Group Project Analysis

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Neural Forge

Purpose behind the database:

Quantify the productivity of each manufacturing plant and track data to ensure we meet quotas can explain why productivity may be down due to outages. We can further use this data to show company executives and shareholders, giving the company better transparency and understanding of the manufacturing process.

Client Requirements:

Relational Database

Data pipeline from input → Api → database → visualization

Clean, structured visualizations to show company executives and shareholders.

Neural Forge Scenario

This database is for a chip manufacturing company with many regional manufacturing plants. We will keep track of the productivity of each site. For each site, we will keep track of each assembly line (by number) and their quota (chips made per hour). For each assembly line, we are keeping track of the chip it is making, how many machines are needed for the line, and the quota (per hour). For this, we need to keep track of information for chips. Including the name, number of cores, production time, and market price. The dynamic parts of our database will be production records, which track the number of chips per hour per site, and the downtime events, which keep track of when assembly lines go down and for what reason.