



Week 6 - Data visualization (Intro)

The objective of the sixth week is to create the data visualization for the project.

As the data mart layer is completed, the project is ready to jump into the visualization part through Power BI. The proper presentation of the data is essential as the main objective is to create actions from the stakeholders through insights gained from the dashboards. Last part of the project is to create visualizations as a foundation for these insights.

Learning materials

- [Power BI Tutorial](#)
- [Power BI Beginner Tutorial](#)
- [Power BI Map](#)

Prerequisites

- Completed data mart layer
- Installed Power BI Desktop through this [link](#) (not from Microsoft Store)

List of actions in Power BI

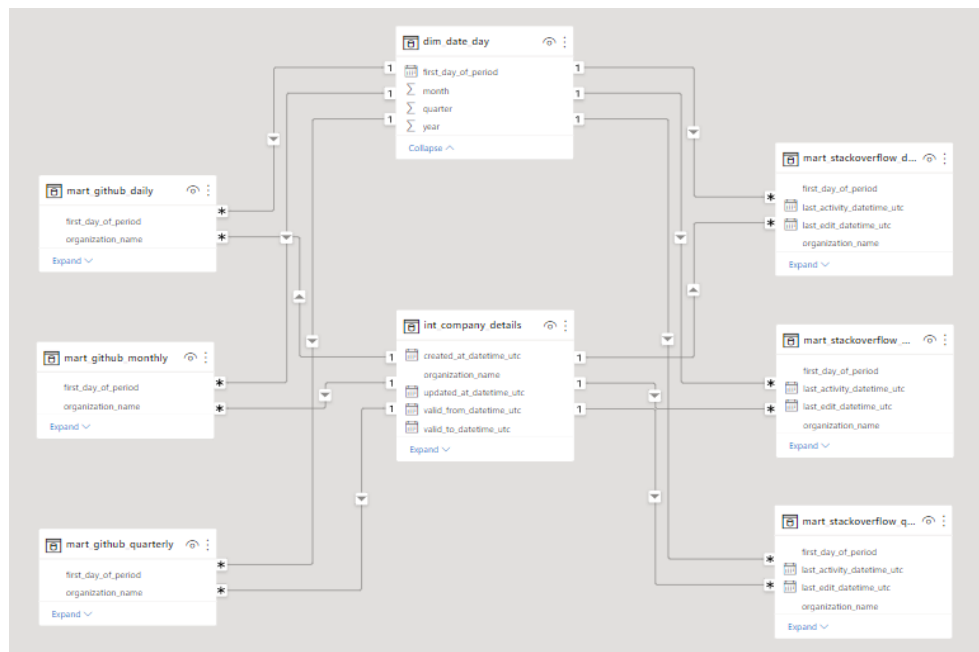
- Add the Big Query data sources. Get data button from the panel.
- Select your project and add all the mart tables and the intermediate Company Details only.
- Edit and sort the Company Details table in the Power Query Editor. The Company details should only contain the actual version of the sheet.

	id	organization_name	repository_account	repository_name	ll_type	ll_type	ll_type	tags
1	7c2d35325898a788996450802b...	javascript			data	data	data	all javascript
2	789f61c86c08886d6449d2920c39...	mlflow		mlflow	data	data	data	all mlflow
3	f18119d4d8d8d8d8d8d8d8d8d8d8...	clickhouse		clickhouse	data	data	data	all clickhouse
4	86b9d9d7c1505050518d6d51796d...	hightouch		hightouch	modern_data_stack	modern_data_stack	modern_data_stack	all hightouch
5	251d18d4d4796c2c6d813d0f8b92...	snowflake		snowflake	data_platform	data_platform	data_platform	all snowflake
6	bac220d75b44ab20548a52c7f7310...	dremla		dremla	modern_data_stack	modern_data_stack	modern_data_stack	all dremla
7	2909155d7d6d15578d8d6c474d2...	chronosphere		chronosphere	data	data	data	all chronosphere
8	5abf9e405d3e3d4d70d9395d4e4a...	superset		superset	modern_data_stack	modern_data_stack	modern_data_stack	all superset
9	7a5c5d8d1379c2d42d8d8d8d8d8d...	metabase		metabase	data	data	data	all metabase
10	8c238f78d78d78d78d78d78d78d7...	airbyte		airbyte	modern_data_stack	modern_data_stack	modern_data_stack	all airbyte
11	8f5c5d8d1379c2d42d8d8d8d8d8d...	airflow		airflow	modern_data_stack	modern_data_stack	modern_data_stack	all airflow
12	ee319d1d8d78d78d78d78d78d78d...	dbt artifacts package		dbt artifacts	modern_data_stack	modern_data_stack	modern_data_stack	all dbt artifacts package
13	b13d6d78d78d78d78d78d78d78d7...	calogica		calogica	modern_data_stack	modern_data_stack	modern_data_stack	all calogica
14	4f8a2d13d99d8d78d78d78d78d78d...	dbt codigen package		dbt codigen	modern_data_stack	modern_data_stack	modern_data_stack	all dbt codigen package
15	198d2d13d99d8d78d78d78d78d78d...	dbt		dbt	modern_data_stack	modern_data_stack	modern_data_stack	all dbt
16	14d9d8d78d78d78d78d78d78d78d...	dbt utils package		dbt utils	modern_data_stack	modern_data_stack	modern_data_stack	all dbt utils package
17	8c179f1488d4d776d3c3d3d3d3d3d...	dbt audit helper package		dbt audit helper	modern_data_stack	modern_data_stack	modern_data_stack	all dbt audit helper package

- Create a **dim_date_day** table from scratch. One of the daily data mart tables can be duplicated, sorted, and renamed for this purpose. The final table should be the following with unique values.

	first_day_of_period	month	quarter	year
1	2022.01.01.0:00:00	1	1	2022
2	2022.01.02.0:00:00	1	1	2022
3	2022.01.03.0:00:00	1	1	2022
4	2022.01.04.0:00:00	1	1	2022
5	2022.01.05.0:00:00	1	1	2022
6	2022.01.06.0:00:00	1	1	2022
7	2022.01.07.0:00:00	1	1	2022
8	2022.01.08.0:00:00	1	1	2022
9	2022.01.09.0:00:00	1	1	2022
10	2022.01.10.0:00:00	1	1	2022

- Create the relational model. This is a possible output, but all the six data mart tables should be mapped to the company details table through organization and the `dim_date_day` table through the `first_day_of_period` column.



First dashboards

Now everything is set to start the creation of the visualizations. At this stage, the task is to start to explore Power BI. An MVP is added here, it is just a few filters and charts to start the visualization. It is up to your imagination, but try to use various charts, filters, diagrams and create some custom KPIs using DAX.

