Moby Bikes - Data Pipeline

Analytical Dashboard and Rental Demand Prediction

Moby Bikes

API

Moby API

Met Éireann

Calendarific

Amazon Aurora

MySQL

Dashboard Streamlit

AWS EventBridge

Daily 6am

AWS Lambda

AWS EventBridge

Daily 8am

AWS Lambda

JSON

CSV

S3 Bucket

Summary

Every morning a Lambda function is invoked to pull data from APIs and dump it into a S3 Bucket.

Later in the morning, a new Lambda function is invoked to parse files from S3, process and load them into an Aurora (MySQL) database.

A Streamlit web app is deployed to present an analytical dashboard with KPIs and Rentals Demand predictions from Weather Forecast.