

Airline Data Management

Navigator

Display Options

- Flight_Information.xlsx [1]
- flight_information

Suggested Tables [1]

- Table 1 (flight_information)

Table 1 (flight_information)

FlightID	FlightNumber	Airline	Destination	Status
1001	FL1102	Airline D	Houston	On Time
1002	FL1435	Airline B	Chicago	On Time
1003	FL1860	Airline A	New York	Cancelled
1004	FL1270	Airline C	Chicago	Delayed
1005	FL1106	Airline C	New York	Delayed
1006	FL1071	Airline A	Phoenix	On Time
1007	FL1700	Airline C	Los Angeles	Cancelled
1008	FL1020	Airline C	Los Angeles	Delayed
1009	FL1614	Airline A	Los Angeles	Cancelled
1010	FL1121	Airline D	Chicago	Cancelled
1011	FL1466	Airline A	Phoenix	On Time
1012	FL1214	Airline D	New York	Delayed
1013	FL1330	Airline C	Houston	On Time
1014	FL1458	Airline C	New York	Delayed
1015	FL1087	Airline C	Houston	Delayed
1016	FL1372	Airline B	New York	Delayed
1017	FL1099	Airline D	Phoenix	Delayed
1018	FL1871	Airline B	Houston	Delayed
1019	FL1663	Airline B	Chicago	Cancelled
1020	FL1130	Airline A	New York	On Time
1021	FL1661	Airline B	New York	Cancelled
1022	FL1308	Airline A	Houston	Delayed
1023	FL1769	Airline A	Chicago	On Time
1024	FL1343	Airline B	Chicago	Delayed

Load Transform Data Cancel

Task 1: Extracting and transforming data in Power Query

Untitled - Power Query Editor

Home

Transform

Add Column

View

Tools

Help

Recent Queries

Enter Data

Data source settings

Manage Parameters

Refresh Preview

Properties Advanced Editor

Choose Columns

Remove Columns

Keep Rows

Remove Rows

Sort

Split Column

Group By

Use First Row as Headers

Replace Values

Data Type: Whole Number

Transform

Merge Queries

Append Queries

Combine Files

Text Analytics

Vision

Azure Machine Learning

Queries [3]

flight_information

passenger_information

ticket_information

Table.RemoveRowsWithErrors(#"Removed Blank Rows", {"Destination", "FlightID", "FlightNumber", "Airline",

	FlightID	FlightNumber	Airline	Destination	Status
1	1001	FL1102	Airline D	Houston	On Time
2	1002	FL1435	Airline B	Chicago	On Time
3	1003	FL1860	Airline A	New York	Cancelled
4	1004	FL1270	Airline C	Chicago	Delayed
5	1005	FL1106	Airline C	New York	Delayed
6	1006	FL1071	Airline A	Phoenix	On Time
7	1007	FL1700	Airline C	Los Angeles	Cancelled
8	1008	FL1020	Airline C	Los Angeles	Delayed
9	1009	FL1614	Airline A	Los Angeles	Cancelled
10	1010	FL1121	Airline D	Chicago	Cancelled
11	1011	FL1466	Airline A	Phoenix	On Time
12	1012	FL1214	Airline D	New York	Delayed
13	1013	FL1330	Airline C	Houston	On Time
14	1014	FL1458	Airline C	New York	Delayed
15	1015	FL1087	Airline C	Houston	Delayed
16	1016	FL1372	Airline B	New York	Delayed
17	1017	FL1099	Airline D	Phoenix	Delayed
18	1018	FL1871	Airline B	Houston	Delayed
19	1019	FL1663	Airline B	Chicago	Cancelled
20	1020	FL1130	Airline A	New York	On Time
21	1021	FL1661	Airline B	New York	Cancelled
22	1022	FL1308	Airline A	Houston	Delayed

Query Settings

PROPERTIES

Name

flight_information

APPLIED STEPS

Source

Navigation

FilterNullAndWhitespace

Removed Other Columns

Promoted Headers

Changed Type

Removed Duplicates

Removed Blank Rows

Removed Errors

3 COLUMNS, 200 ROWS

Column profiling based on top 1000 rows

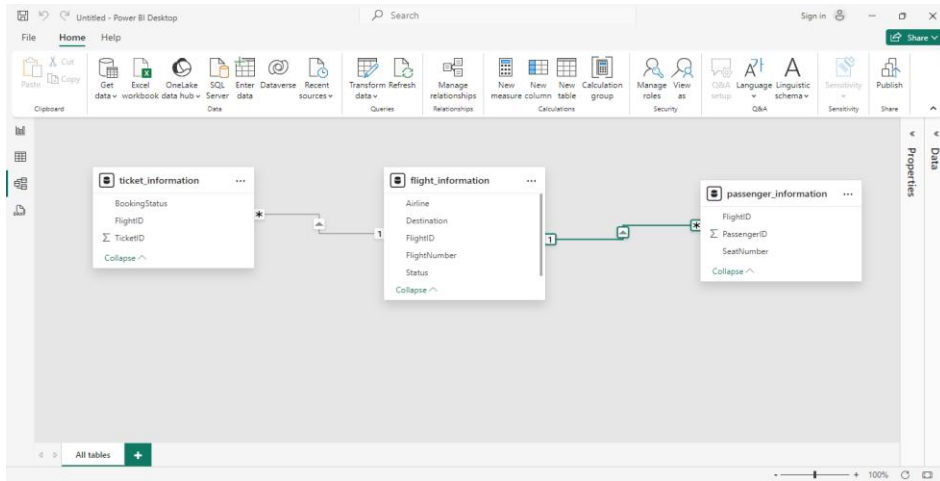
PREVIEW DOWNLOADED AT 2:57 PM

2.Cleaned data: removed duplicates, missing values

Task 2: Data Modelling

1.(2) Created Relationship between datasets(key is flight ID)





Task 3. Enhanced Data Insights

Untitled - Power Query Editor

Home Transform Add Column View Tools Help

Column From Examples Custom Invoke Custom Function Conditional Column Index Column Duplicate Column Merge Columns Format Parse Extract Statistics Standard Scientific Rounding Information Date Time Duration Text Analytics Vision Azure Machine Learning

Queries [3]

flight_information

passenger_information

ticket_information

fx = Table.AddColumn(#"Changed Type1", "flight number", each [FlightNumber], type text)

	Airline	Destination	Status	Classify Flights	flight number
1	Airline D	Houston	On Time	Best	FL1102
2	Airline B	Chicago	On Time	Best	FL1435
3	Airline A	New York	Cancelled	To Be Improved	FL1860
4	Airline C	Chicago	Delayed	To Be Improved	FL1270
5	Airline C	New York	Delayed	To Be Improved	FL1106
6	Airline A	Phoenix	On Time	Best	FL1071
7	Airline C	Los Angeles	Cancelled	To Be Improved	FL1700
8	Airline C	Los Angeles	Delayed	To Be Improved	FL1020
9	Airline A	Los Angeles	Cancelled	To Be Improved	FL1614
10	Airline D	Chicago	Cancelled	To Be Improved	FL1121
11	Airline A	Phoenix	On Time	Best	FL1466
12	Airline D	New York	Delayed	To Be Improved	FL1214
13	Airline C	Houston	On Time	Best	FL1330
14	Airline C	New York	Delayed	To Be Improved	FL1458
15	Airline C	Houston	Delayed	To Be Improved	FL1087
16	Airline B	New York	Delayed	To Be Improved	FL1372
17	Airline D	Phoenix	Delayed	To Be Improved	FL1099
18	Airline B	Houston	Delayed	To Be Improved	FL1871
19	Airline B	Chicago	Cancelled	To Be Improved	FL1663
20	Airline A	New York	On Time	Best	FL1130
21	Airline B	New York	Cancelled	To Be Improved	FL1661
22					

7 COLUMNS, 200 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 2:57 PM

Query Settings

PROPERTIES

Name

flight_information

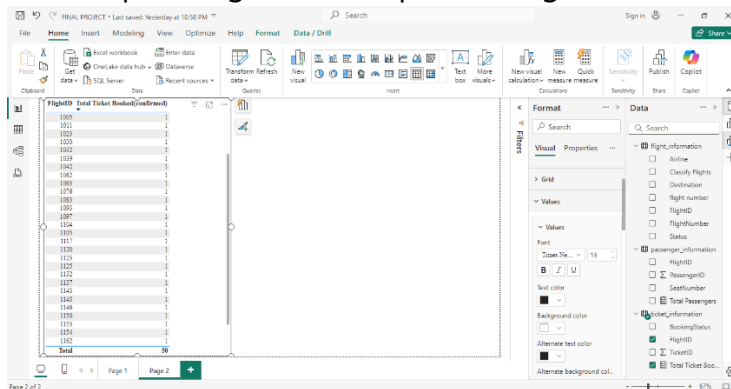
All Properties

APPLIED STEPS

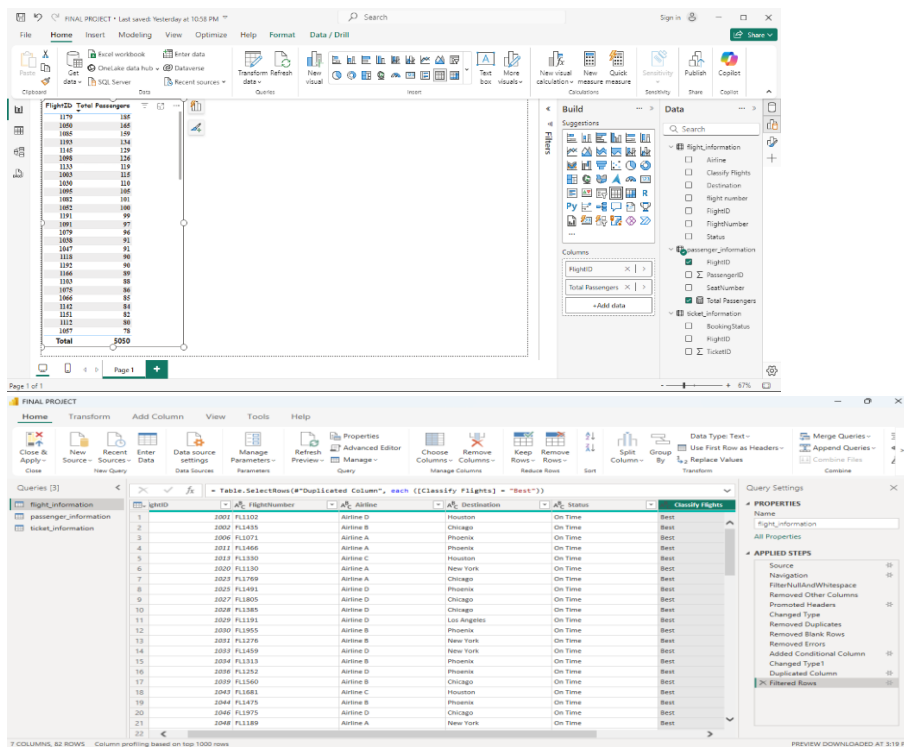
- Source
- Navigation
- FilterNullAndWhitespace
- Removed Other Columns
- Promoted Headers
- Changed Type
- Removed Duplicates
- Removed Blank Rows
- Removed Errors
- Added Conditional Column
- Changed Type1
- Duplicated Column

Task 4: Calculations Using DAX

1. Total passengers for a specific flight



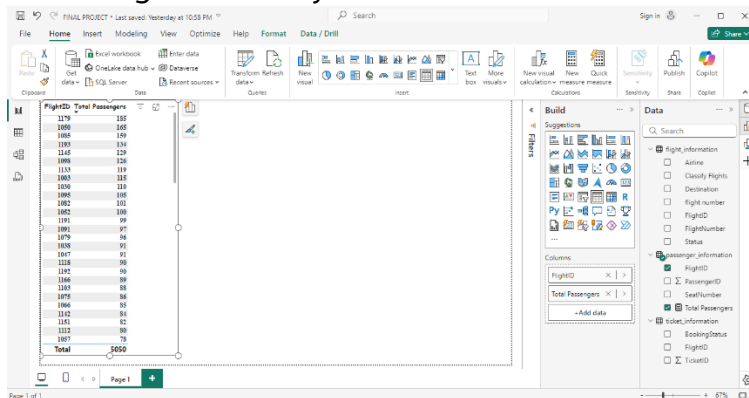
2. Total tickets booked



3. Filtered table showing "Best" flights only

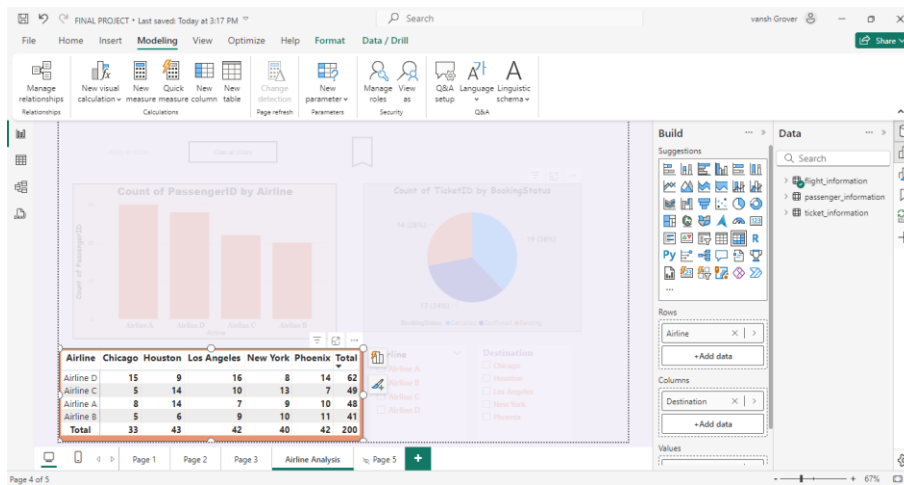
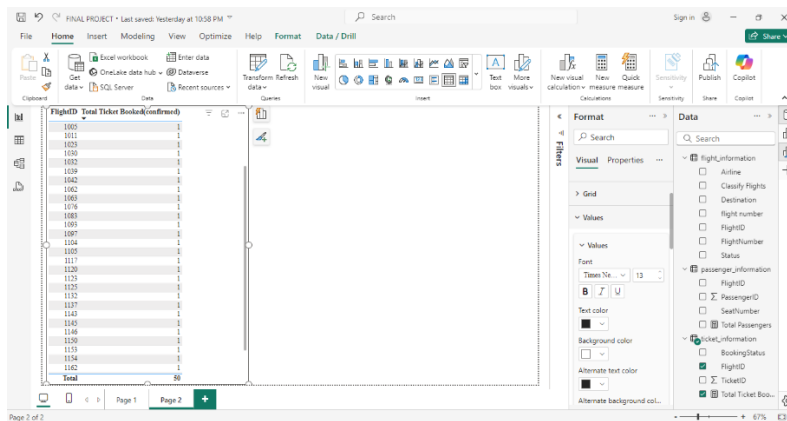
Task 5: Visualization

1. Passenger count by airline



2. Ticket booking status

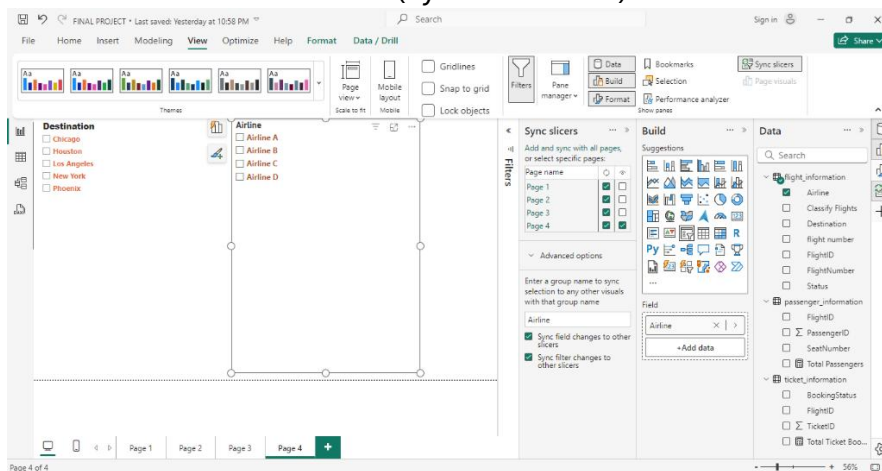




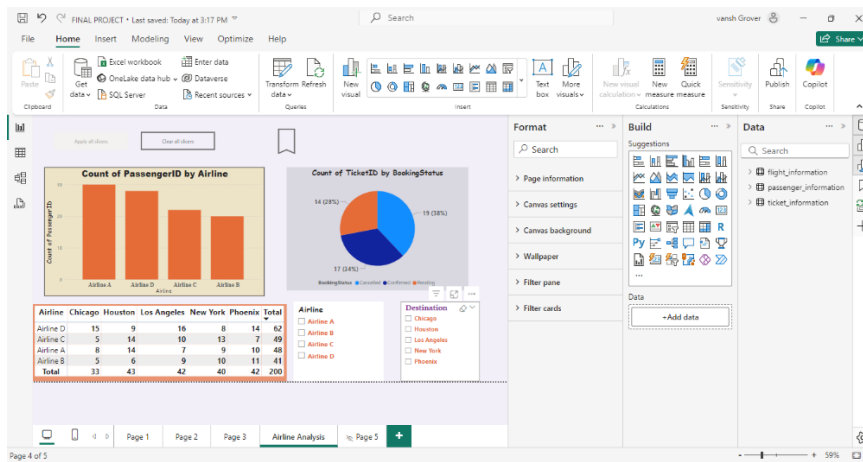
3. Flights by airline and destination

Task 5(Added interactive features)

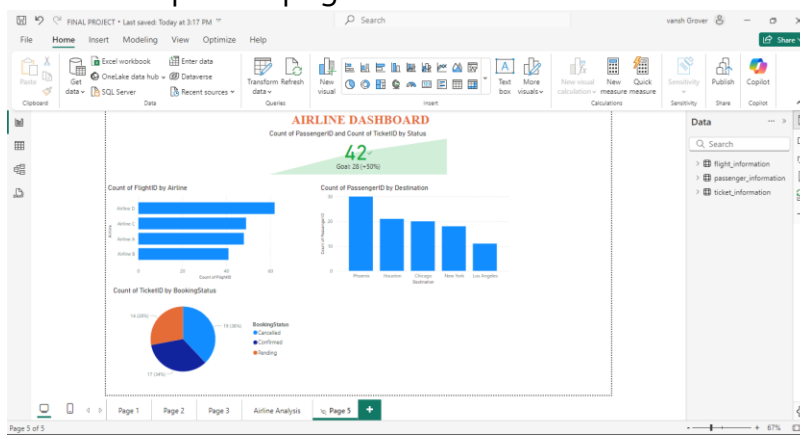
1.Destination and Airline.(synced slicers)



2. Quick views features added

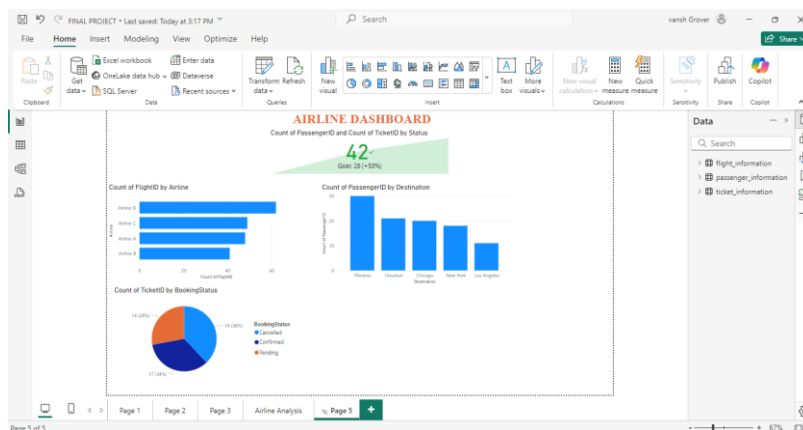


3. Airline-specific pages



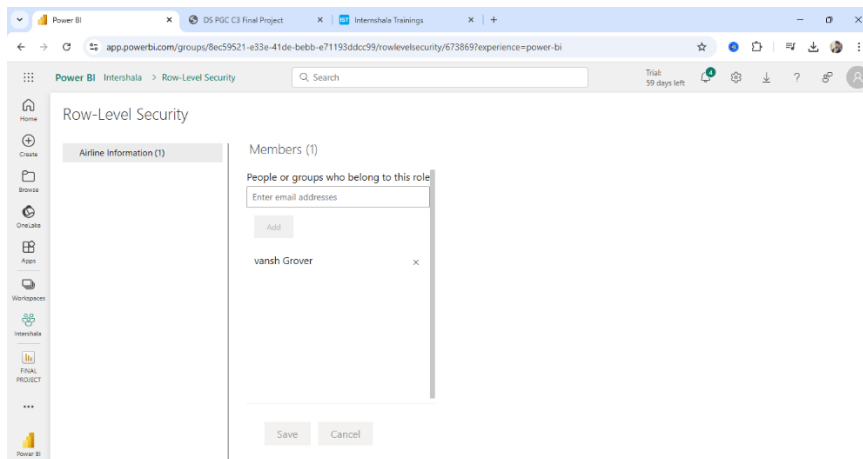
6. Final Dashboard and Power BI Service

1.



2. Configure Row-Level Security (RLS) for Airline A data and assign it to a user





3. Set up a schedule refresh at 5 PM daily

