Uses Cases

- An organization has deployed 100M weather sensors.
- The goal is to gather the data transmitted from all devices in one database to do predictions, and trend analysis.

Main Data

- Number of devices (100000000)
- Analysts (10)
- Period (10 years)

Assumptions

- Data per hour is as good as per minute for trends
- Still need to keep the data per minute for deeper analysis

Operations

Actor:	sensor device
Description:	send weather data to the server
Operation Type:	write
Data in Operation:	device ID, time stamp, device metrics
Frequency:	send metric data every minute
Rate:	100000000 / 1 min
Op Type	Write

Actor:	Data Scientist
Description:	run analytic/trend query on temperature
Operation Type:	read
Data in Operation:	temperature metrics
Frequency:	run ~10 analytic queries per hour
Rate:	10 (Data Scientist) * 10 (queries) 100 / 1h
Op Type	Write

Entities

- Users
    - Profile
- Devices
    - Categories
- Data Devices
    - airTemperature
    - Pressure
    - Wind (direction, speed)

Observations

- There is more write operators that read operations