic australia)	au	60	Sleigh	3 Reports Sleigh sightings includin
15 \$1.R51	3/11/2001, 10:00:00 PM	melbourne (vic australia)	au	0	Sleigh	Sleights near melbourne with flickr

Query settings Name Santa Spotter

Applied steps Source Navigation Promoted headers Changed column type

Select Replace Current when changing the data types.

The selected column has an existing type conversion. Would you like to replace the existing conversion, or preserve the existing conversion and add the new conversion as a separate step?

Replace current **Add new step** **Cancel**

Change the Latitude and longitude data types from Numeric to Text.

Select Replace Current when changing the data types.

The selected column has an existing type conversion. Would you like to replace the existing conversion, or preserve the existing conversion and add the new conversion as a separate step?

Replace current **Add new step** **Cancel**

Do the same for longitude.

Select **Replace Current** when changing the data types.

The selected column has an existing type conversion. Would you like to replace the existing conversion, or preserve the existing conversion and add the new conversion as a separate step?

Replace current **Add new step** **Cancel**

Select **Next** to move onto the Power Query load screen.

Query settings

Name: Santa Spotter

Applied steps

- Source
- Navigation
- Promoted headers
- Changed column type**

Next

On the Mapping Entities screen select **Load to a New Entity**. This will create a brand-new entity when importing the data and will save you the time of having to create the entity and attributes from scratch.

Enter the Entity name as **Sleigh Sighting** and the Display name as **Sleigh Sighting**.

Select **Delete rows that no longer exist in the query output**.

Queries

Santa Spotter 

Load settings	Field mapping
----------------------	----------------------

(Load to existing entity
 Load to new entity
 Do not load

Entity name: Sleigh Sighting

Entity display name: Sleigh Sighting

Entity description:

Delete rows that no longer exist in the query output 

Key fields: crdfa_UniqueID Primary name field: Name

Source column	Destination field	Destination field type
city	crdfa_city	Multiline text
comments	crdfa_comments	Multiline text
country	crdfa_country	Text
Date Spotted	crdfa_DateSpotted	Multiline text
duration	crdfa_duration	Floating point number
latitude	crdfa_latitude	Multiline text
longitude	crdfa_longitude	Multiline text
Name	crdfa_Name	Multiline text

Multiline text is not supported for primary

Back  Next

Set all the field types, **EXCEPT FOR “COMMENTS”**, that can be changed, to **Text**.

Set the Key field to **ID** and the Primary field name to **Unique ID** as well.

Set the Primary name field to **Name**.

Map entities

Queries	Load settings	Field mapping
----------------	----------------------	----------------------

Santa Spotter

(Load to existing entity
 Load to new entity
 Do not load

Entity name: Sleigh Sighting

Entity display name: Sleigh Sighting

Entity description:

Delete rows that no longer exist in the query output 

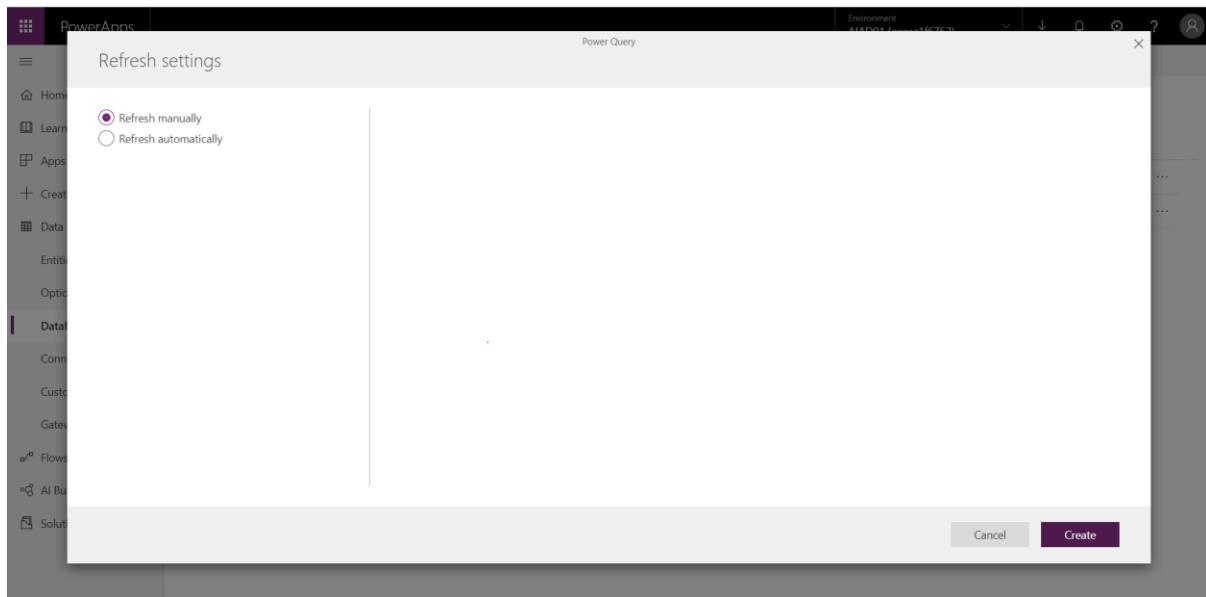
Key fields: crdfa_UniqueID Primary name field: Name

Source column	Destination field	Destination field type
city	crdfa_city	Text
comments	crdfa_comments	Multiline text
country	crdfa_country	Text
Date Spotted	crdfa_DateSpotted	Text
duration	crdfa_duration	Floating point number
latitude	crdfa_latitude	Text
longitude	crdfa_longitude	Text
Name	crdfa_Name	Text
Resolved	crdfa.Resolved	Two options
shape	crdfa_shape	Text

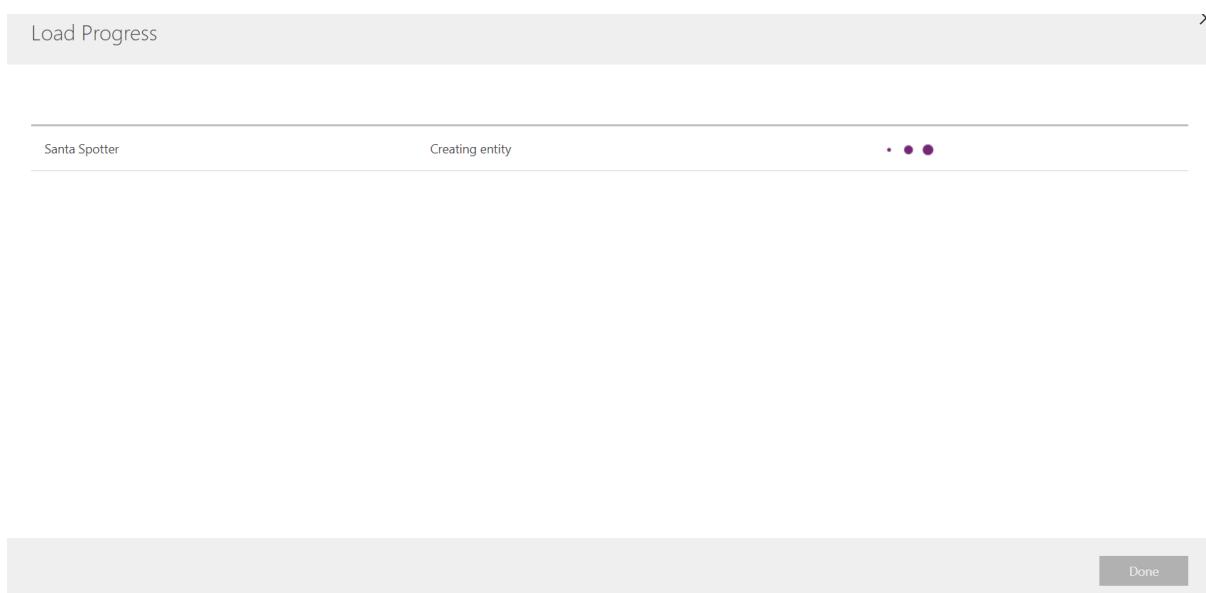
Back  Next

Hit **next** to continue.

Select **Refresh manually** and then click **Create**.

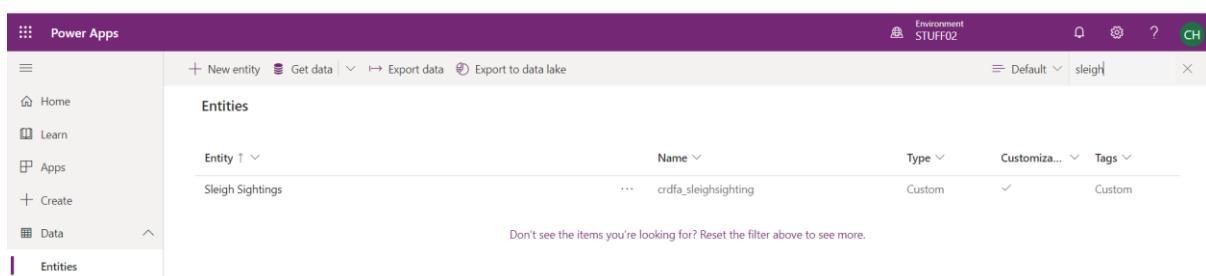


You will be able to see the indicator of the entity being created in the background, in the form of 3 resizing dots. This may take some time so use the time to plan your next steps....



Once the process is complete you will be notified. Click the **Done** button to proceed.

You will see your Data flow has now been added to the list and your entity added to the Common Data Service



This concludes Lab number 1 and the focus around the bringing in data from a data source into the Common Data Service.

Lab 2: Configuring Forms, Views & Charts in the Dataverse*

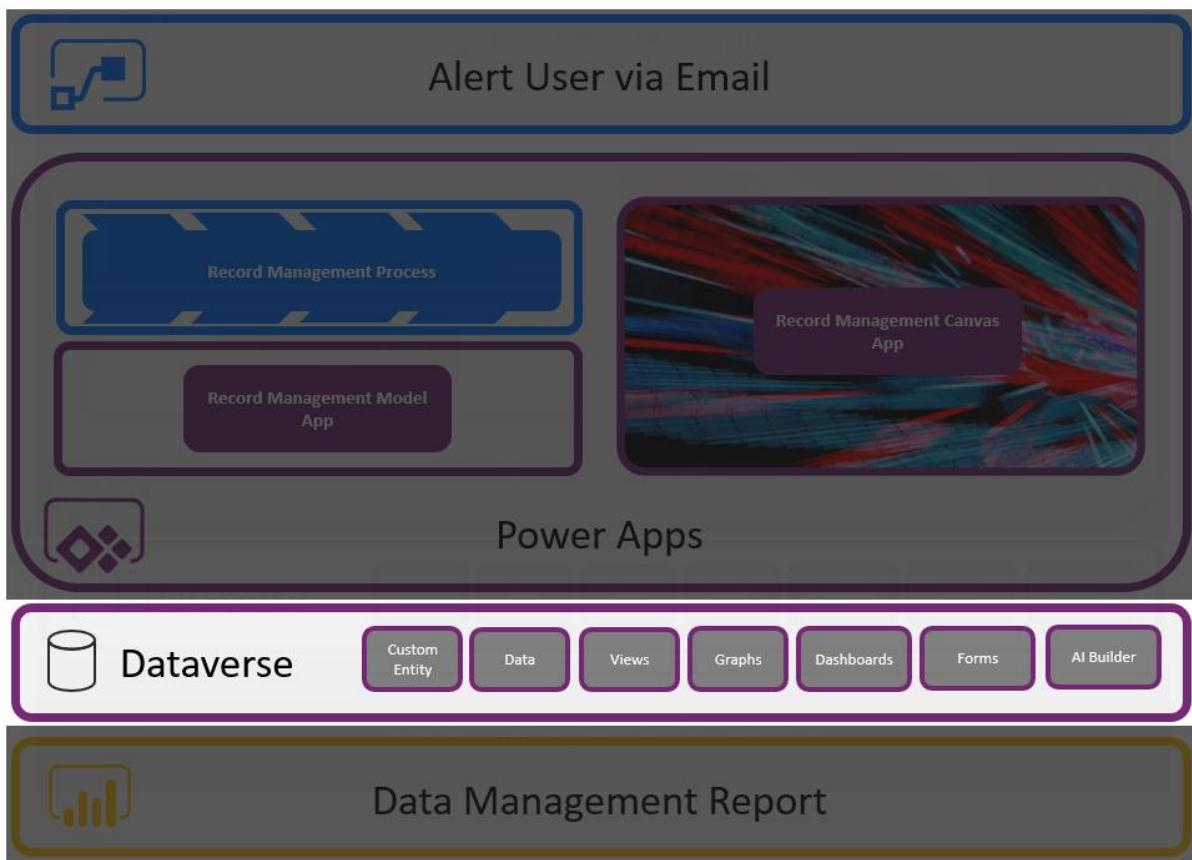
We will start off by leveraging the data structure you just brought into the Common Data Service (CDS) via Data Flows from Excel. This will give the users of the solution a much more efficient mechanism to interact with the data.

Please Note:

This lab can be completed independently, with only Lab 1 being and no support of the other labs.

Solution Components

Dataverse: Forms, Views & Graphs



Let's Begin

Navigate to <https://make.powerapps.com> and select **Data** from the menu on the left. Then select **Tables**. This will display a list of the standard data tables within Dataverse. This is the home of all tables that exist within your environment.

The screenshot shows the 'Tables' list in the Power Apps maker experience. The left sidebar has 'Tables' selected under the 'Data' category. The main area displays a table with columns: Table, Name, Type, Customizable, and Tags. The 'Name' column lists various entities like Account, Activity, Address, etc. The 'Type' column shows Standard or Custom. The 'Customizable' column has checkmarks. The 'Tags' column includes Master, Standard, Productivity, and KB. A note at the bottom says 'Don't see the items you're looking for? Reset the filter above to see more.'

Table	Name	Type	Customizable	Tags
Account	account	Standard	✓	Master
Activity	activitypointer	Custom	✓	Standard
Address	customeraddress	Standard	✓	Standard
Appointment	appointment	Standard	✓	Productivity
Attachment	activitymymeattachment	Standard	✓	Productivity
Business Unit	businessunit	Standard	✓	Standard
Contact	contact	Standard	✓	Master
Currency	transactioncurrency	Standard	✓	Standard
Email	email	Standard	✓	Productivity
Email Template	template	Standard	✓	Standard
Fax	fax	Standard	✓	Productivity
Feedback	feedback	Standard	✓	KB
Letter	letter	Standard	✓	Productivity
Mailbox	mailbox	Standard	✓	Configuration
Organization	organization	Custom	✓	System
Phone Call	phonecall	Standard	✓	Standard
Position	position	Standard	✓	System
Privilege	privilege	Custom		System
Recurring Appointment	recurringappointmentmaster	Standard	✓	Standard
Sleigh Sighting	cr3b8_sleighsighting	Custom	✓	Custom
Task	task	Standard	✓	Productivity
Team	team	Standard	✓	System
Team template	teamtemplate	Standard	✓	Standard
User	systemuser	Standard	✓	Standard

Don't see the items you're looking for? Reset the filter above to see more.

Search for “Sleigh Sightings” using the search box at the top right corner and you will see that a table has been created. If you do not see your Sleigh Sightings table listed check the following:

1. Make sure you are in the correct environment
2. Refresh the entire maker experience web page

The screenshot shows the 'Tables' list in the Power Apps maker experience after searching for 'Sleigh'. The search bar at the top right contains 'Sleigh'. The 'Tables' section is selected in the left sidebar. The main area displays a table with columns: Table, Name, Type, Customizable, and Tags. The 'Name' column shows a single entry 'Sleigh Sighting'. The 'Type' column shows 'Custom'. The 'Customizable' column has a checkmark. The 'Tags' column shows 'Custom'. A note at the bottom says 'Don't see the items you're looking for? Reset the filter above to see more.'

Table	Name	Type	Customizable	Tags
	Sleigh Sighting	Custom	✓	Custom

Don't see the items you're looking for? Reset the filter above to see more.

Clicking on the **Sleigh Sightings** will display the Columns that exist within that Table.

The screenshot shows the 'Sleigh Sighting' table structure in the Microsoft Power Apps Studio. The table has 26 columns:

Display name	Name	Data type	Type	Customizable	Required	Searchable
city	cr3bf_city	Text	Custom	✓	Optional	✓
comments	cr3bf_comments	Multiline Text	Custom	✓	Optional	✓
country	cr3bf_country	Text	Custom	✓	Optional	✓
Created By	createdby	Lookup	Standard	✓	Optional	✓
Created By (Delegate)	createdonbehalfby	Lookup	Standard	✓	Optional	✓
Created On	createdon	Date and Time	Standard	✓	Optional	✓
date posted	cr3bf_dateposted	Date Only	Custom	✓	Optional	✓
duration	cr3bf_duration	Floating Point Number	Custom	✓	Optional	✓
Import Sequence Number	importsequencenumber	Whole Number	Standard	✓	Optional	✓
latitude	cr3bf_latitude	Text	Custom	✓	Optional	✓
longitude	cr3bf_longitude	Text	Custom	✓	Optional	✓
Modified By	modifiedby	Lookup	Standard	✓	Optional	✓
Modified By (Delegate)	modifiedonbehalfby	Lookup	Standard	✓	Optional	✓
Modified On	modifiedon	Date and Time	Standard	✓	Optional	✓
Name	Primary Name Column	Text	Custom	✓	Optional	✓
Owner	ownerid	Owner	Standard	✓	Required	✓
Owning Business Unit	owningbusinessunit	Lookup	Standard	✓	Optional	✓
Owning Team	owningteam	Lookup	Standard	✓	Optional	✓
Owning User	owninguser	Lookup	Standard	✓	Optional	✓
Record Created On	overriddencreatedon	Date Only	Standard	✓	Optional	✓
shape	cr3bf_shape	Text	Custom	✓	Optional	✓
Sleigh Sighting	cr3bf_sleighsightingid	Unique Identifier	Standard	✓	Required	✓
Status	statecode	Choice	Standard	✓	Required	✓
Status	cr3bf_status	Text	Custom	✓	Optional	✓
Status Reason	statuscode	Choice	Standard	✓	Optional	✓

Form Configuration

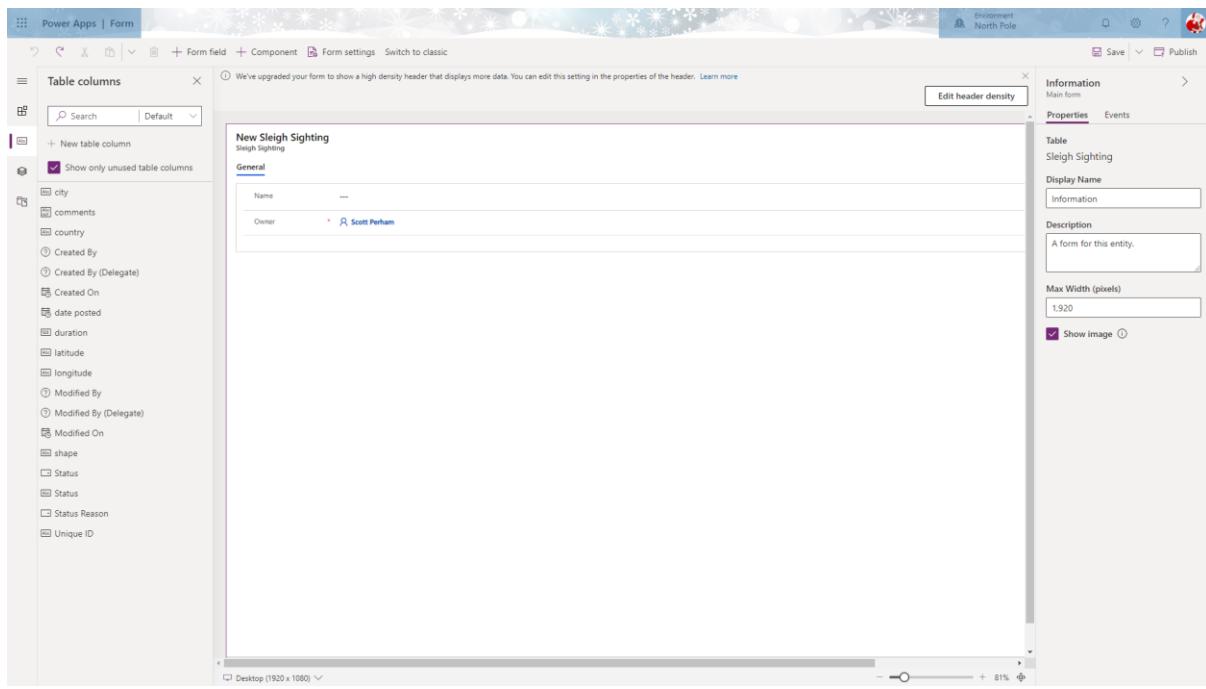
Forms are the mechanism used to capture and display data in Model Driven Applications.

Select the **Forms** option from the tab headings and click the form named “Information” with the **Form type** “Main”

The screenshot shows the 'Sleigh Sighting' forms structure in the Microsoft Power Apps Studio. The table has 3 rows:

Name	Form type	Type
Information	Main	Custom
Information	Card	Custom
Information	QuickViewForm	Custom

This will open the form editor.



Drag and drop the following fields from the **Table Columns** panel on the left onto the designer:

1. city
2. country
3. latitude
4. longitude
5. date posted
6. duration
7. shape
8. comments
9. Status (There are two status fields, make sure you select the TEXT version of the field)

Status

We've upgraded your form to show a high density header that displays more data. You can edit this setting in the properties of the header. [Learn more](#)

Table columns

New Sleigh Sighting

General

Name
Owner: city (Scott Perham)

Properties

Main form

Table

Sleigh Sighting

Display Name: Information

Description: A form for this entity.

Max Width (pixels): 1920

Show image

Save and Publish the form. You MUST do this before navigating back to the main Table screen.

Environment North Pole

Save | Publish

Information

Main form

Properties

Events

Table

Sleigh Sighting

Click the Browser Back button to navigate to the main Table screen.

Information Form

https://make.powerapps.com/

Table columns

Search Default

+ New table column

Show only unused table columns

New

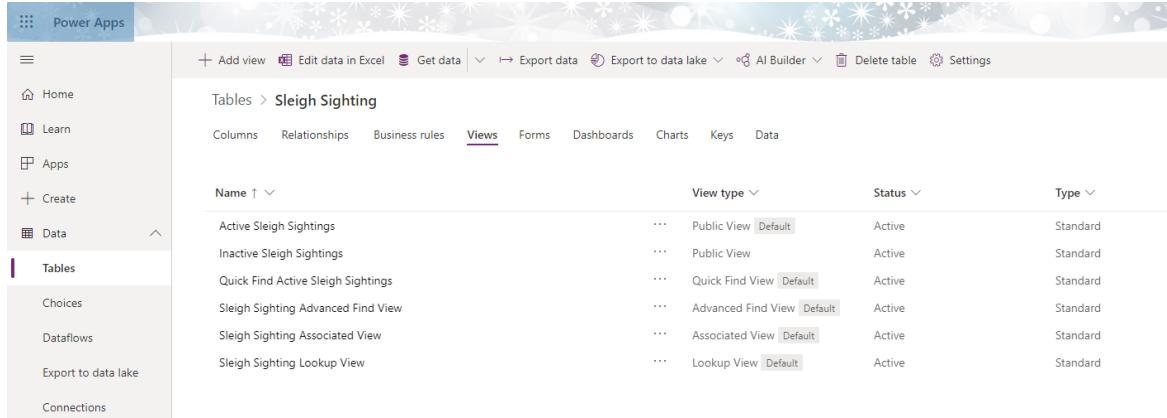
Sleigh

General

View Configuration

Views are the mechanism used to view lists of data within all application types within the Power Platform.

Select the **Views** tab from the menu and click the view named “Active Sleigh Sightings”.



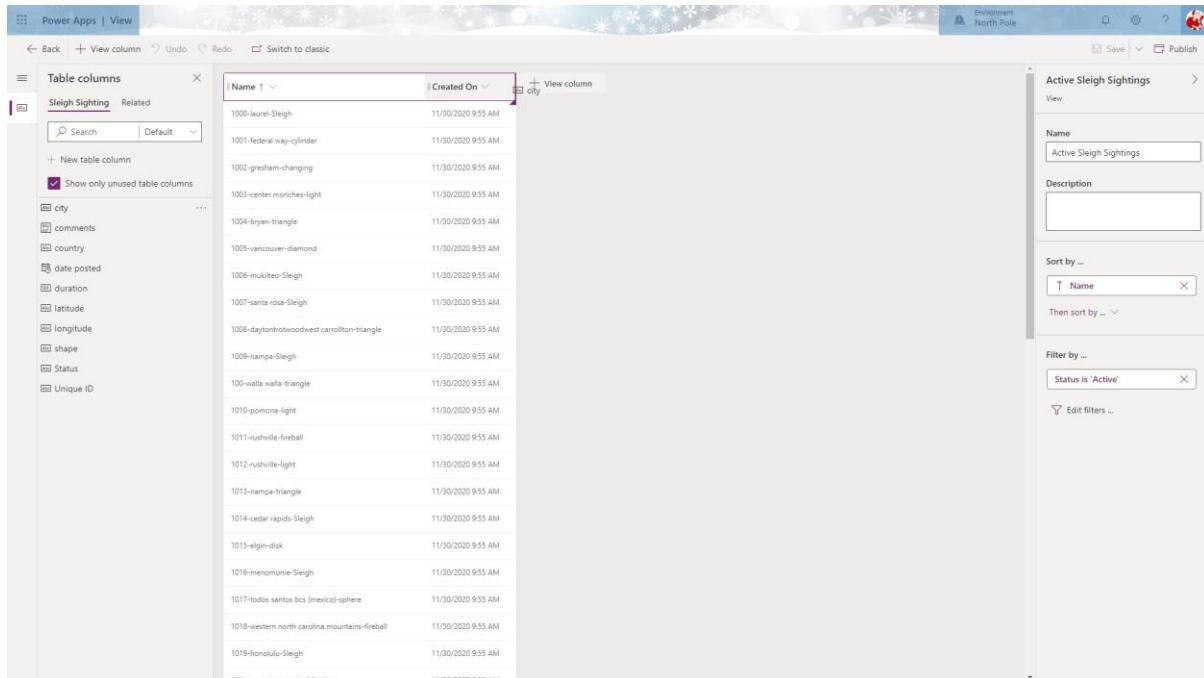
The screenshot shows the Power Apps interface with the 'Tables' section selected. Under 'Tables', 'Sleigh Sighting' is chosen. The 'Views' tab is highlighted. A list of views is displayed:

Name	Type	Status	Type
Active Sleigh Sightings	Public View	Active	Standard
Inactive Sleigh Sightings	Public View	Active	Standard
Quick Find Active Sleigh Sightings	Quick Find View	Active	Standard
Sleigh Sighting Advanced Find View	Advanced Find View	Active	Standard
Sleigh Sighting Associated View	Associated View	Active	Standard
Sleigh Sighting Lookup View	Lookup View	Active	Standard

This will open the view editor with the default columns selected.

Drag and drop the following fields into the main view headers section.

1. City
2. Country
3. Duration
4. Date posted
5. Shape
6. Status



The screenshot shows the 'Active Sleigh Sightings' view editor. On the left, the 'Table columns' pane lists various fields like city, comments, country, date posted, duration, latitude, longitude, shape, status, and Unique ID. A filter for 'city' is applied. The main pane displays a list of records with columns for Name and Created On. On the right, the view configuration pane shows settings for Name (Active Sleigh Sightings), Description, Sort by (Name), and Filter by (Status is 'Active').

Save and Publish your changes to the “Active Sleigh Sightings” view. You MUST do this before you navigate back to the main Table screen.

The screenshot shows the Microsoft Power Apps canvas interface. On the left, the 'Table columns' pane is open, listing columns for the 'Sleigh Sighting' table, including Name, Created On, city, country, duration, date posted, shape, and Status. A search bar and a 'Default' dropdown are also present. On the right, a view titled 'Active Sleigh Sightings' is displayed, showing a list of entries with the following data:

Name	Created On	city	country	duration	date posted	shape	Status
1000-laurel-Sleigh	11/30/2020 9:55 AM	laurel	us	180:00	10/2/2019	Sleigh	Pending
1001-federal way-cylinder	11/30/2020 9:55 AM	federal way	us	30:00	10/2/2019	cylinder	Active
1002-gresham-changing	11/30/2020 9:55 AM	gresham	us	1300:00	10/2/2019	changing	Active
1003-center monches-light	11/30/2020 9:55 AM	center monches	us	7:00	10/2/2019	light	Closed
1004-bryan-triangle	11/30/2020 9:55 AM	bryan	us	15:00	10/2/2019	triangle	Active
1005-vancouver-diamond	11/30/2020 9:55 AM	vancouver	us	60:00	10/2/2019	diamond	Active
1006-mukilteo-Sleigh	11/30/2020 9:55 AM	mukilteo	us	3:00	10/2/2019	Sleigh	Closed
1007-santa rosa-Sleigh	11/30/2020 9:55 AM	santa rosa	us	7:00	10/2/2019	Sleigh	Active
1008-daytonrototwoodwest carrollton-triangle	11/30/2020 9:55 AM	daytonrototwood...	us	1,200:00	10/2/2019	triangle	Active
1009-nampa-Sleigh	11/30/2020 9:55 AM	nampa	us	45:00	10/2/2019	Sleigh	Pending
100-walla walla-triangle	11/30/2020 9:55 AM	walla walla	us	1,200:00	11/1/2018	triangle	Active
1010-pomona-light	11/30/2020 9:55 AM	pomona	us	120:00	10/2/2019	light	Active
1011-rushville-fireball	11/30/2020 9:55 AM	rushville	us	20:00	10/2/2019	fireball	Active
1012-rushville-light	11/30/2020 9:55 AM	rushville	us	2,700:00	10/2/2019	light	Pending
1013-nampa-triangle	11/30/2020 9:55 AM	nampa	us	180:00	10/2/2019	triangle	Pending
1014-cedar rapids-Sleigh	11/30/2020 9:55 AM	cedar rapids	us	900:00	10/2/2019	Sleigh	Active
1015-eigin-disk	11/30/2020 9:55 AM	eigin	us	300:00	10/2/2019	disk	Active
1016-menomonie-Sleigh	11/30/2020 9:55 AM	menomonie	us	0:00	10/2/2019	Sleigh	Pending
1017-todos santos bcs (mexico)-sphere	11/30/2020 9:55 AM	todos santos bcs...	us	80:00	10/2/2019	sphere	Pending
1018-western north carolina mountains-fireball	11/30/2020 9:55 AM	western north ca...	us	5:00	10/2/2019	fireball	Closed
1019-honolulu-Sleigh	11/30/2020 9:55 AM	honolulu	us	300:00	10/2/2019	Sleigh	Active

Once the view has been saved and published, use the **Back** button to navigate back to the Table screen.

The screenshot shows the Microsoft Power Apps canvas interface. On the left, the 'Table columns' pane is open, listing columns for the 'Sleigh Sighting' table, including Name, Created On, city, country, duration, date posted, shape, and Status. A search bar and a 'Default' dropdown are also present. On the right, a view titled 'Active Sleigh Sightings' is displayed, showing a list of entries with the following data:

Name	Created On	city	country	duration	date posted	shape	Status
1000-laurel-Sleigh	11/30/2020 9:55 AM	laurel	us	180:00	10/2/2019	Sleigh	Pending
1001-federal way-cylinder	11/30/2020 9:55 AM	federal way	us	30:00	10/2/2019	cylinder	Active
1002-gresham-changing	11/30/2020 9:55 AM	gresham	us	1300:00	10/2/2019	changing	Active
1003-center monches-light	11/30/2020 9:55 AM	center monches	us	7:00	10/2/2019	light	Closed
1004-bryan-triangle	11/30/2020 9:55 AM	bryan	us	15:00	10/2/2019	triangle	Active
1005-vancouver-diamond	11/30/2020 9:55 AM	vancouver	us	60:00	10/2/2019	diamond	Active
1006-mukilteo-Sleigh	11/30/2020 9:55 AM	mukilteo	us	3:00	10/2/2019	Sleigh	Closed
1007-santa rosa-Sleigh	11/30/2020 9:55 AM	santa rosa	us	7:00	10/2/2019	Sleigh	Active
1008-daytonrototwoodwest carrollton-triangle	11/30/2020 9:55 AM	daytonrototwood...	us	1,200:00	10/2/2019	triangle	Active
1009-nampa-Sleigh	11/30/2020 9:55 AM	nampa	us	45:00	10/2/2019	Sleigh	Pending
100-walla walla-triangle	11/30/2020 9:55 AM	walla walla	us	1,200:00	11/1/2018	triangle	Active
1010-pomona-light	11/30/2020 9:55 AM	pomona	us	120:00	10/2/2019	light	Active
1011-rushville-fireball	11/30/2020 9:55 AM	rushville	us	20:00	10/2/2019	fireball	Active
1012-rushville-light	11/30/2020 9:55 AM	rushville	us	2,700:00	10/2/2019	light	Pending
1013-nampa-triangle	11/30/2020 9:55 AM	nampa	us	180:00	10/2/2019	triangle	Pending
1014-cedar rapids-Sleigh	11/30/2020 9:55 AM	cedar rapids	us	900:00	10/2/2019	Sleigh	Active
1015-eigin-disk	11/30/2020 9:55 AM	eigin	us	300:00	10/2/2019	disk	Active
1016-menomonie-Sleigh	11/30/2020 9:55 AM	menomonie	us	0:00	10/2/2019	Sleigh	Pending
1017-todos santos bcs (mexico)-sphere	11/30/2020 9:55 AM	todos santos bcs...	us	80:00	10/2/2019	sphere	Pending
1018-western north carolina mountains-fireball	11/30/2020 9:55 AM	western north ca...	us	5:00	10/2/2019	fireball	Closed
1019-honolulu-Sleigh	11/30/2020 9:55 AM	honolulu	us	300:00	10/2/2019	Sleigh	Active

Charts Configuration

Charts are a mechanism to enable users the ability to understand and interact with data in a more visual format.

Select the **Charts** tab from the menu.

You will see that there are currently no charts available within the table.

The screenshot shows the Power Apps portal interface. On the left, there's a navigation sidebar with options like Home, Learn, Apps, Create, and Data. Under Data, 'Tables' is selected. The main content area is titled 'Tables > Sleigh Sighting'. At the top of this area are buttons for 'Add chart', 'Edit data in Excel', 'Get data', 'Export data', 'Export to data lake', 'AI Builder', 'Delete table', and 'Settings'. Below these buttons, there are tabs for 'Columns', 'Relationships', 'Business rules', 'Views', 'Forms', 'Dashboards', 'Charts' (which is underlined in blue), 'Keys', and 'Data'. A search bar with 'Name ↑' and 'Type ↓' dropdowns is present. The main content area displays a large circular icon with a funnel symbol, indicating no results found. Below the icon, the text 'We didn't find anything to show here' is shown, followed by 'Remove the filter to see other items, or try using an alternate search term' and a 'Remove filter' button.

Create a new chart by clicking **Add chart**.

This screenshot shows the same Power Apps portal interface as the previous one, but with a different focus. The 'Tables' tab is now selected in the sidebar. The main content area is titled 'Tables > Sleigh Sighting'. It contains tabs for 'Columns', 'Relationships', 'Business rules', and 'Views'. The rest of the interface is similar to the first screenshot, including the top navigation bar with various buttons and the search bar.

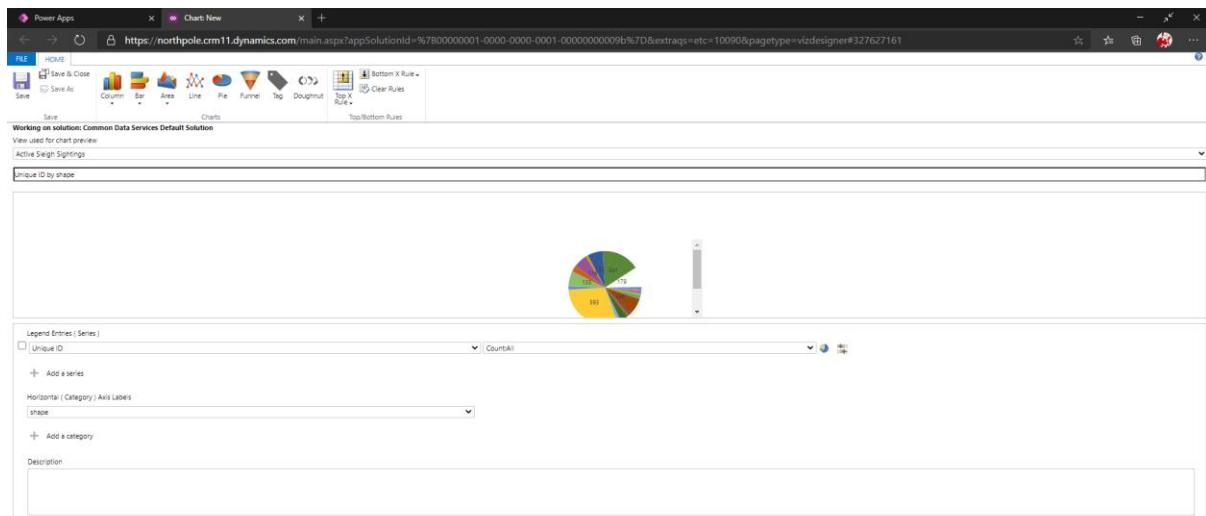
This will open the chart editor in a separate page.

This screenshot shows the Power Apps chart editor. The top navigation bar includes 'FILE', 'HOME', 'Save & Close', 'Column', 'Bar', 'Area', 'Line', 'Pie', 'Funnel', 'Tag', 'Doughnut', 'Top X Rule', 'Bottom X Rule', 'Clear Rules', and 'Top/Bottom Rules'. The main workspace displays a bar chart with four light blue bars. The Y-axis is labeled 'Sleigh' and the X-axis is labeled 'Category'. Below the chart, there are sections for 'Legend Entries (Series)', 'Horizontal (Category) Axis Labels', and a 'Description' text area. The 'Horizontal (Category) Axis Labels' section has a 'Select Field' dropdown and a 'Horizontal Axis Labels' button. The 'Legend Entries (Series)' section has a 'Select Field' dropdown and an 'Aggregate' button. The 'Description' section has a text input field.

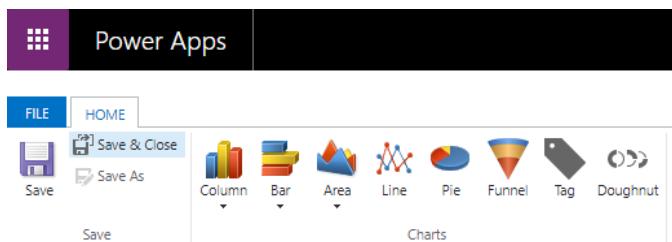
The first chart to create is the distribution of sleigh shapes that have been sighted.

Choose Pie chart from the toolbar and choose the following from the available options:

1. View: **Active Sleigh Sightings**
2. Legend Entries: **Unique ID**
3. Horizontal Axis Labels: **Shape**



Click **Save & Close** to return to the charts list.

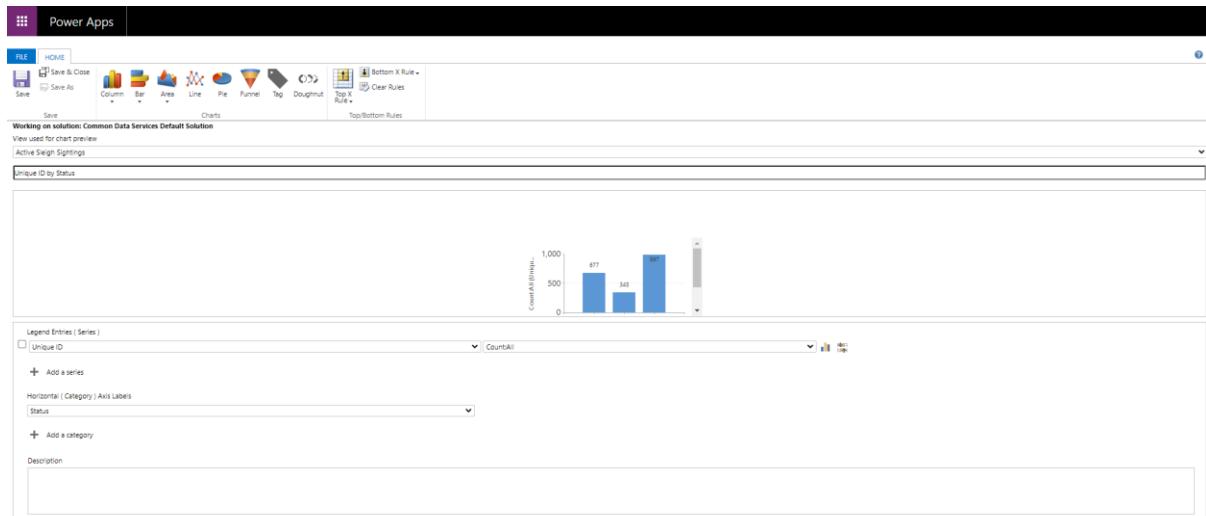


You will see the new chart displayed in the list of available charts.

The screenshot shows the 'Tables' page in Power Apps. The left sidebar has 'Tables' selected. The main area shows a table named 'Sleigh Sighting' with columns: Name, Type, and Unique ID by shape. The 'Charts' tab is selected at the bottom of the table view. The top navigation bar includes 'Add chart', 'Edit data in Excel', 'Get data', 'Export data', 'AI Builder', 'Delete table', and 'Settings'.

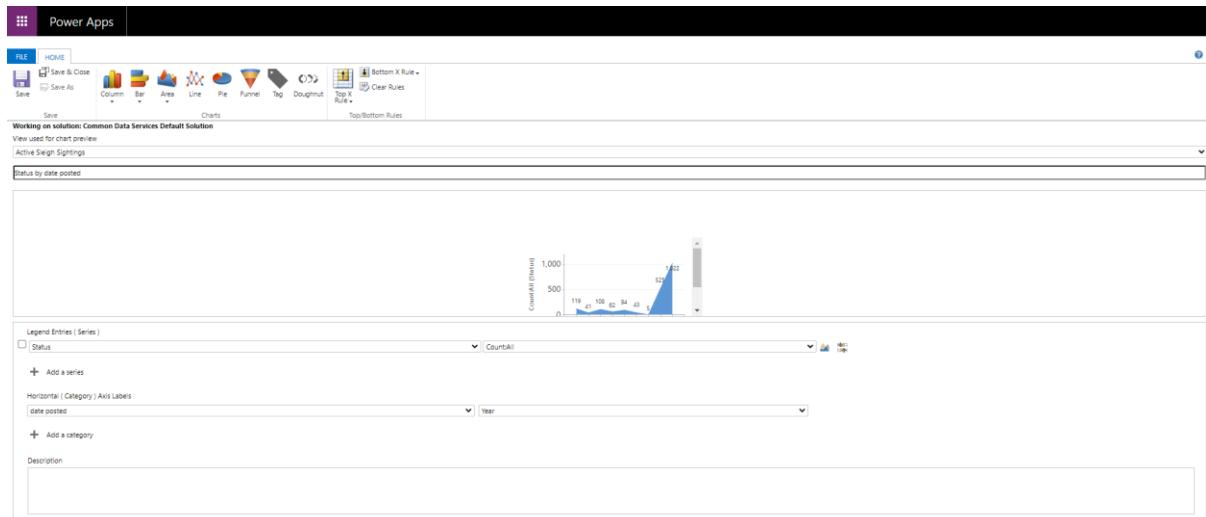
Create another chart using the following options:

1. Chart type: Column
2. View: **Active Sleigh Sightings**
3. Legend Entries: **Unique ID**
4. Horizontal Axis Labels: **Status**



And a third using the following options:

1. Chart type: Area
2. View: **Active Sleigh Sightings**
3. Legend Entries: **Status**
4. Horizontal Axis Labels: **Date posted / year**



Once these charts have been created, they will be displayed in the list of available charts for the Sleigh Sightings table.

Power Apps

Tables > Sleigh Sightings

Columns Relationships Business rules Views Forms Dashboards Charts Keys Data

Name	Type
Status by date posted	Custom
Unique ID by shape	Custom
Unique ID by Status	Custom

Don't see the items you're looking for? Reset the filter above to see more.

These charts will be added to a dashboard in a later lab.

Lab 3: Configuring your Business Process Flow and Model Driven App experience

In this lab we will configure a Model Driven application for the mid office users who will be controlling the Sleigh Sightings process and managing the flow of information

Please Note:

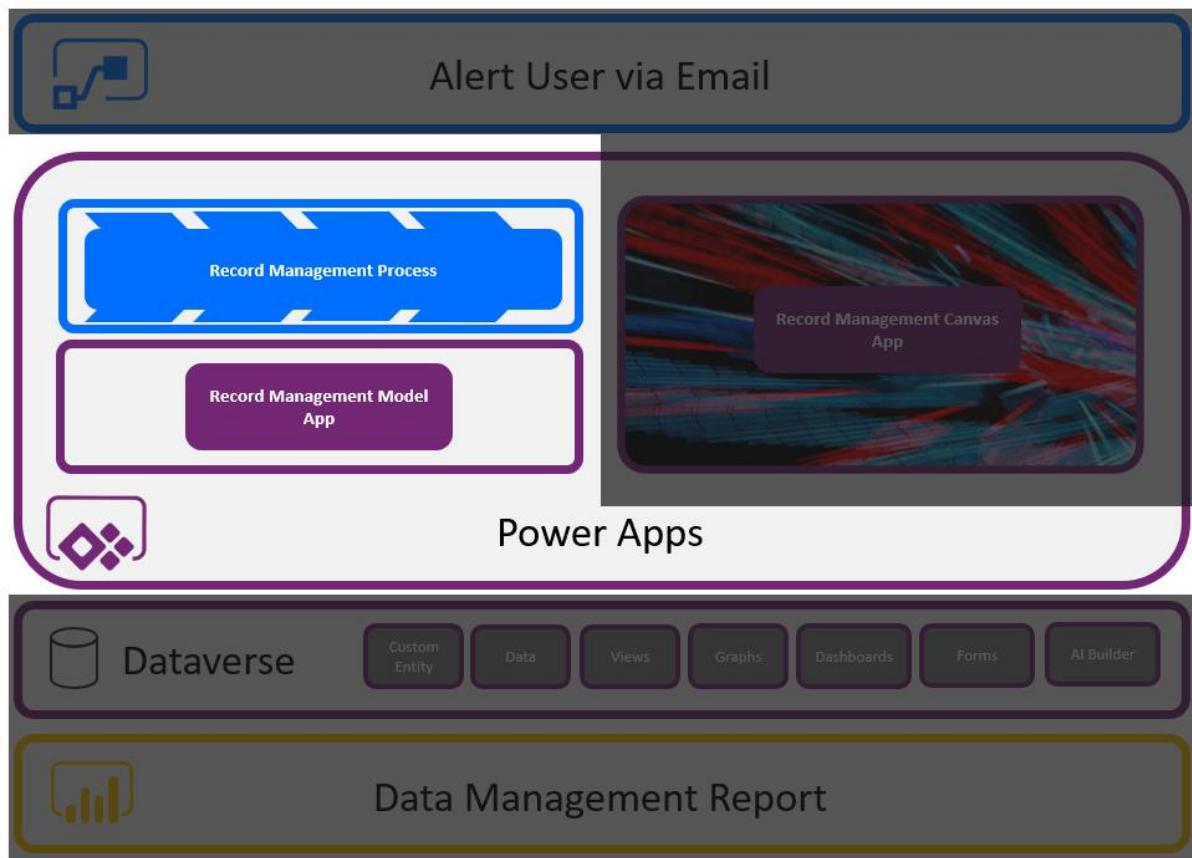
Many of the elements in this lab are is reliant on the completion of Lab number 2. If you do not complete Lab number 2, the forms, graphs and views will not work in the same way. This is especially relevant in the Dashboards section.

Solution Components

PowerApps (Model Driven Applications)

Microsoft Flow : Business Process Flow

PowerApps (Classic Dashboards)



Let's Begin

Business Process Flow

We will be creating a basic step-by-step process for the elves to follow when entering a new sleigh sighting.

Select **Flows** from the left menu and then the **Business process flows** tab.

The screenshot shows the Power Apps Flows interface. On the left, there's a navigation bar with options like Home, Learn, Apps, Create, Data, Tables, Choices, Dataflows, Export to data lake, and Connections. The main area is titled 'Flows' and has tabs for 'My flows', 'Team flows', 'Business process flows' (which is selected), and 'UI flows'. Below the tabs is a table with columns for 'Display name' and 'Last modified'. Three flows are listed:

Display name	Last modified
Translation Process	1 wk ago
New Process	1 wk ago
Expired Process	1 wk ago

Click the **+ New** at the top of the page to create a new flow.

This screenshot is identical to the one above, showing the Power Apps Flows interface with the 'Business process flows' tab selected. The '+ New' button is highlighted in grey, indicating it is the active action to start creating a new flow.

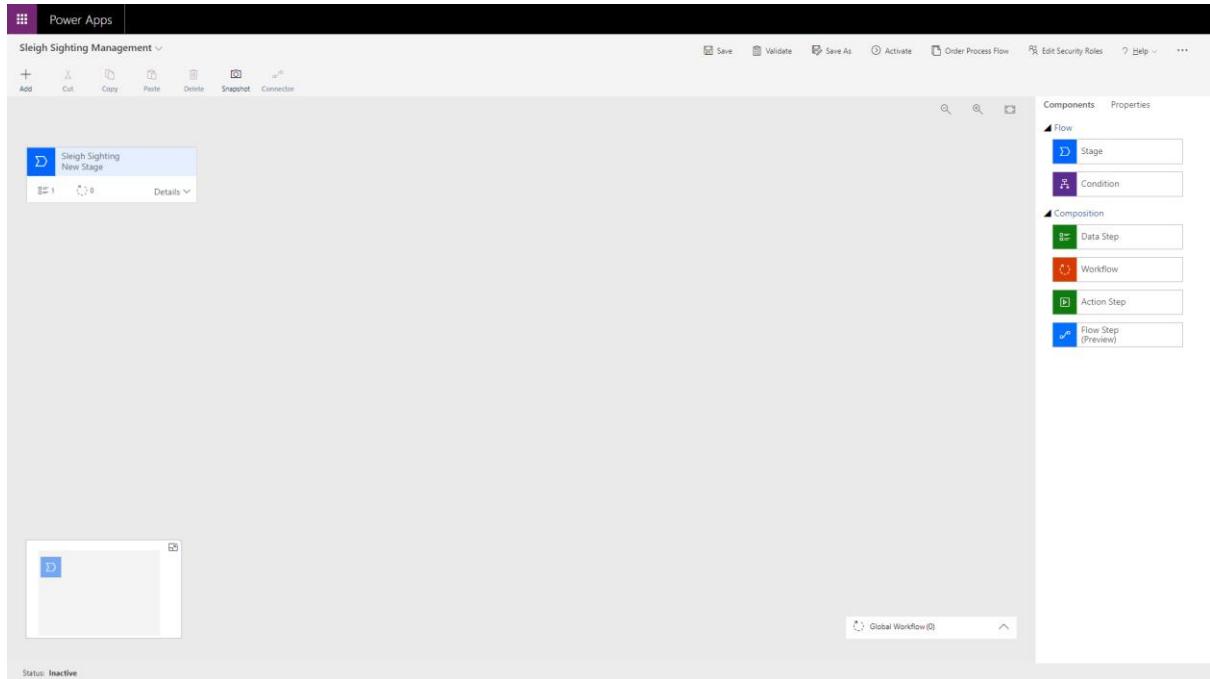
In the **Flow name** textbox, enter “Sleigh Sighting Management”, select “Sleigh Sightings” from the list of tables and click **Create**.

The screenshot shows the 'Build a business process flow' dialog box. On the left, there's a preview area with a title 'Build a business process flow' and a diagram showing a start node connected to several steps. Below the diagram, there's a note: 'Guide one or more end-users through a defined process to complete a multistep task.' and a list of examples: 'Onboarding and training new employees' and 'Nurturing sales leads and closing the loop on opportunities'. On the right, there's a configuration panel with the following fields:

- Flow name ***: Sleigh Sighting Management
- Name ***: new_sleighsightingmanagement
- Choose an entity ***:
 - Sleigh
 - Sleigh Sighting

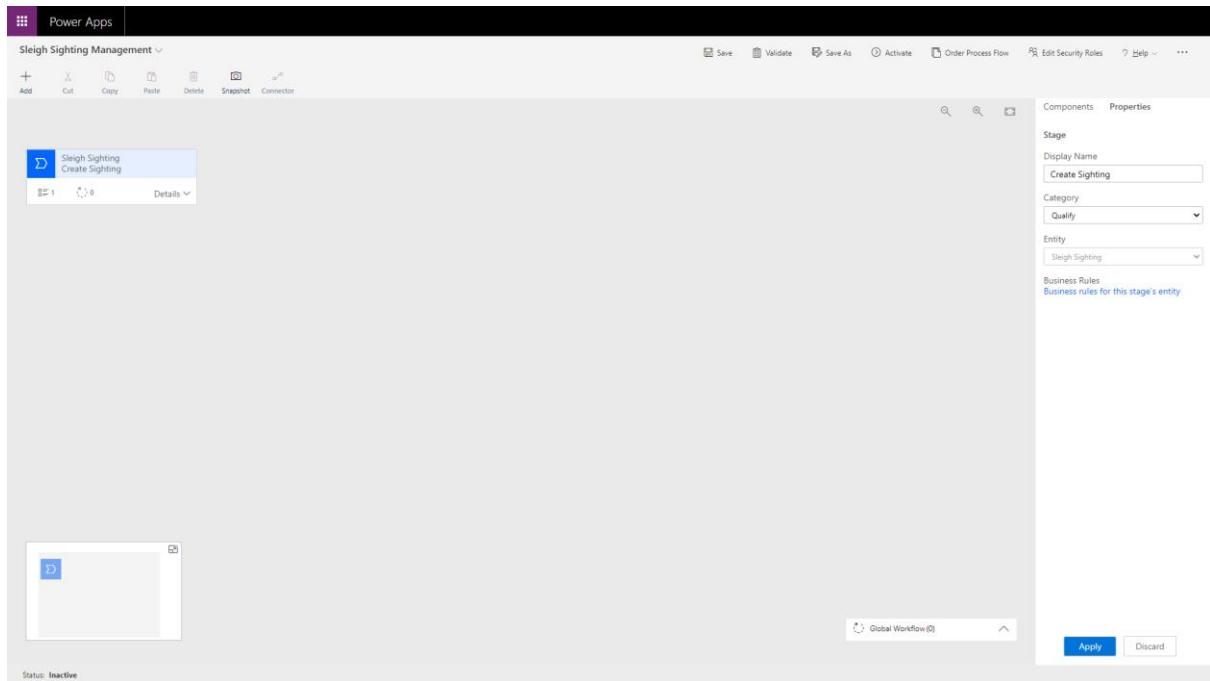
At the bottom right of the dialog are 'Create' and 'Cancel' buttons.

This will launch the flow designer with a default first stage already added to the flow.



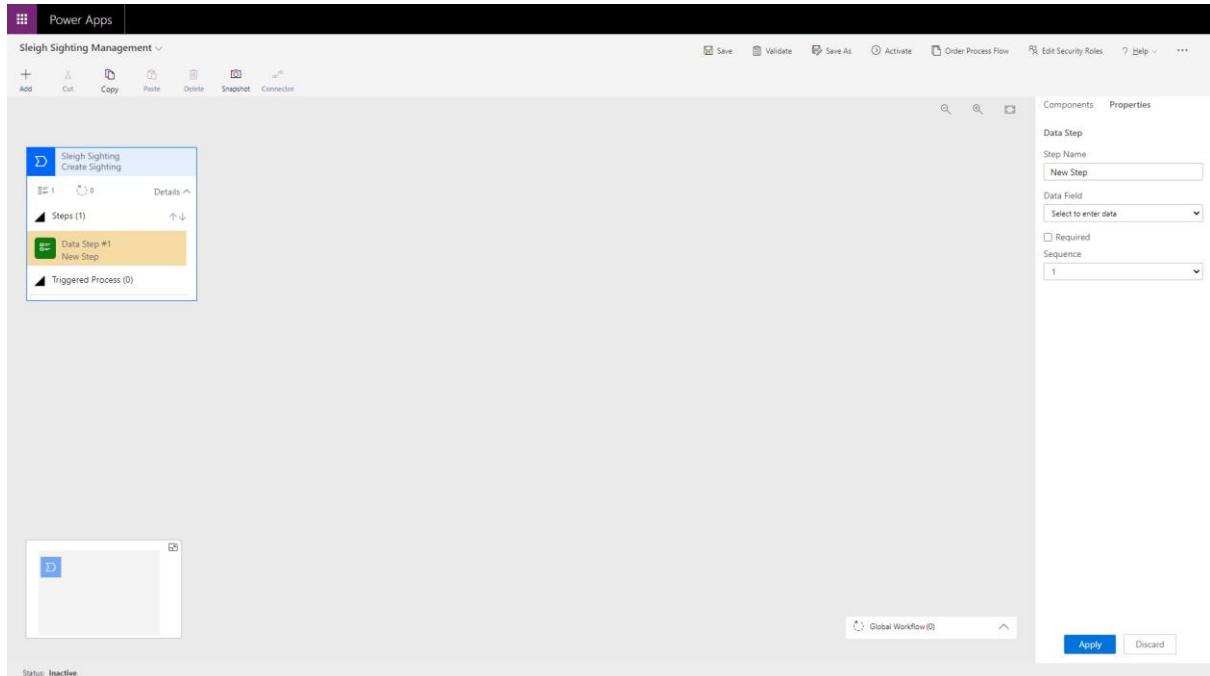
Rename this flow by selecting the stage and entering “Create Sighting” in the **Display Name** textbox and selecting “Qualify” from the **Category** dropdown.

Make sure you click **Apply** to commit the changes made.

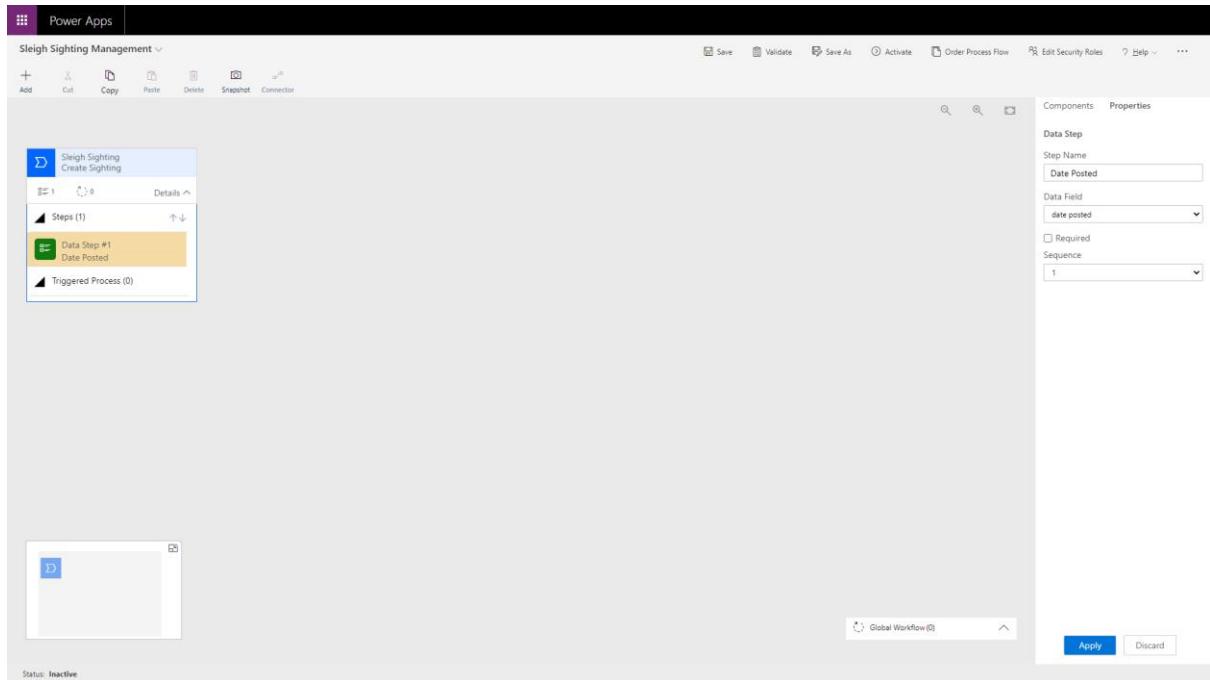


Expand the first stage’s **Details** section to view the Data Steps.

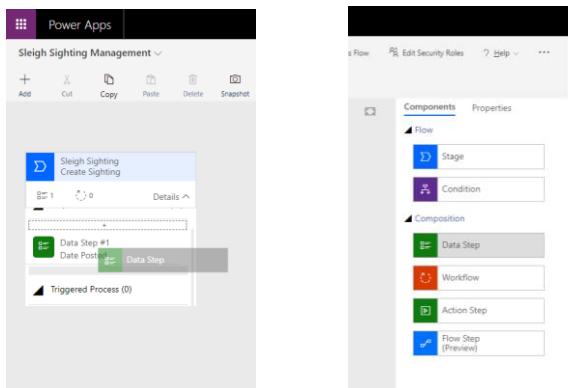
Select the first step to view the properties pane on the right.



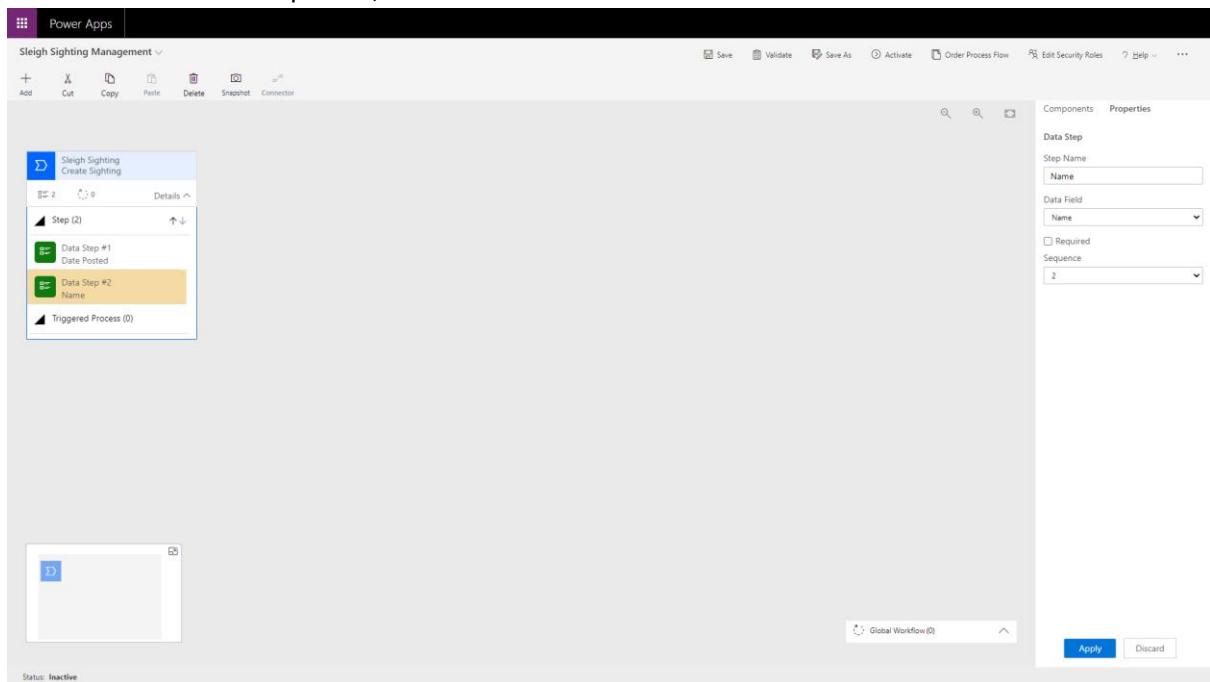
From the **Data Field** dropdown select the “date posted” field.



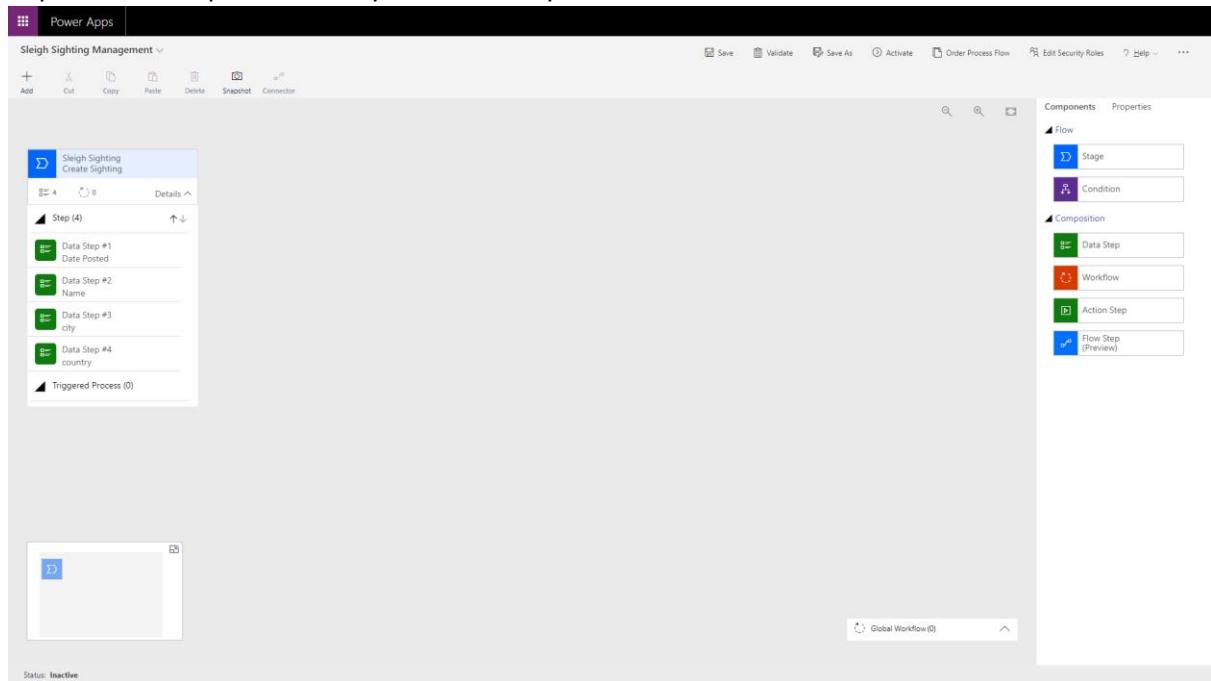
To add additional steps, select the **Components** tab from the pane on the right and drag a **Data Step** to the + symbol below the existing step.



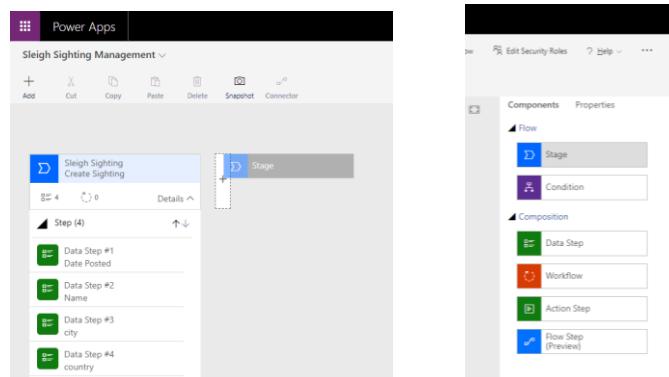
From the Data Field dropdown, select the “Name” field.



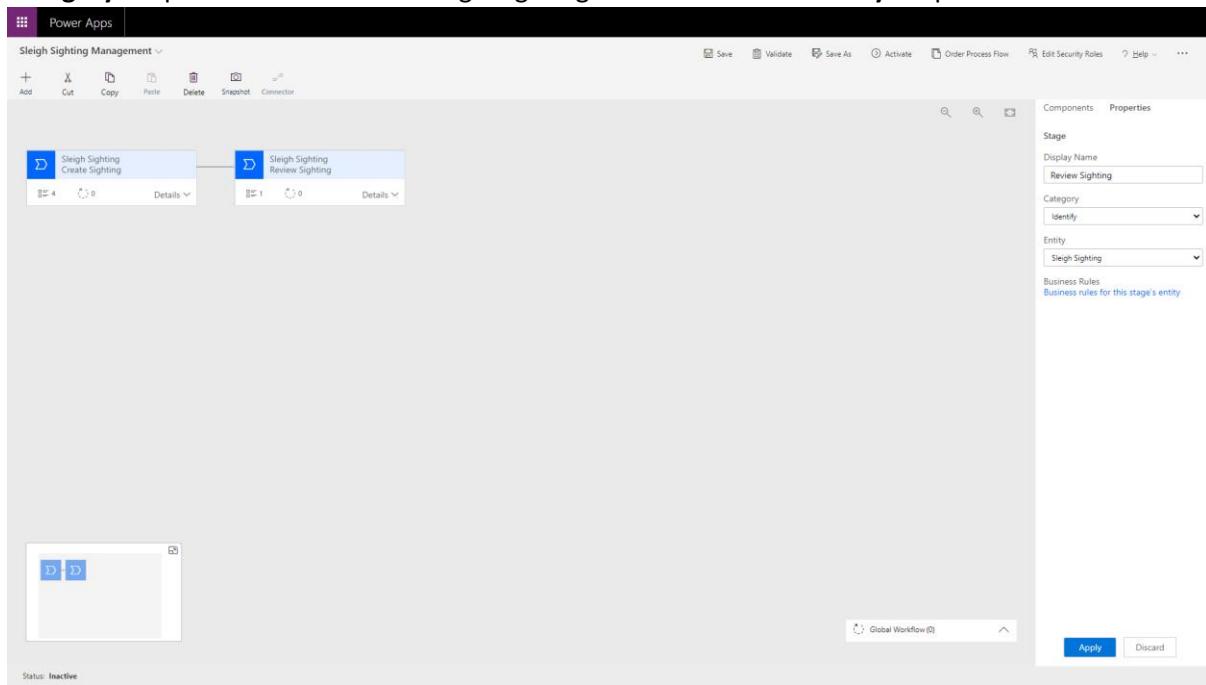
Repeat these steps for the “city” and “country” fields.



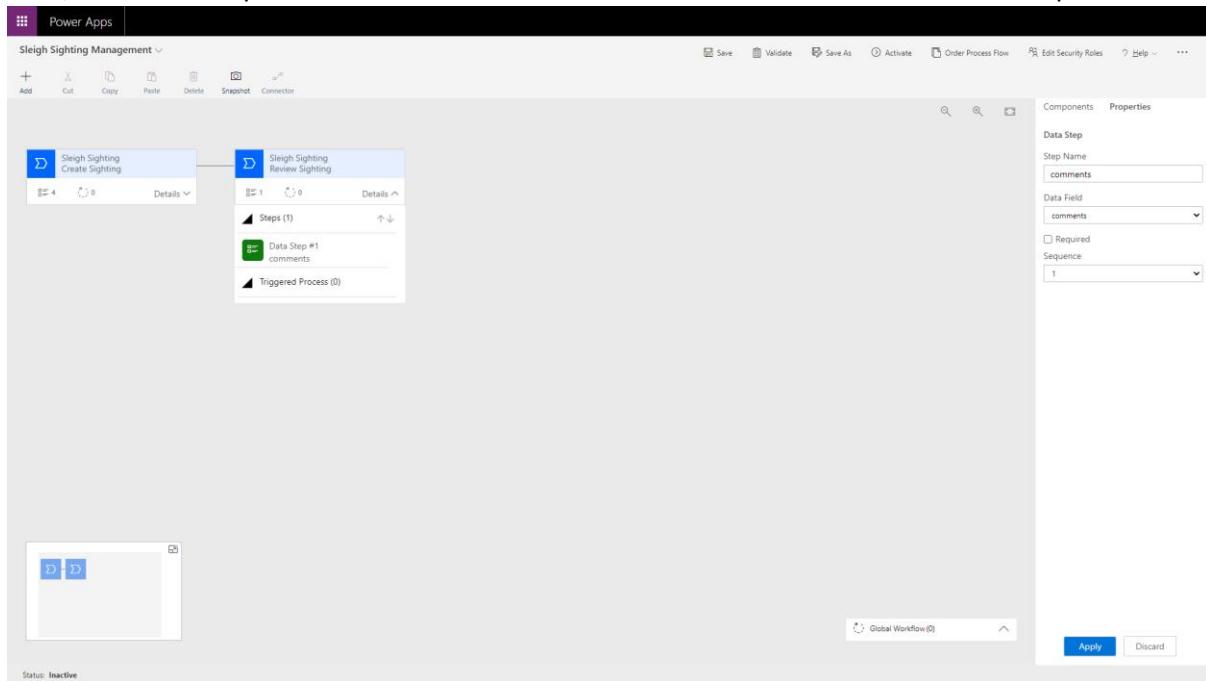
Next, we should add another stage. To do this, from the **Components** list on the right, drag a new **Stage** element over the + symbol to the right of the existing step.



After placing the step, set the **Display Name** to “Review Sighting” and choose “Identity” from the **Category** dropdown. Ensure that “Sleigh Sighting” is selected in the **Entity** dropdown.

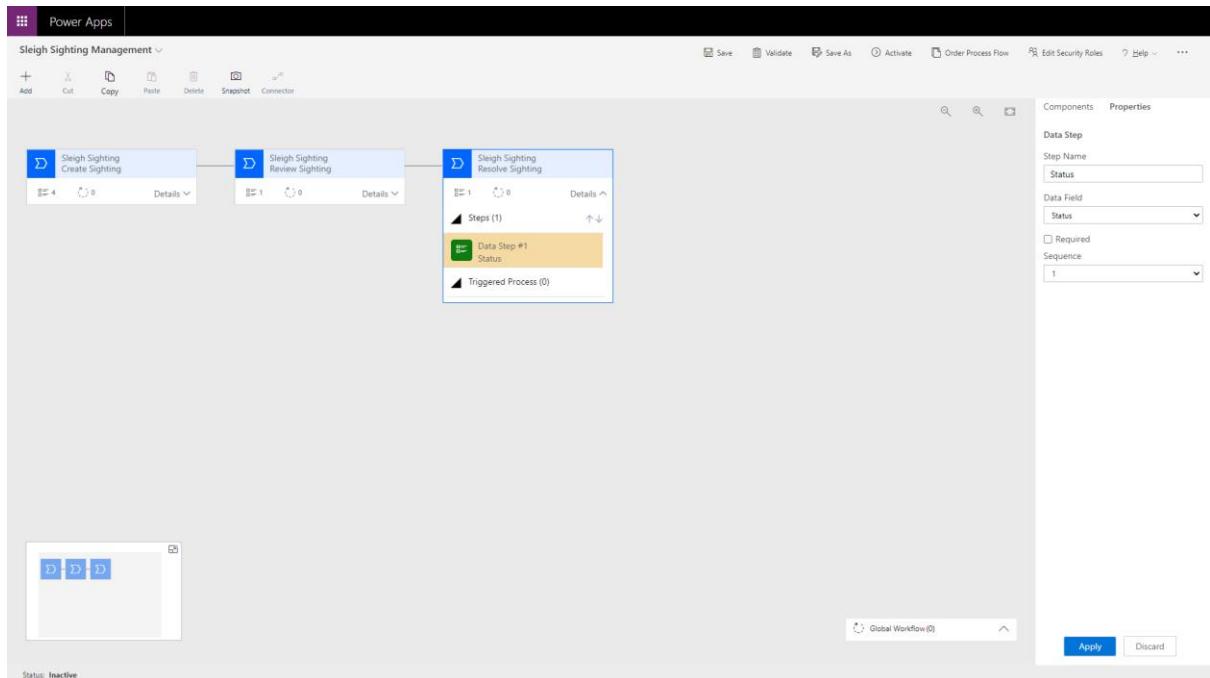


Next, add a new step as before and select the “comments” field from the **Data Field** dropdown.

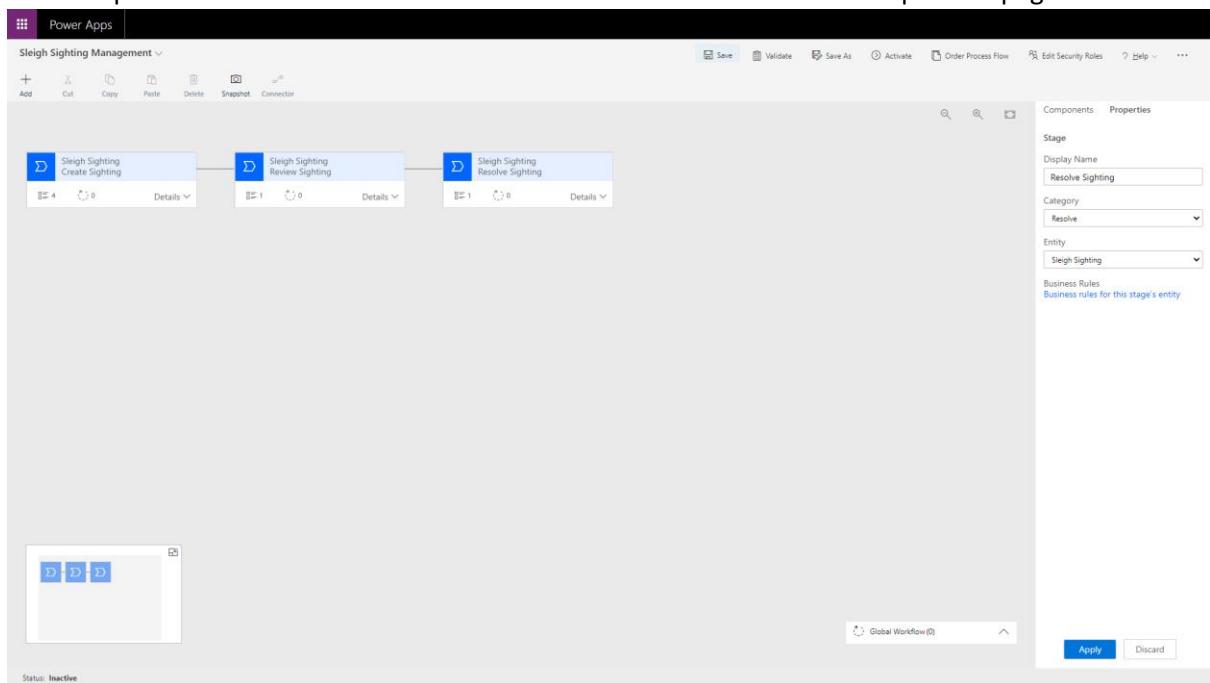


Add a new stage with the **Display Name** “Resolve Sighting” and a **Category** of “Resolve” ensuring that “Sleigh Sighting” is selected in the **Entity** dropdown. To this stage, add a **Data Step** selecting the

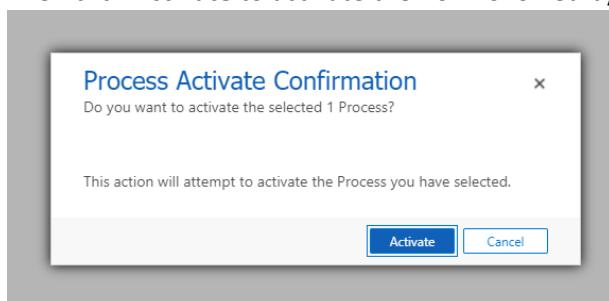
"Status" field.



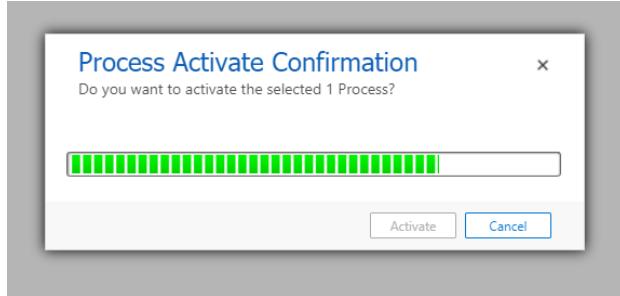
This completes the Business Process Flow so click the **Save** button at the top of the page.



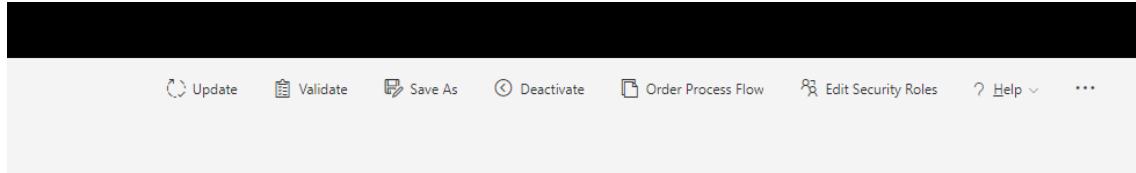
Then click **Activate** to activate the flow followed by the **Activate** button on the displayed dialog.



This will display a progress bar dialog and may take a little time to complete.



Once the progress bar dialog has disappeared, confirm that the activation was successful by checking that **Deactivate** button now exists (don't click it!).



Finally, close the page to return to the Power App maker portal and you should see your new flow listed under the **Business process flows** tab.

Display name	Last modified
Sleigh Sighting Management	38 sec ago
Translation Process	1 wk ago
New Process	1 wk ago
Expired Process	1 wk ago

Model Driven Application

Now that we have created the Business Process Flow, we need to configure our Model Driven Application that will display this to the elves responsible for managing sleigh sightings.

From within the app maker experience (<https://make.powerapps.com>), click **Apps** on the left menu to display the available applications.

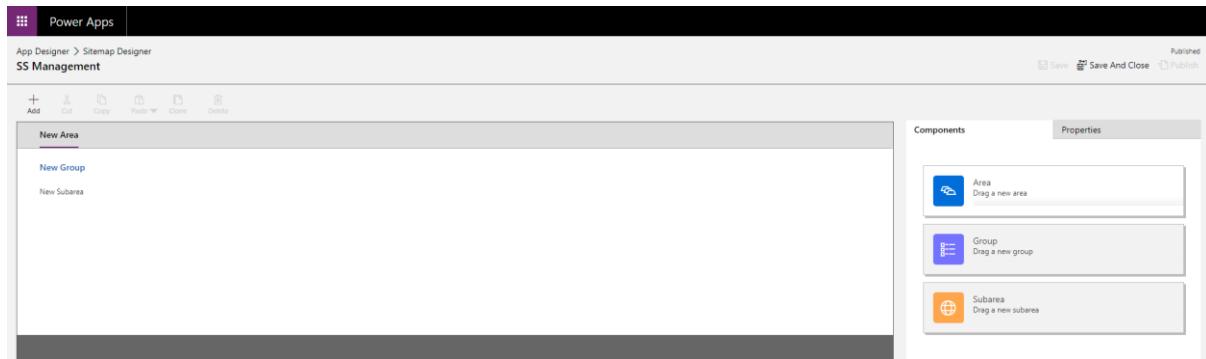
You should see an app named “SS Management”. This is the application we will configure.

To edit the application, select SS Management by clicking the circle to the left (only appears when you move the mouse over the name), then click **Edit** from the toolbar.

This will launch the Model Driven Application maker experience.

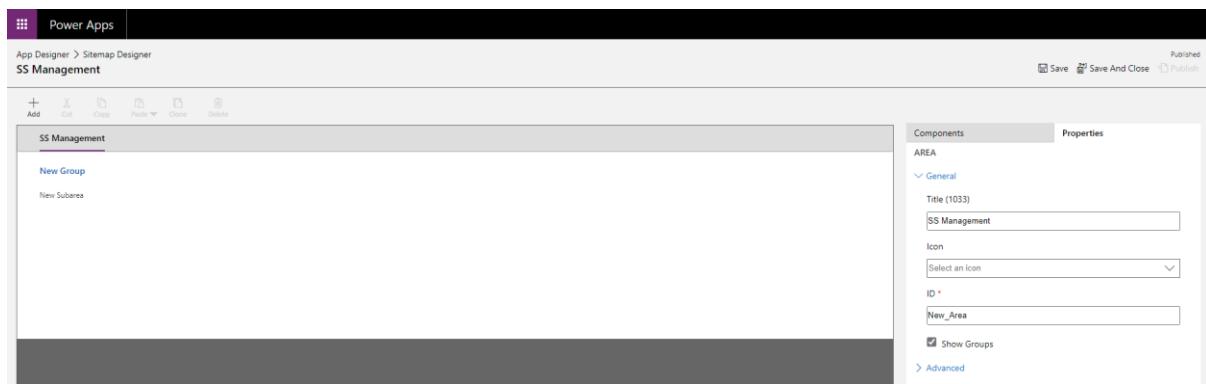
The first thing you will notice is that the **Site Map** element is displaying a warning that there is important configuration missing. Let's fix this by clicking the pencil icon on the **Site Map** element.

This will launch the site map editor.



Edit the default Area component by click on the text “New Area”. This will display the properties pane on the right.

Enter “SS Management” in the **Title** textbox.



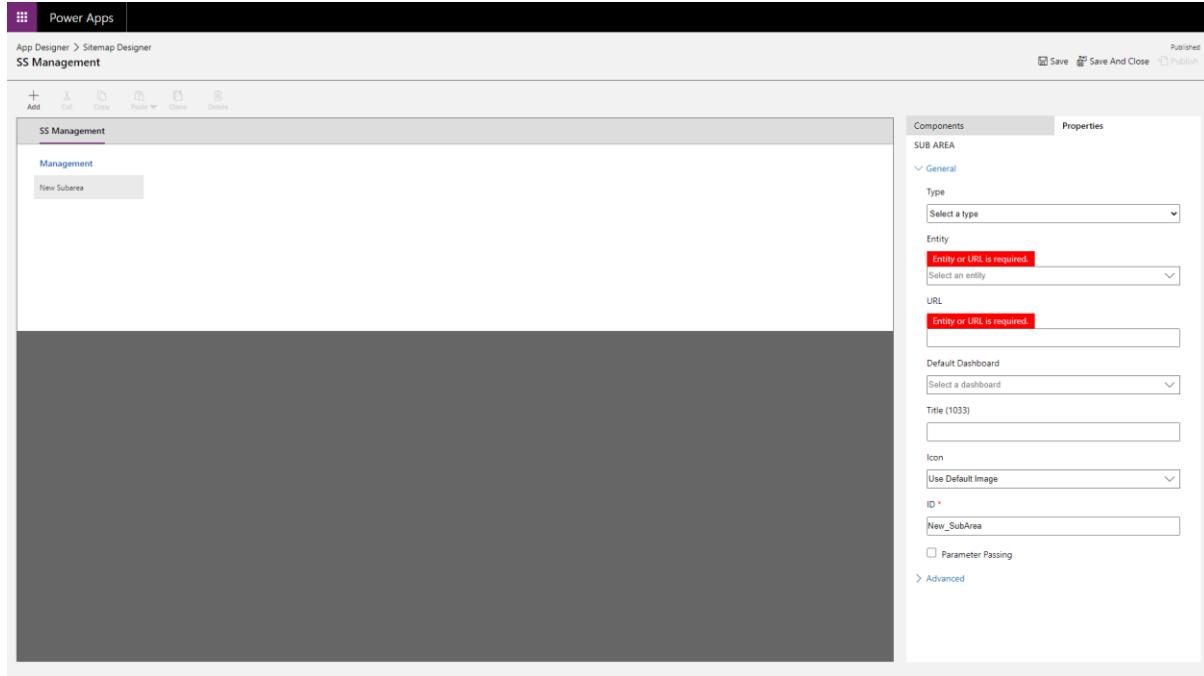
Next, click the “New Group” text on the left to display the properties pane for the group.

Here, enter “Management” into the **Title** textbox.

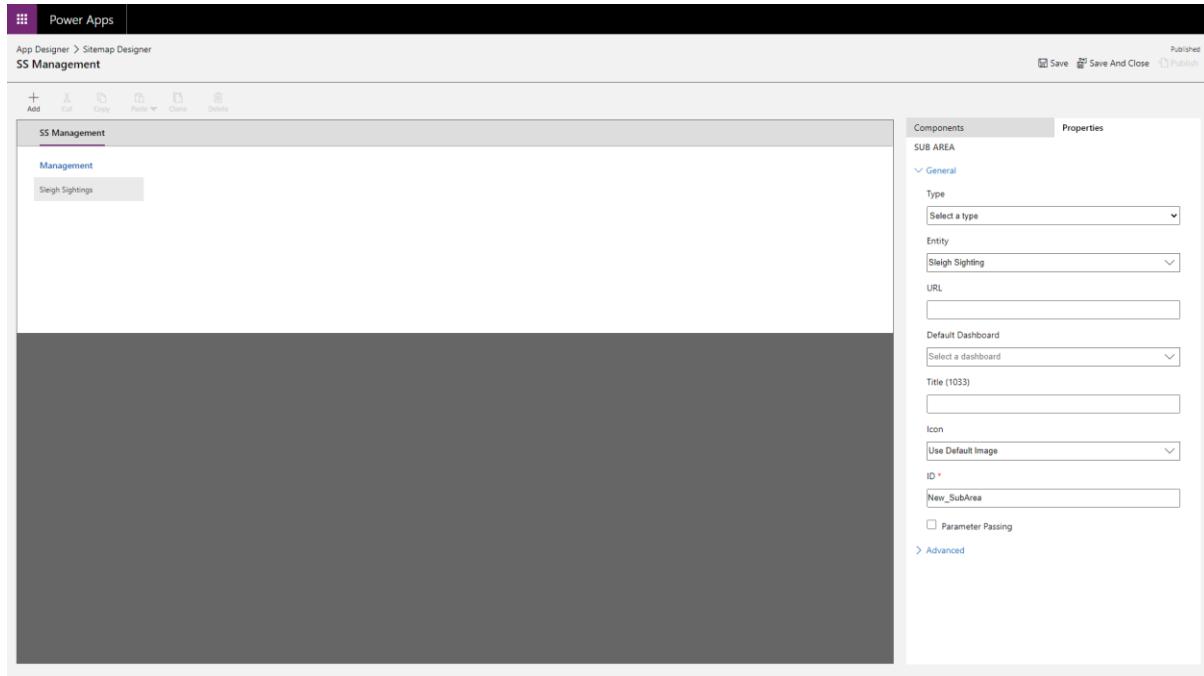


Finally, edit the existing subarea but clicking the “New Subarea” text on the left which will display the subarea properties pane on the right.

This pane requires either an Entity (renamed to Table in Dataverse) to display a list of or a URL to navigate to.

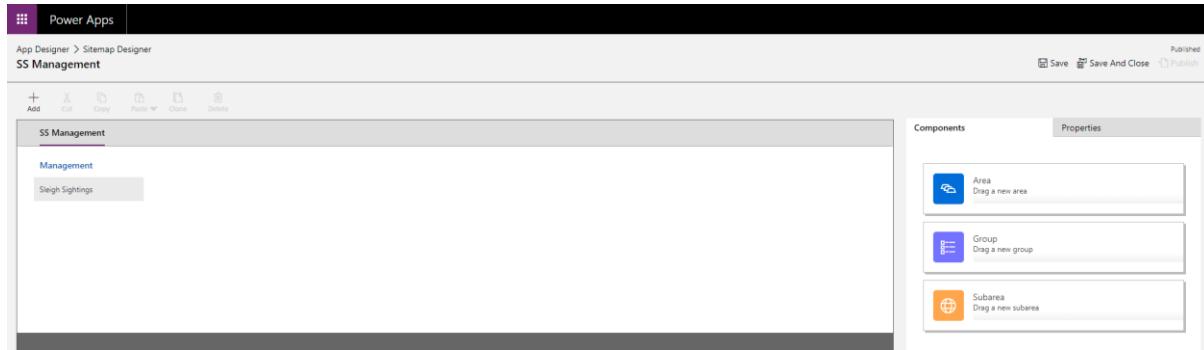


We would like to display the list of existing sleigh sightings so select the “Sleigh Sighting” table from the Entity dropdown.

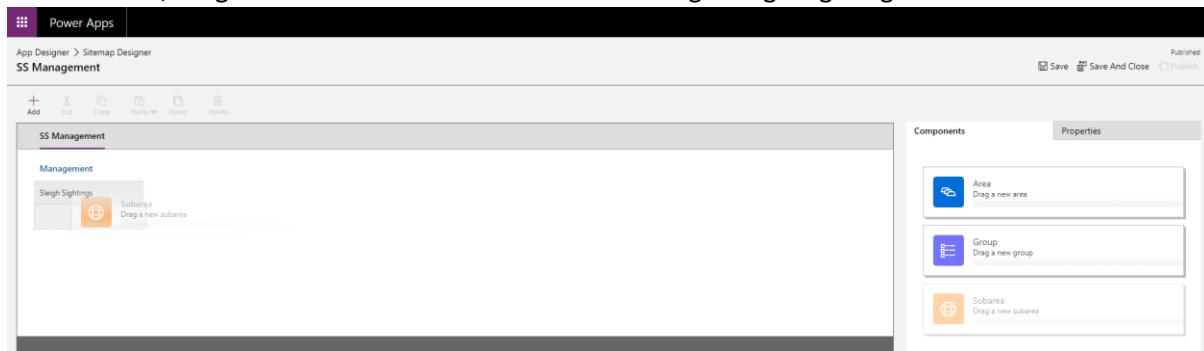


Next, we want to add a new subarea that will allow us to display a dashboard with the charts we created earlier.

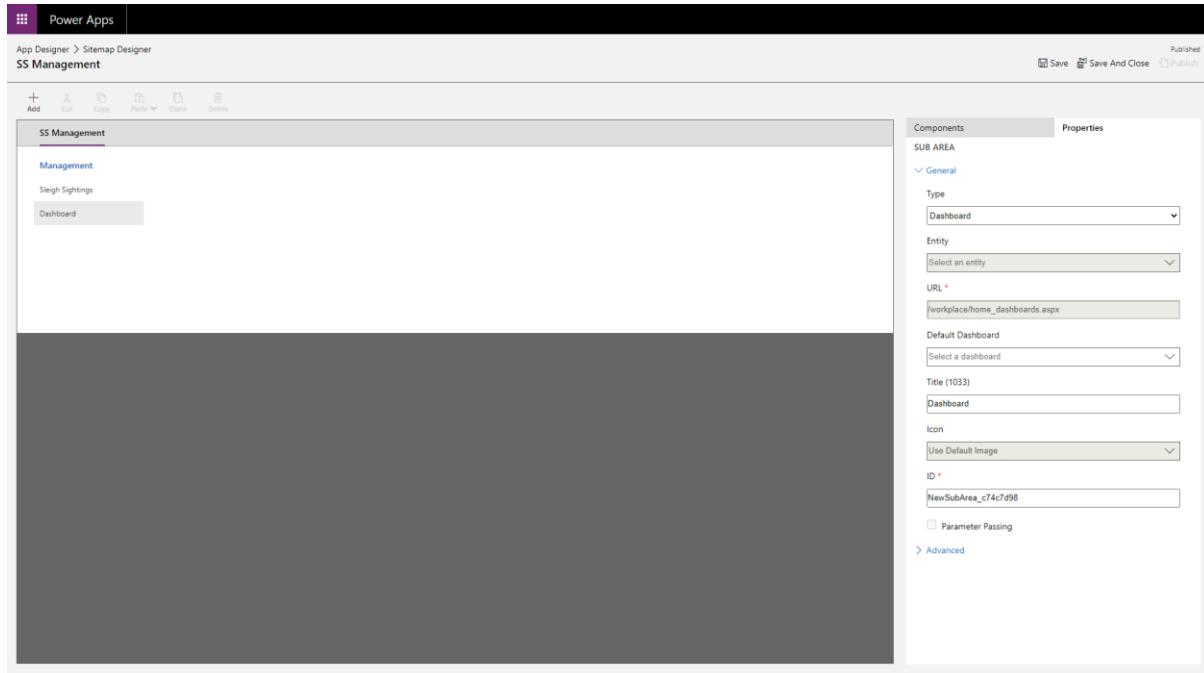
To do this, select the “Sleigh Sightings” subarea on the left and select **Components** tab on the right to list the available components.



From this list, drag a new Subarea underneath the existing “Sleigh Sightings” subarea on the left.

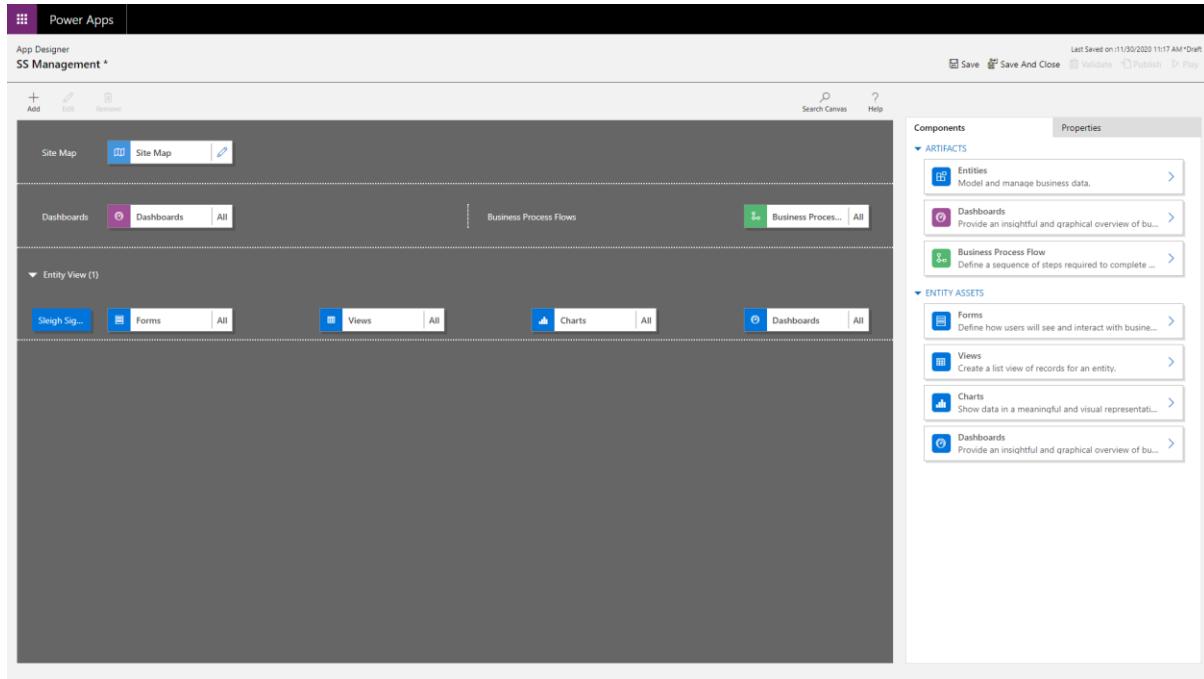


Select the new subarea, ensure the properties pane is selected and choose “Dashboard” from the **Type** dropdown. (We will come back and select the dashboard later)



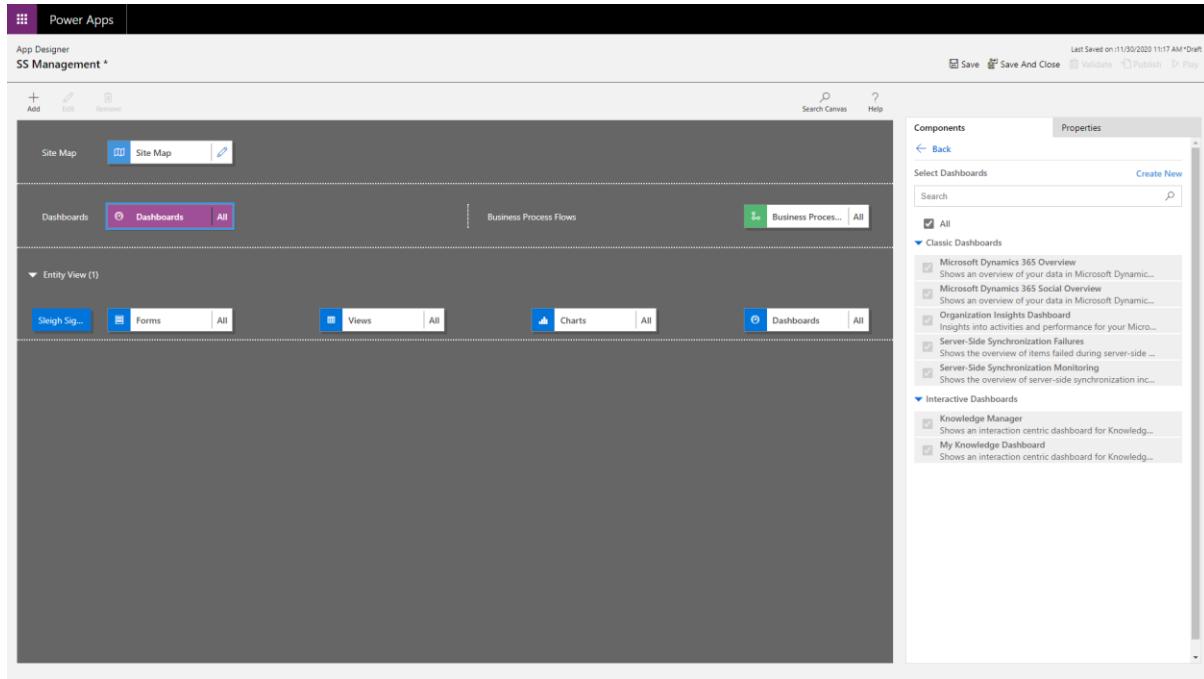
Click **Save** followed by **Publish** to commit the changes made and finally click **Save And Close** to return to the Entity Driven Application maker experience.

You will see that a new row has been added under **Entity View**.

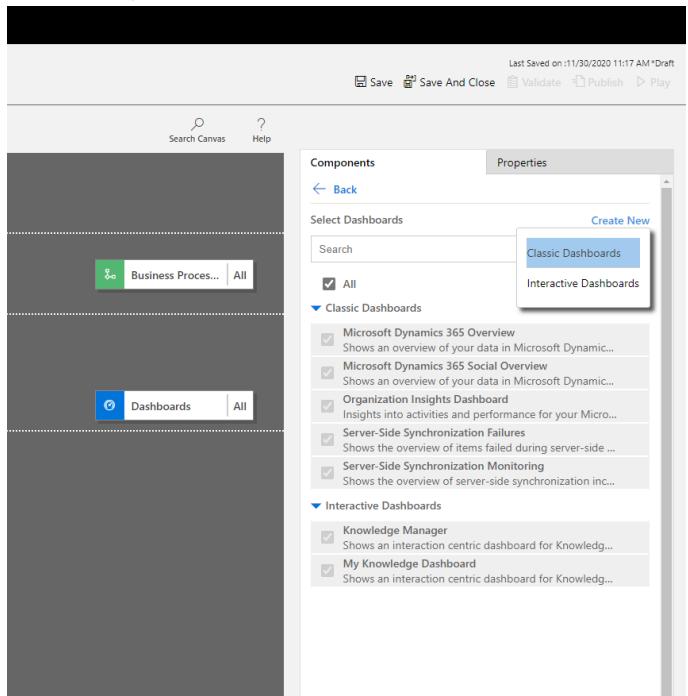


Next, we want to create a dashboard and add it to the application.

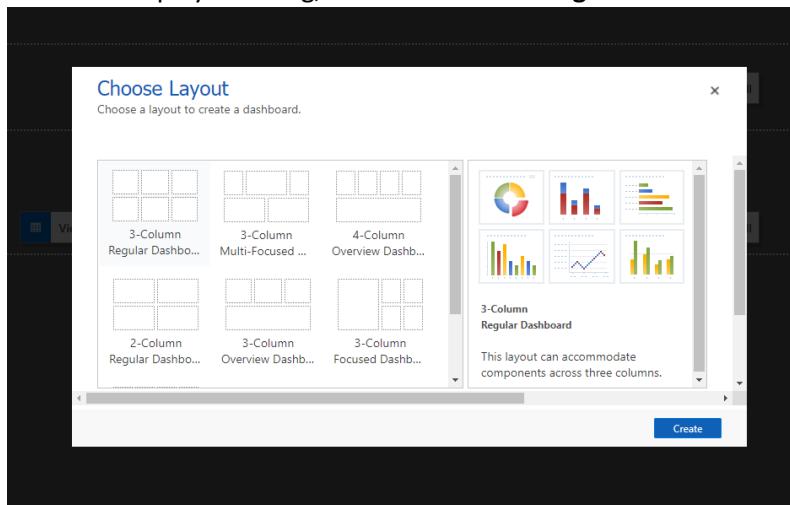
Begin by selecting the **Dashboards** element in the main area to open the dashboard properties pane.



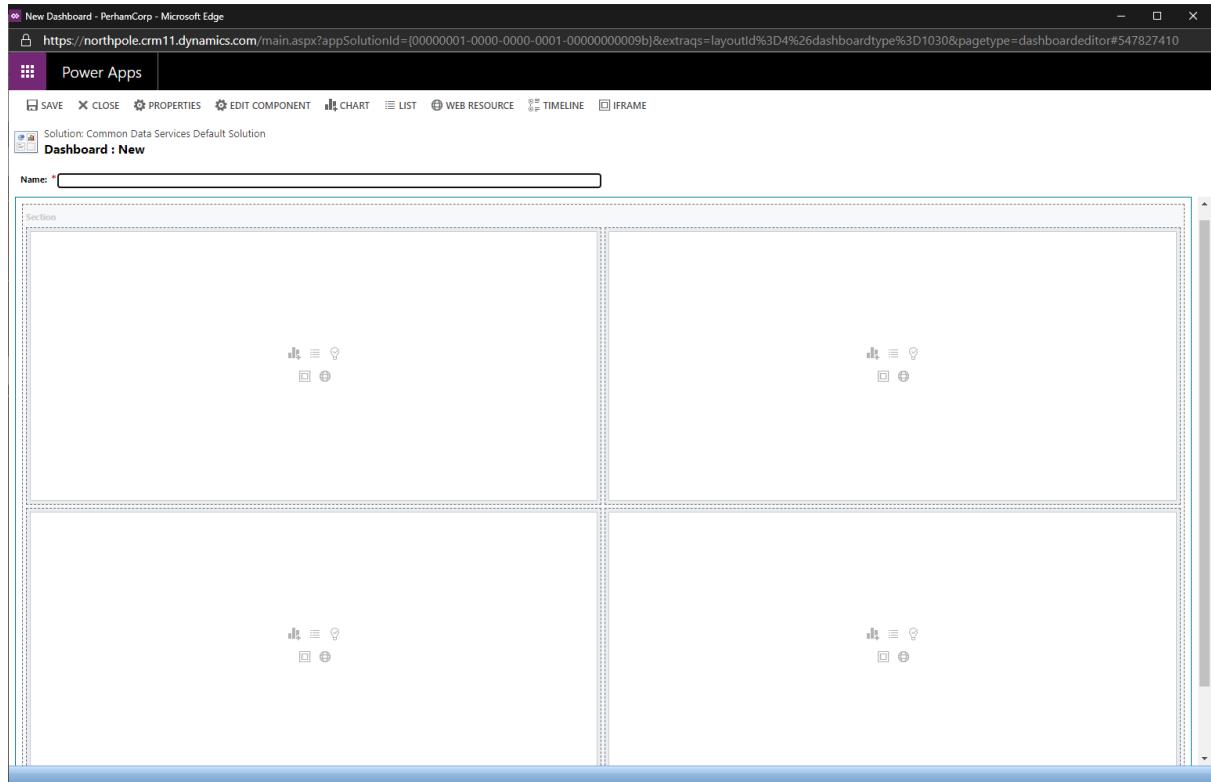
From here, click the **Create New** link and select **Classic Dashboards**.



From the displayed dialog, choose **2-column Regular Dashboard** and click **Create**.

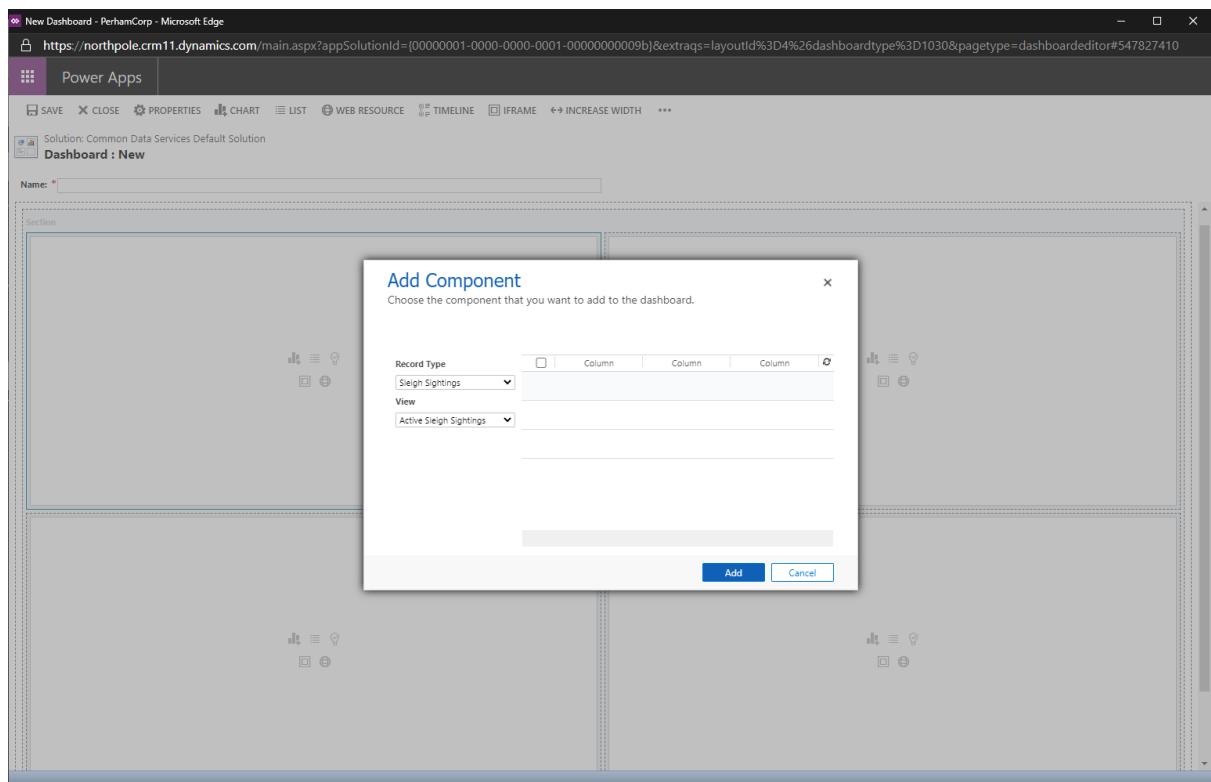


The dashboard editor will load displaying 4 empty areas.



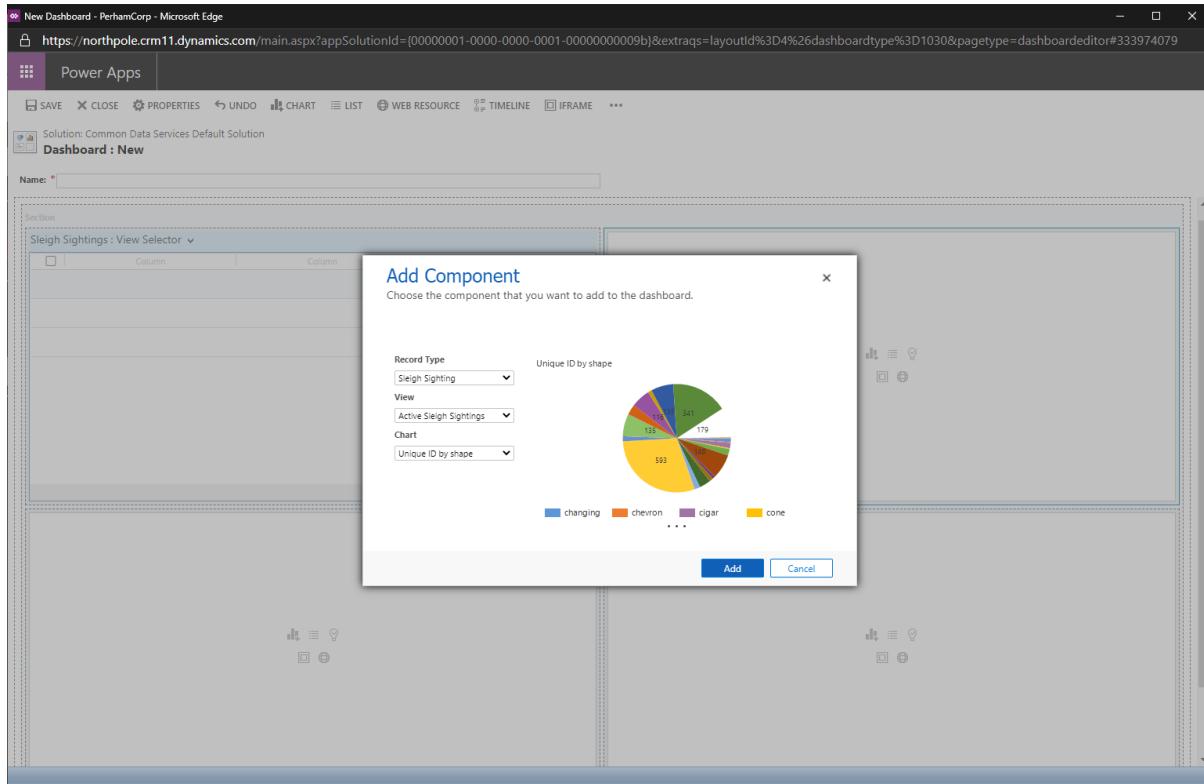
In the area on the top-left, select the list icon () and from the display that is displayed, choose “Sleigh Sightings” from the **Record Type** dropdown and “Active Sleigh Sightings” from the **View** dropdown.

Click **Add** to add this list to the dashboard.



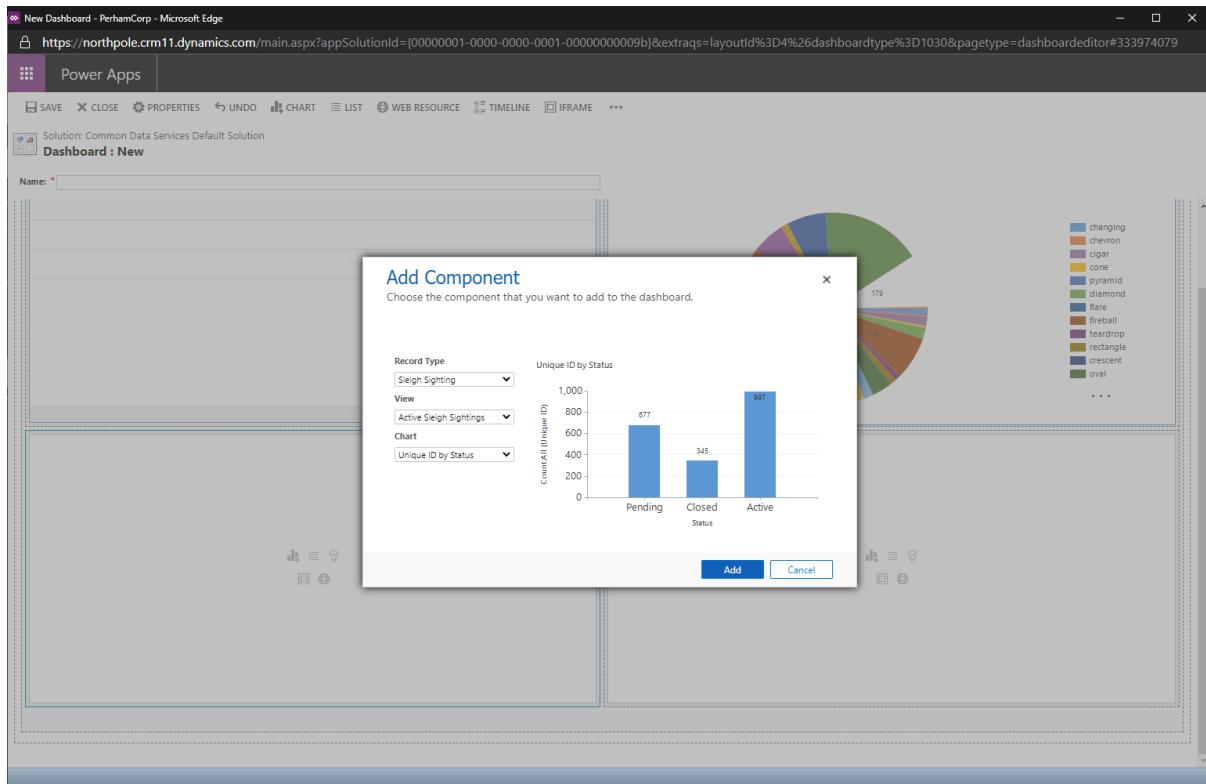
Next, click the chart icon (bar chart) in the top-right panel and in the chart selection dialog, for **Record Type** choose “Sleigh Sighting”, **View** choose “Active Sleigh Sightings” and **Chart** choose “Unique ID by shape” to display the pie chart created earlier.

Click **Add** to add this chart to the dashboard.



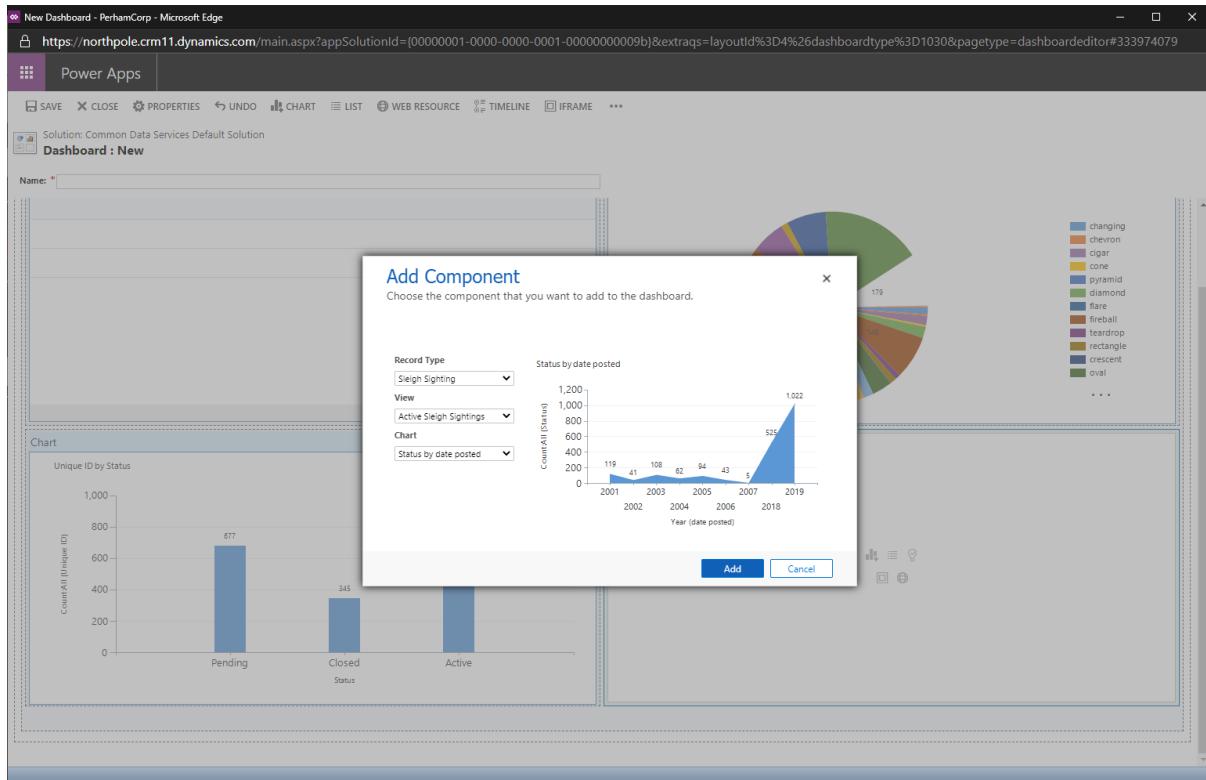
Next, click the chart icon (bar chart) in the bottom-left panel and in the chart selection dialog, for **Record Type** choose “Sleigh Sighting”, **View** choose “Active Sleigh Sightings” and **Chart** choose “Unique ID by status” to display the column chart created earlier.

Click **Add** to add this chart to the dashboard.

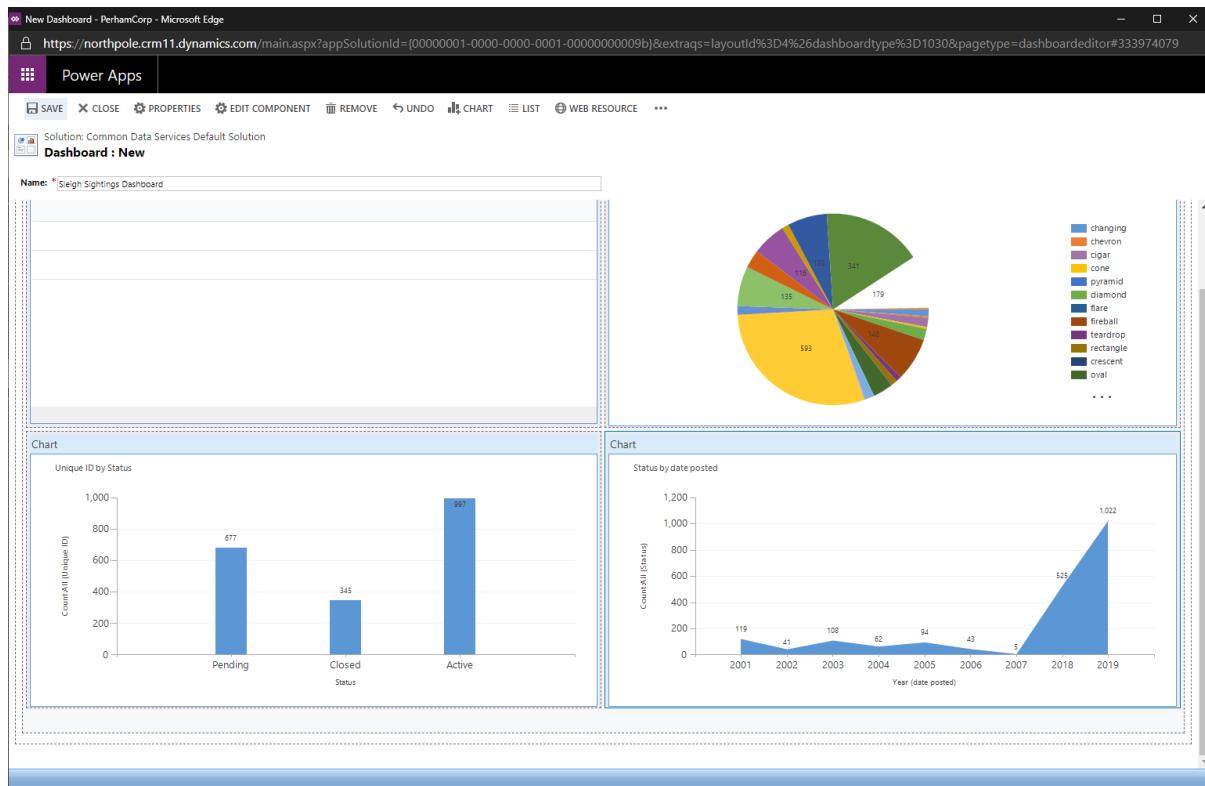


Finally, click the chart icon (in the bottom-right panel and in the chart selection dialog, for **Record Type** choose “Sleigh Sighting”, **View** choose “Active Sleigh Sightings” and **Chart** choose “status by date posted” to display the area chart created earlier.

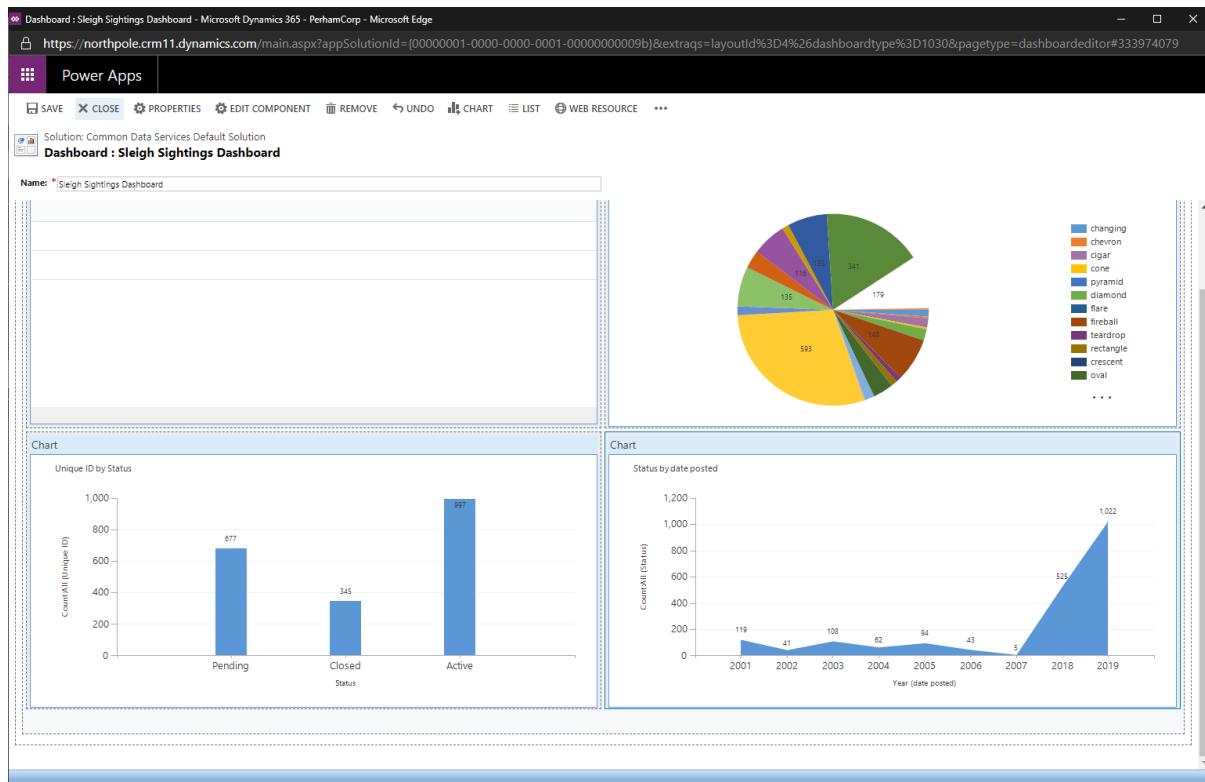
Click **Add** to add this chart to the dashboard.



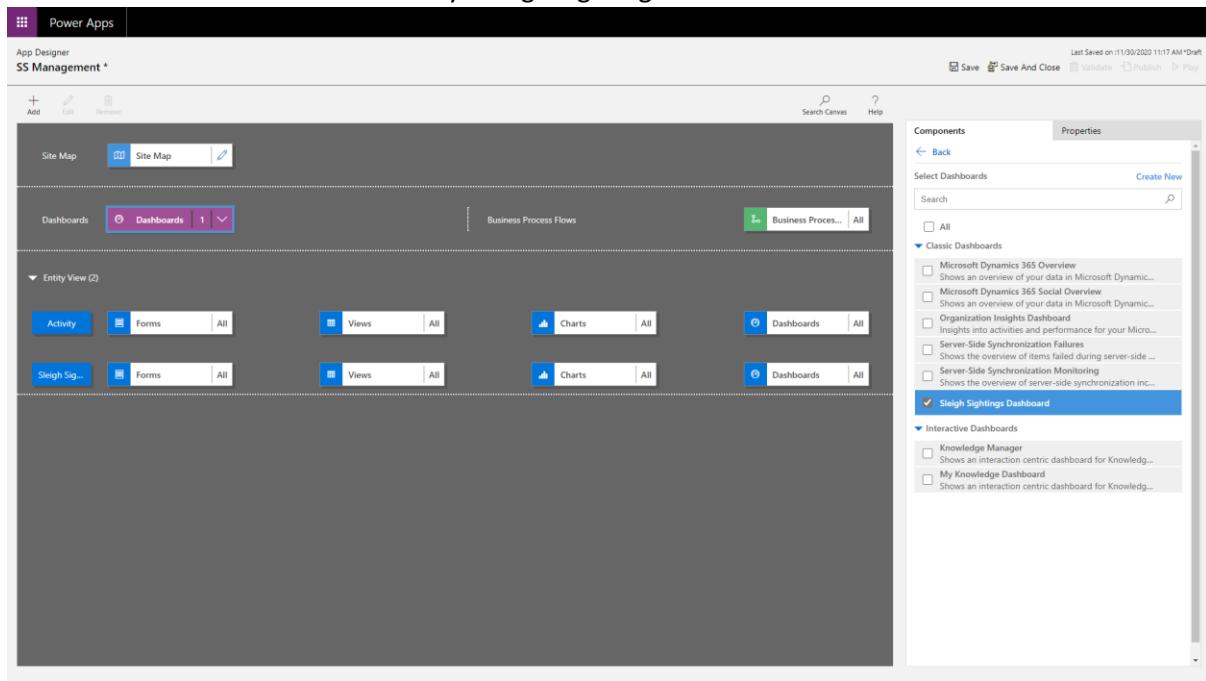
After adding the elements to the dashboard, enter “Sleigh Sightings Dashboard” in the **Name** textbox and click **Save**.



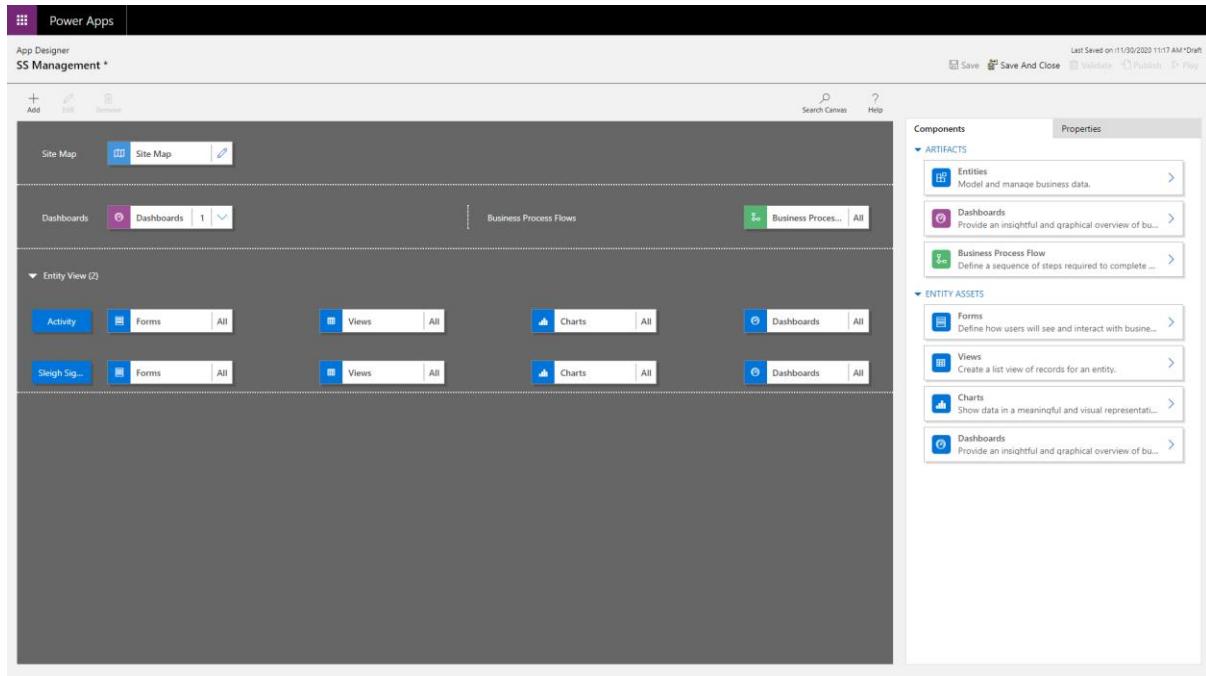
Finally, click **Close** to return to the Entity Driven Application maker experience.



The new dashboard should now appear in the list under Classic Dashboards. Ensure that the **All** checkbox is *unchecked* and check only “Sleigh Sightings Dashboard”.

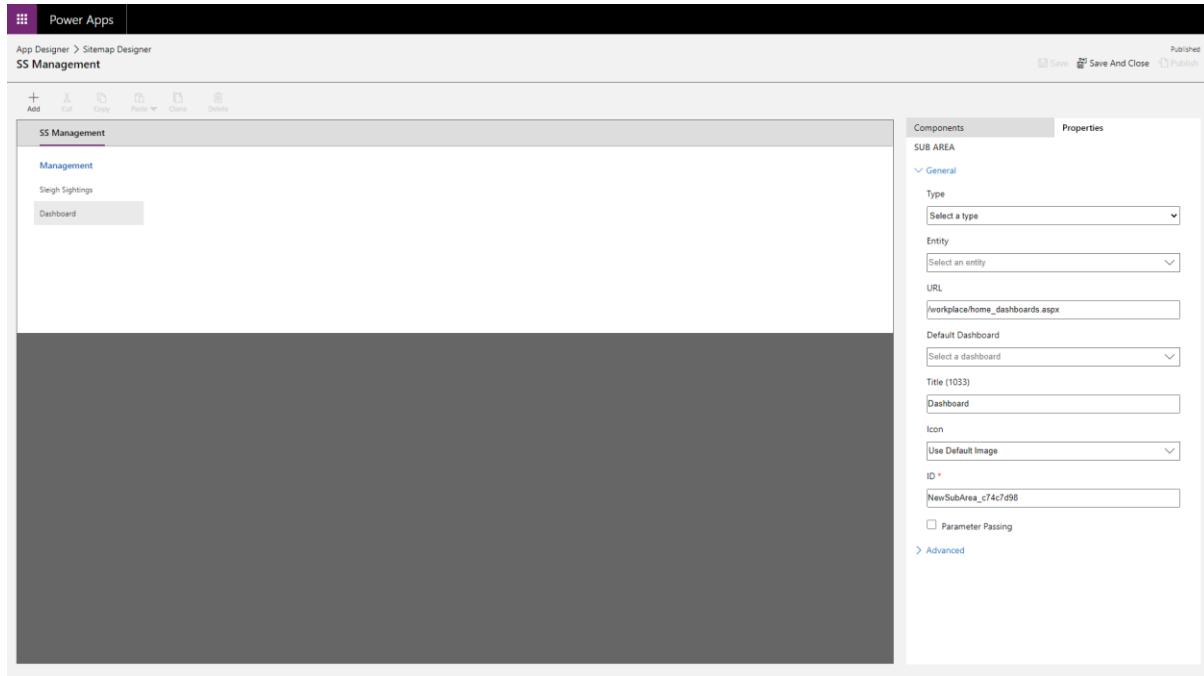


Now the dashboard has been created, it can be added to the sitemap subarea that was created earlier. To do this, click on the pencil icon next to the **Site Map** element.



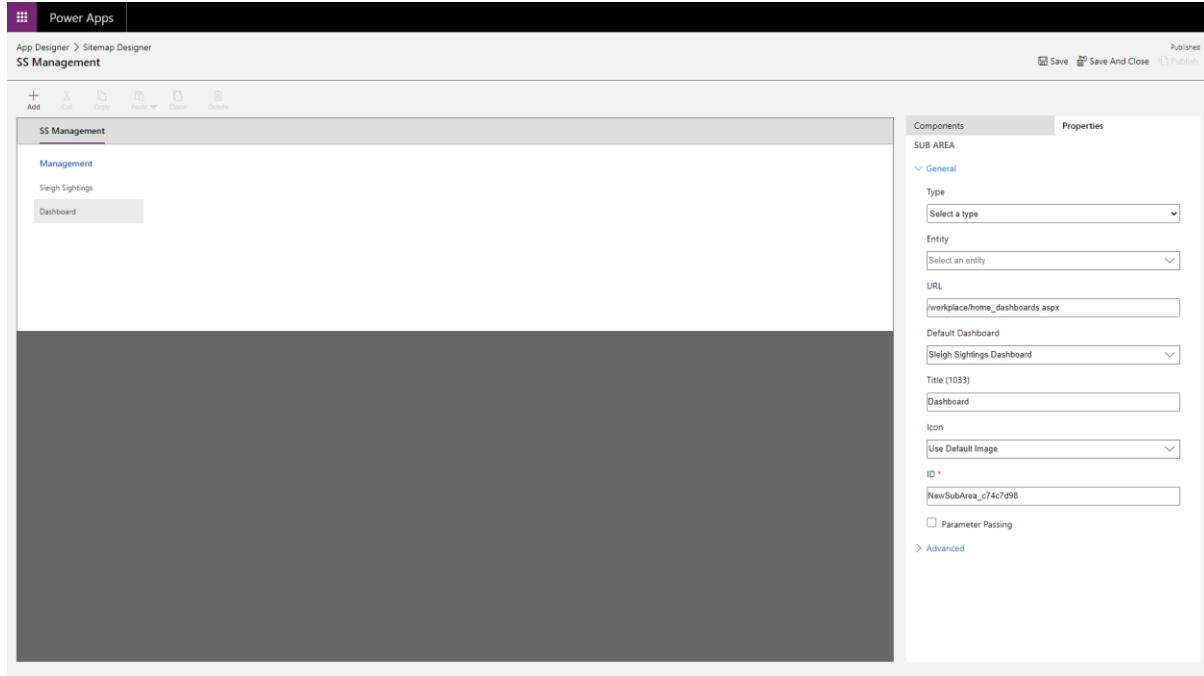
Select the Dashboard subarea on the left and ensure that the properties pane is displayed on the

right.

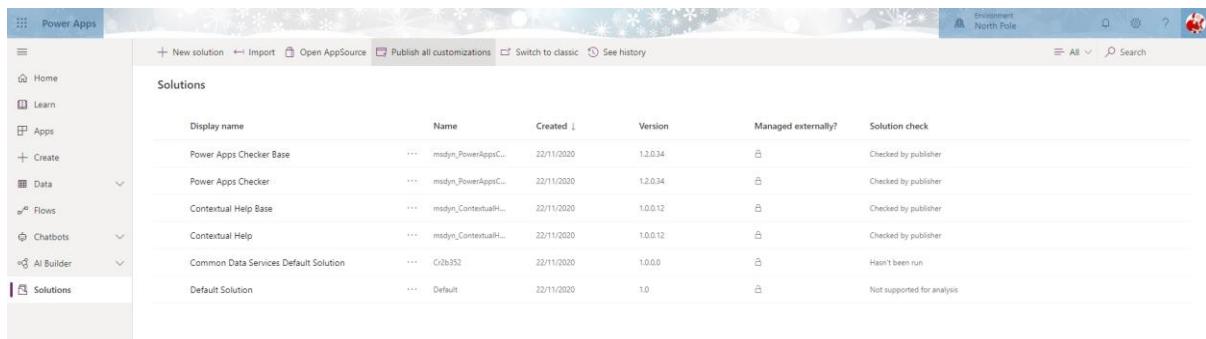
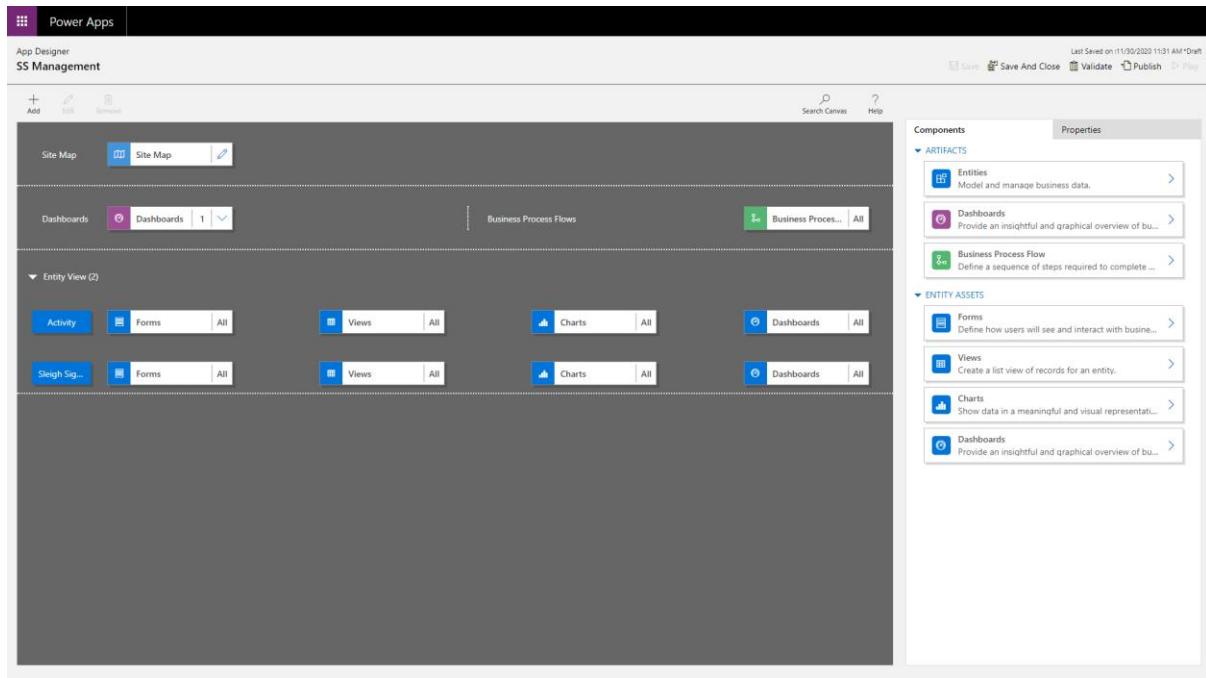


Choose “Sleigh Sightings Dashboard” from the **Default Dashboard** dropdown.

Click **Save**, **Publish** and then **Save And Close** to return to the application overview screen.



The final step in creating the application is to click **Save** and then **Publish** on the App Designer screen. This will make the new sitemap and dashboard available as part of the application.



To test the application, navigate to **Apps** from the left menu, select “SS Management” and click the **Play** button on the toolbar.



This will launch your application.

The first, default page will be the list of active sleigh sightings.

Clicking the **+ New** button will take you to the form to add a new sighting that you configured earlier.

The screenshot shows a Power Apps interface titled "SS Management". On the left, there's a navigation menu with "Home", "Recent", "Pinned", "Management", "Sleigh Sightings" (which is selected and highlighted in blue), and "Dashboard". The main area is titled "Active Sleigh Sightings" and contains a table with the following data:

Name	Created On	city	country	duration	date posted	shape	Status
1000-laurel-Sleigh	11/30/2020 9:55 AM	laurel	us		180.00	10/2/2019	Sleigh
1001-federal way-cylinder	11/30/2020 9:55 AM	federal way	us		30.00	10/2/2019	cylinder
1002-gresham-changing	11/30/2020 9:55 AM	gresham	us		1,500.00	10/2/2019	changing
1003-center moriches-light	11/30/2020 9:55 AM	center moriches	us		7.00	10/2/2019	light
1004-bryan-triangle	11/30/2020 9:55 AM	bryan	us		15.00	10/2/2019	triangle
1005-vancouver-diamond	11/30/2020 9:55 AM	vancouver	us		60.00	10/2/2019	diamond
1006-mukilteo-Sleigh	11/30/2020 9:55 AM	mukilteo	us		3.00	10/2/2019	Sleigh
1007-santa rosa-Sleigh	11/30/2020 9:55 AM	santa rosa	us		7.00	10/2/2019	Sleigh
1008-daytontrotwoodwest carrollton-triangle	11/30/2020 9:55 AM	daytontrotwoodwest ...	us		1,200.00	10/2/2019	triangle
1009-nampa-Sleigh	11/30/2020 9:55 AM	nampa	us		45.00	10/2/2019	Sleigh
1010-walla walla-triangle	11/30/2020 9:55 AM	walla walla	us		1,200.00	11/1/2018	triangle
1010-pomona-light	11/30/2020 9:55 AM	pomona	us		120.00	10/2/2019	light
1011-rushville-fireball	11/30/2020 9:55 AM	rushville	us		20.00	10/2/2019	fireball
1012-rushville-light	11/30/2020 9:55 AM	rushville	us		2,700.00	10/2/2019	light
1013-nampa-triangle	11/30/2020 9:55 AM	nampa	us		180.00	10/2/2019	triangle
1014-cedar rapids-Sleigh	11/30/2020 9:55 AM	cedar rapids	us		900.00	10/2/2019	Sleigh
1015-elgin-disk	11/30/2020 9:55 AM	elgin	us		300.00	10/2/2019	disk
1016-menomonie-Sleigh	11/30/2020 9:55 AM	menomonie	us		0.00	10/2/2019	Sleigh
1017-todos santos bcs (mexico)-sphere	11/30/2020 9:55 AM	todos santos bcs (mex...)	us		80.00	10/2/2019	sphere
1018-western north carolina mountains-fireball	11/30/2020 9:55 AM	western north carolina...	us		5.00	10/2/2019	fireball

At the bottom, there are navigation links for "All", "#", and letters A through Z, followed by a page number indicator "1 - 50 of 2019 (0 selected)" and a "Page 1" link.

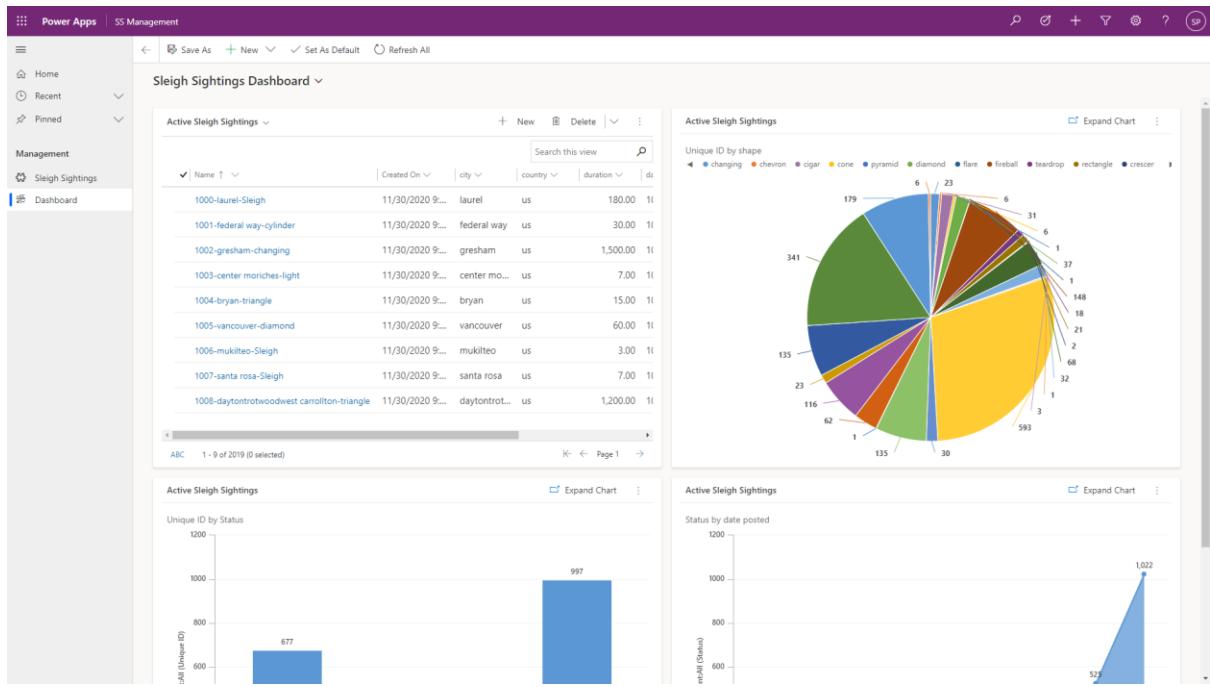
This form has the fields that you dragged onto the main form for the Sleigh Sighting table and also display the Business Process Flow at the top.

The screenshot shows a Power Apps interface titled "SS Management". On the left, there's a navigation menu with "Home", "Recent", "Pinned", "Management", "Sleigh Sightings" (selected), and "Dashboard". The main area is titled "New Sleigh Sighting" and contains a form with the following sections:

- Create Sighting (< 1 Min)**: A section with a red circular icon containing a target symbol. It includes fields for "Active for less than one minute" (with a switch icon) and "Date Posted" (with a calendar icon).
- General**: A section with a blue underline. It includes fields for Name, city, country, latitude, longitude, date posted, duration, shape, comments, Status, and Owner (set to "Scott Perham").
- Business Process Flow**: A horizontal sequence of icons: "Create Sighting" (target icon), "Review Sighting" (eye icon), and "Resolve Sighting" (circle icon). There are arrows indicating the flow between these steps.

At the bottom, there are buttons for "Save & Close", "New", and "Flow".

Finally, navigate to the dashboard by clicking **Dashboard** on the left menu.



Lab 4: Configuring your Microsoft Flow Notifications

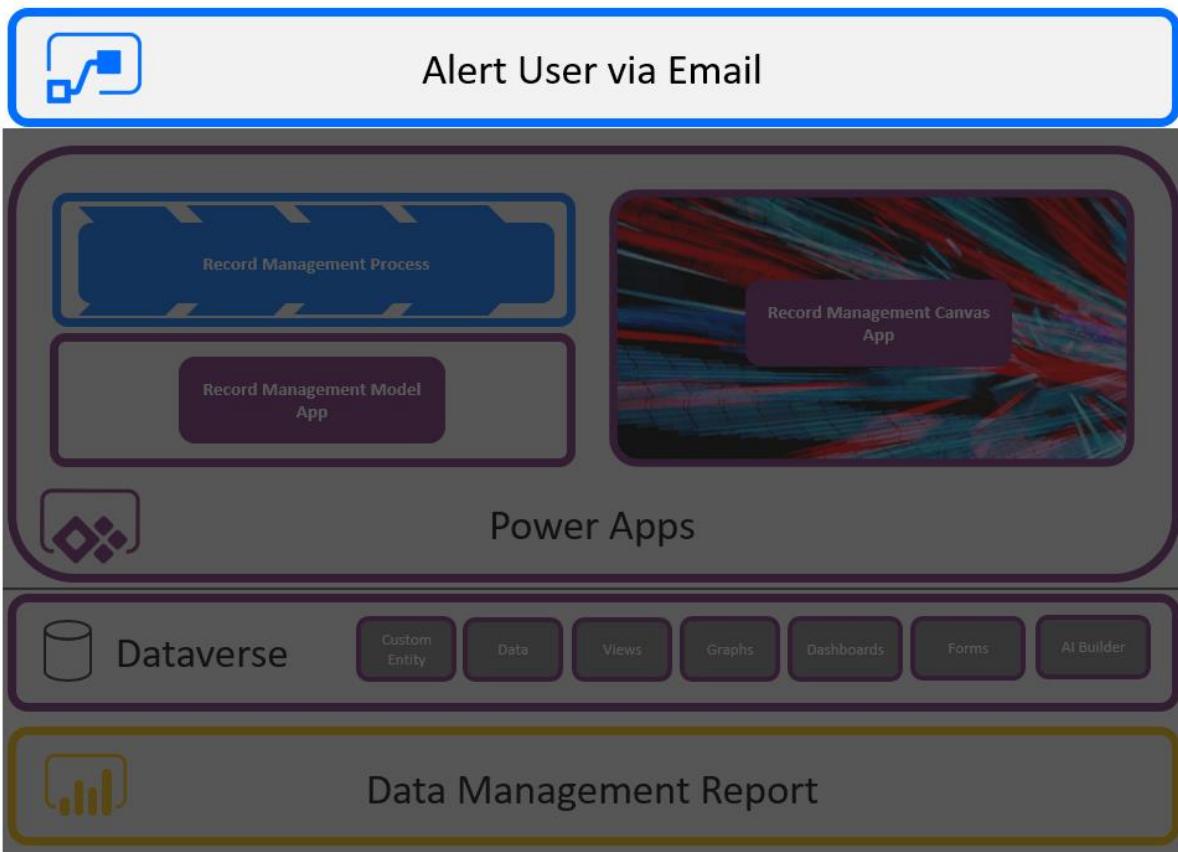
In this lab we will configure an Automated Flow to alert the captured Sleigh sighting record that their information has been captured and that they are being taken through the sleigh sighting process.

Please Note:

This lab can be completed independently, with only Lab 1 being and no support of the other labs.

Solution Components

Microsoft Flow



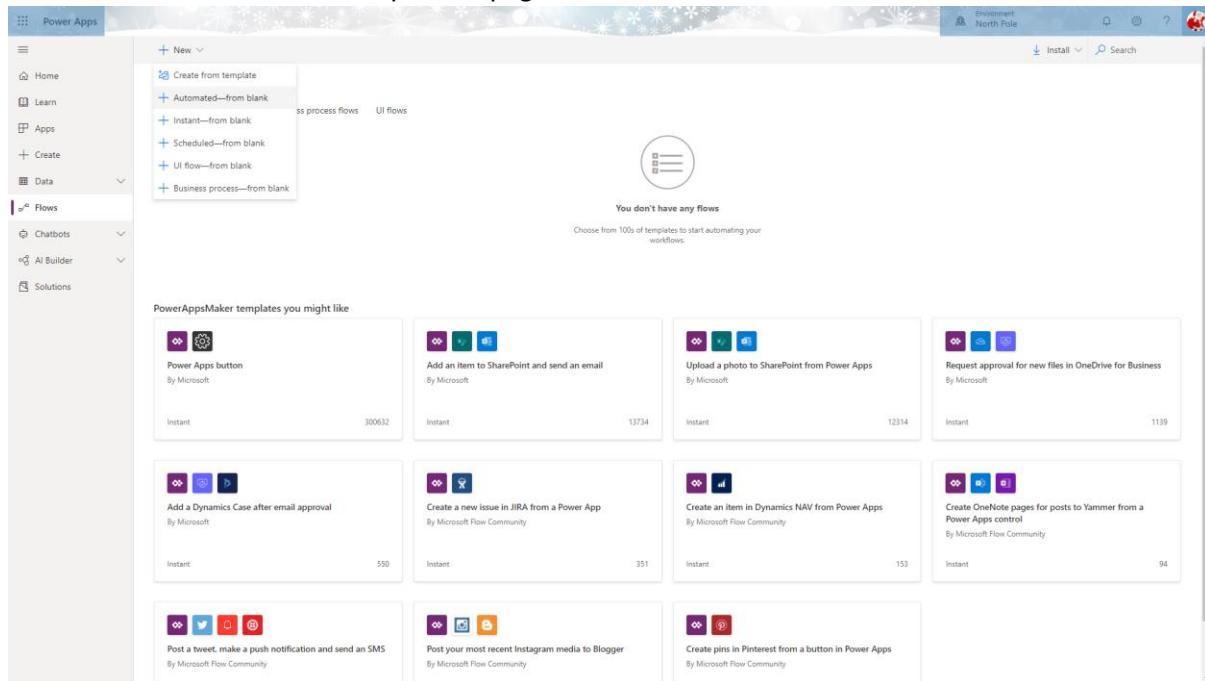
Let's Begin

Flow

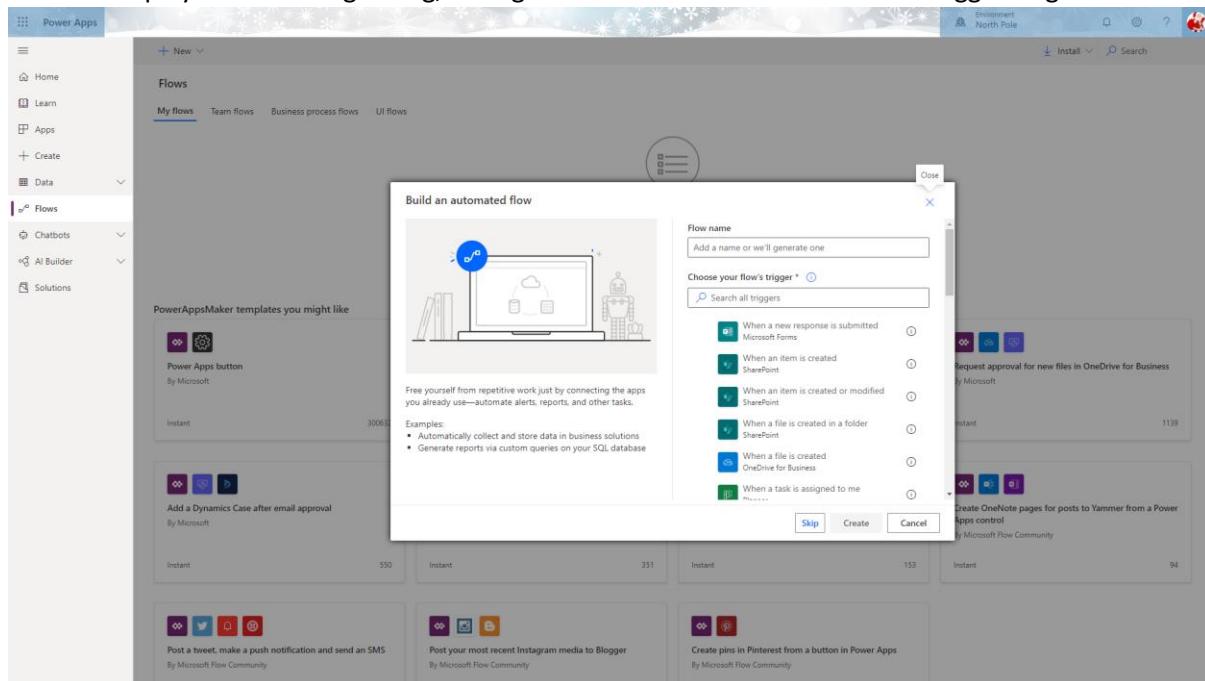
Navigate to the make experience (<https://make.powerapps.com>) and select **Flows** from the menu on the left.

Template	Description	Status
Power Apps button	By Microsoft	Instant
Add an item to SharePoint and send an email	By Microsoft	Instant
Upload a photo to SharePoint from Power Apps	By Microsoft	Instant
Request approval for new files in OneDrive for Business	By Microsoft	Instant
Add a Dynamics Case after email approval	By Microsoft	Instant
Create a new issue in JIRA from a Power App	By Microsoft Flow Community	Instant
Create an item in Dynamics NAV from Power Apps	By Microsoft Flow Community	Instant
Create OneNote pages for posts to Yammer from a Power Apps control	By Microsoft Flow Community	Instant
Post a tweet, make a push notification and send an SMS	By Microsoft Flow Community	350
Post your most recent Instagram media to Blogger	By Microsoft Flow Community	351
Create pins in Pinterest from a button in Power Apps	By Microsoft Flow Community	153

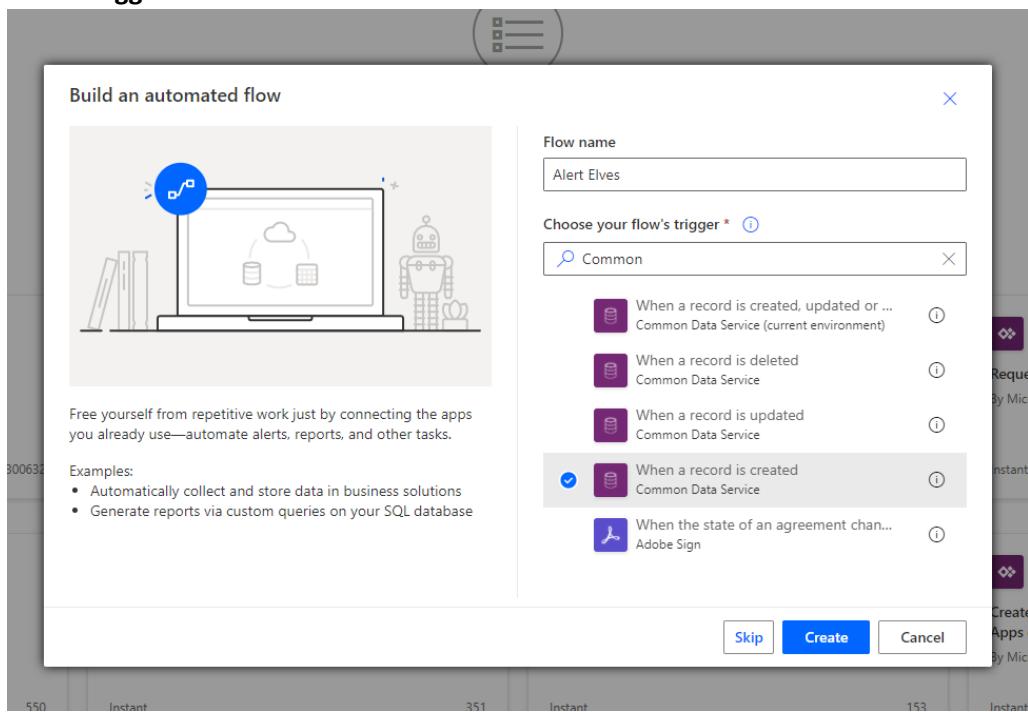
Click the **+ New** button at the top of the page and select **Automated – from blank**.



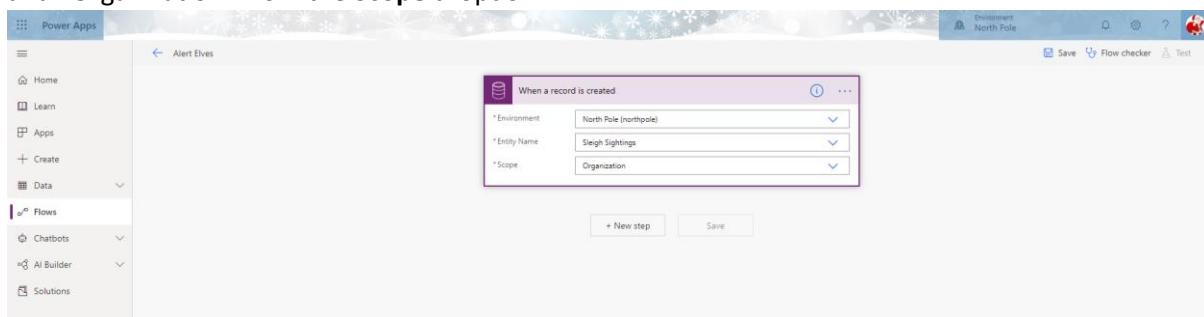
This will display the following dialog, asking for the name of the flow and the trigger to get it started.



For the **Flow Name** enter “Alert Elves”. Enter “Common” into the search box below **Choose your flow’s trigger** and select **When a record is created**. Then click **Create**.

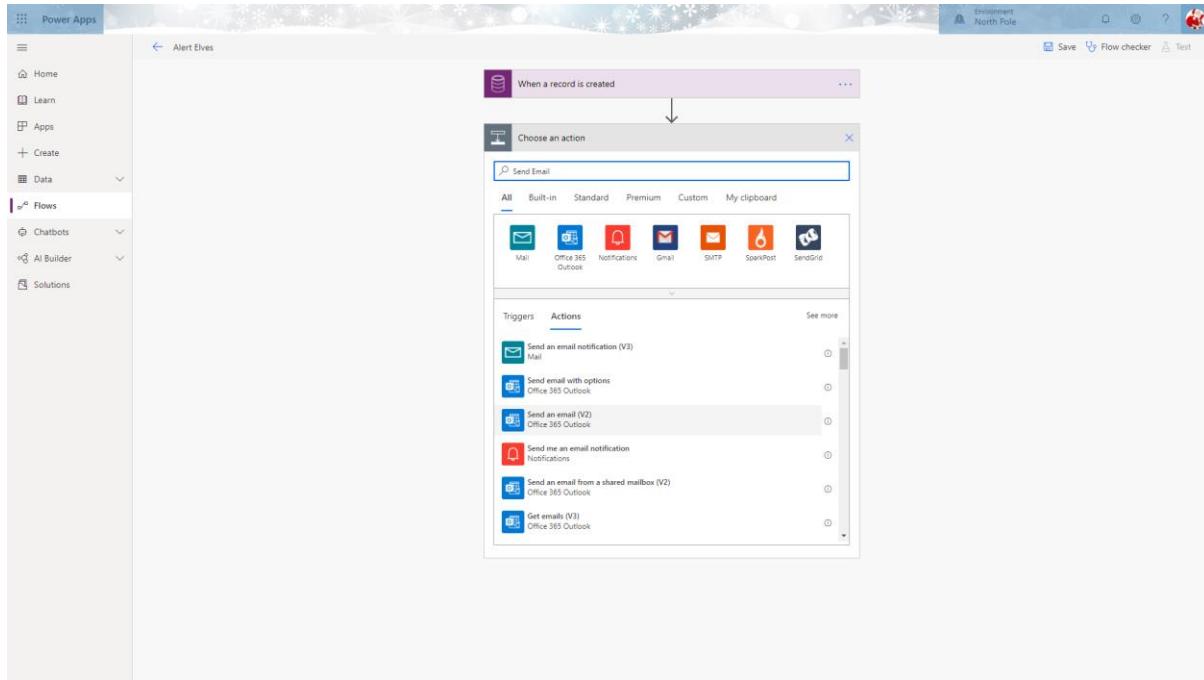


This will launch the flow designer with the trigger step in place. To configure this, choose your environment from the **Environment** dropdown, “Sleigh Sightings” from the **Entity name** dropdown and “Organization” from the **Scope** dropdown.



To send an email when a new sleigh is sighted, click the **New Step** button.

In the **Choose and action** panel, type “Send Email” into the search box to list available steps and select **Send an email (V2)**.

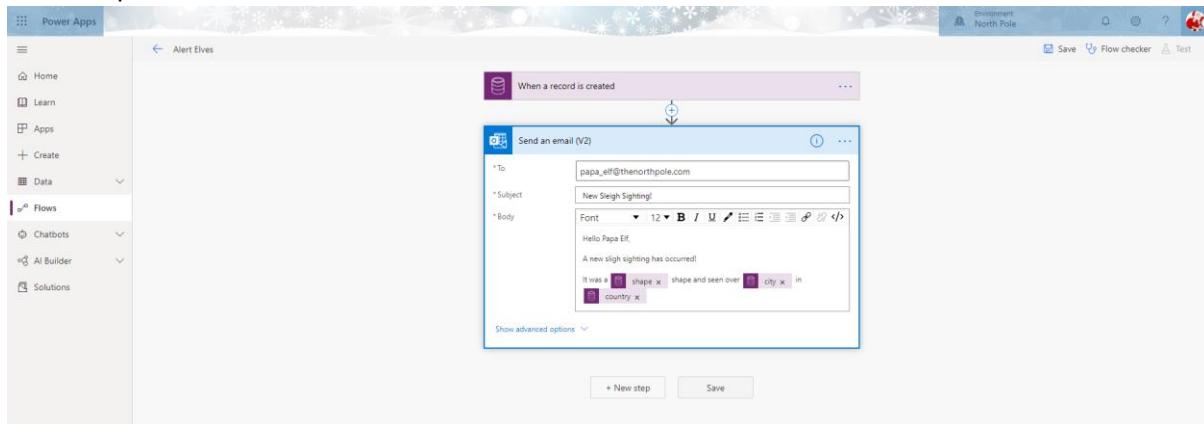


The step will change to display the properties of the send and email step.

Enter an email address to send the email to, a subject and a body.

Within the body, you can select a field from the displayed list to enter a placeholder that will be replaced when the email is generated.

When you have finished, click **Save** to save the flow then close the designer to return to the app maker experience.



Your flow should now be displayed under **My flows** in the **Flows** screen.

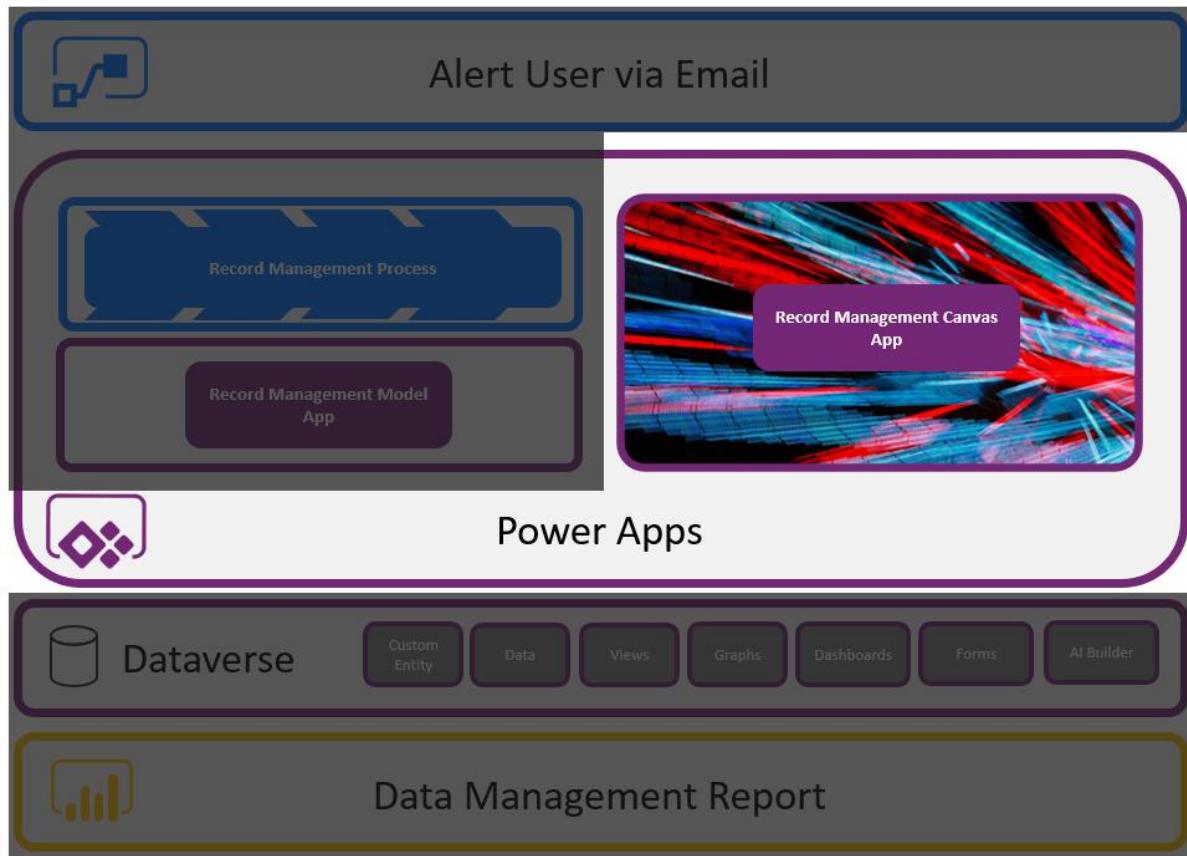
The screenshot shows the Microsoft Power Apps Flows interface. On the left, there's a navigation sidebar with options like Home, Learn, Apps, Create, Data, Flows, Chatbots, AI Builder, and Solutions. The 'Flows' option is selected. The main area is titled 'Flows' with tabs for 'My flows', 'Team flows', 'Business process flows', and 'UI flows'. A table lists the flow 'Alert Elves', which was modified 12 seconds ago and is of type 'Automated'. There are buttons for '+ New' and 'Install' at the top right.

Lab 5: Configuring the Sleigh Sightings Canvas App

In this lab we will learn how to configure a basic Power Apps (Canvas App) that the elves in black team can use on the road to capture information for the Mid office sightings management team to leverage. This app needs to be as simple and user friendly as possible.

Solution Components

Power Apps : Canvas Apps



Let's Begin

PowerApps Canvas App

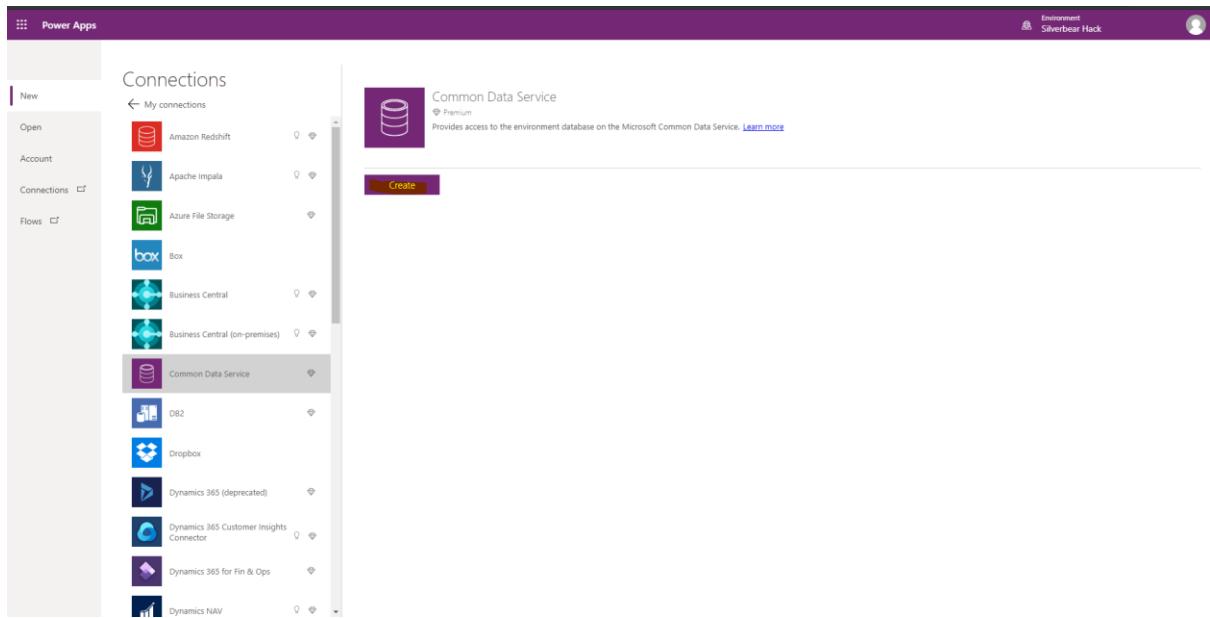
Navigate to <https://make.powerapps.com> and select **Apps**. To create your new Canvas app select **New App** and then select **Canvas**.

The screenshot shows the Microsoft Power Apps portal interface. On the left, there's a navigation sidebar with options like Home, Learn, Apps (which is currently selected), Create, Data, Flows, Chatbots, AI Builder, and Solutions. The main area has a top navigation bar with New app, Edit, Play, Share, Monitor, Delete, and Settings. Below this, a dropdown menu is open, showing 'Canvas' as the selected option. A table lists existing apps: 'SS Management' (modified 1 week ago by Chris Huntingford) and 'Solution Health Hub' (modified 2 weeks ago by SYSTEM). The 'Canvas' option is highlighted with a yellow background.

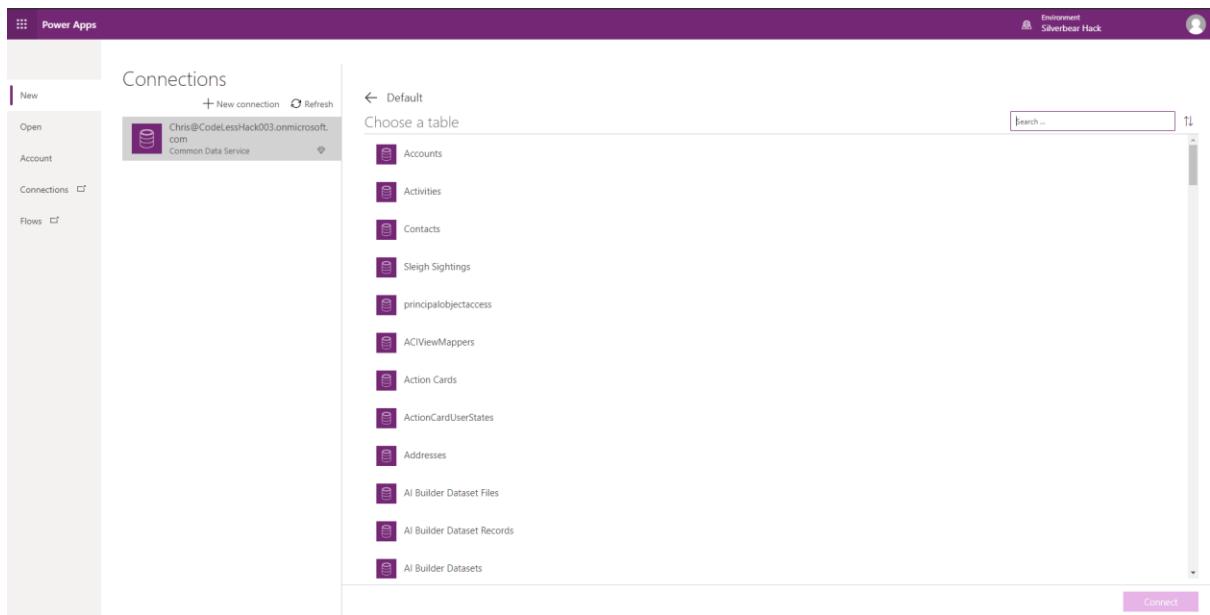
You will be taken to the canvas app splash screen where you will be encouraged to start from data. We will be creating your first canvas app by leveraging data from Microsoft Dataverse. To begin the process, select the **Common Data Service: Phone layout** option.

The screenshot shows the 'Create an app' splash screen in the Power Apps portal. On the left, there's a sidebar with New, Open, Account, Connections, and Flows. The main area has a heading 'Create an app in Silverbear Hack'. It shows two sections: 'Start with your data' and 'Start with a blank canvas or a template'. In the 'Start with your data' section, there are four tiles: 'Common Data Service' (selected, highlighted with a yellow border), 'SharePoint', 'OneDrive for Business', and 'SQL Server'. Each tile has a 'Phone layout' button below it. In the 'Start with a blank canvas or a template' section, there are two tiles: 'Blank app' and 'App templates'. Each also has a 'Phone layout' button below it. An arrow points from the 'Start with your data' section towards the 'Start with a blank canvas or a template' section.

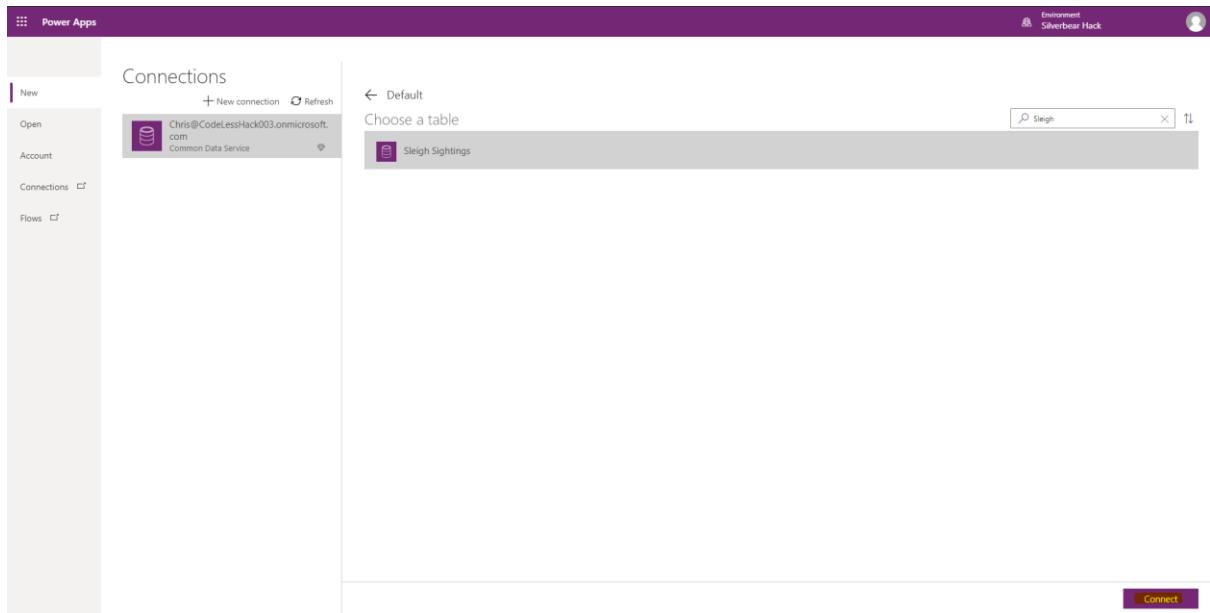
You will be prompted to create a new connection to the Common Data Service (Dataverse). To do this, select **Create**.



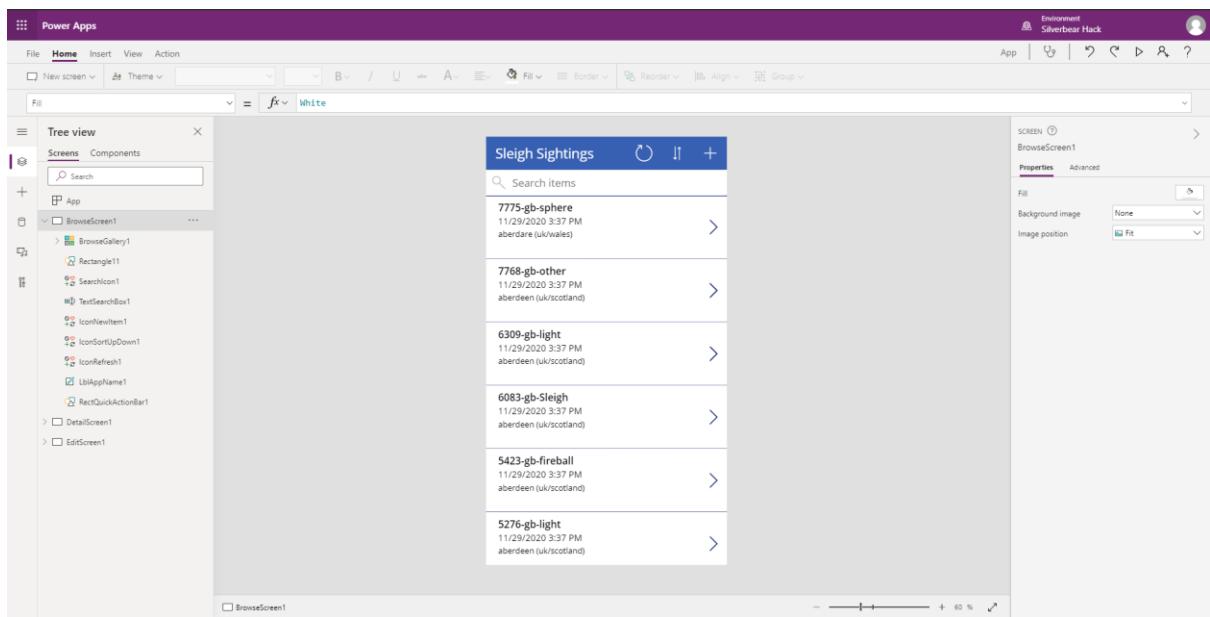
Once you have made the connection, you will be shown a list of tables.



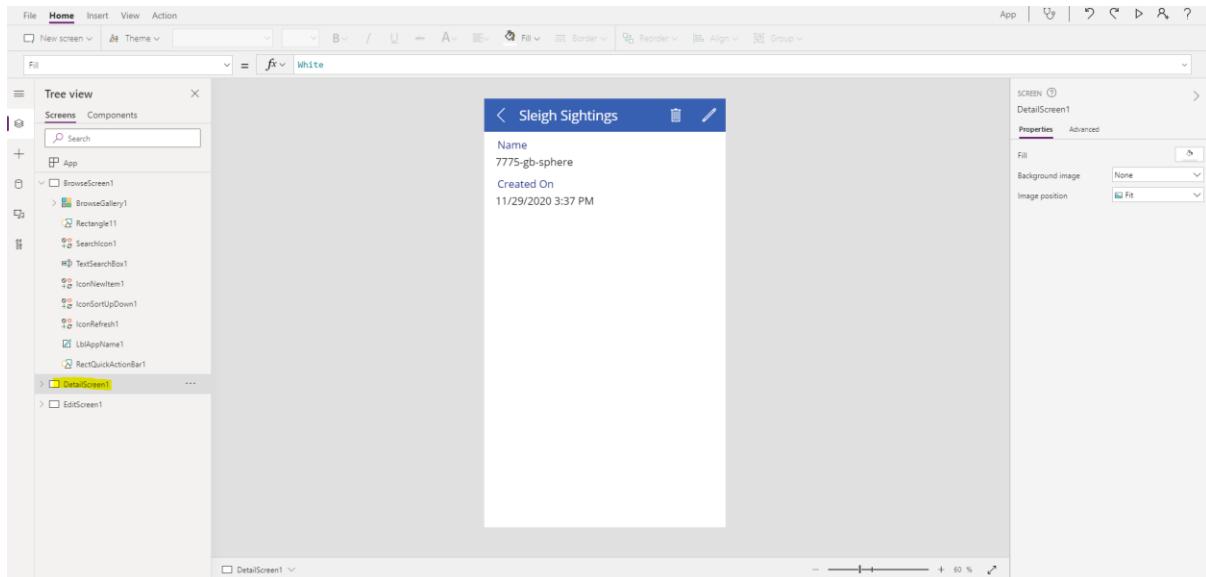
Filter this list by looking for the **Sleigh Sightings** table. Select the **Sleigh Sightings** table and then select **Connect**.



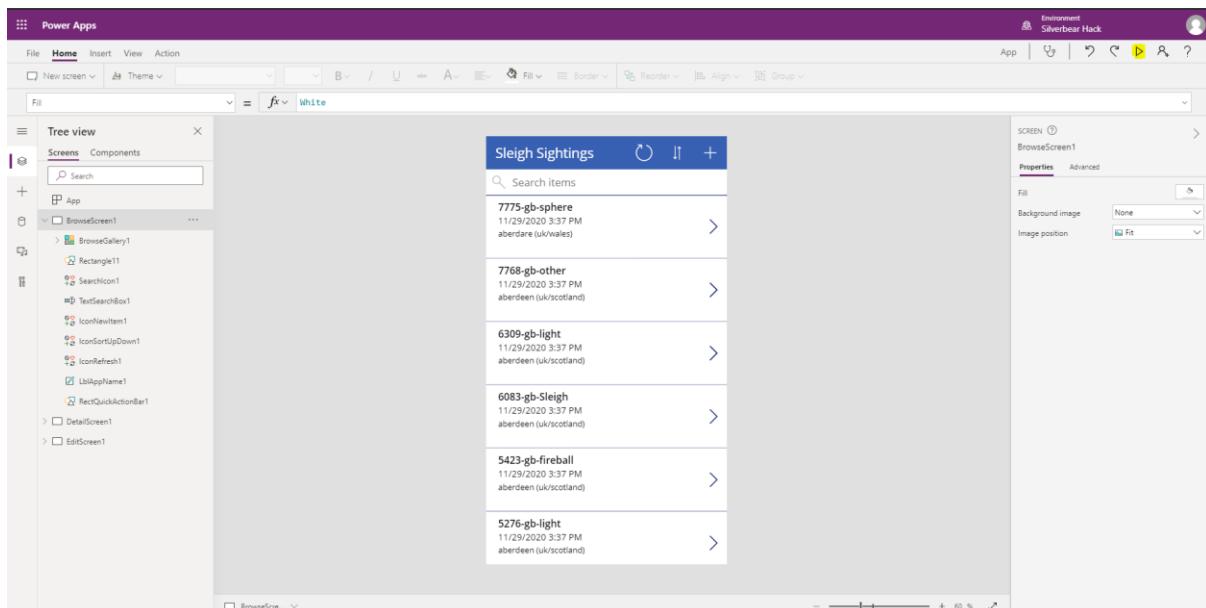
The Power Apps studio will then leverage the data you have already added to the Sleigh Sightings table and your first 3 screen Canvas app will automatically be created for you.



On the left panel, in the tree view, you can navigate between different screens and components. Practice by moving between the various screens now.



Test out your app by clicking the **Play Button** ().



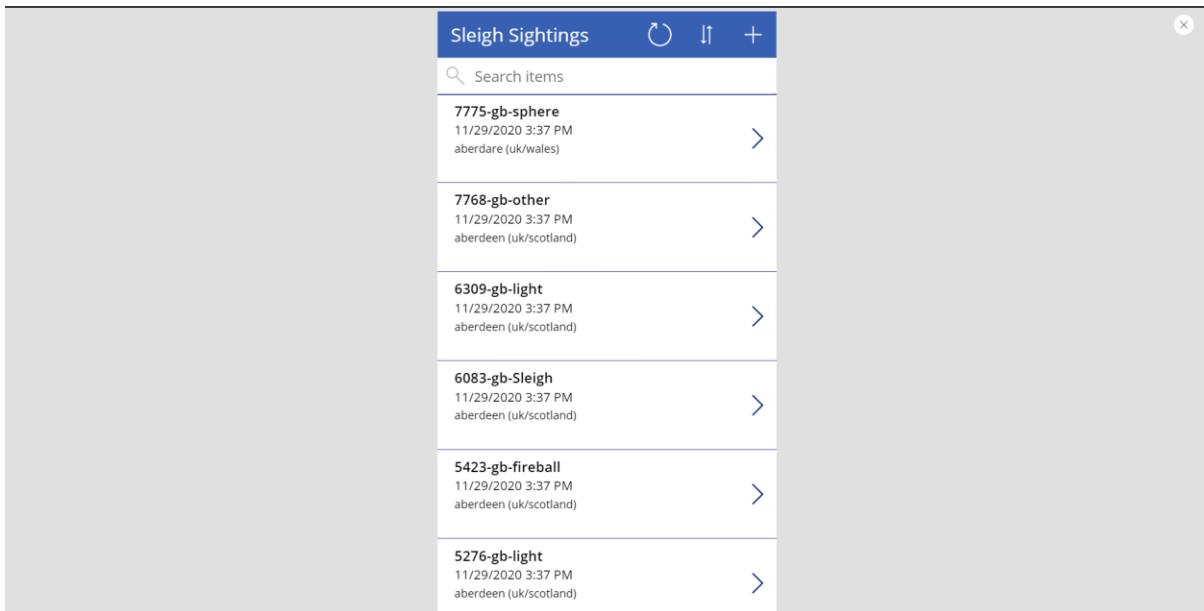
This will place your app in “Run” mode where you can interact with components and navigate between the various screens.

The **Browse Screen** will list the records in the Dataverse “Sleigh Sightings” table. To get more

information about the various records, select the arrow () icon in the gallery to view the details of the record.

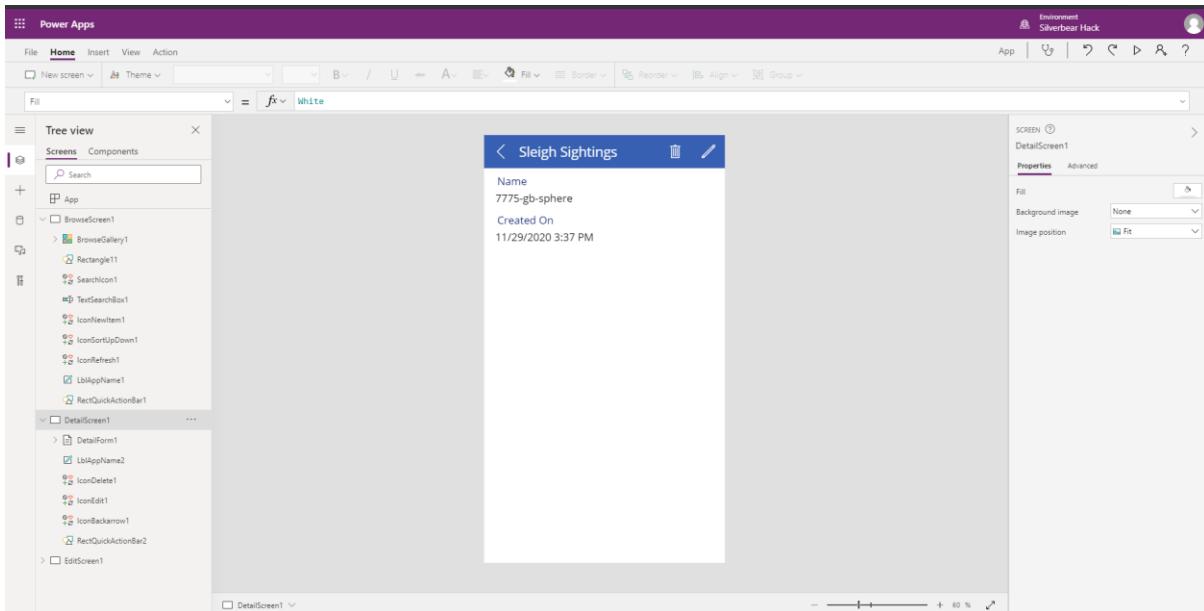


To edit the detailed record select the **Edit** () icon from the menu on the very top of the app.



To exit “Run Mode”; Click the **Close** button () on the top right of the screen.

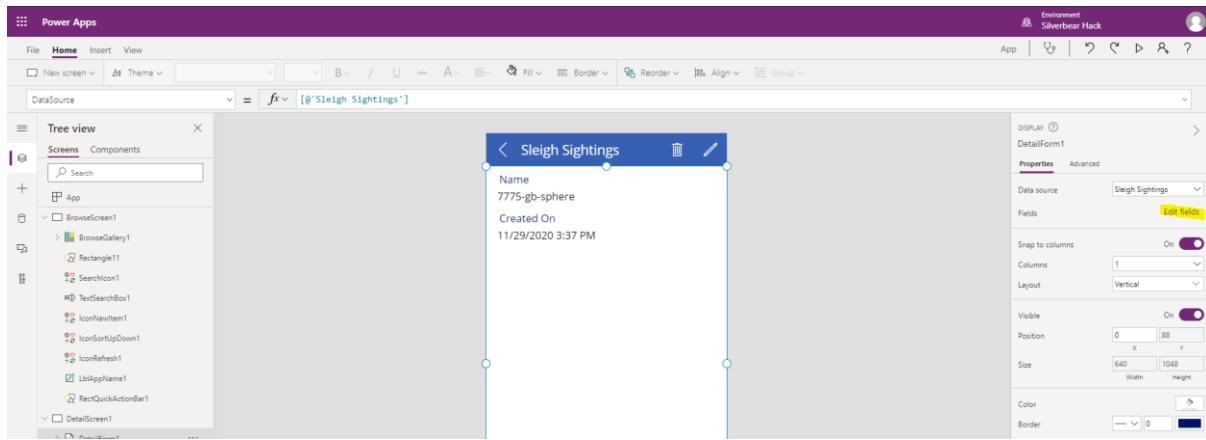
We will now edit the app to make sure users can capture new potential Sleigh Sighting records. To do this, Its important to make sure we add the correct fields to the input forms. We will start with the “Detail Form”. To access this navigate to the tree view on the left of the page and select the option to expand this screen and view all of the components.



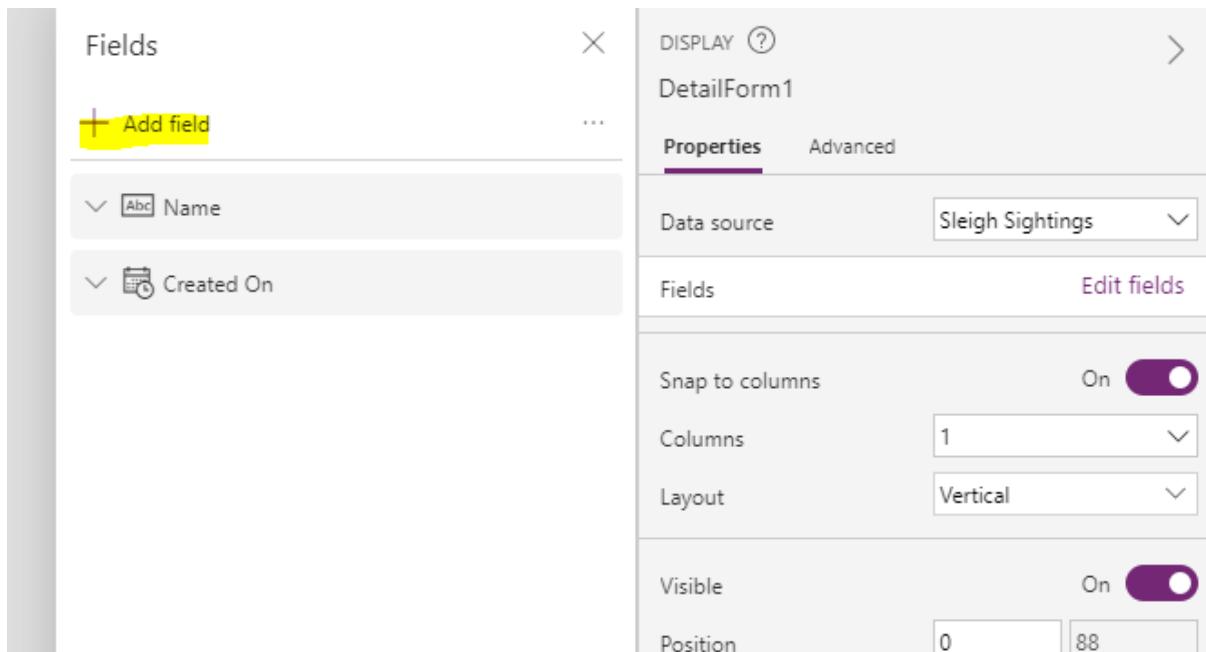
You will notice that there are only 2 fields that are visible on the page. We will add some more fields to make sure the users know exactly which record they are interacting with.

In the navigation pane, within the **DetailScreen1** select the **DetailsForm1**. You will notice that when you select the component from the tree view, the component is shown as selected in the app canvas. You are now able to change the properties of this component.

In the panel, on the right hand side of the page, select the **Edit Fields** option.



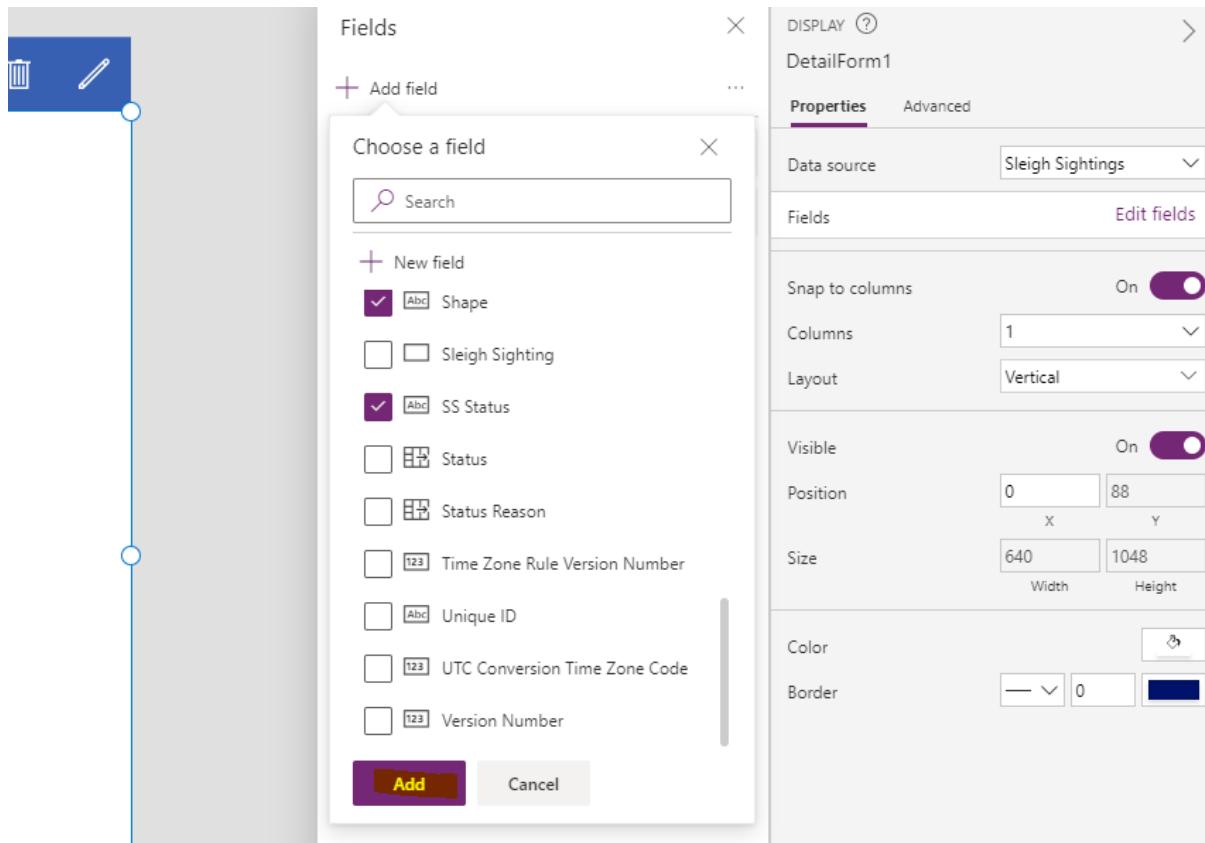
A panel will appear. Select the **Add Field** option.



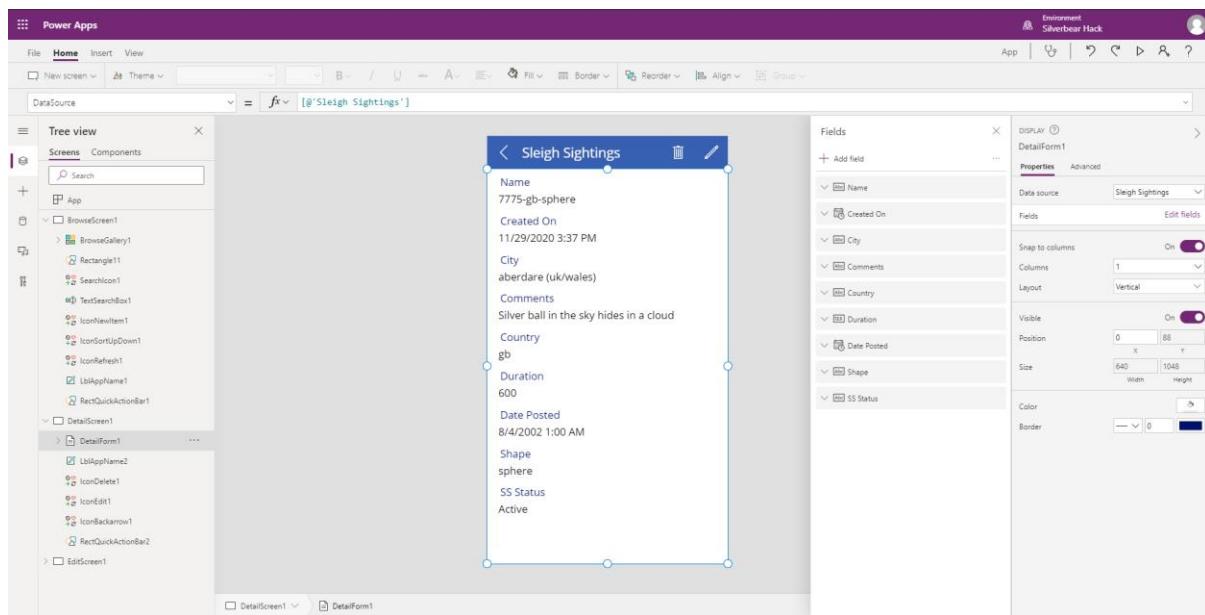
You will be presented with a menu of all of the fields within the **Sleigh Sightings** table in Dataverse. Select the following fields from the list:

- City
- Comments
- Country
- Date Posted
- Duration
- Lat
- Long
- Shape
- SS Status

Once the fields have been selected, click the **Add** button to make sure the fields are then added to the **DetailForm1**.

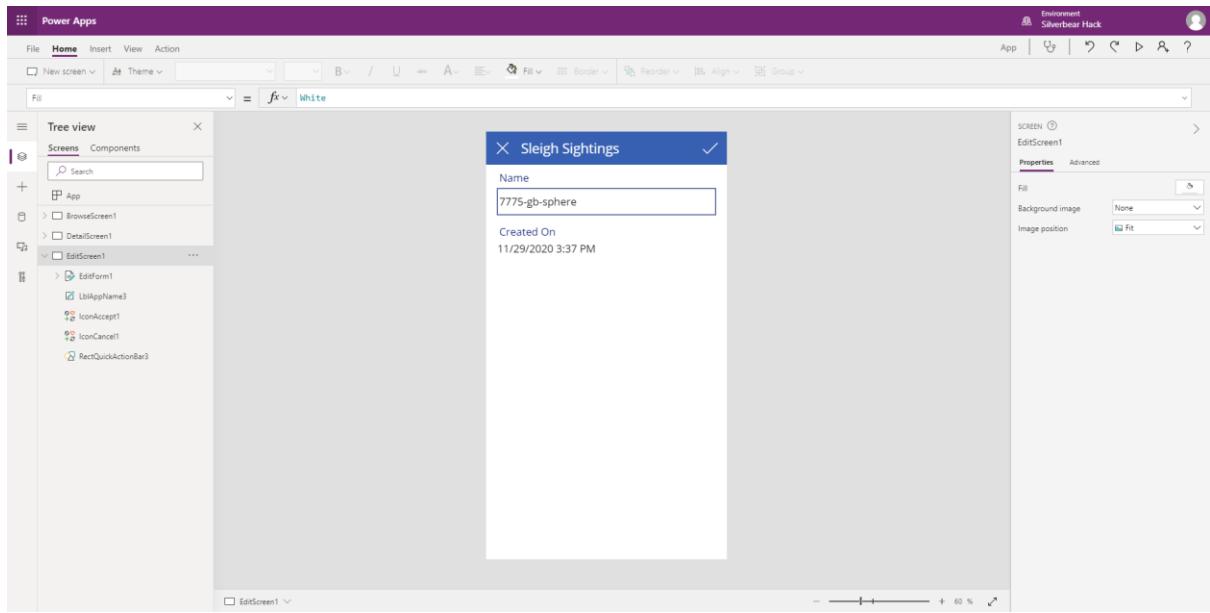


When the panel is closed you will be presented with the latest version of the form.

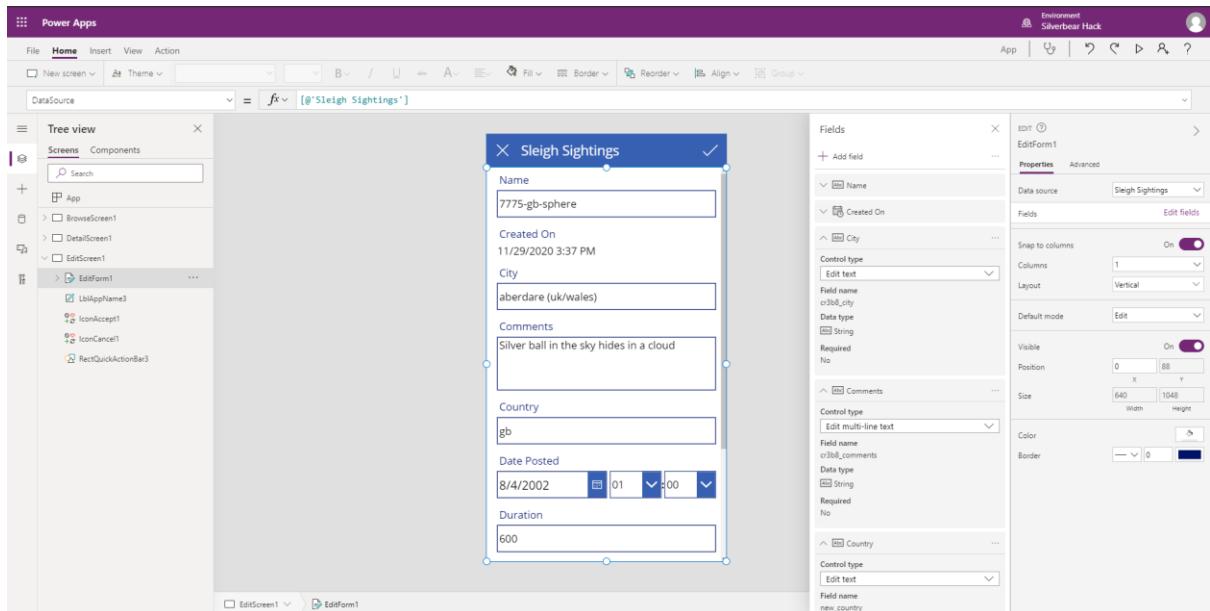


Please be sure to save your app regularly as you go.

We will now update the **EditForm1** on the **EditScreen1**. To do this, run through the EXACT same process as above, except make sure to edit the **EditForm1**.

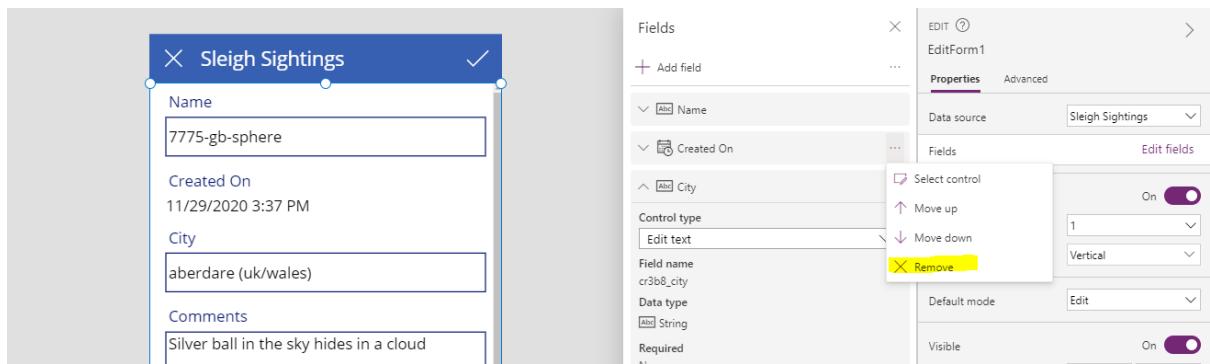


After you have added the relevant fields, your form will look as follows:



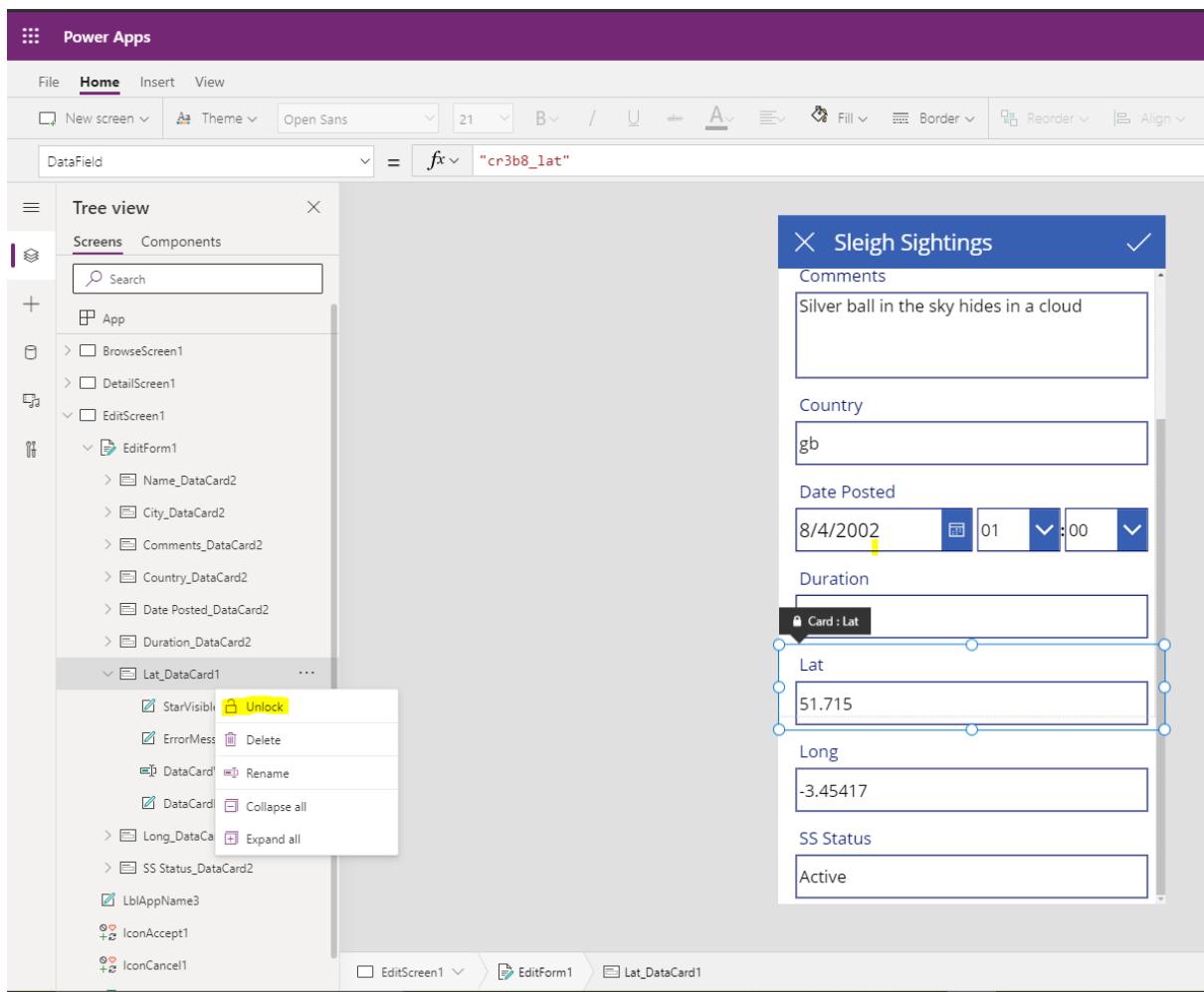
One of the most important parts about data capture is the ability to automate as much of this as possible.

Firstly, let's remove unnecessary fields from the form. To achieve this, in the **Fields** panel, click on the ellipses next to the relevant fields and select **Remove**. You only need to do this for the **CreatedOn** field.



We will now automate some of the data capture by adding Power Apps expressions to the datacards on the form. As a standard, when a Power Apps form is connected to data in Dataverse, the fields are locked. We need to unlock the fields we would like to edit.

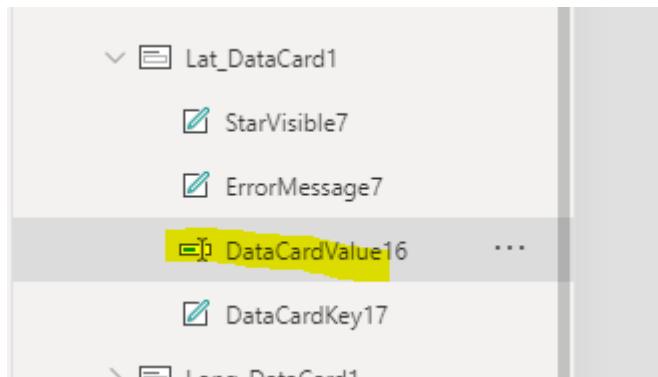
In order to achieve this, select the relevant data card in the tree view within the form, right click and select **unlock**.



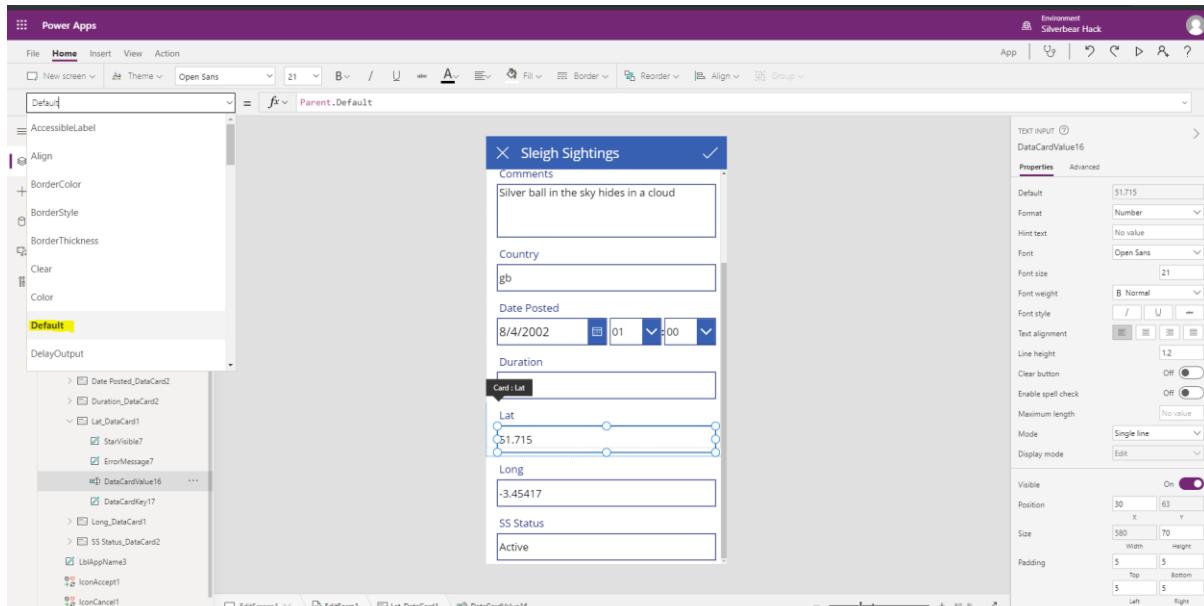
The following data cards need to be unlocked :

- Lat_DataCard1
- Long_DataCard1

We will now set the Latitude and Longitude of the UFO case automatically based on your location. Select the **DataCardValue16** component from the tree view.

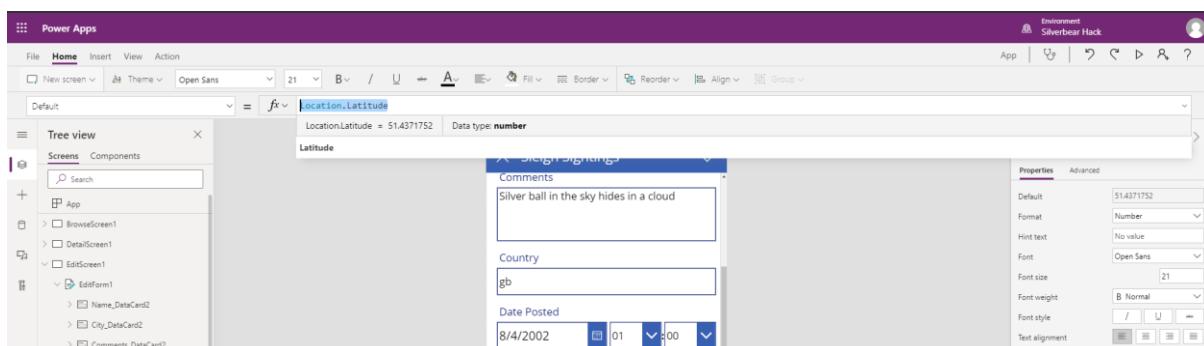


Navigate to the Expression bar at the top of the screen and select **Default** from the list.



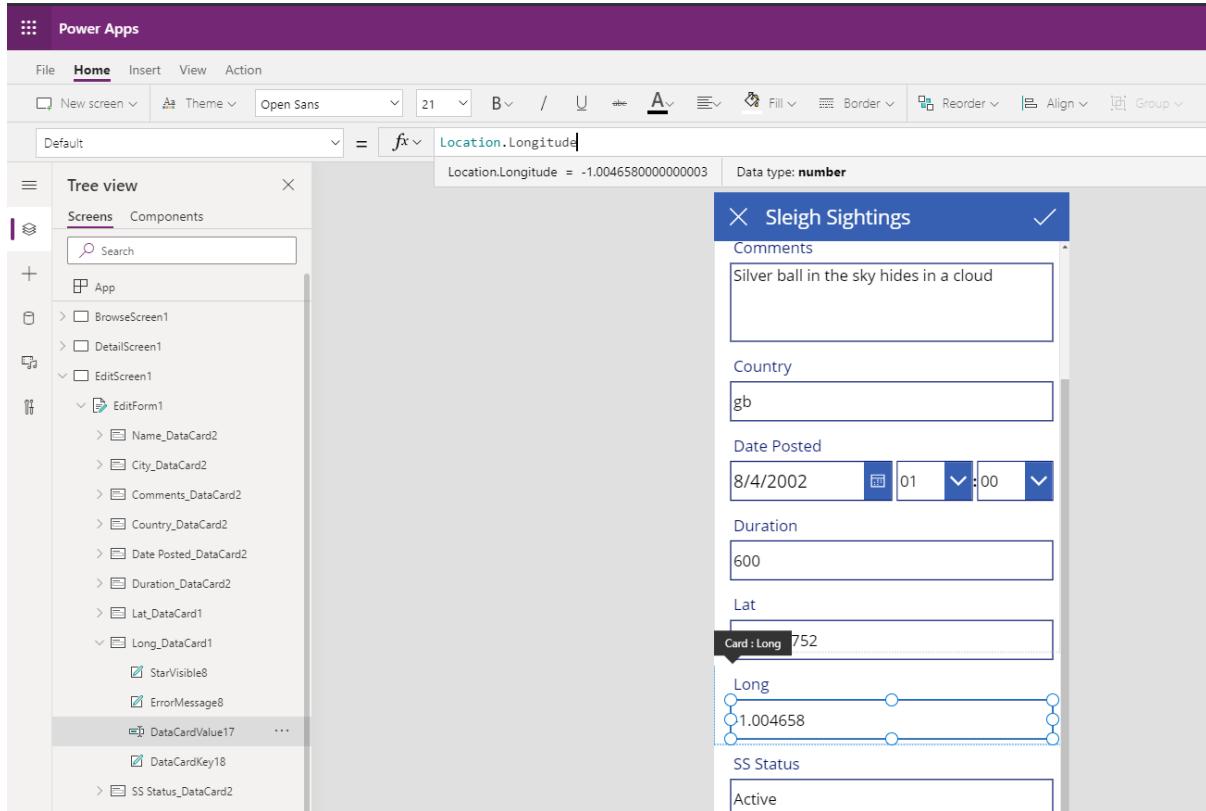
In the expression pane enter in the following expression:

`Location.Latitude`



This will automatically update the value in the field on the form.

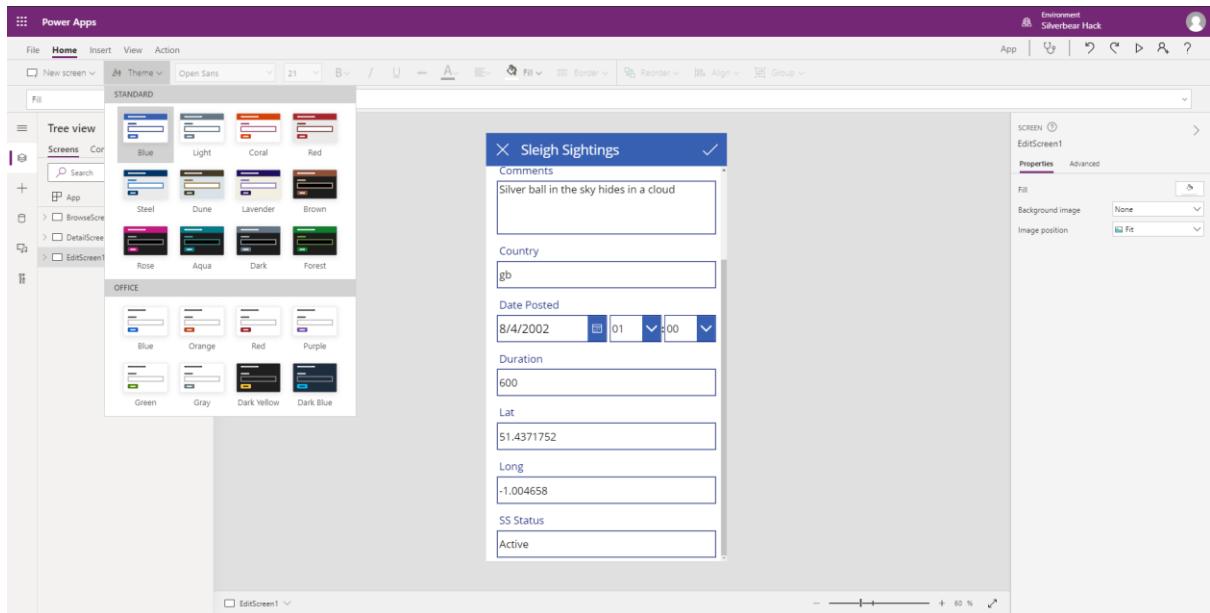
Follow the same process for the Longitude data card to make sure the correct data is stored & managed.



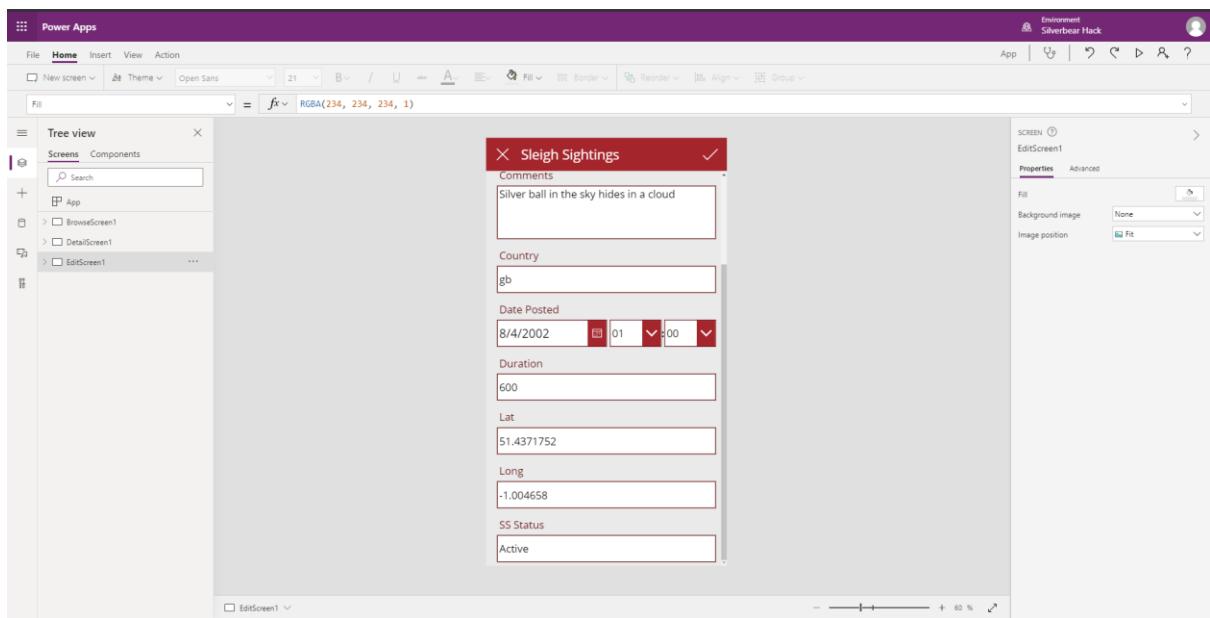
We are now able to capture and manage data within the canvas app. Please save your app and test it out by running it. You will be able to go back to the model driven app in the previous labs to review the data captured.

In the final part of the canvas app build, we will focus on theming / styling the app. In these steps we are providing guidelines, but please feel free to select whichever themes and images you would like.

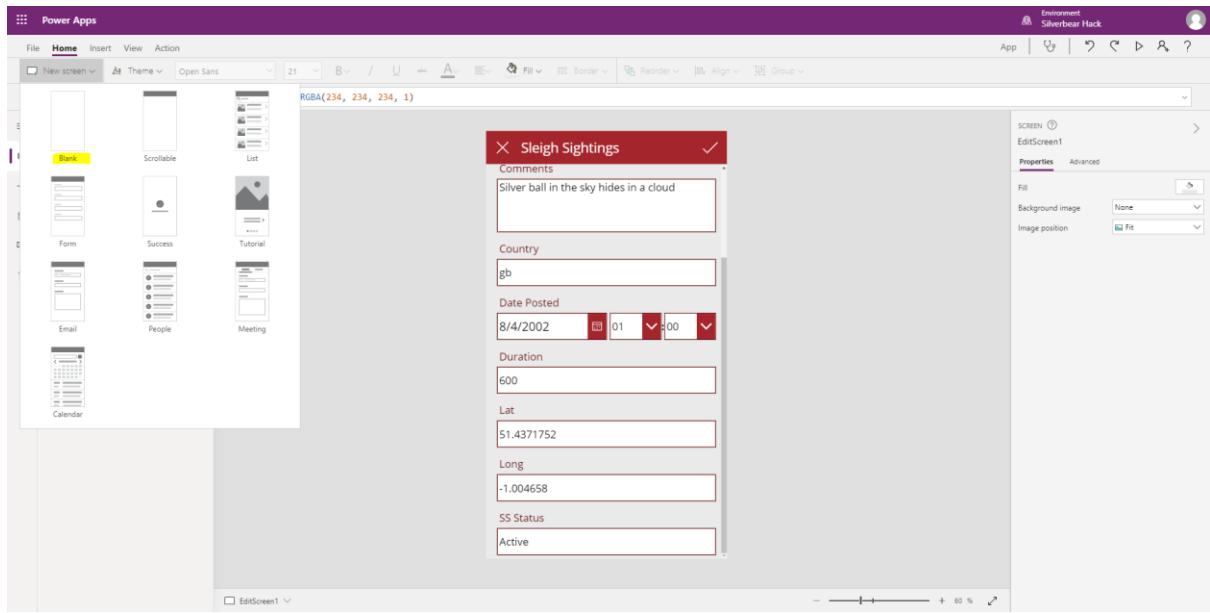
To start off, select the **home** option in the menu and then the **Theme** option. You will see a list of available, built in themes you may select from.



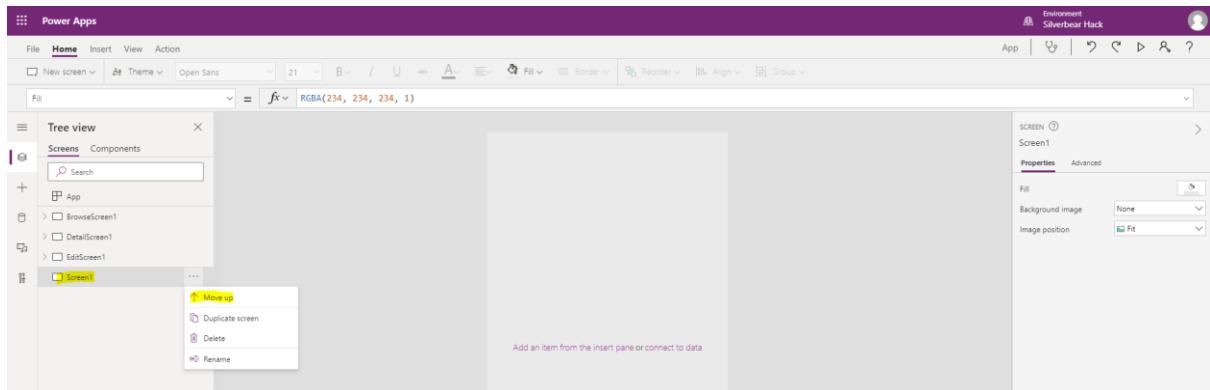
Pick the theme you feel matches your app look & feel in the most appropriate manner. This will change the theme of all of the core, out the box components within the app.



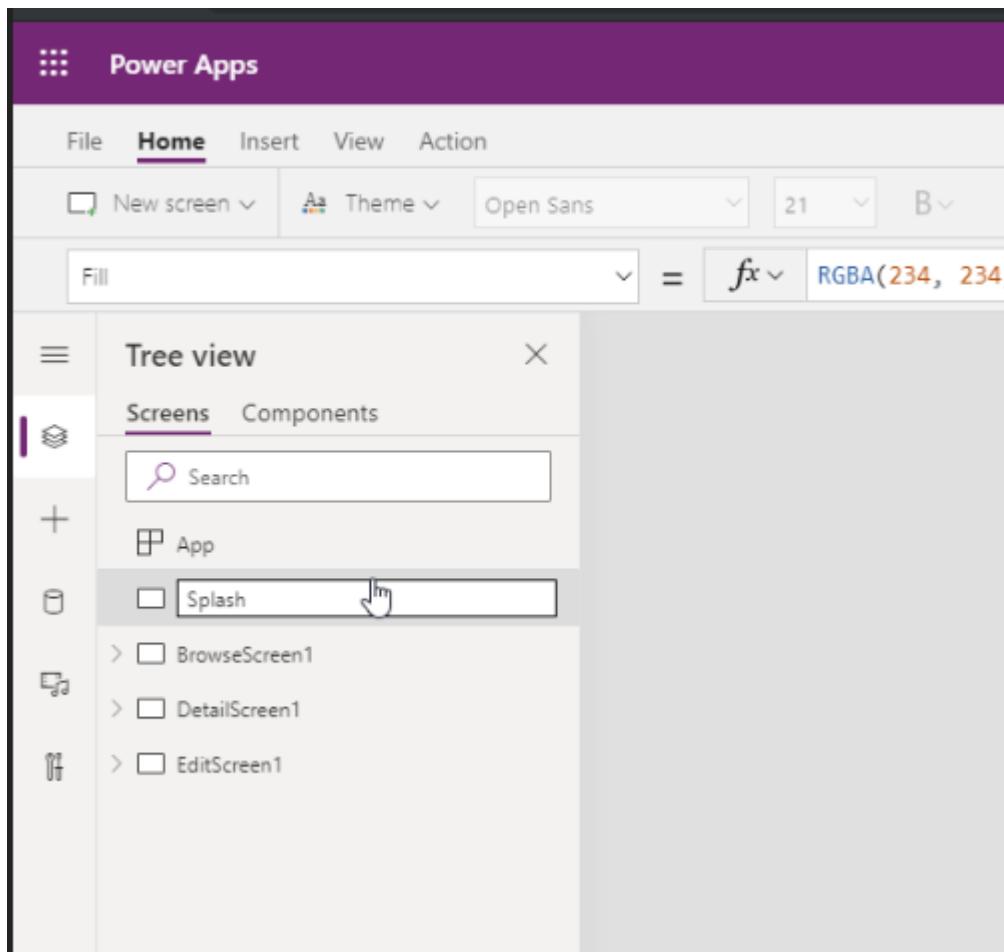
We will now add a “Splash Screen” that will welcome new users into your app experience. To start this process navigate to the **home** screen and then select **New Screen** from the menu. Select the **Blank** option from the list.



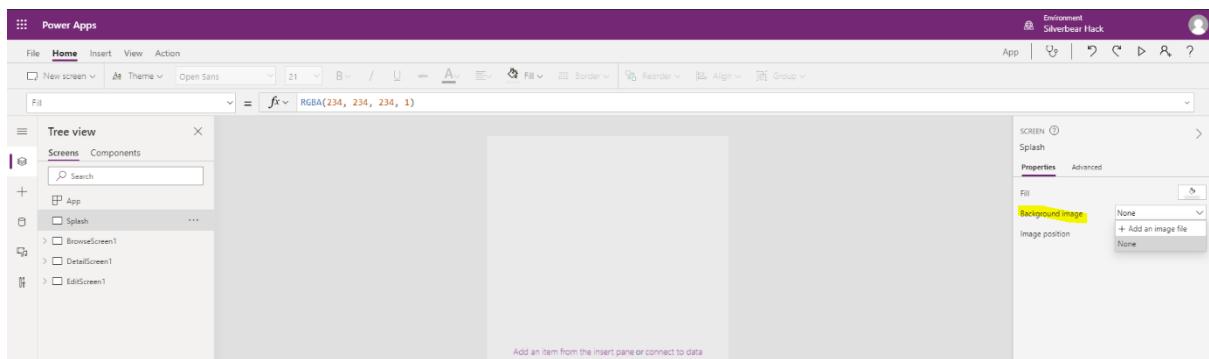
A new screen will immediately be added to the tree view on the left within your app. Move your new screen to the top of the list by clicking on the ellipses and selecting **Move up**.

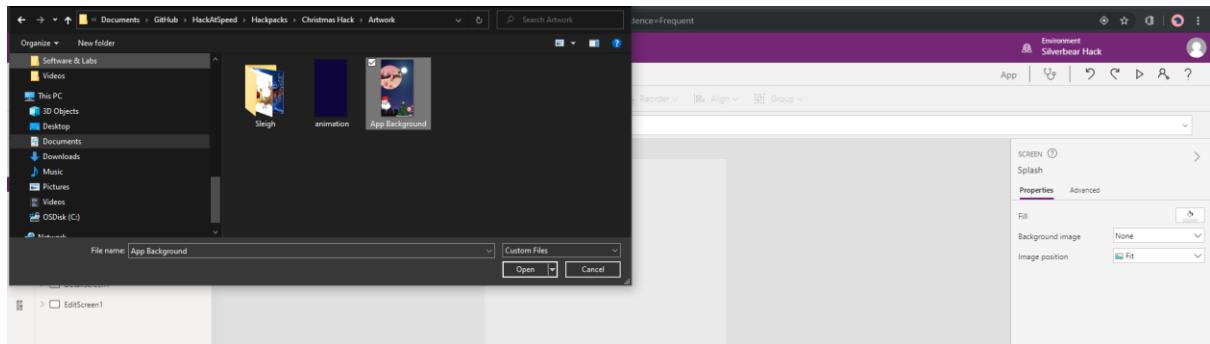


Double click on the screen name in the tree view and change the name to **SPLASH**.

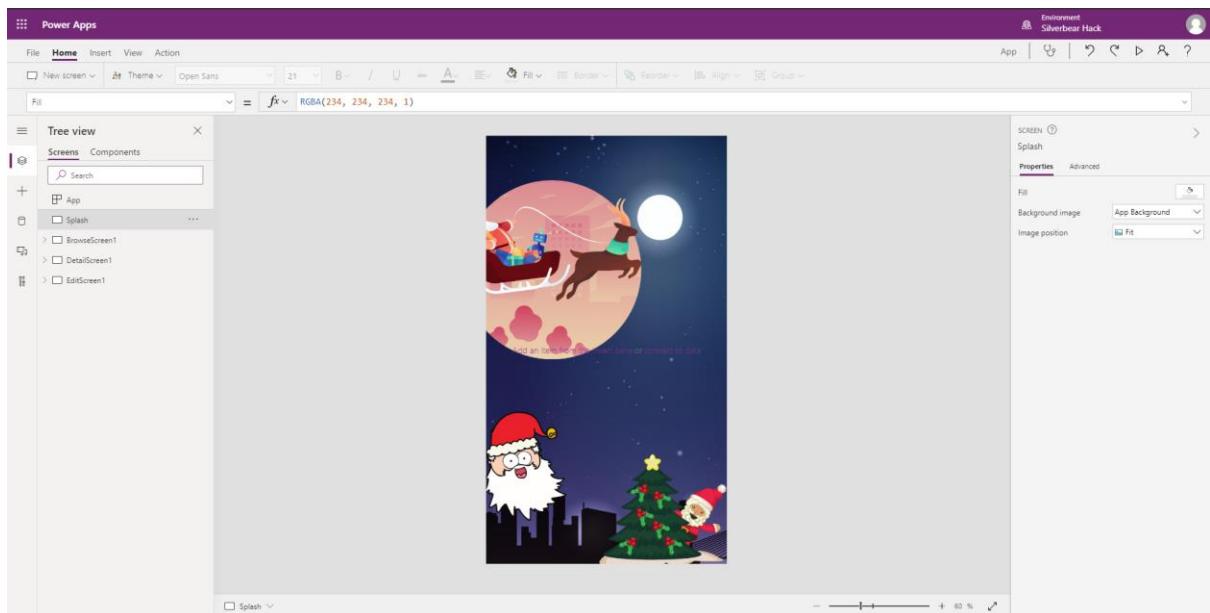


Add a new background image to your **SPLASH** screen by selecting **Background Image** from the properties panel on the left and then select **Add an Image File**.

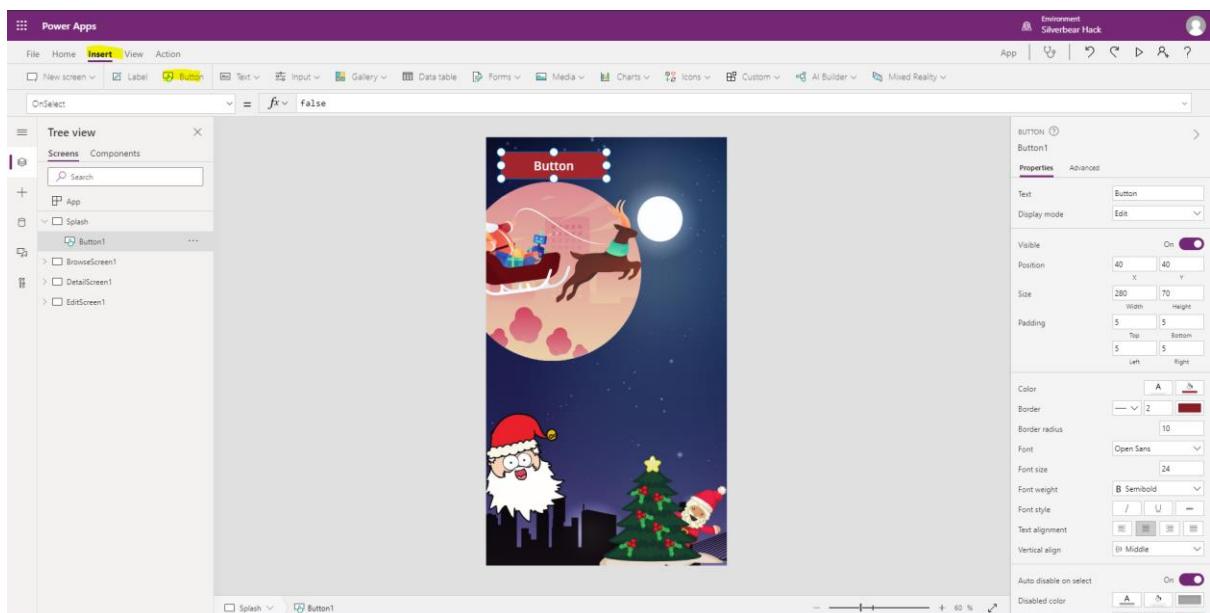




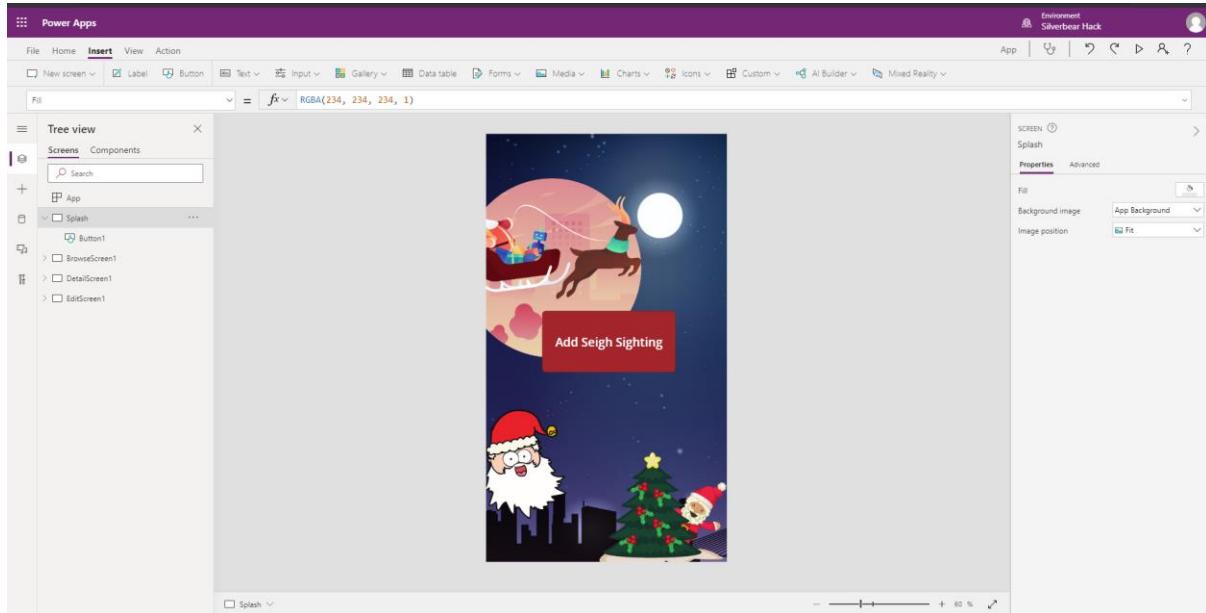
Your background will then be set and visible on the Splash screen.



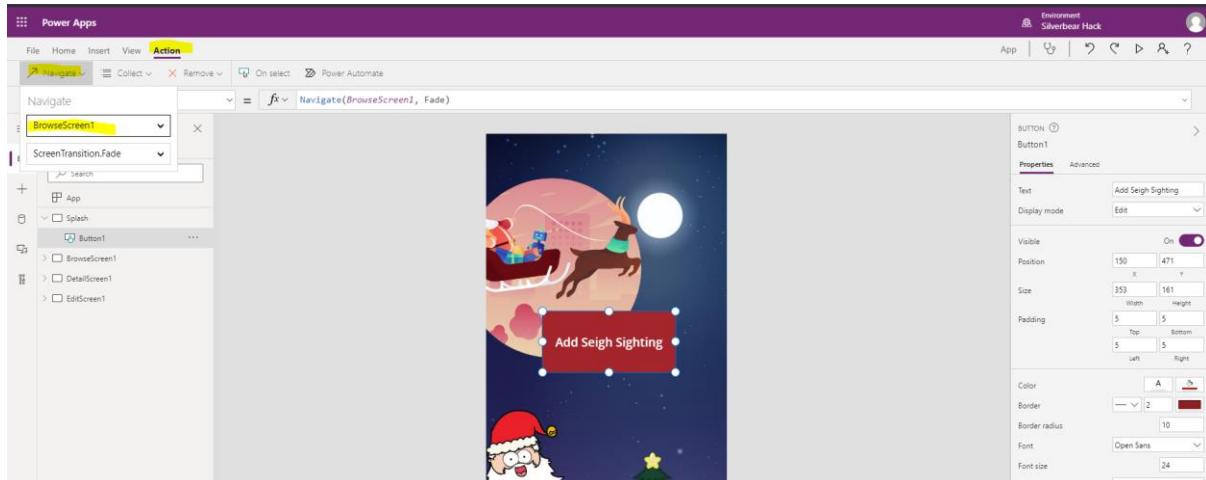
The final step in the process is to add the final navigation controls. Select the **Insert** option from the main menu and then select the **Button** component. This will add a new, themed button onto your splash screen.



Drag the button to a preferred location on the page, double click on the button and change the name to Add Sleigh Sighting. You can also resize the button as needed.



In order to enable navigation to the Browse page, navigate to the **Action** menu option and then select **Navigate**. You will be presented with a list of the screens within the app. Select the **BrowseScreen**.



Save and Run your app to make sure the navigation works correctly. Capture a new Sleigh Sighting record and review in the Model driven app you created in the previous lab.

Lab 6: Configuring a Basic Power BI Dashboard

In this lab we will learn how to configure a basic Power BI report and Dashboard in order to allow Mid office users the ability to view data in a format that is easy to understand and interactive.

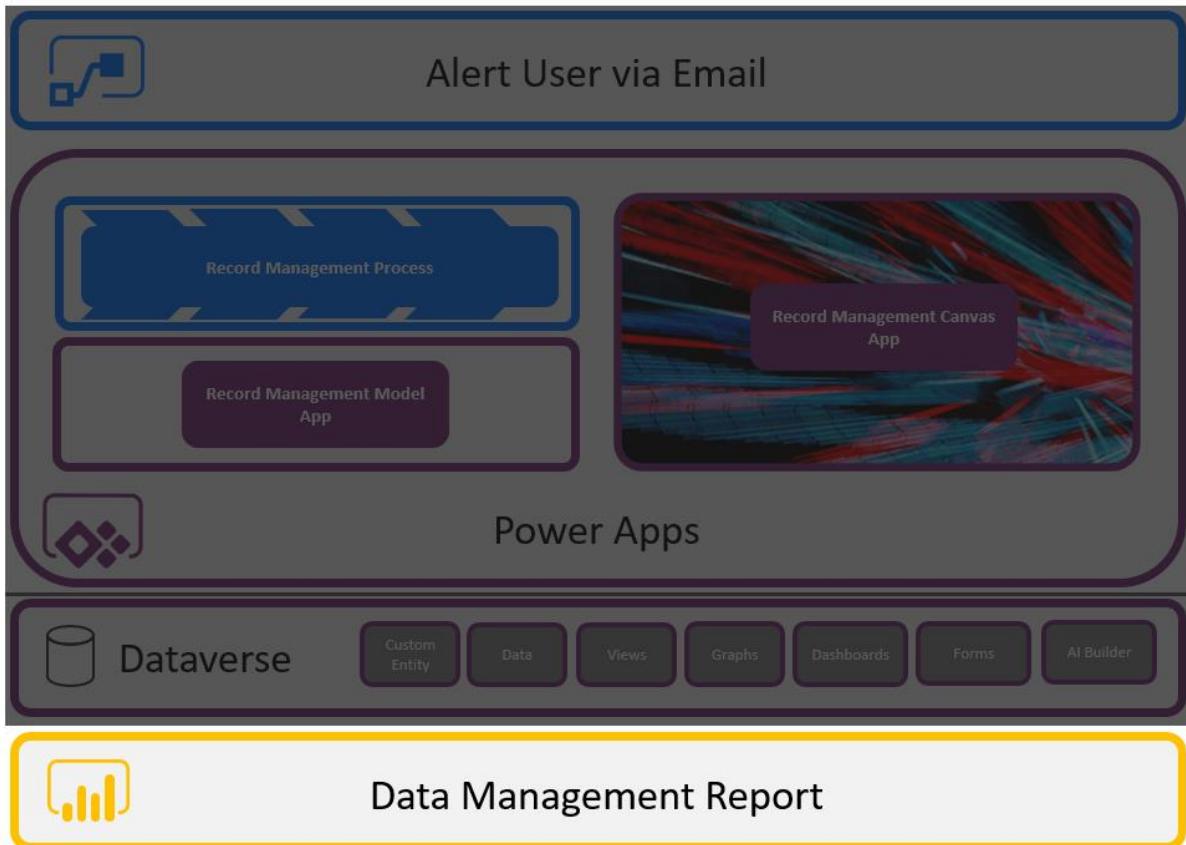
Please Note:

This lab can be completed independently, with only Lab 1 being and no support of the other labs.

This part of the hackathon is totally optional and instead of building this part, you can simply import the "Sleigh Sightings base.Pbix" Power BI file into your environment.

Solution Components

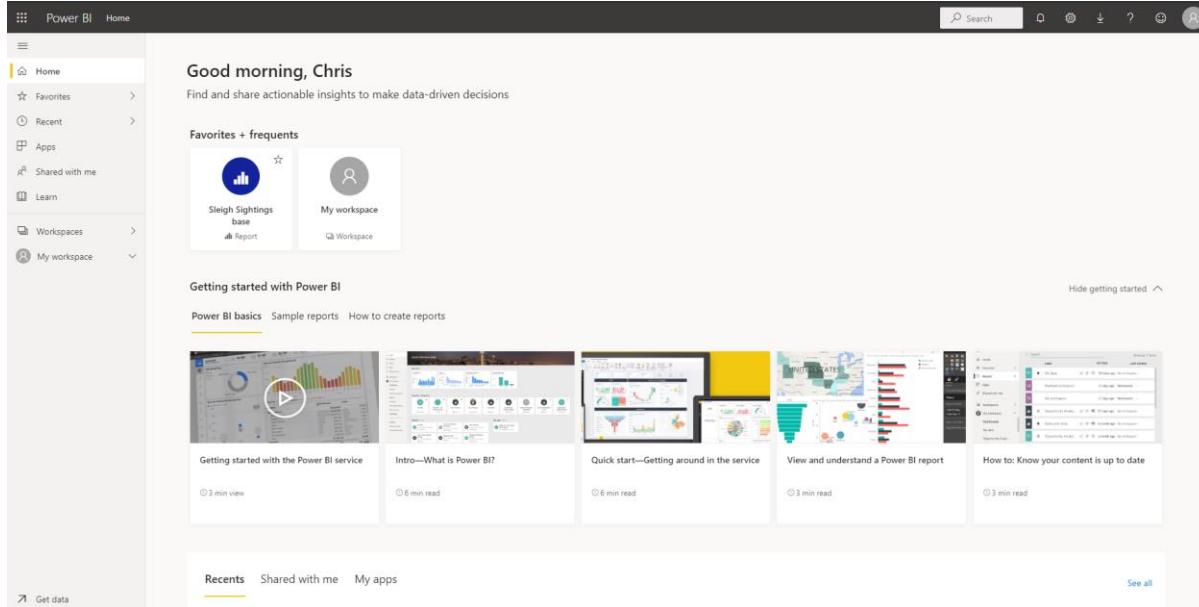
Microsoft Power BI



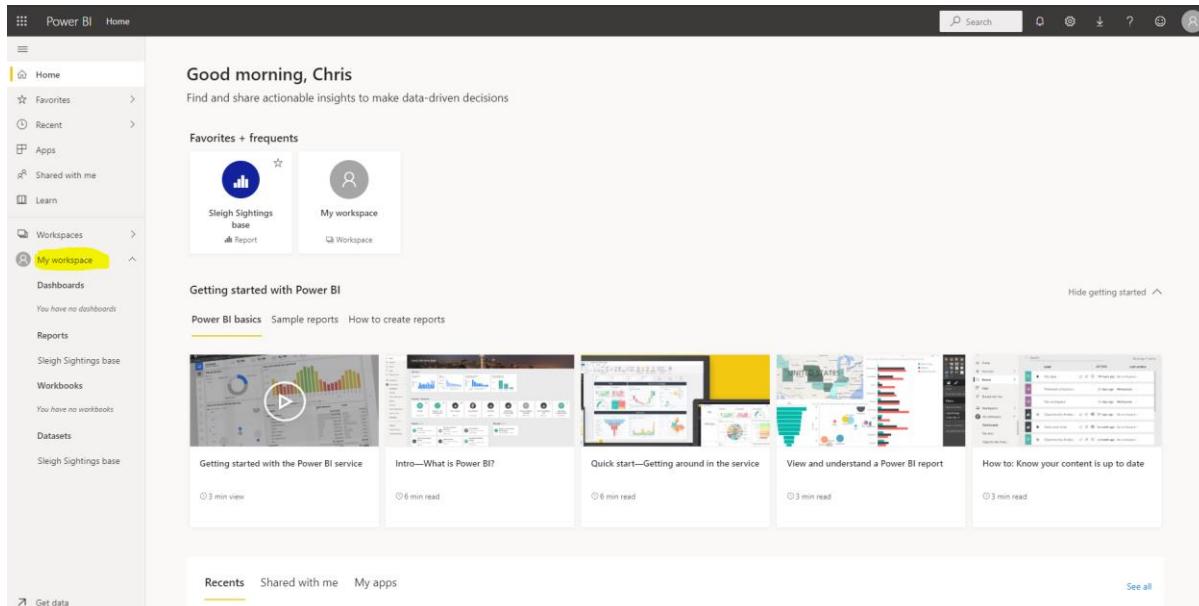
Let's Begin

Power BI Desktop

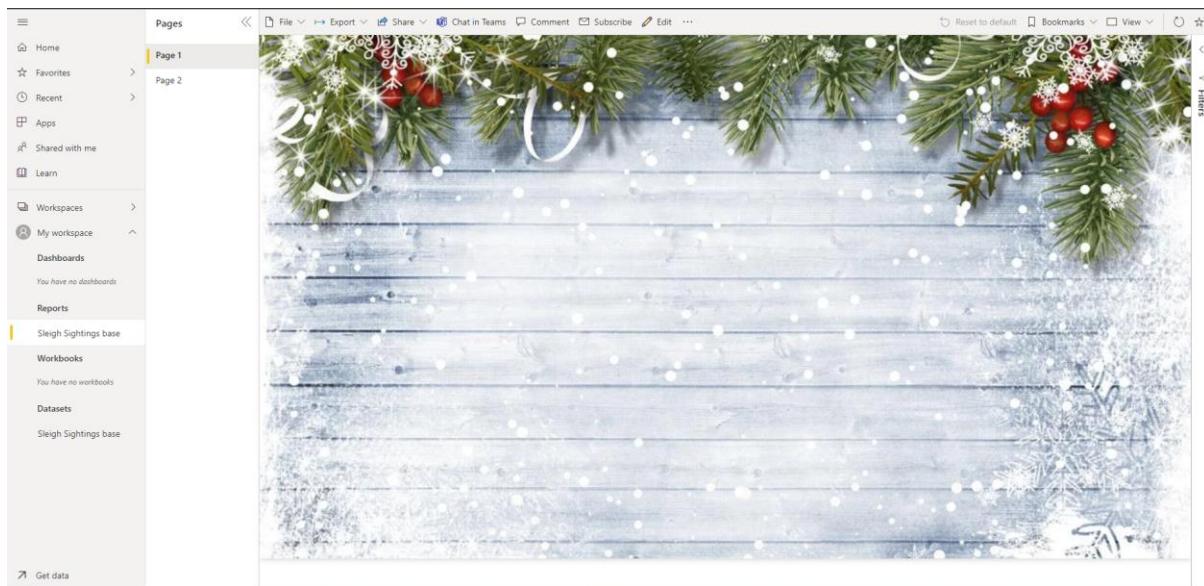
To access Power BI, Navigate to <https://app.powerbi.com/home>. Your view may be different to the one below, depending on the user you are leveraging to access the Power BI application.



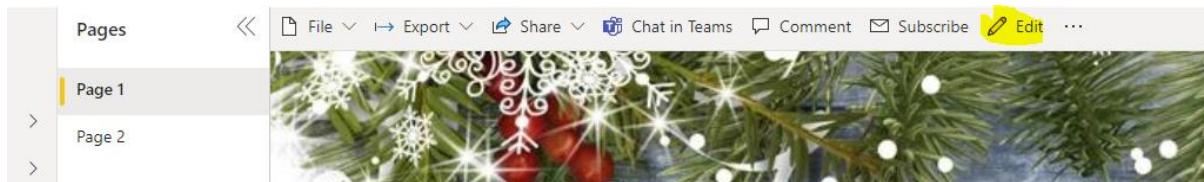
Each person using Power BI has their own workspace where their own personal Power BI reports and dashboards can be created. On the left hand side of the page select **My Workspace**. Depending on the user you have logged in with, you may see several reports that are available to you.



Select the **Sleigh Sightings Base** report that has been pre-created and connected to data. You will notice a page with a Christmas backdrop. This is where you will be designing your Power BI report.



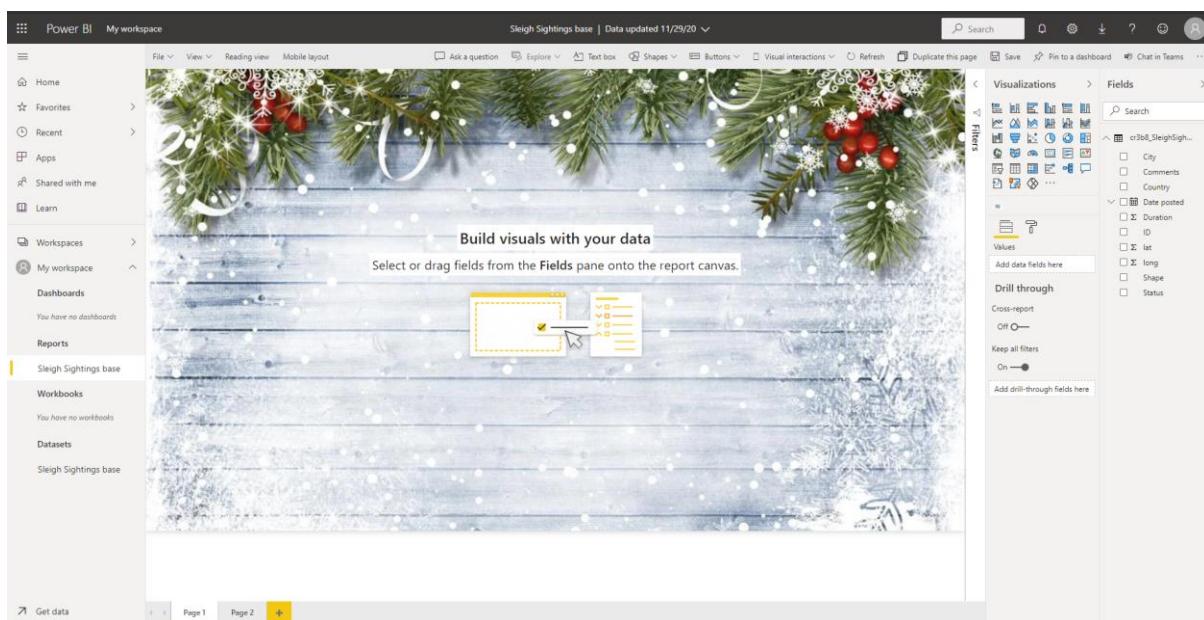
To start your Power BI report build, select **Edit** from the tool bar.



The report will be placed into Edit mode. You will see that 2 panels have appeared on the right hand side of the screen.

The Visualizations panel will enable you to add Power BI visualisations to the report canvas. These will help you clearly visualise and understand your data.

The Fields panel contains the data fields that you have available to you from the Microsoft Dataverse table. These fields will be used in the visualisations.

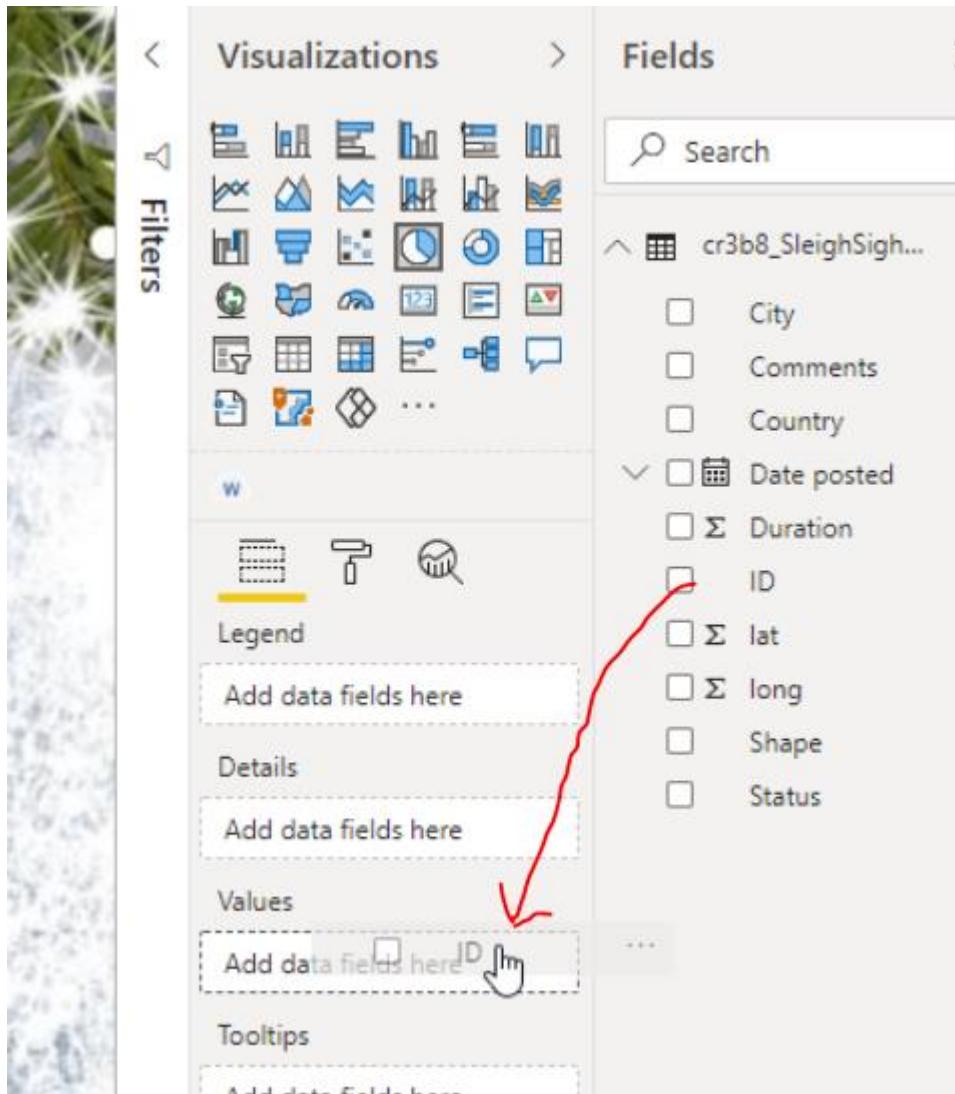


To build your first visualisation, let's take a look at the Sleigh Sightings by shape. To do this select the Pie Chart Visualisation from the list. This will automatically add your pie chart to the report canvas in the top left.



We now need to work out the number of sightings. To do this, make sure your pie chart visual is still selected.

From the right hand **Fields** panel drag the **ID** in to the **Values** property of the Pie Chart.



You will notice that the **ID** field is automatically counted in the pie chart **Values** property and the pie chart in the report canvas has been completely saturated with 2000+ records.

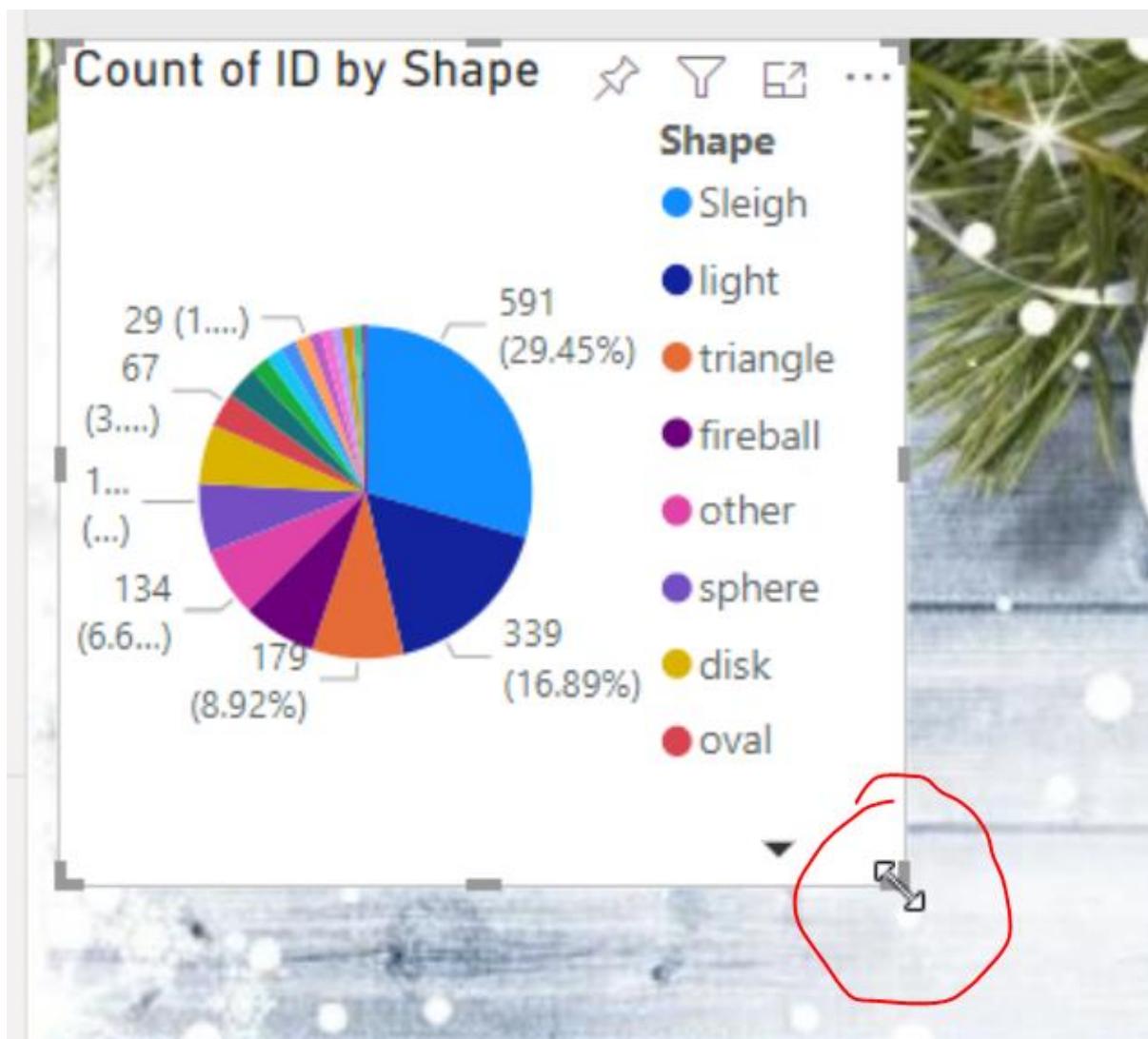


We now need to filter those records by the sleigh shape. To do this, drag the **Shape** field from the **Fields** column into the **Legend** property of the pie chart visualisation.

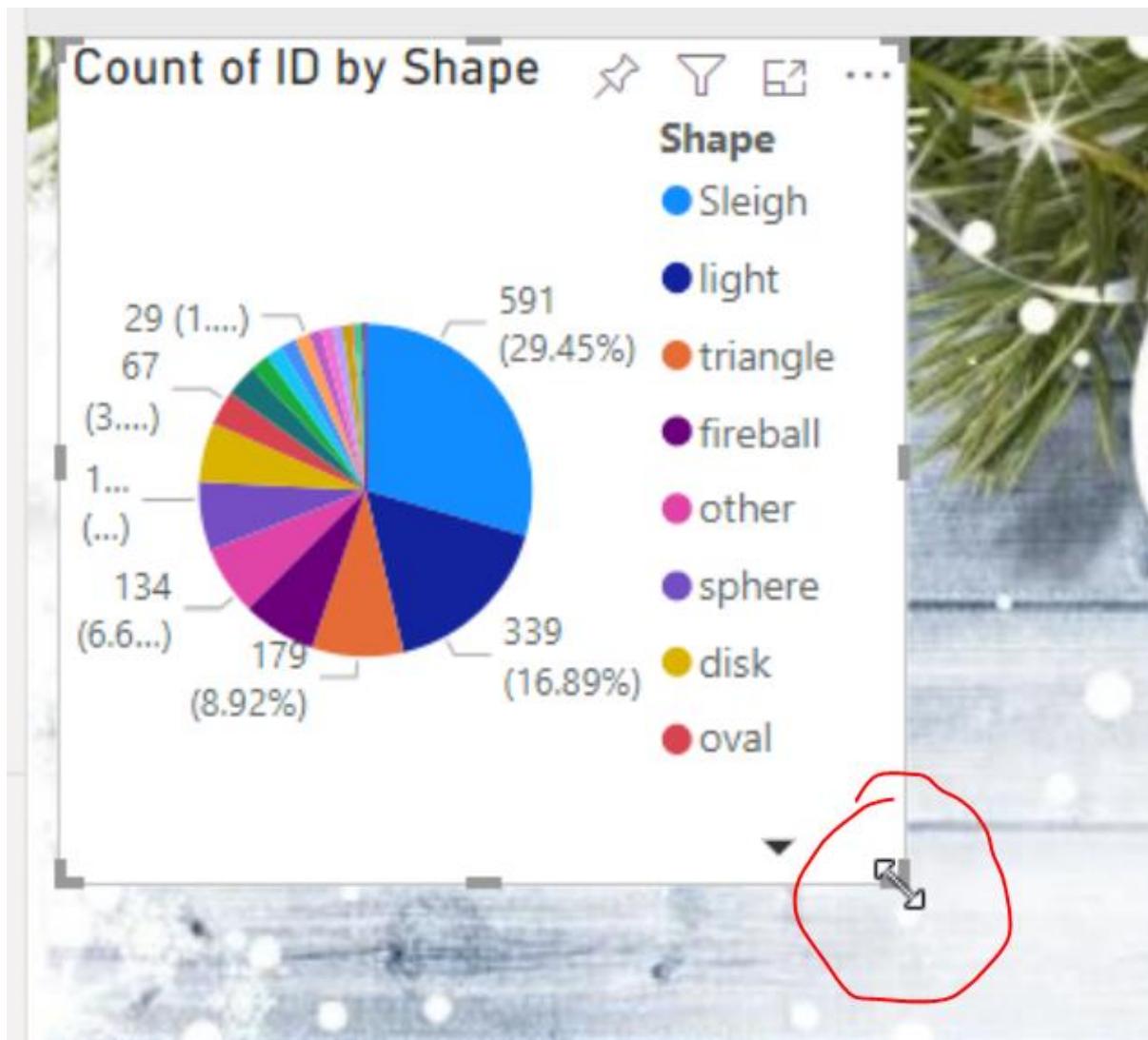
As you do this, you will notice that your Pie Chart visual in the report canvas changes to show the number of Sleigh Sightings by shape.

The screenshot shows a Power BI workspace titled 'Sleigh Sightings base | Data updated 11/29/20'. A pie chart titled 'Count of ID by Shape' is displayed, showing the distribution of shapes. The legend includes: Sleigh (blue), light (dark blue), triangle (orange), fireball (purple), other (pink), sphere (light purple), disk (yellow), and oval (red). The data labels on the pie slices are: Sleigh (591, 29.45%), light (339, 16.89%), triangle (179, 8.92%), fireball (134, 6.6...), other (67, 3....), sphere (29, 1....), and oval (1, ...). The chart is set against a background of Christmas-themed pine branches and snowflakes.

We will resize the visual to make sure that users are easily able to interact with the data. To do this, simply hover over one of the corners until the resize double arrow is visible.



Simple drag the corner of the chart to make it larger and more accessible to users. Use your discretion on the size. You can always resize later.



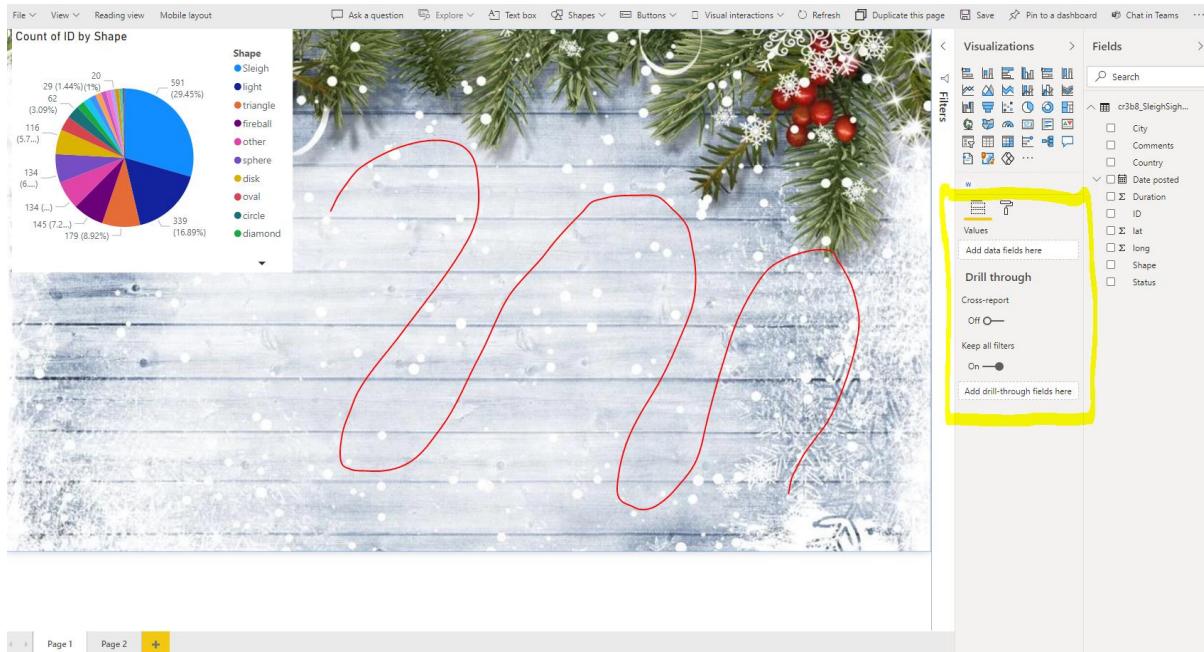
As you can see by the data shown in the visual, Santas sleigh has been spotted a number of times.

The screenshot shows the Power BI desktop application. On the left, the ribbon menu includes Home, View, Reading view, Mobile layout, Ask a question, Explore, Text box, Shapes, Visual interactions, Refresh, Duplicate this page, Save, Pin to a dashboard, and Chat in Teams. The main workspace displays the 'Count of ID by Shape' pie chart. The Power BI Visualizations pane on the right lists various visual elements and their properties, such as Fields, Legend, Details, Values, Tooltips, Drill through, and Cross-report settings. The 'Shape' field is currently selected in the legend.

Now that we have added the first visual, we will use these principals to add the rest of the elements top the reports canvas.

VERY IMPORTANT: Please **Deselect** the current pie chart visual by clicking in the empty space on the report canvas. If you do not do this, you will simply end up changing the pie chart visual. It will be evident you have done this when there arent multiple properties available in the **visualization** panel.

The below image highlights blank space indicated by the red marker and the **Visualization** panel highlighted in yellow.



Next we will add a Map showing where in the world the sightings have been logged. This visual makes use of the **Latitude & Longitude** fields as well as the **Shape** field.

Select the **Map** visual from the **Visualization** panel. This will automatically add the map visual to the report canvas.



The Map visual has a lot of properties that are visible in the **Visualization** panel. We will populate the following properties with the following fields:

- Legend : Shape
- Latitude : Lat
- Longitude : Long

The screenshot shows the Power BI Visualization panel for the Map visual. The properties are configured as follows:

- Location:** Add data fields here
- Legend:** Shape
- Latitude:** Average of lat
- Longitude:** Average of long
- Size:** Add data fields here

The Fields pane on the right shows the following fields:

- Comments
- Country
- Date posted
- Duration
- ID
- Lat
- Long
- Shape
- Status

The fields Lat, Long, and Shape are checked.

When dragging numeric fields into Latitude and Longitude properties in the map, often the numbers aren't translated as Latitude & Longitude. You may get an error on the map visualisation.

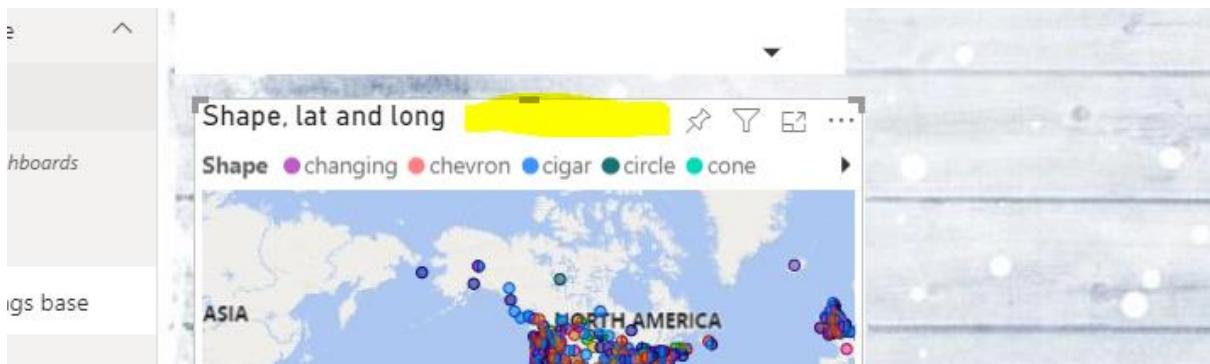


This will involve a simple fix. Simply select the dropdown in both the Latitude and Longitude fields in the **Visualization** panel and select **Don't Summarise**. This will then allow the data to be translated correctly by the map visualisation.

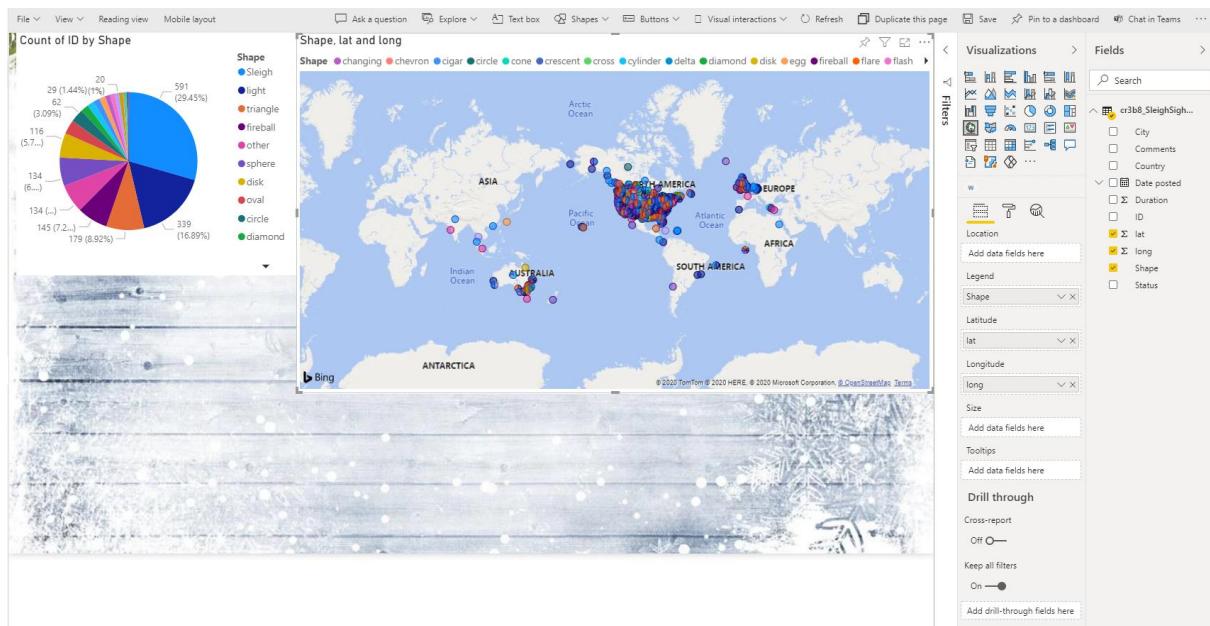


As you can see, most of the sleigh sightings have taken place in North America.

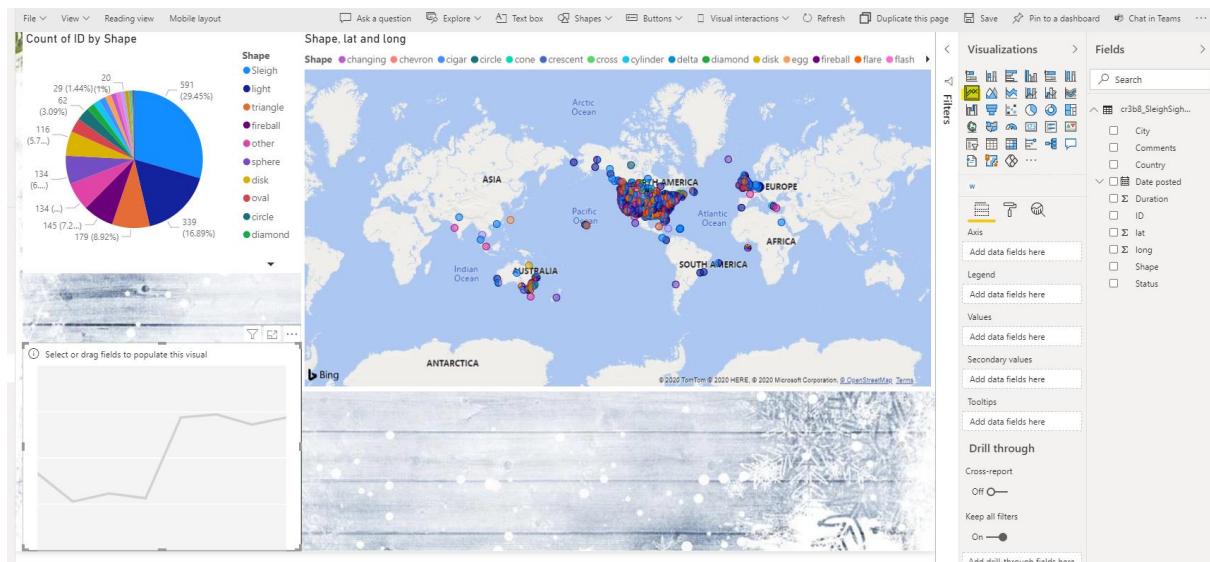
We will move and resize the map visual to make sure users can access the data more effectively. To move the visual, simply click on the top of the map visual and drag it to the relevant location on the map.



Resize the visual as you previously did with the Pie Chart.



The next visual we will be adding is a **Line Chart** visual. This is so that we can map the number of sightings by date. To do this make sure to click into one of the blank areas to deselect the map. The **line chart** visual will be automatically added to the report canvas.



With the line chart still selected drag the following fields onto the matching visualisation properties:

- Axis : Date Posted
- Values : ID

are ● flash

Visualizations

Fields

Filters

Search

cr3b8_SleighSigh...

- City
- Comments
- Country
- Date posted
- Σ Duration
- ID
- Σ lat
- Σ long
- Shape
- Status

Axis

Date posted

- Year
- Quarter
- Month
- Day

Legend

Add data fields here

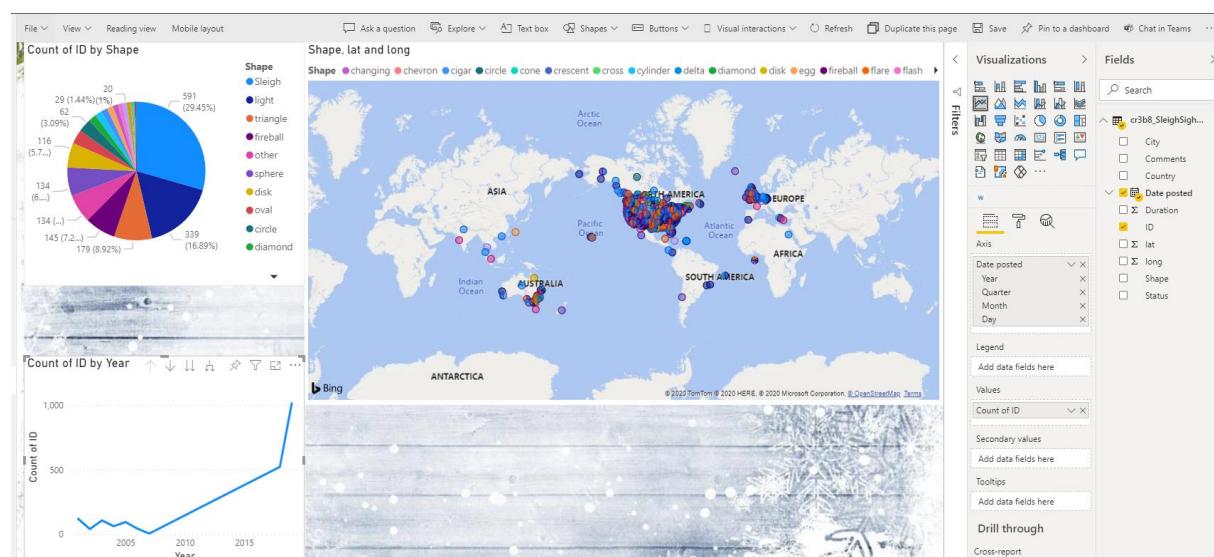
Values

Count of ID

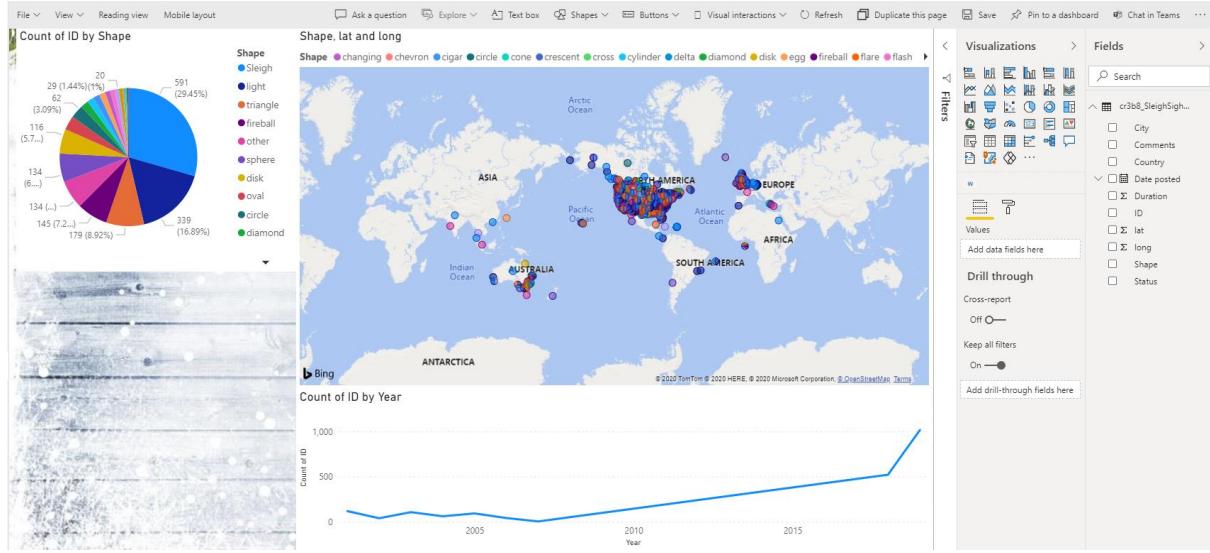
Secondary values

Add data fields here

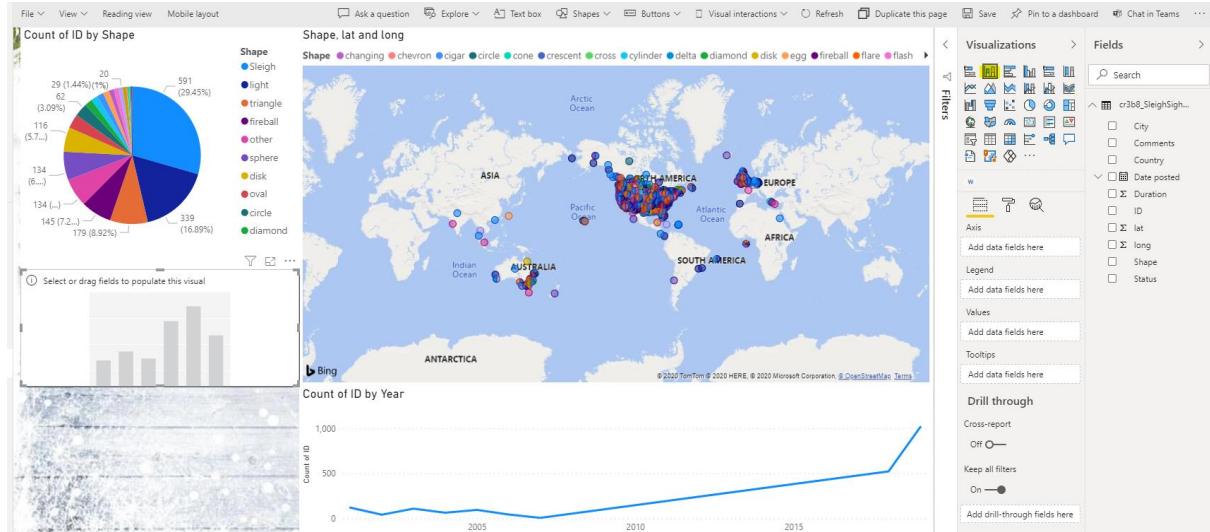
That data will be translated to sightings over time within the line chart.



Using the move & resize principals from the previous step, fit the chart into the report in a manner that makes sense.



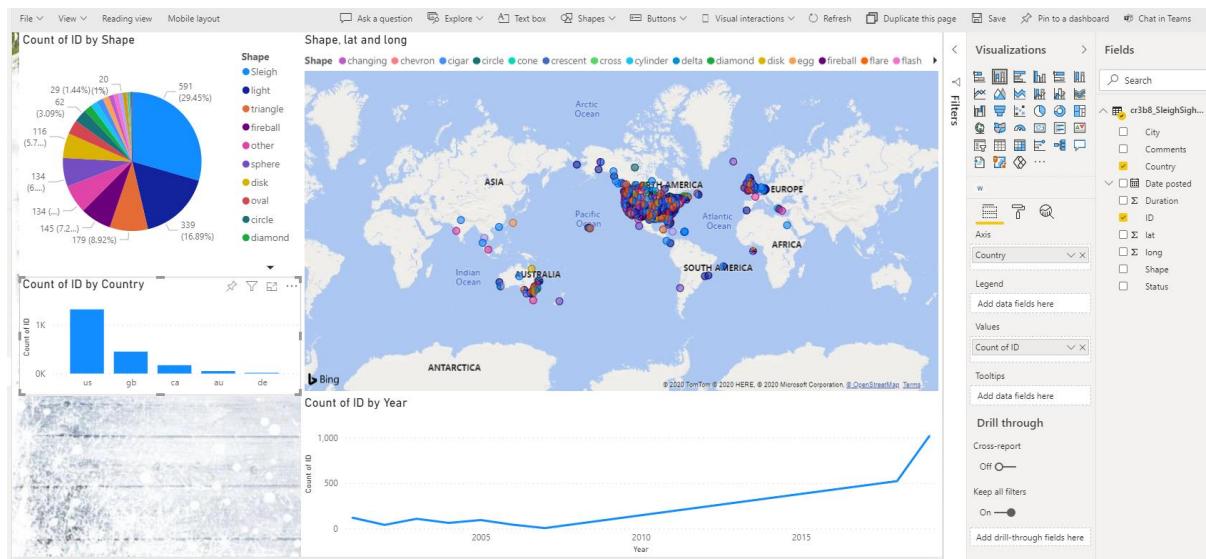
We will now analyse the sightings data by city. From the **Visualization** panel, select the **Stacked Column Chart**. This will be added to the report canvas.



To better understand the sightings by city, map the following fields to the visualisation properties:

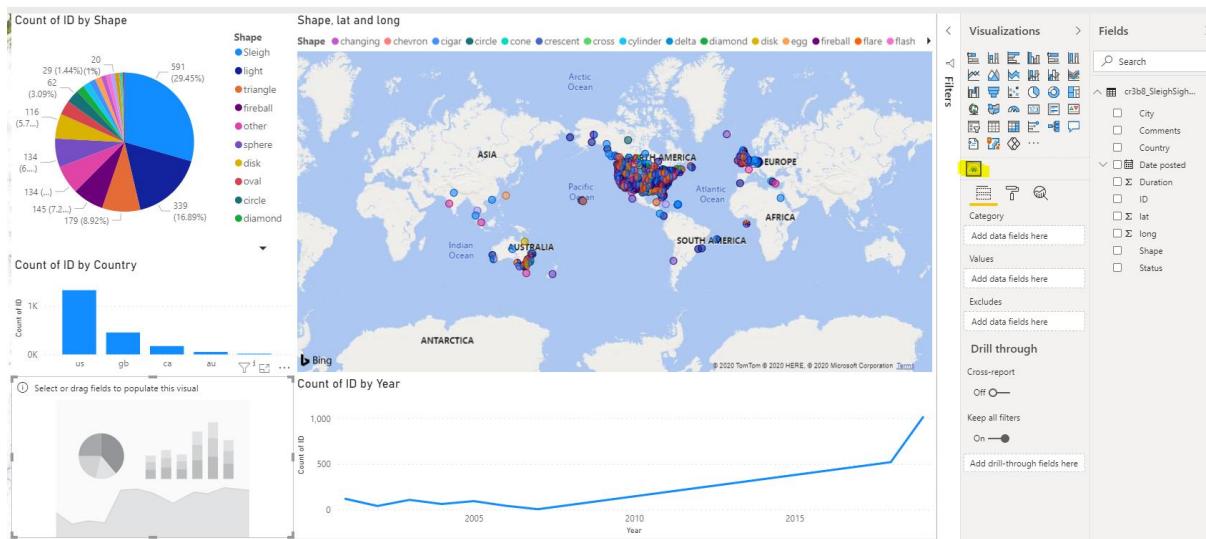
- Axis : Country
- Calues : ID

The column chart will then show the number of sightings by country.



Finally, the last visual will enable us to better understand the details of the sightings. We will be using a custom visual that has already been uploaded to your Power BI report for you.

Remember to deselect the current visual before adding a new one. Select the **Word Cloud** visual from the **Visualization** panel. This new visualization will be added to the last remaining slot on the report canvas.



To better understand the details of the sightings map the following fields to the visualisation properties:

- Category : Comments
- Values : ID

Change the value in the ID field from **First ID** to **Count ID**.

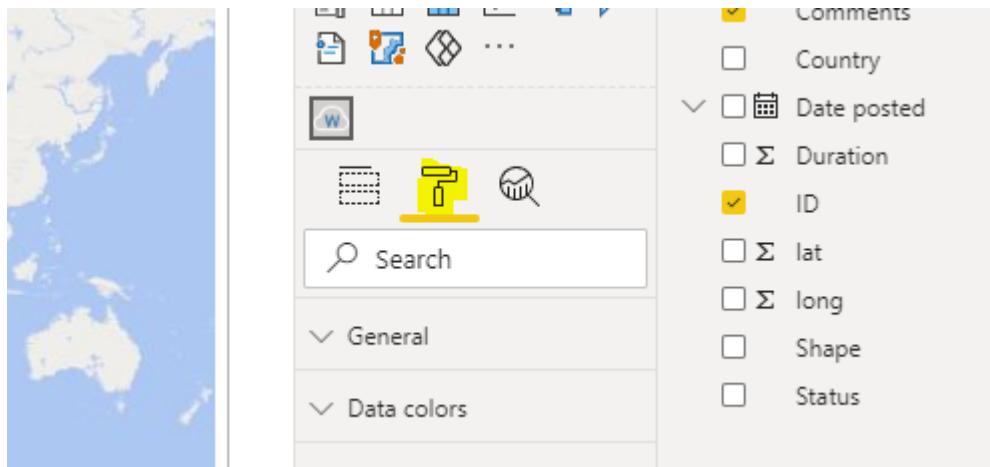
The screenshot shows the Power BI visualization editor. On the left, there's a world map with a tooltip for 'Microsoft Corporation Terms'. The main area shows the 'Comments' category settings. A context menu is open over the 'Count' option in the 'Drill through' section, with 'Count' highlighted in yellow. The menu options include 'Remove field', 'Rename for this visual', 'Move to', 'First', 'Last', 'Count (Distinct)', and 'Count'.

The word cloud will look something like the image below :

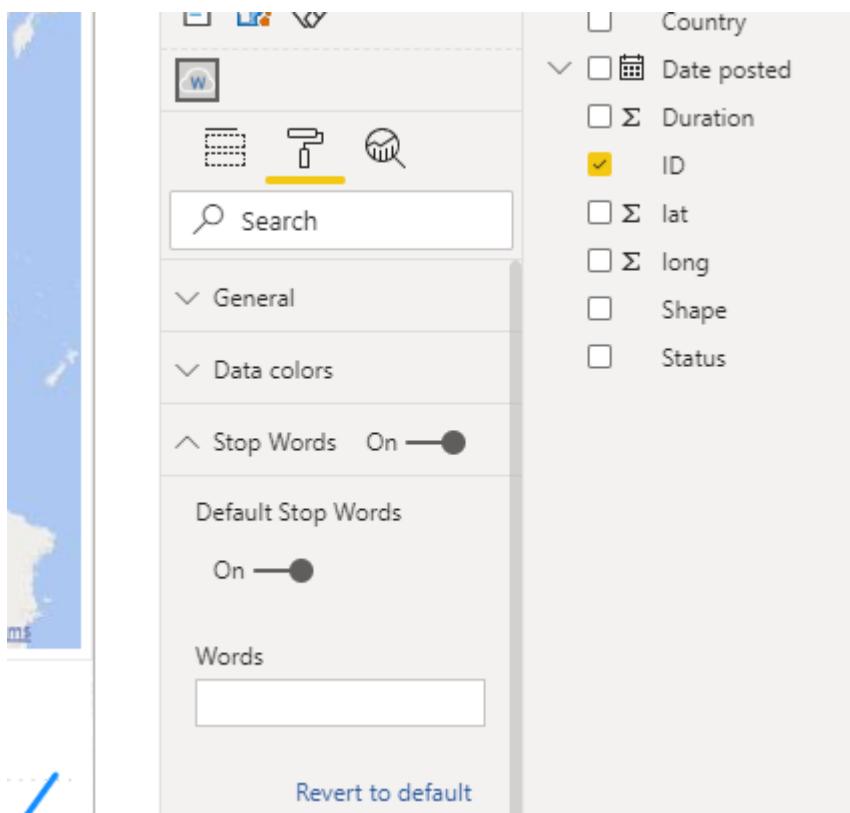


This is great, but irrelevant words are being included in the report that provide very little to no significant value to us. These are called "Stop Words" (Such as : And, a, but, is, that) We want to exclude these words from the visual.

Make sure the **Word Cloud** visual is still selected. In the **Visualization** panel, select the **Format** option to view all formatting properties.



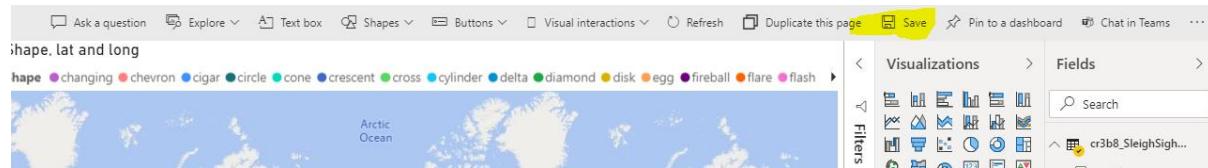
Scroll down until you find the **Stop Words** property. Expand that and turn on the **Default Stop Words** option.



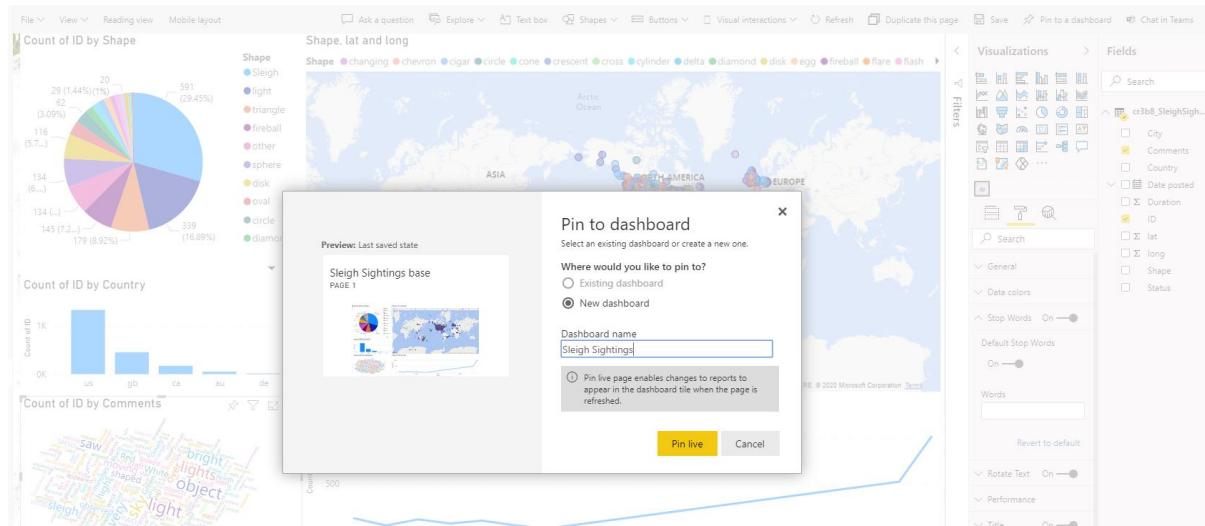
This will change the way the word cloud visualisation displays information.



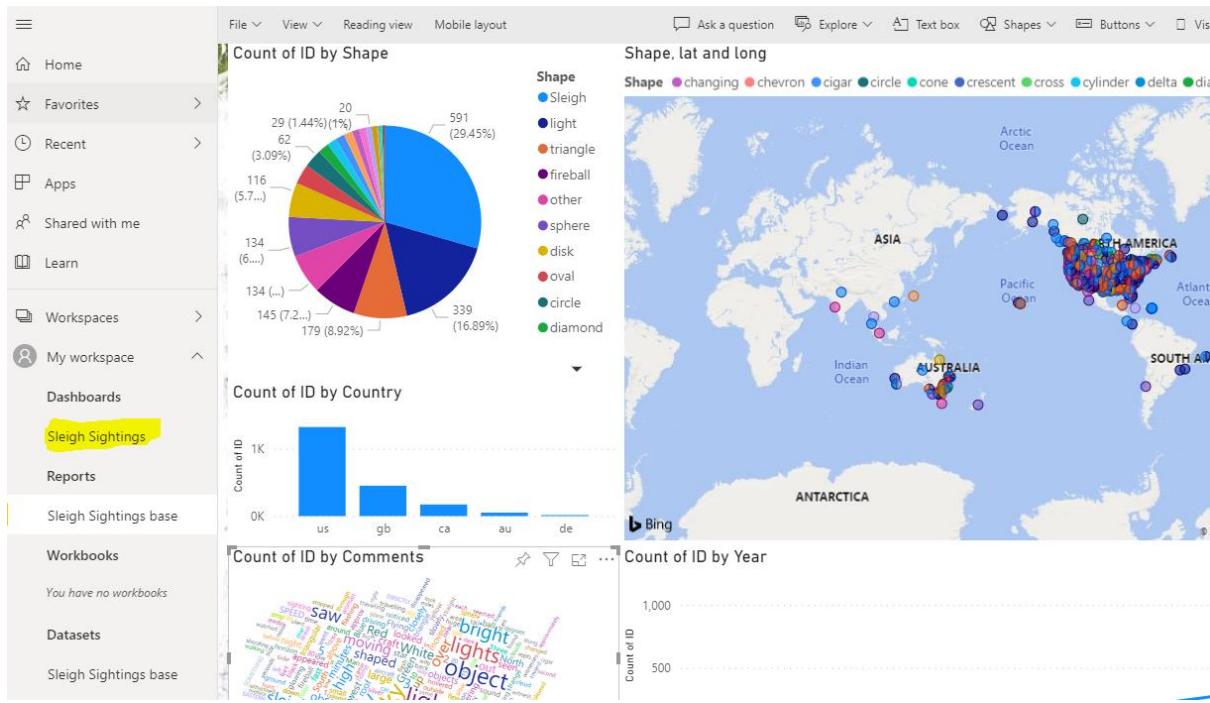
Congratulations, you have created your Santa Sleigh Sightings Power BI report. Please save this report before you test it out by selecting the **Save** option from the tool bar.



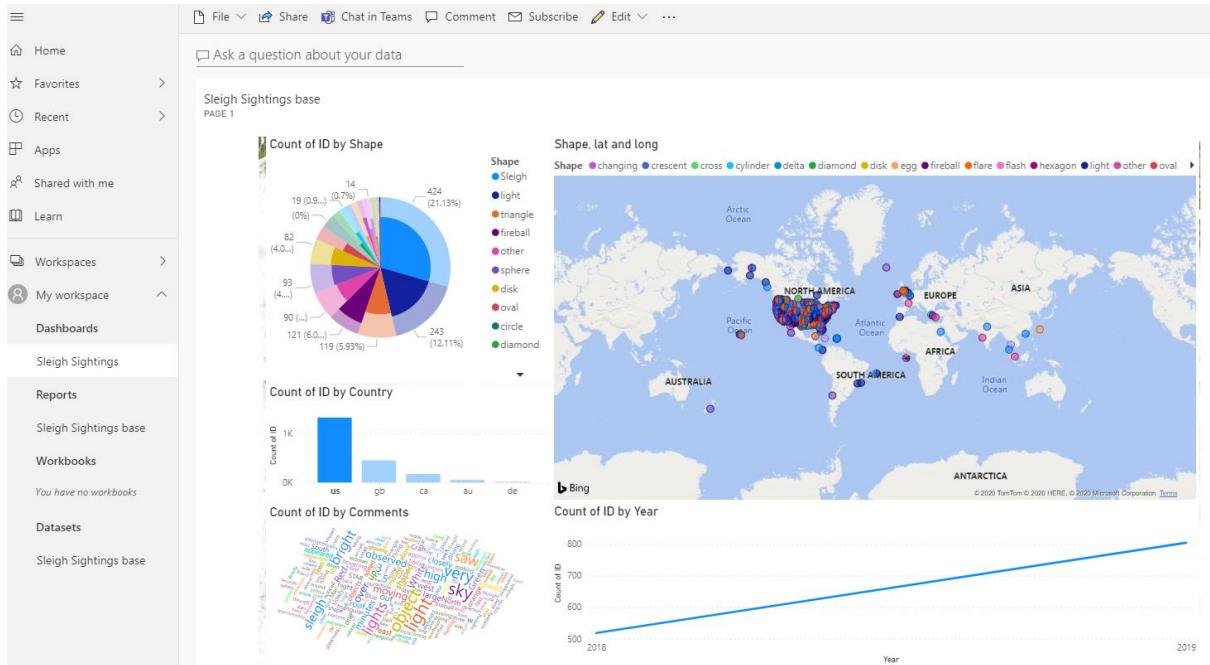
Once your report has been saved, Select the **Pin to Dashboard** option from the toolbar. Enter in the dashboard heading **Sleigh Sightings**, and then select **Pin Live**.



You will see that the new **Sleigh Sightings** dashboard has been added to the **Dashboards** within **My Workspace**.



To test your new dashboard simply select **Sleigh Sightings**.



You will then be able to select various elements on the dashboard to drill into the data to understand it further. As we can see, when drilling into the **US** in the Bar chart visual, the data in the dashboard significantly changes.

Final Learnings

The Microsoft Power Platform provides immediate value to businesses in an incredibly short amount of time by allowing users the ability to create solutions to solve problems and fill gaps in organisations typical SaaS type applications cannot normally solve. It's Flexibility and ease of use

provide makers with a performant, scalable and affordable platform that has the capacity to be adopted in all areas of the business.

