

DBT TASK 2

Creat requirements.txt

```
requirements.txt
You, 20 hours ago | 1 author (You)
1 dbt-adapters==1.4.0
2 dbt-common==1.7.0
3 dbt-core==1.8.4
4 dbt-extractor==0.5.1
5 dbt-postgres==1.8.2
6 dbt-semantic-interfaces==0.5.1
7

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

Collecting pip
Using cached pip-24.2-py3-none-any.whl.metadata (3.6 kB)
Using cached pip-24.2-py3-none-any.whl (1.8 MB)
Installing collected packages: pip
Attempting uninstall: pip
Found existing installation: pip 24.0
Uninstalling pip-24.0:
Successfully uninstalled pip-24.0
Successfully installed pip-24.2
PS D:\Alterra\AnggiSDC\Alterra\Demo-DBT>
```

Dan gambar di bawah adalah di gunakan untuk setup project dan configuration DBT

```
models:
32 my_project:
33   # Config indicated by + and -
34   _stg:
35     +materialized: view
36     +schema: _stg
37     +database: store
38   _int:
39     +materialized: table
40     +schema: _int
41     +database: store
42   _fct:
43     +materialized: table
44     +schema: _fct
45     +database: store
46   _mart:
47     +materialized: table
48     +schema: _mart
49     +database: store
50

my_project > ! dbt_project.yml
You, 3 days ago | 1 author (You)
1 name: 'my_project'
2 version: '1.0.0'
3 profile: 'my_project'
4
5
6 model-paths: ["models"]
7 analysis-paths: ["analyses"]
8 test-paths: ["tests"]
9 seed-paths: ["seeds"]
10 macro-paths: ["macros"]
11 snapshot-paths: ["snapshots"]
12
13 clean-targets:
14   - "target"
15   - "dbt_packages"
16 models:
17   my_project:
18     _stg:
19       +materialized: view
20
```

Setup DBT profile

Profile.yml

```
dbt-profiles > ! profiles.yml
You, 21 hours ago | 1 author (Yo
1  my_project:
2    outputs:
3
4      dev:
5        type: postgres
6        threads: 1
7        host: localhost
8        port: 5432
9        user: postgres
10       pass: pass
11       dbname: store
12       schema: public
13
14     target: dev
15
```

Gambar di atas adalah konfigurasi penting dalam proyek yang mengatur bagaimana DBT terhubung ke database.

Dalam kasus di atas database di beri nama store dengan skema public dengan port 5432. Setelah itu dapat dilakukan dengan perintah seperti pada gambar di bawah ini :

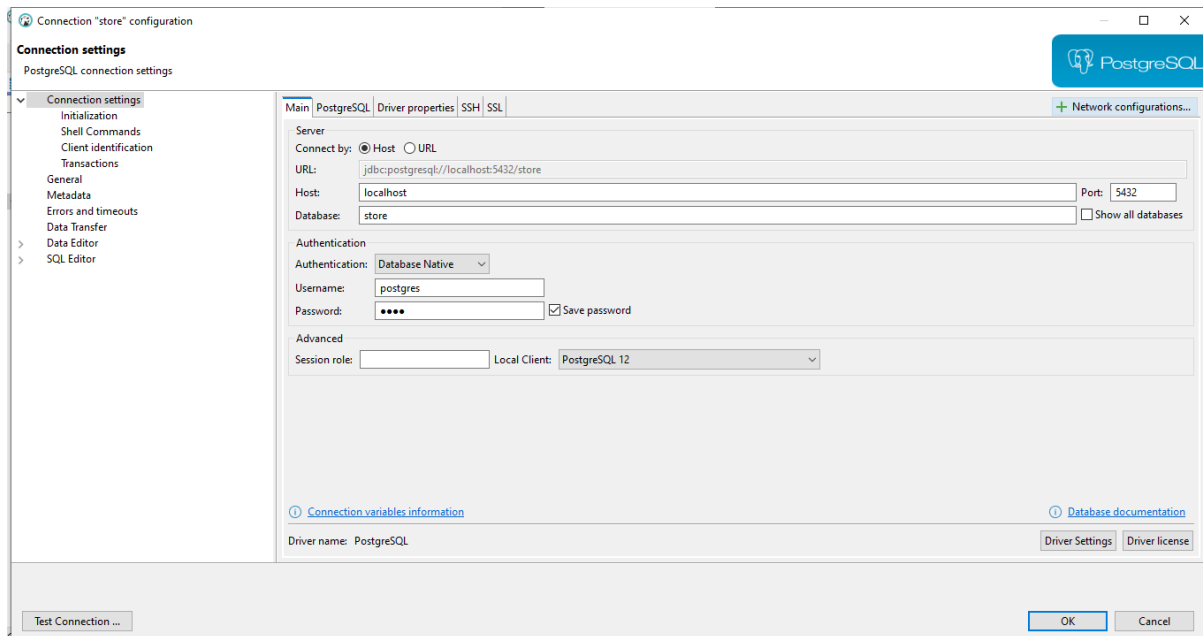
```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  GITLENS
PS D:\Alterra\AnggiSDC\Alterra\Demo-DBT> $env:dbt_profiles_DIR = "$(pwd)/dbt-profiles"
PS D:\Alterra\AnggiSDC\Alterra\Demo-DBT> echo $env:dbt_profiles_DIR
D:\Alterra\AnggiSDC\Alterra\Demo-DBT\dbt-profiles
PS D:\Alterra\AnggiSDC\Alterra\Demo-DBT> 
```

Setelah itu kita coba untuk melakukan creat postgre docker compose

Kita bias lakukan dengan cara perintah : docker compose up -d

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  GITLENS
● PS D:\Alterra\AnggiSDC\Alterra\Demo-DBT> echo $env:dbt_profiles_DIR
D:\Alterra\AnggiSDC\Alterra\Demo-DBT\dbt-profiles
● PS D:\Alterra\AnggiSDC\Alterra\Demo-DBT> docker compose up -d
time="2024-08-09T19:59:04+07:00" level=warning msg="D:\Alterra\AnggiSDC\Alterra\Demo-DBT\docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 3/3
  ✓ Container demo-dbt_master   Started      1.9s
  ✓ Container demo-dbt_manager  Started      2.8s
  ✓ Container demo-dbt-worker-1 Started      3.5s
● PS D:\Alterra\AnggiSDC\Alterra\Demo-DBT> 
```

Setelah itu kita lakukan connection dengan PostgreSQL lakukan setting seperti gambar di bawah ini:



Pastikan konfigurasi nya sama seperti yang sudah di tentukan sebelumnya di profiles.yml dan docker compose.yml.

Konfigurasi ini mendefinisikan tiga layanan dalam kluster citus seperti master, worker, manager.

Master : layanan utama sebagai koordinasi dan eksekusi query untuk seluruh kluster

Worker : node tambahan untuk melakukan eksekusi query di subset data yang di bagi oleh master

Manager: mengelola keanggotaan dalam kluster citus dan berinteraksi dengan docker untuk konfigurasi.

Defining source

Lakukan script di bawah ini di file raw_schema.yml

version: 2

sources:

- name: store
- database: store
- schema: public

tables:

- name: brands

columns:

- name: brand_id
- description: "Unique identifier for each brand"

tests:

- unique
- not_null
- name: name
 - description: "Name of the brand"
 - tests:
 - not_null
- name: products
 - columns:
 - name: product_id
 - description: "Unique identifier for each product"
 - tests:
 - unique
 - not_null
 - name: brand_id
 - description: "Foreign key referencing brands"
 - tests:
 - relationships:
 - to: source('store', 'brands')
 - field: brand_id
- name: name
 - description: "Name of the product"
 - tests:
 - not_null
- name: price
 - description: "Price of the product"
 - tests:
 - not_null
- name: orders
 - columns:

- name: order_id

- description: "Unique identifier for each order"

- tests:

- unique

- not_null

- name: order_date

- description: "Date and time the order was placed"

- tests:

- not_null

- name: order_details

- columns:

- name: order_detail_id

- description: "Unique identifier for each order detail"

- tests:

- unique

- not_null

- name: order_id

- description: "Foreign key referencing orders"

- tests:

- relationships:

- to: source('store', 'orders')

- field: order_id

- name: product_id

- description: "Foreign key referencing products"

- tests:

- relationships:

- to: source('store', 'products')

- field: product_id

- name: quantity

- description: "Quantity of the product ordered"

tests:

- not_null

- name: price

description: "Price of the product in the order"

tests:

- not_null

CREAT POSTGRE DOCKER COMPOSE

Lakukan script dibawah ini di dalam file docker-compose.yml

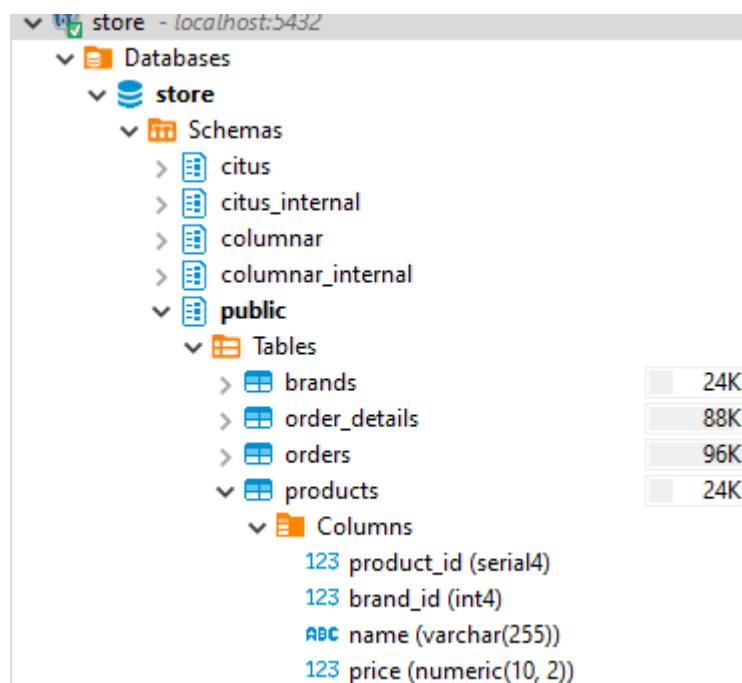
```
🔥 docker-compose.yml
You, 21 hours ago | 1 author (You)
1  version: '3'
2
3  services:
4
5      master:
6          container_name: "${COMPOSE_PROJECT_NAME:-citus}_master"
7          image: "citusdata/citus:12.0.0"
8          ports:
9              - "${COORDINATOR_EXTERNAL_PORT:-5432}:5432"
10         labels:
11             - "com.citusdata.role=Master"
12         environment: &AUTH
13             - POSTGRES_PASSWORD=pass
14             - POSTGRES_USER=postgres
15             - POSTGRES_DB=store
16             - PGUSER=postgres
17             - POSTGRES_HOST_AUTH_METHOD=trust
18         networks:
19             - postgres-network
20         volumes:
21             - ./citus-db-data:/var/lib/postgresql/data/
22             - ./init.sql:/docker-entrypoint-initdb.d/init.sql
23
24         worker:
25             image: "citusdata/citus:12.0.0"
26             labels:
27                 - "com.citusdata.role=Worker"
28             depends_on:
29                 - manager
30             environment: *AUTH
31             command: "/wait-for-manager.sh"
```

```
volumes:
  - ./citus-healthcheck:/healthcheck

manager:
  container_name: "${COMPOSE_PROJECT_NAME:-citus}_manager"
  image: "citusdata/membership-manager:0.3.0"
  volumes:
    - "${DOCKER_SOCKET:-/var/run/docker.sock}:/var/run/docker.sock"
    - ./citus-healthcheck:/healthcheck
  depends_on:
    - master
  environment: *AUTH

networks:
  postgres-network:
    driver: bridge
```

LALU KITA LIAT DI DBEAVER



order_details Enter a SQL expression to filter results (use Ctrl+Space)

	order_detail_id	123 order_id	123 product_id	123 quantity	123 price
1	1	1	2	7	9,099.93
2	2	2	4	8	3,999.92
3	3	3	3	9	6,299.91
4	4	4	3	10	6,999.9
5	5	5	2	2	2,599.98
6	6	6	3	6	4,199.94
7	7	7	1	7	5,599.93
8	8	8	2	10	12,999.9
9	9	9	1	5	3,999.95
10	10	10	3	3	2,099.97
11	11	11	3	8	5,599.92
12	12	12	1	8	6,399.92
13	13	13	1	7	5,599.93
14	14	14	1	7	5,599.93
15	15	15	2	7	9,099.93
16	16	16	1	9	7,199.91
17	17	17	2	1	1,299.99
18	18	18	2	3	3,899.97
19	19	19	4	10	4,999.9
20	20	20	3	8	5,599.92
21	21	21	1	10	7,999.9
22	22	22	4	7	3,499.93
23	23	23	3	2	1,399.98
24	24	24	2	1	1,299.99

Kesimpulan dari gambar di atas belum rapih, masih terdapat no telfon yang menggunakan + dan tidak. Maka dari itu harus di buat menjadi lebih rapih lagi agar lebih mudah untuk di proses.