

## **Twitter Relational Database Api Analysis and Report**

By: Julen Marmol Martin

### **Hardware Configuration**

CPU Model: 11<sup>th</sup> Gen Intel® Core™ i7-1165G7

CPU Speed: 2.80 GHz

Number of CPU Cores: 4

Number of CPU Threads: 8

RAM: 16,0 GB (15,7 GB usable)

Disk: NVMe INTEL SSDPEKNW512GB

Operating System: Windows 11 Pro

### **Software Configuration**

Database: Sqlite

Database Version: jdbc 3.34.0

Programming Language: Java 19

Libraries Used: util, BufferedReader, FileReader, IOException, Files, Paths, sql.

### **API Performance**

API Function	API Function Calls/Sec
postTweet	109421,162
getHomeTimeline	1,3089

- Factors Influencing API performance:
  - High RAM usage by other applications: At the time I ran the program, There were multiple other programs opened; around 50 tabs in google chrome, 2 word documents, and DataGrip. It is likely that these programs could've impacted the performance of the program by using about 50% (8 GB) of the available ram.
  - Battery Mode: I ran the program with my laptop using battery power. I've previously noticed that when I run resource-intensive programs on battery mode, the performance of the laptop is significantly worse than when plugged in.
  - Stand By: The laptop went into standby mode for a significant amount of time while it was creating the home timelines. This could've significantly impacted the performance of the home timelines creation or even fully stopped it.