

FINAL PROJECT • APPL 2026

HYPEGRAPH

Jaksel Viral Analytics & Forecasting System

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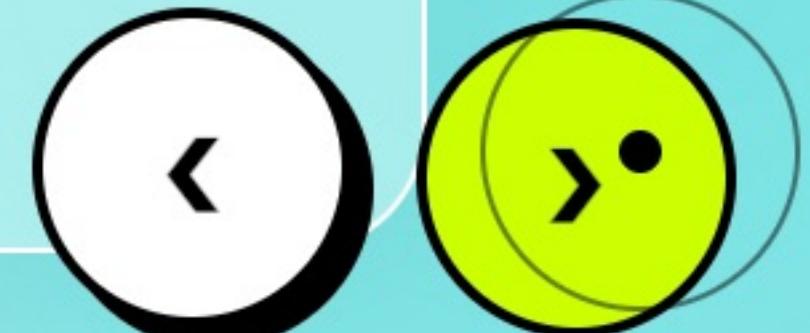
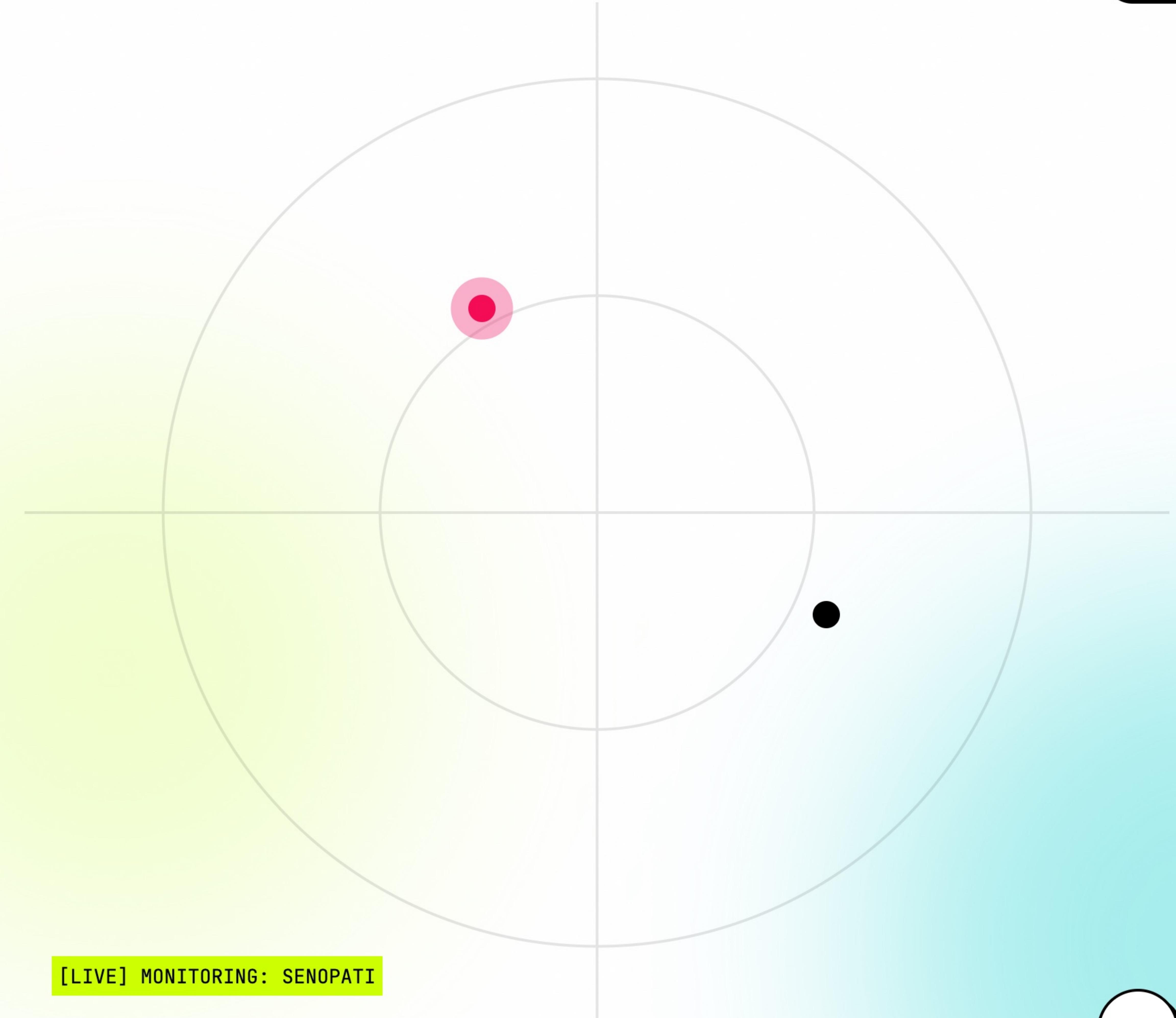
01 // THE PROBLEM

FOMO VS CHAOS

Gen Z terjebak paradoks: Ingin datang ke tempat paling **Hype**, tapi membenci **Crowd**.

"Google Maps hanya deteksi macet di jalan, bukan antrian di dalam cafe."

[LIVE] MONITORING: SENOPATI



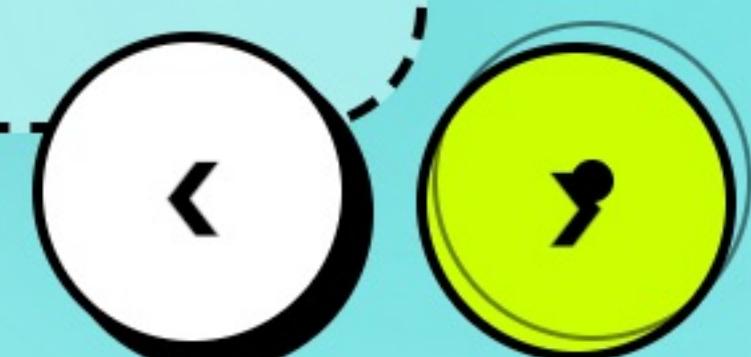
03 // REQUIREMENTS

SRS SUMMARY

- Crawling Data Medsoc (Tags/Loc)
- Visualisasi Heatmap Interaktif
- Push Notification "Rising Star"

NON-FUNCTIONAL

- ⚡ Response Time: < 200ms
- 👥 Concurrency: 10k Users
- 🔒 Security: AES-256

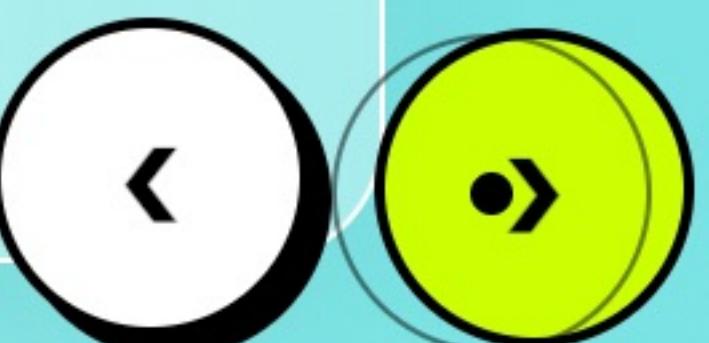
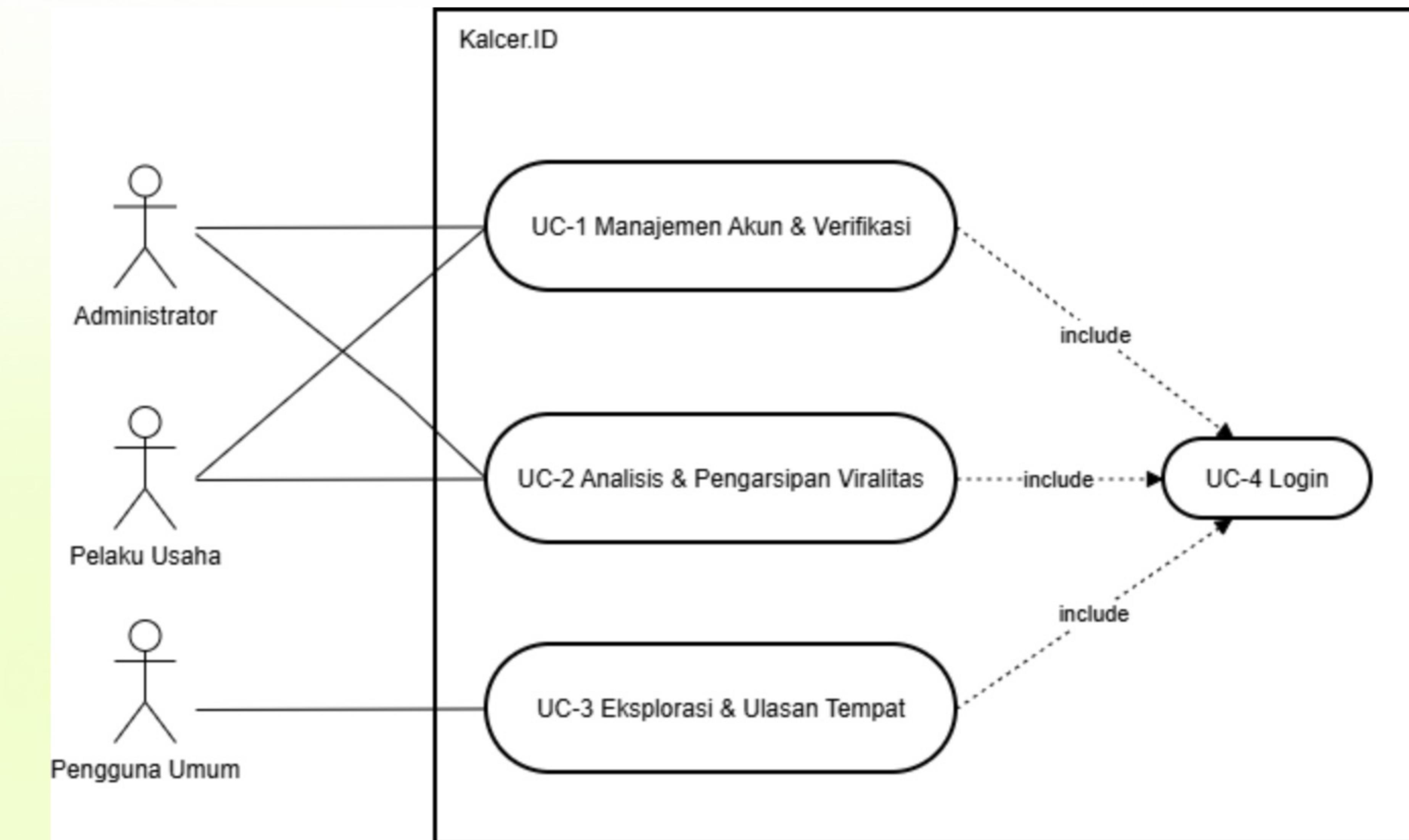


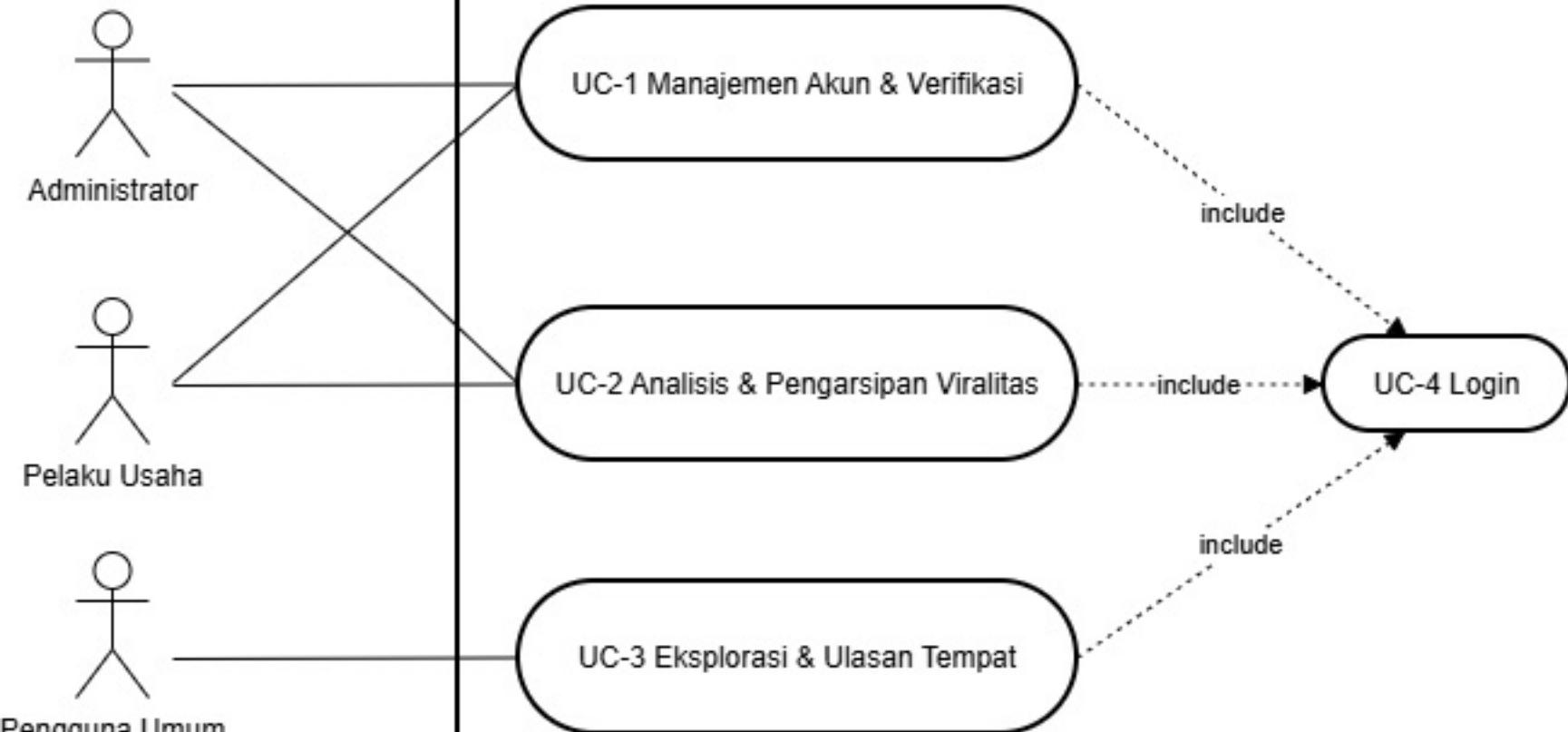
04 // INTERACTIONS

USE CASE DIAGRAM

Pemetaan aktor dan fungsionalitas sistem.

- + User: View & Search
- + Admin: Manage Data
- + AI Engine: Auto-Generate Trends



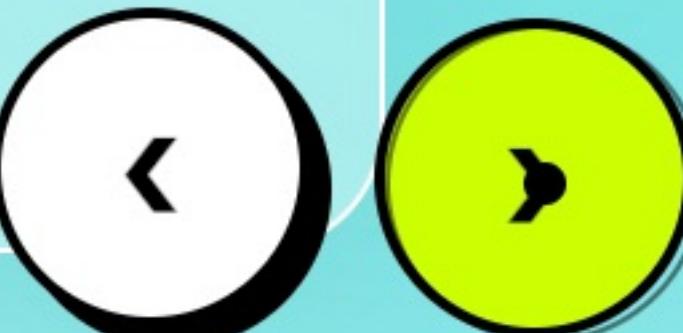
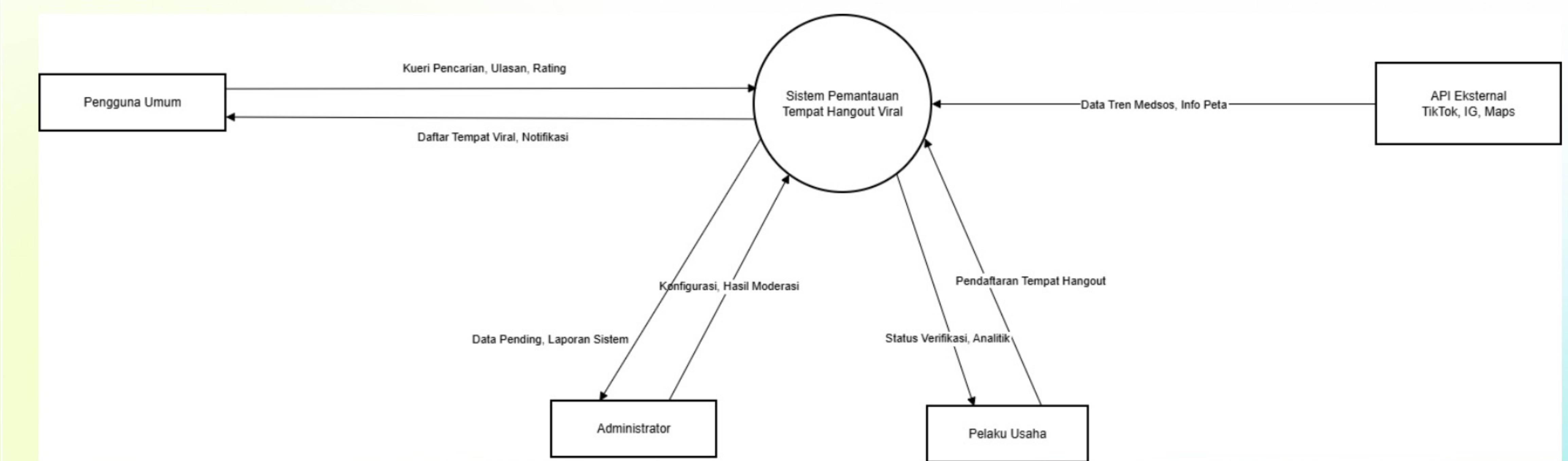


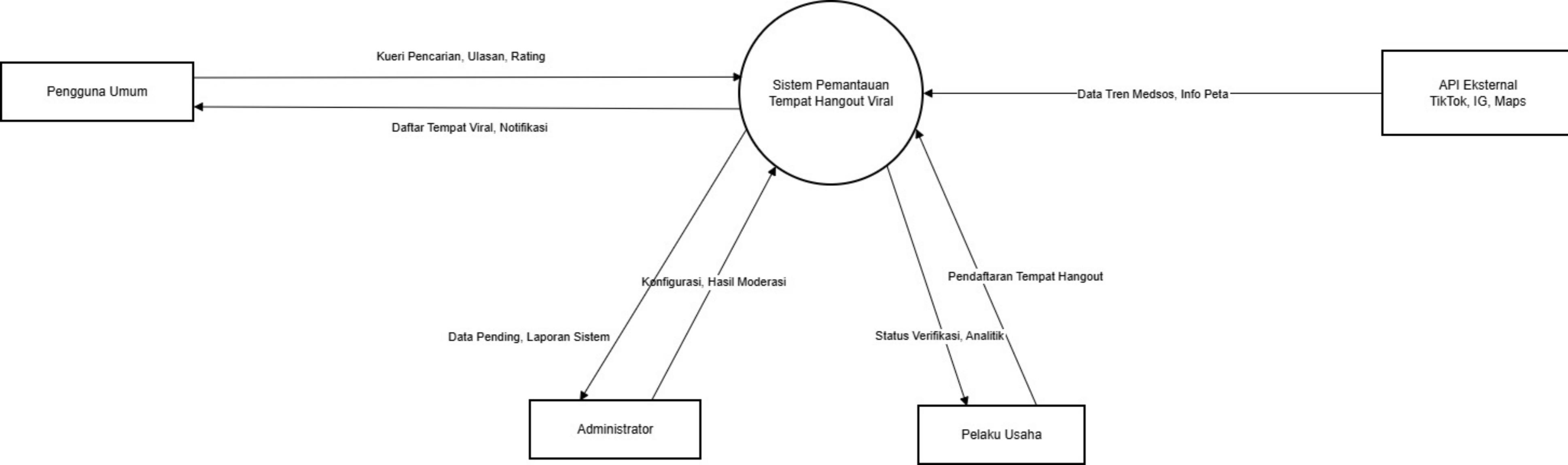
05 // DATA FLOW

DFD ARCHITECTURE

**Context Diagram:**

Interaksi sistem global dengan API Eksternal & Pengguna.



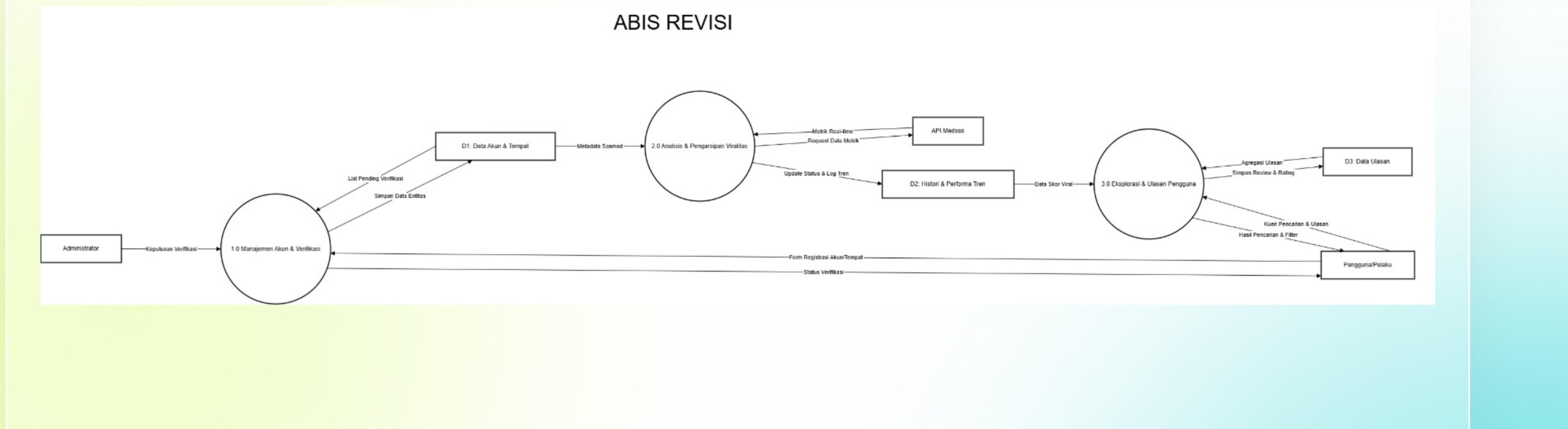


05 // DATA FLOW

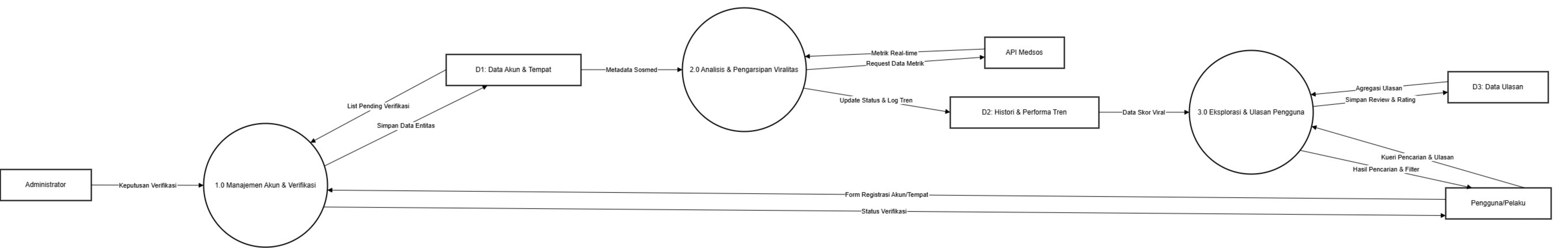
DFD ARCHITECTURE

**Level 1 Breakdown:**

1.0 Akun -> 2.0 Analisis -> 3.0 Eksplorasi.



ABIS REVISI

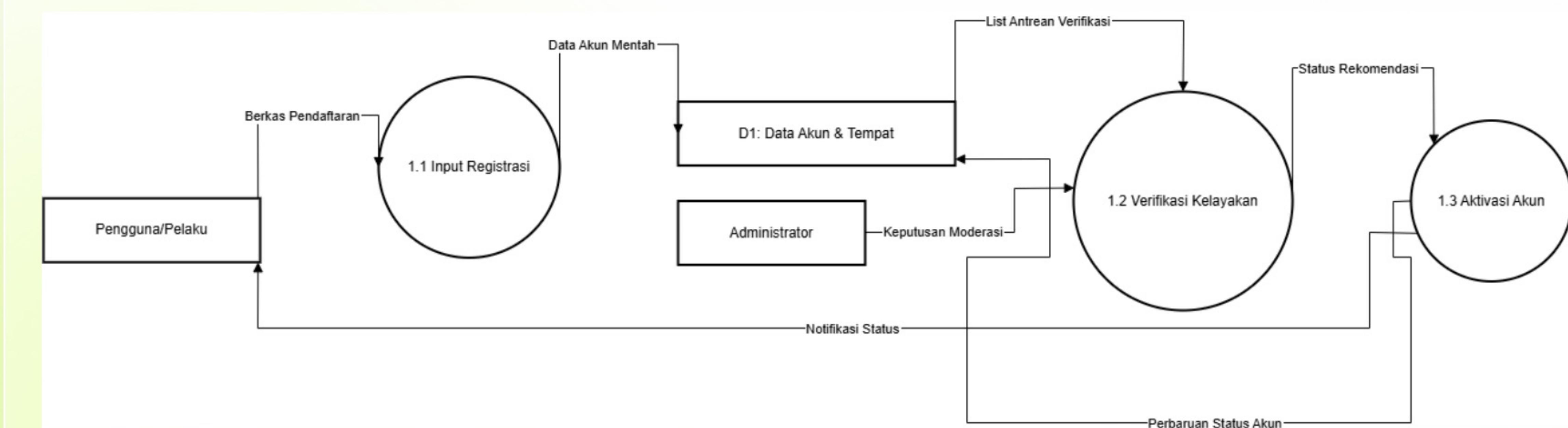


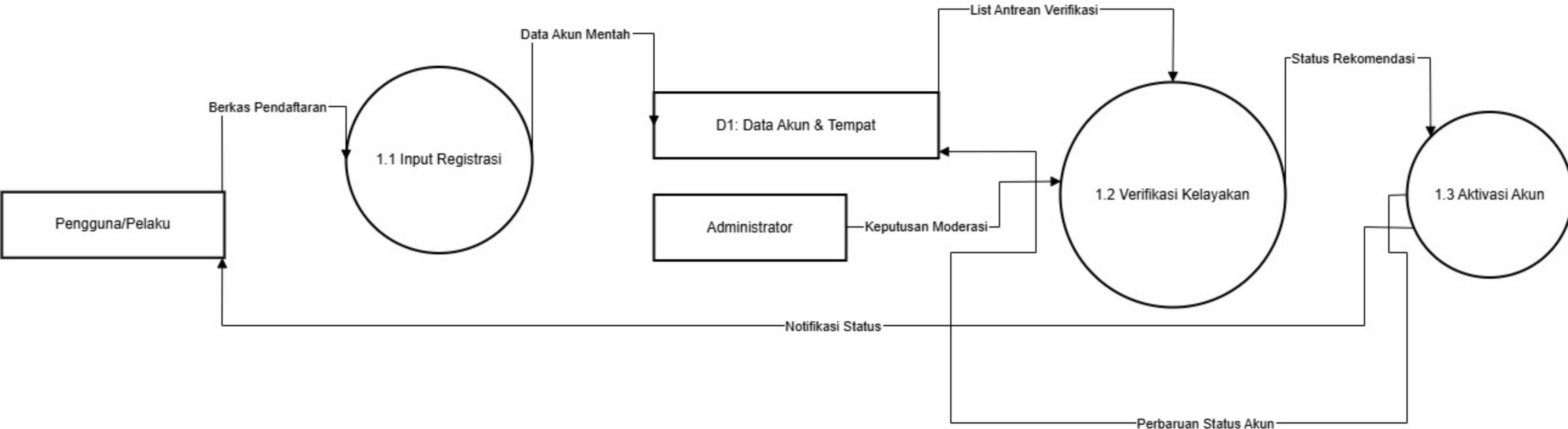
05 // DATA FLOW

DFD ARCHITECTURE

**Level 2.1(Akun):**

Proses pendaftaran, validasi admin, dan manajemen sesi.





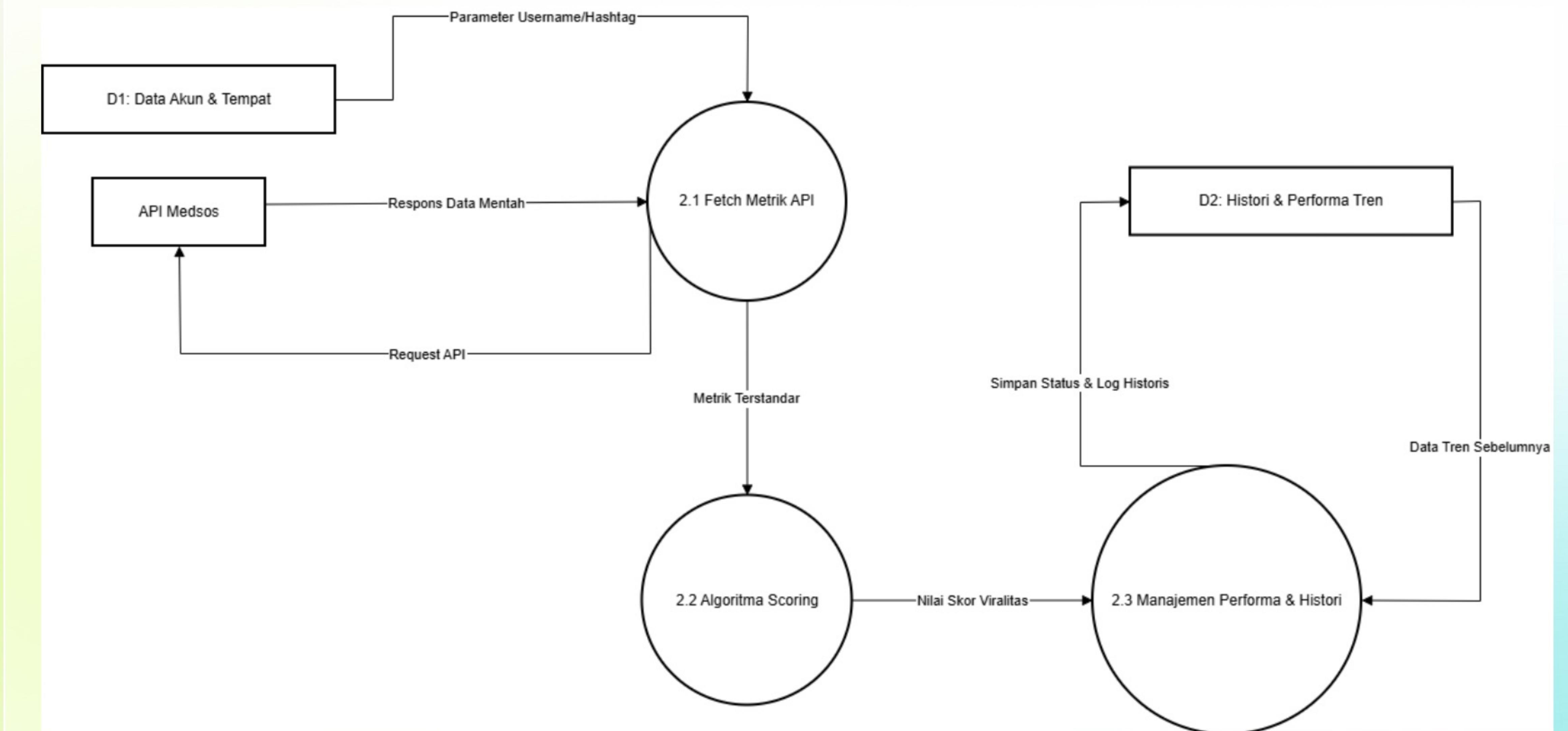
05 // DATA FLOW

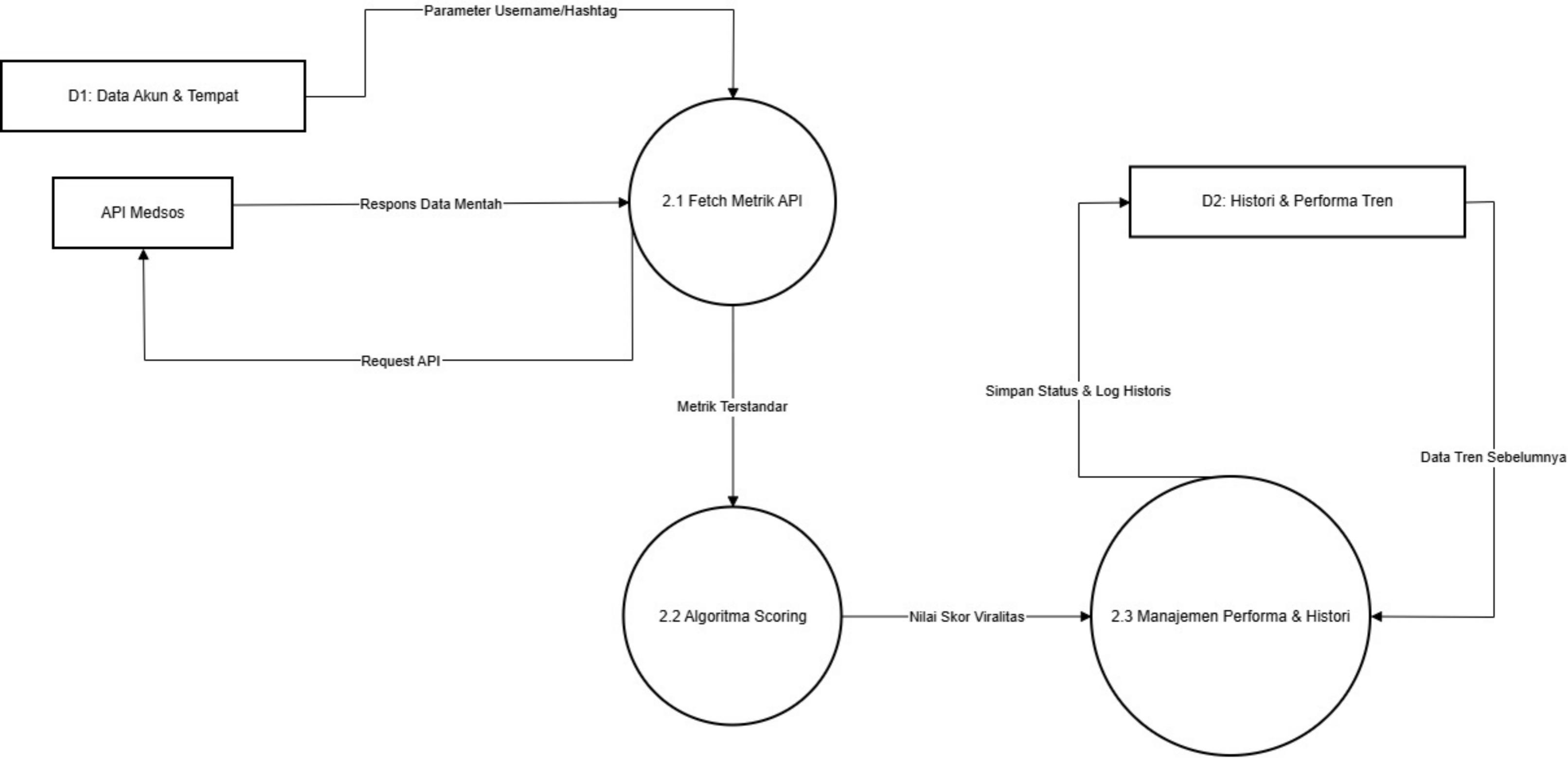
DFD ARCHITECTURE



Level 2.2 (Viralitas):

Algoritma scoring, fetch API medsos, dan pengarsipan tren.



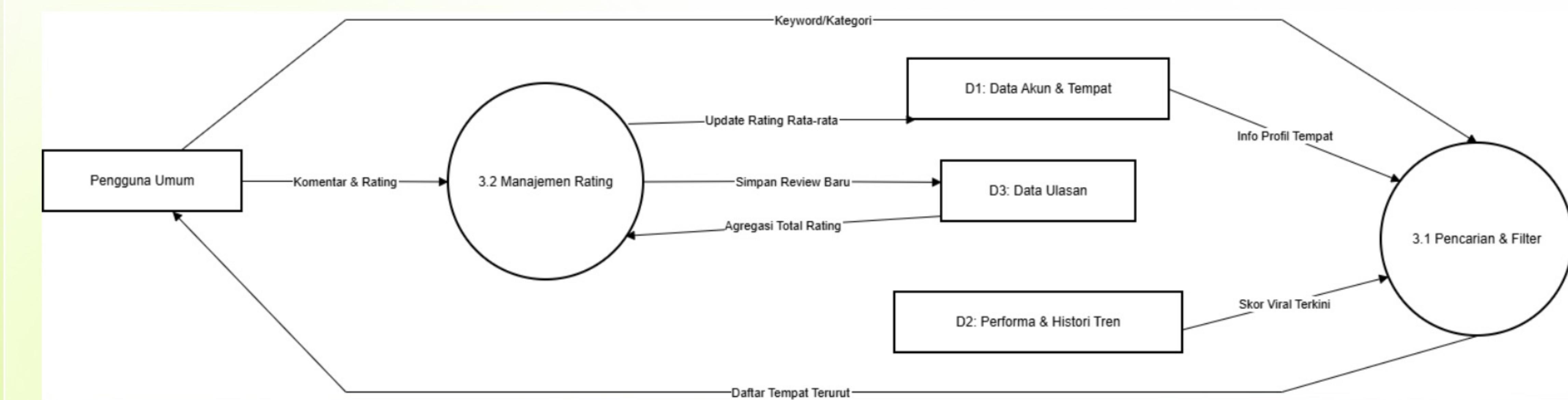


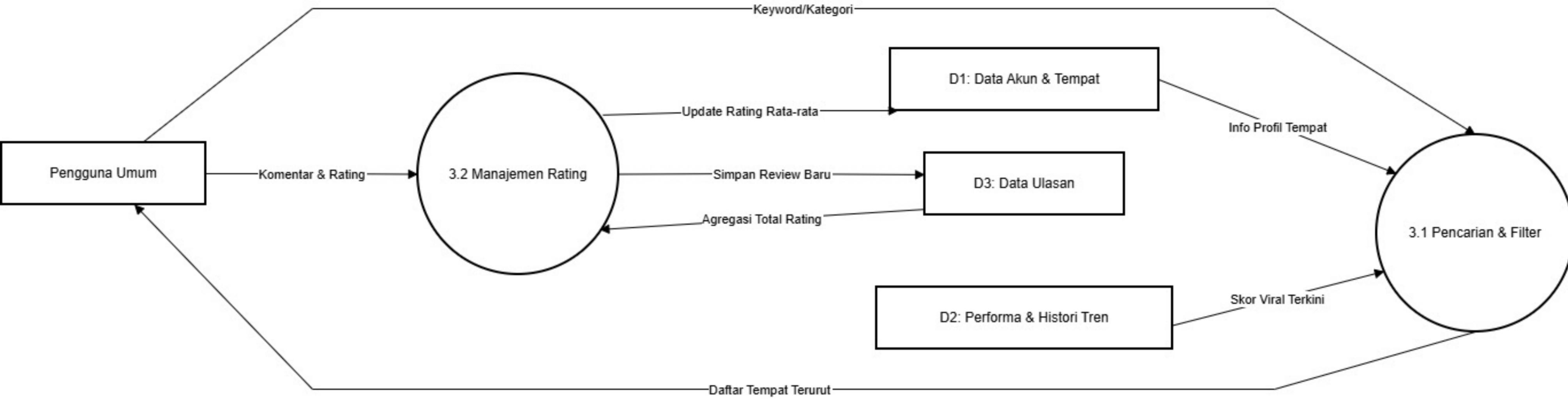
05 // DATA FLOW

DFD ARCHITECTURE

**Level 2.3 (Eksplorasi):**

Pencarian tempat, filter kategori, dan manajemen ulasan user.





06 // LOGIC FLOW

ACTIVITY DIAGRAM

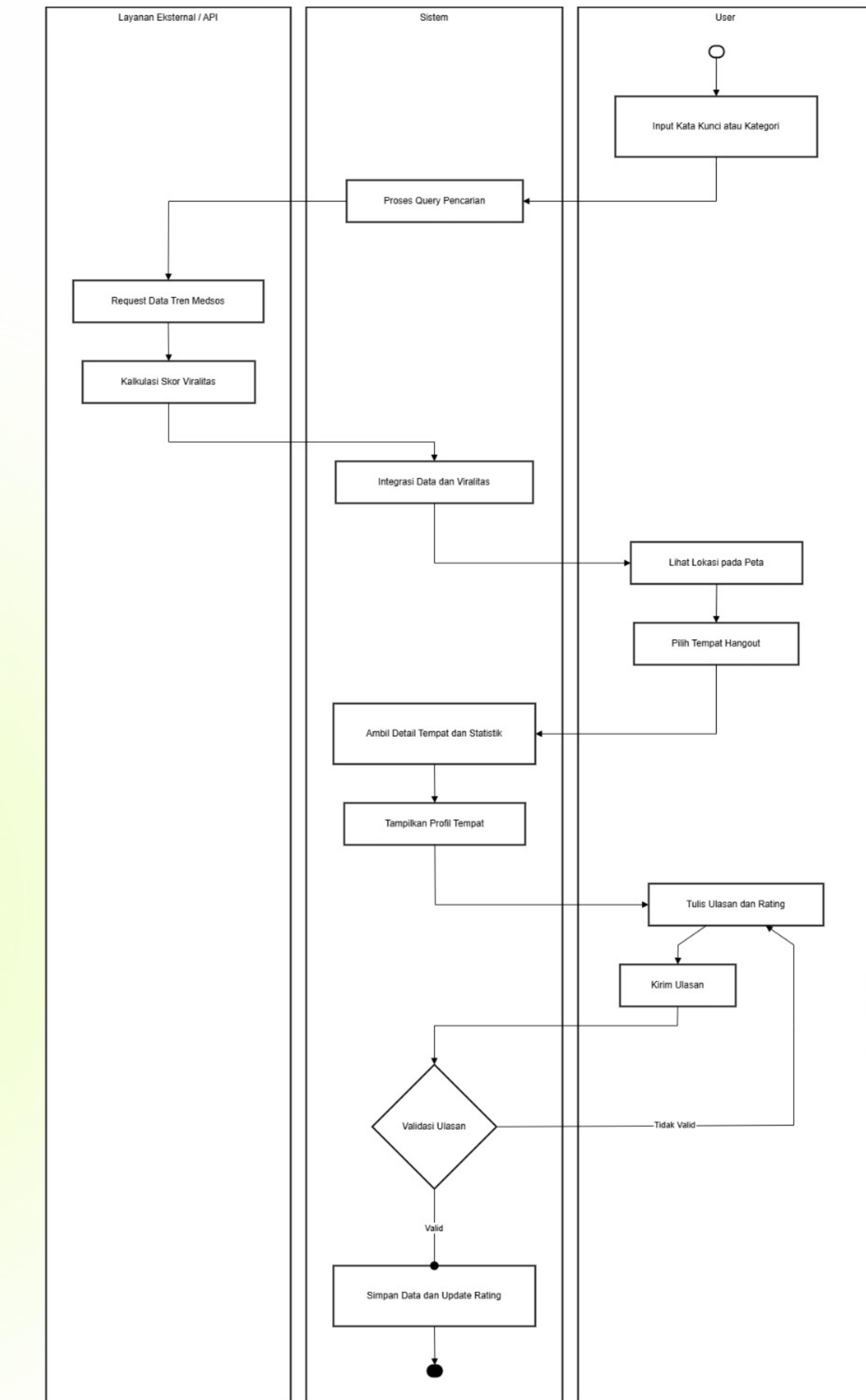
Alur logika pencarian dan kalkulasi viralitas.

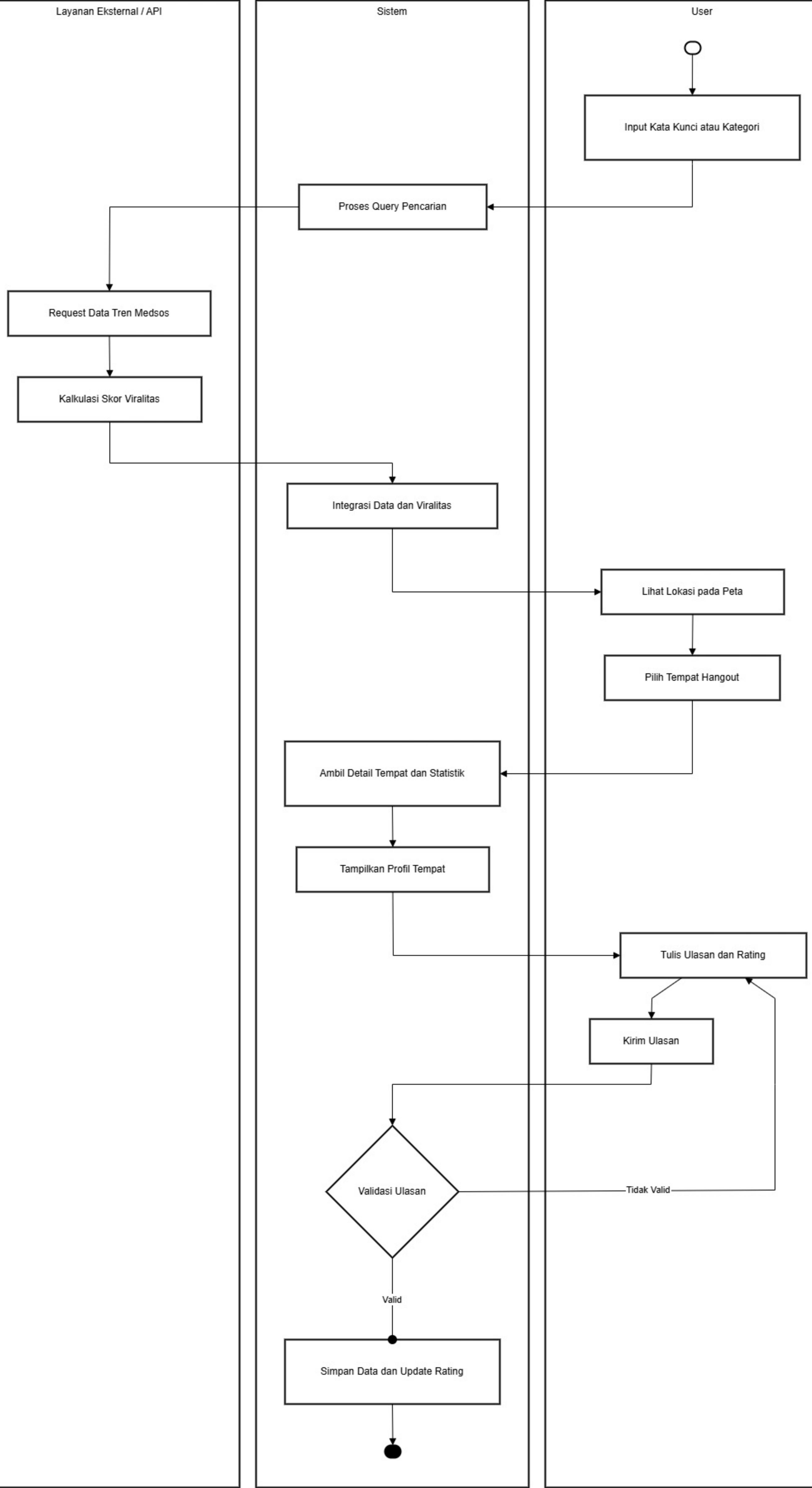
> RUN_LOGIC_TEST:

INPUT: 50

INPUT: 90

>> SCORE 90: CRITICAL HYPE



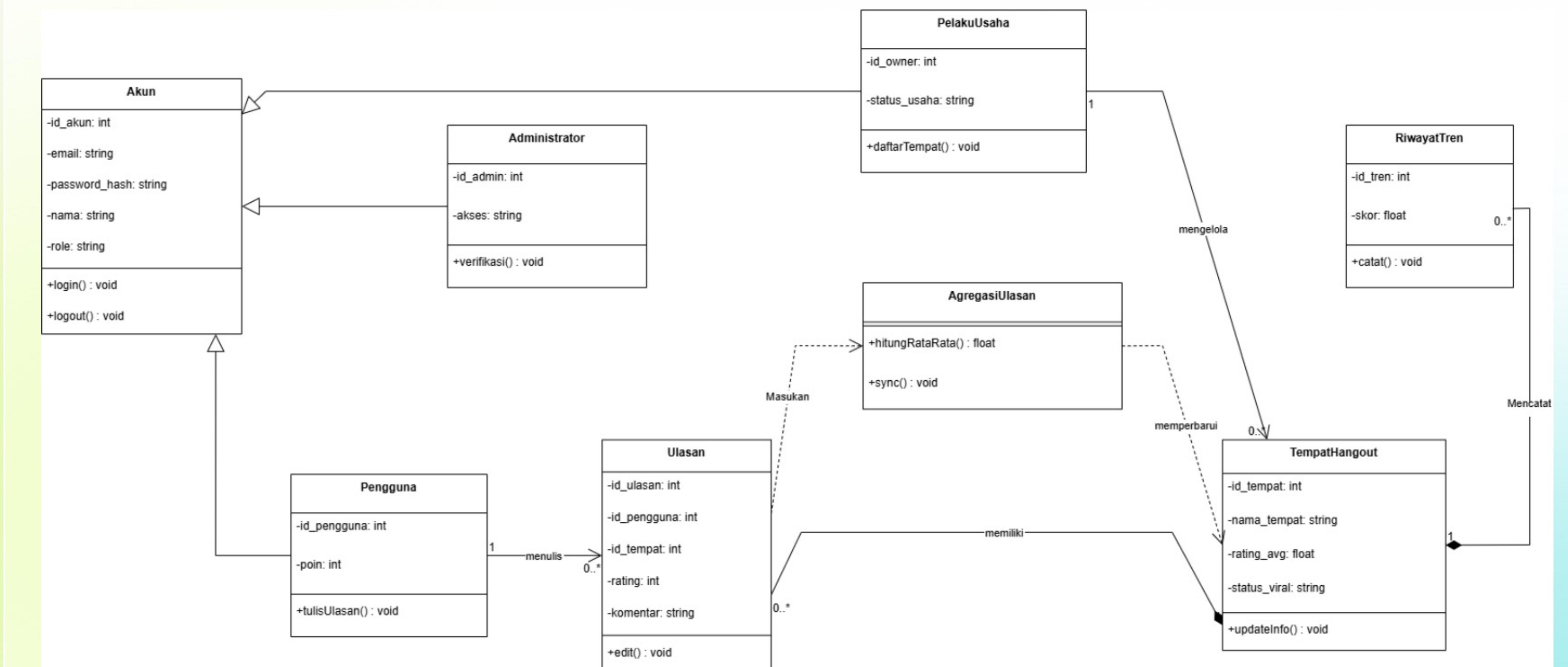


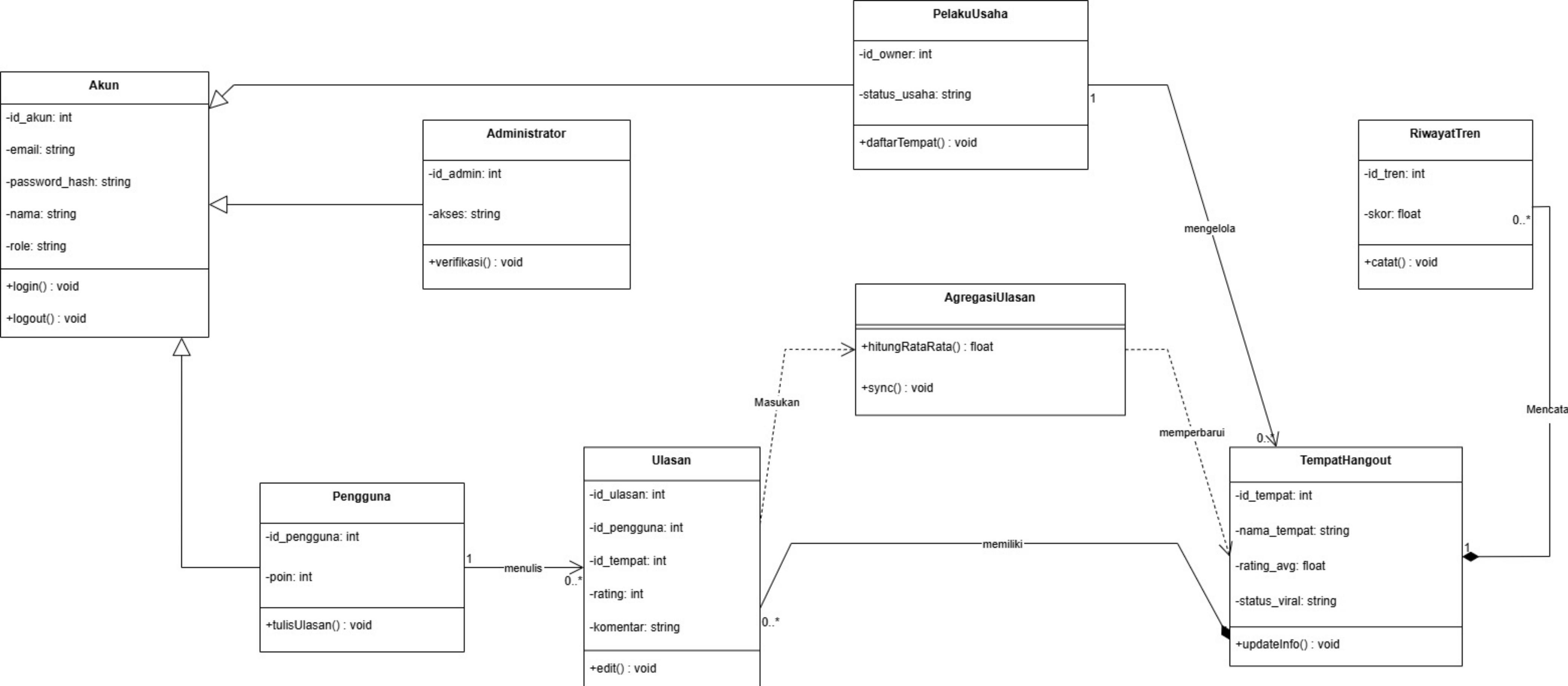
07 // STRUCTURE

CLASS DIAGRAM

Relasi Database & Objek.

- + HangoutSpot
- + ViralityMetric (History)

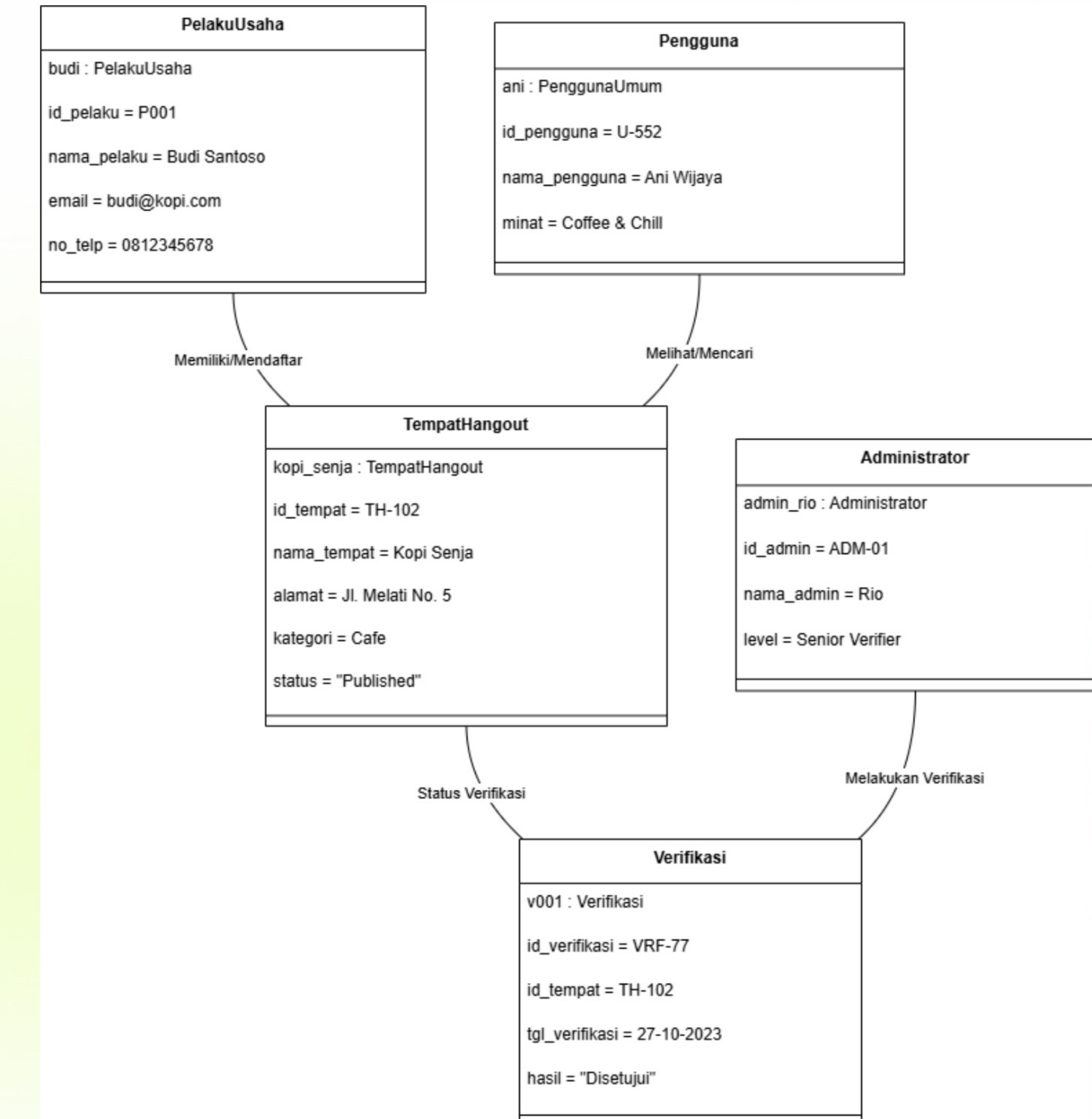


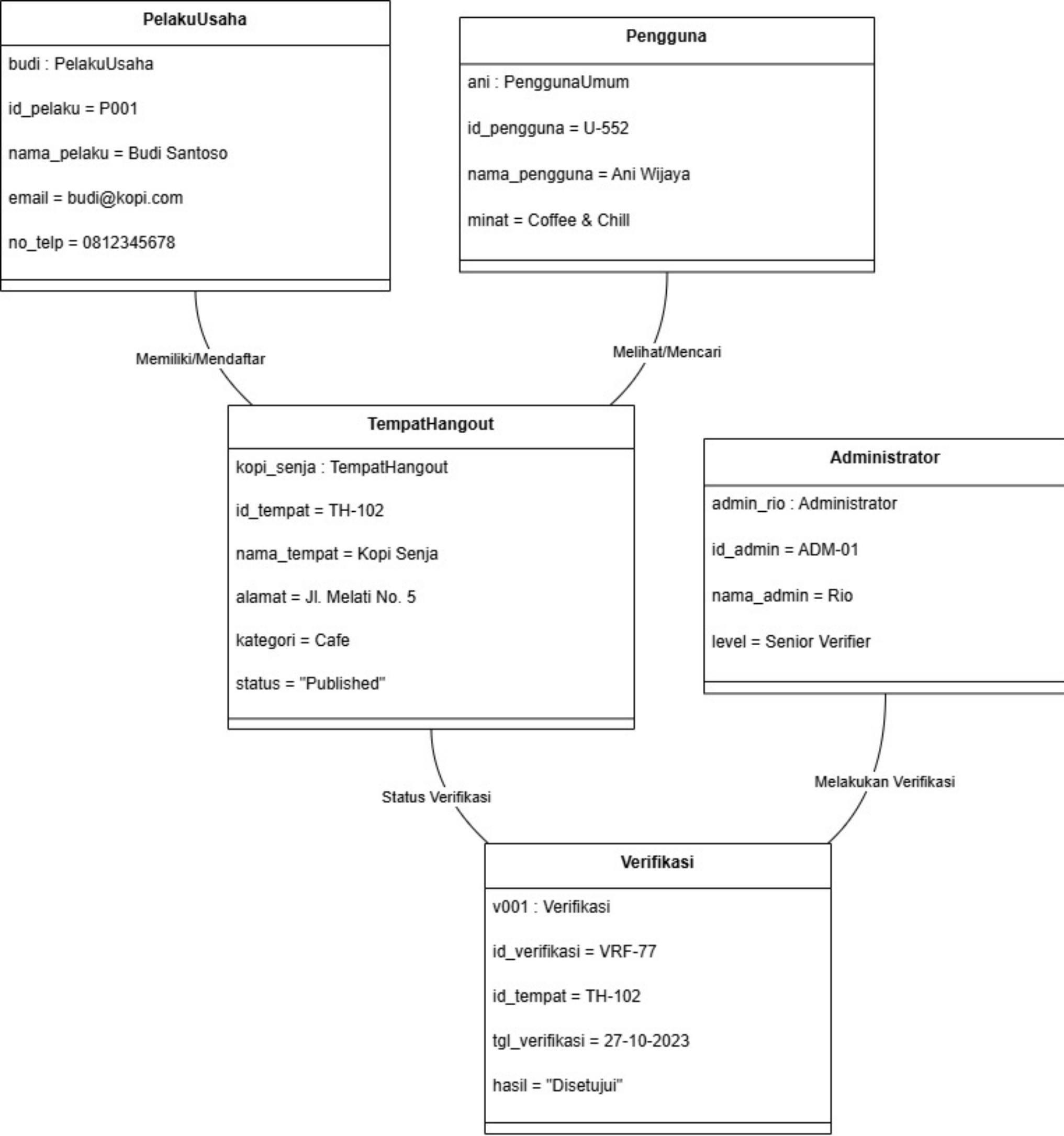


08 // SNAPSHOT

OBJECT DIAGRAM

Gambaran instance data pada saat runtime.



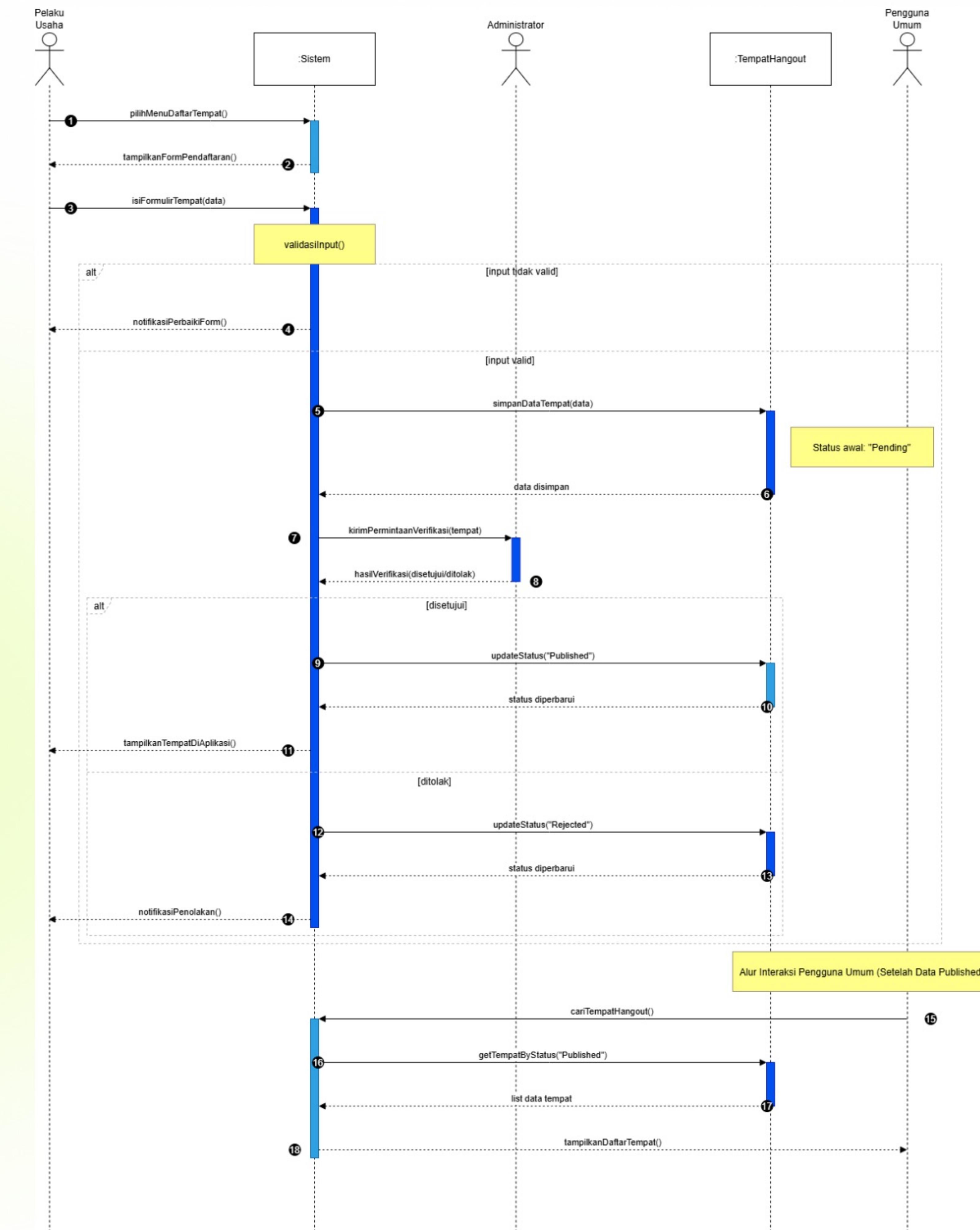


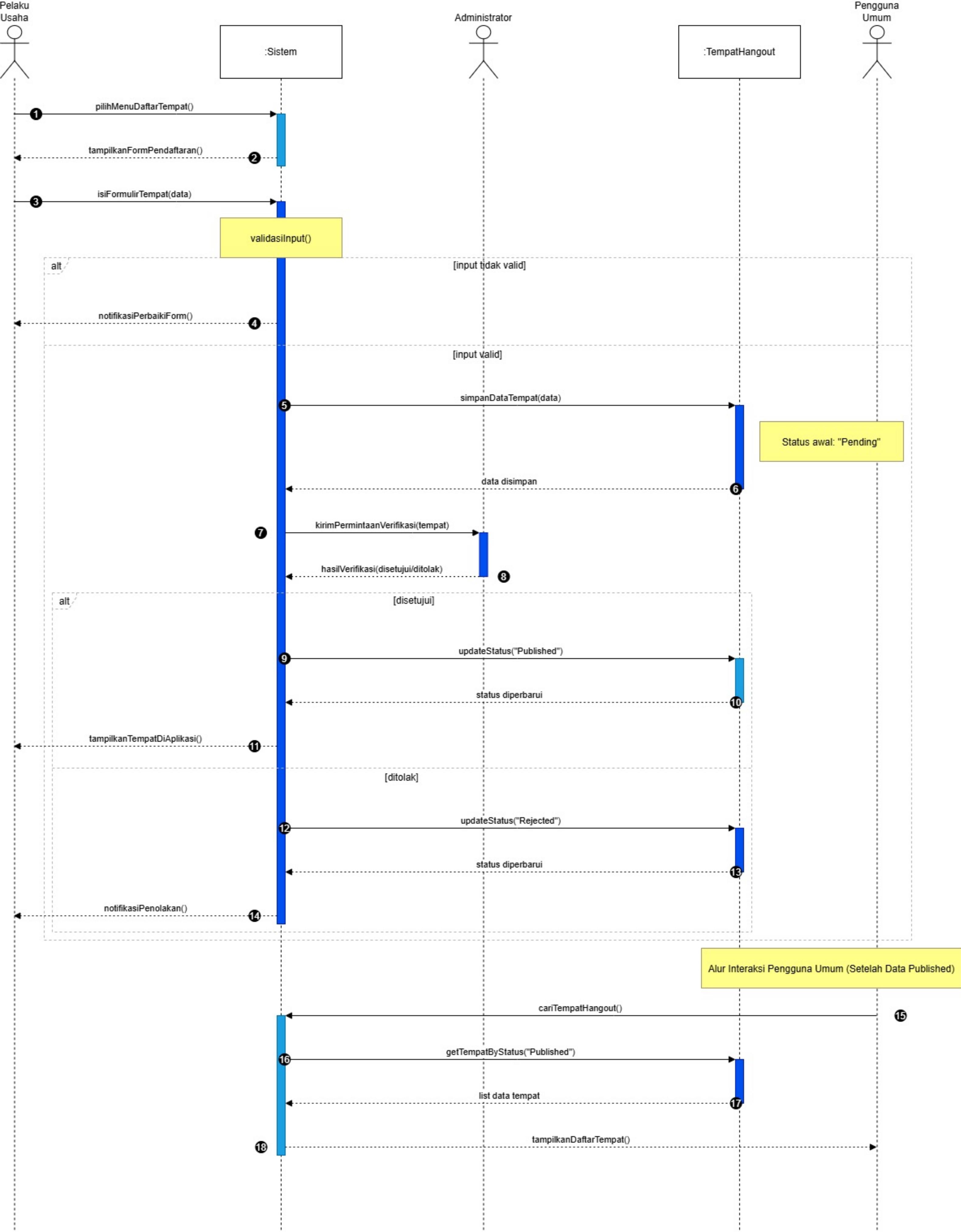
09 // INTERACTIONS

SEQUENCE DIAGRAM

Detail urutan pesan antar objek (Pendaftaran Tempat).

- + Request User
- + Validasi Sistem
- + Verifikasi Admin



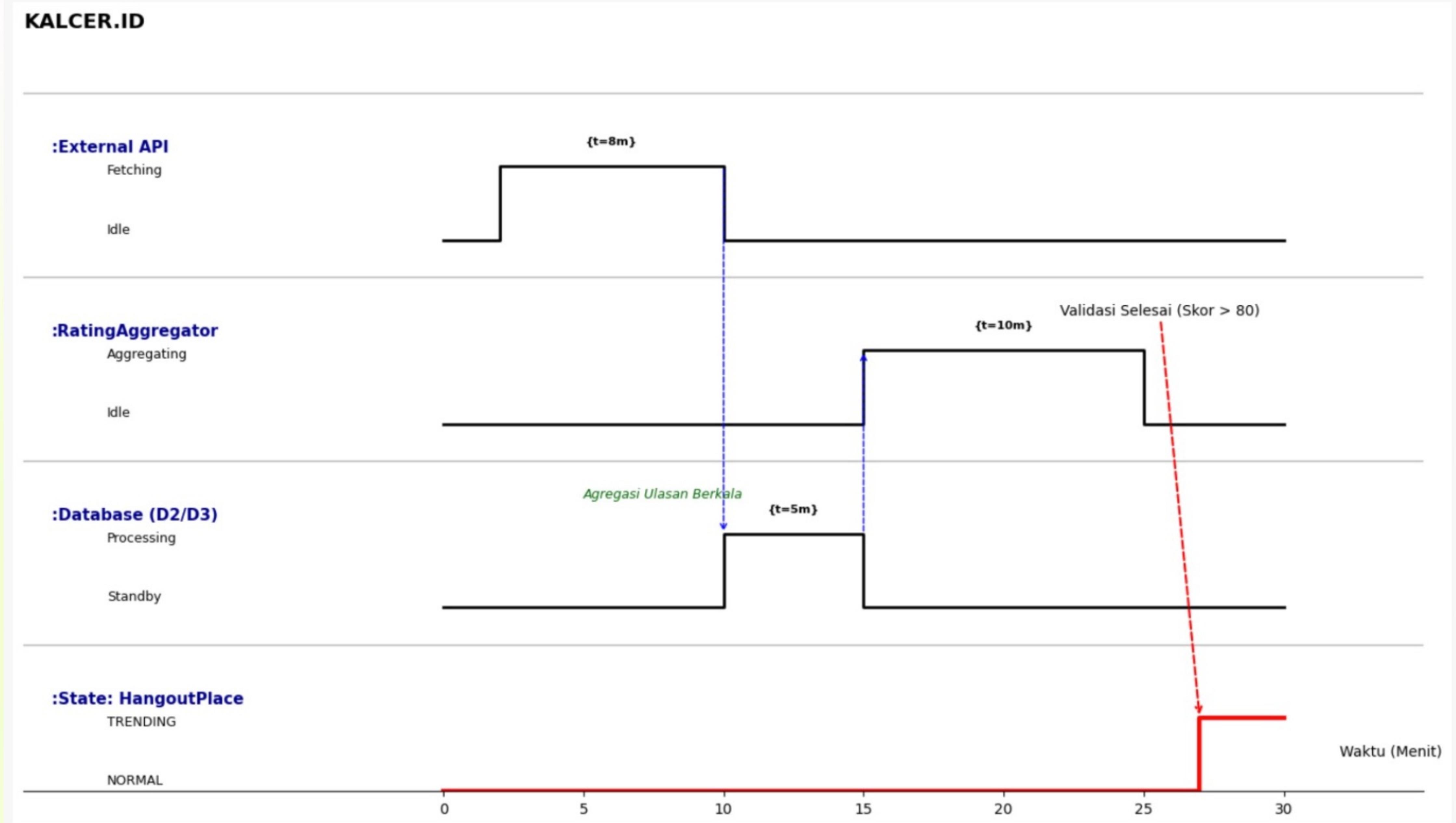


10 // CONSTRAINTS

TIMING DIAGRAM

Analisis batasan waktu respon sistem dan interaksi state.

Menampilkan durasi maksimal yang diizinkan untuk setiap proses (pada diagram ini prosesnya adalah bagaimana agregasi rating bekerja).



:External API

Fetching

Idle

{t=8m}

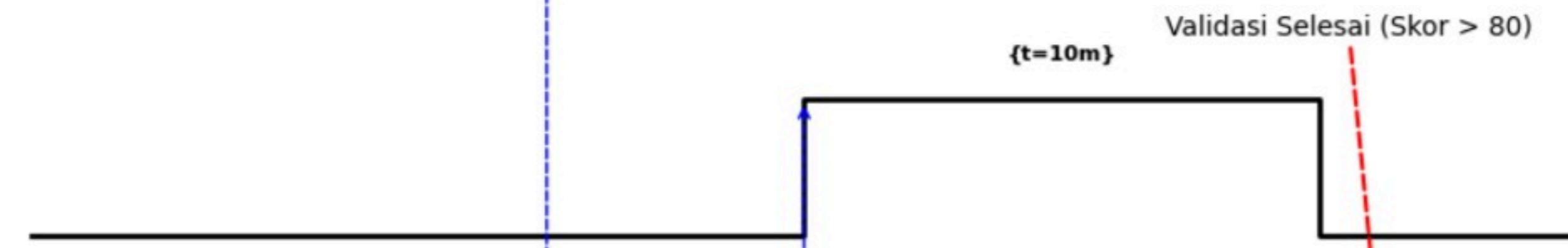
**:RatingAggregator**

Aggregating

Idle

{t=10m}

Validasi Selesai (Skor > 80)

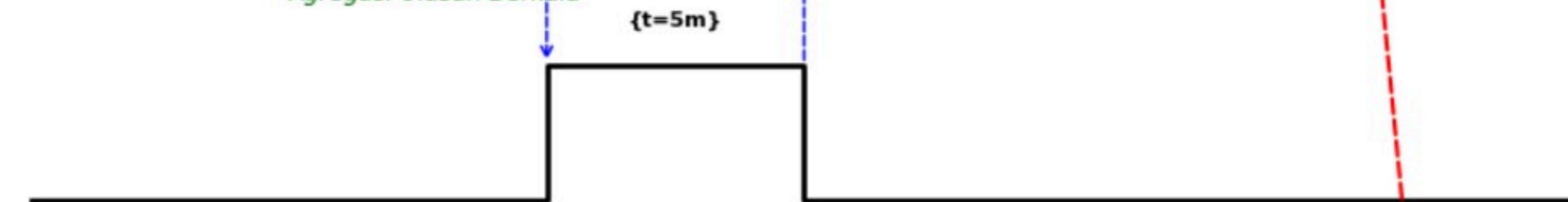
**:Database (D2/D3)**

Processing

Standby

Agregasi Ulasan Berkala

{t=5m}

**:State: HangoutPlace**

TRENDING

NORMAL

Waktu (Menit)



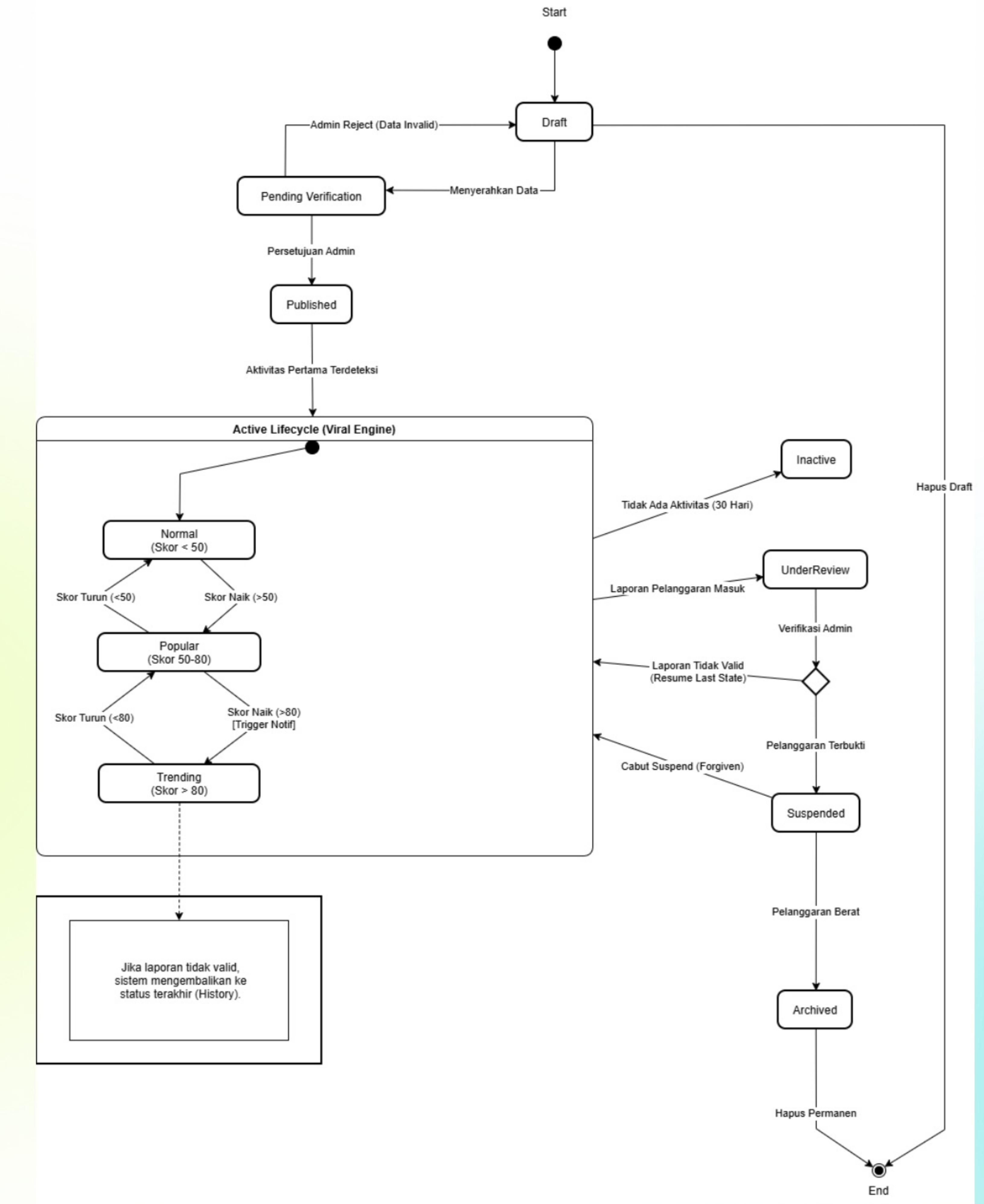
11 // LIFECYCLE

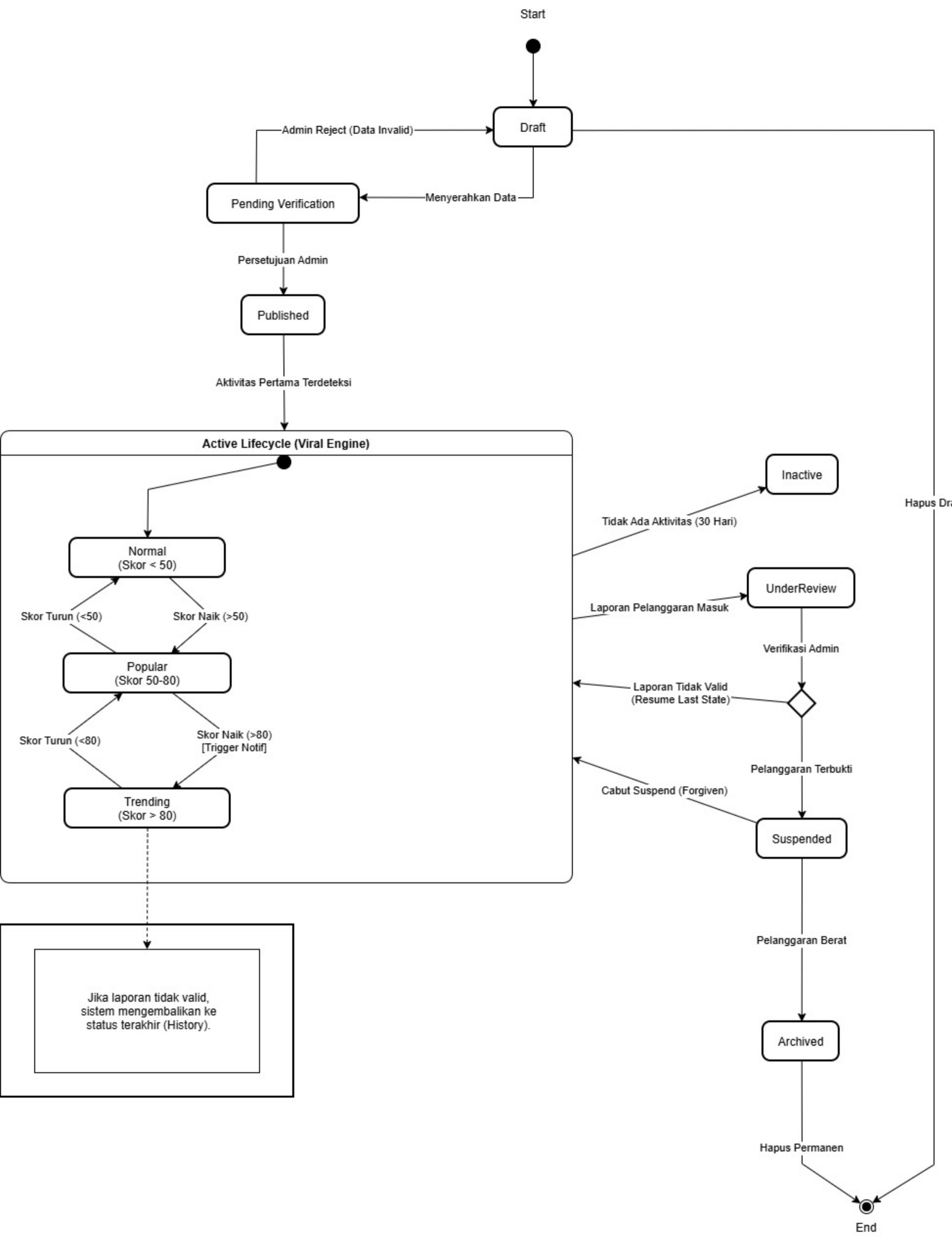
STATE MACHINE

Status Viralitas:

under 80 📈 / Viral (> 80) 🚨

STATUS: HIDDEN GEM





12 // MODULARITY

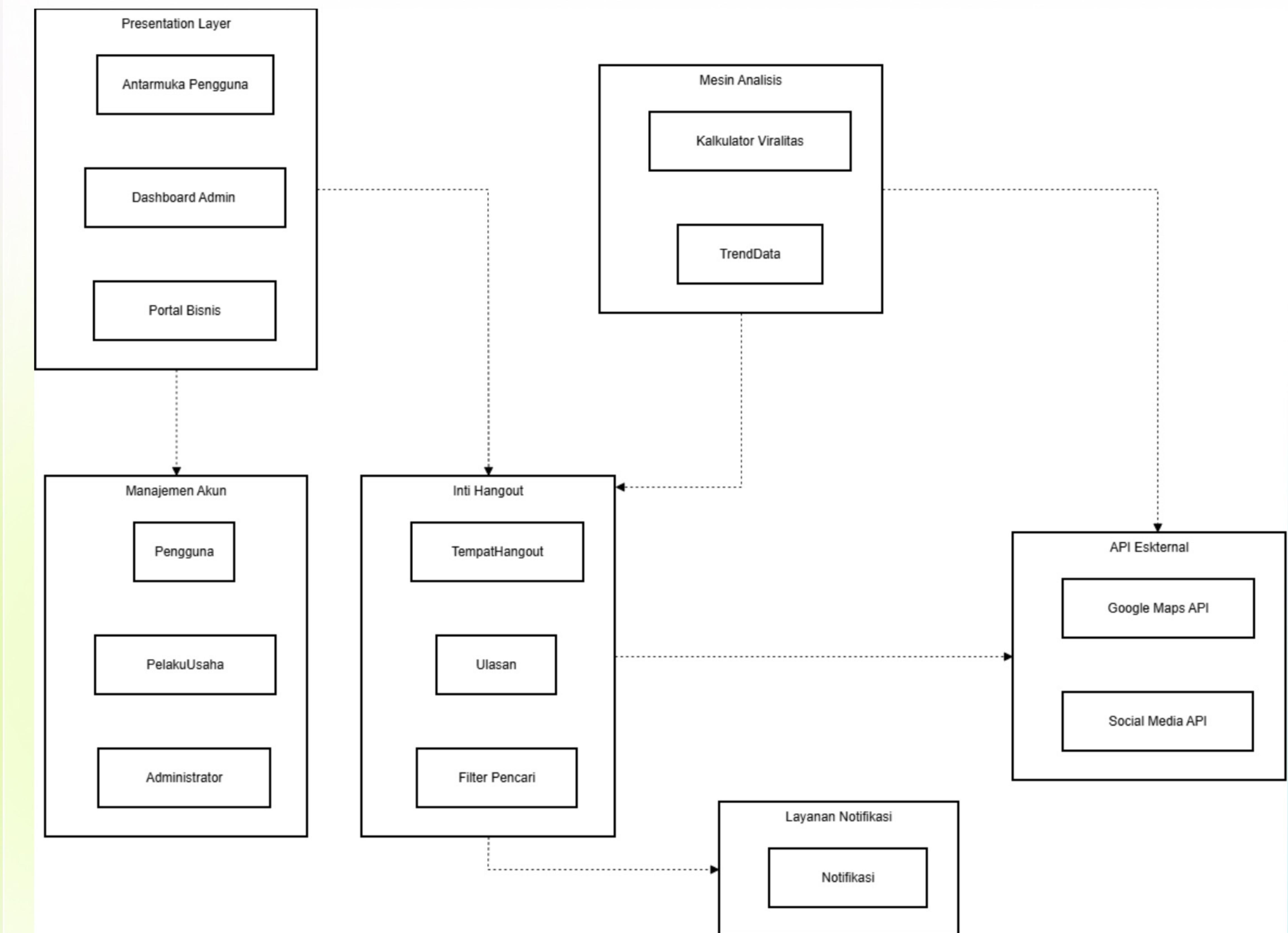
PACKAGE DIAGRAM

Layering Arsitektur Sistem.

Presentation

VS

Data Layer



Presentation Layer

Antarmuka Pengguna

Dashboard Admin

Portal Bisnis

Manajemen Akun

Pengguna

PelakuUsaha

Administrator

Mesin Analisis

Kalkulator Viralitas

TrendData

Inti Hangout

TempatHangout

Ulasan

Filter Pencari

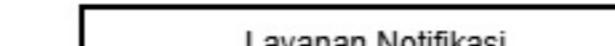
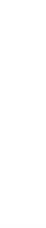
API Eskternal

Google Maps API

Social Media API

Layanan Notifikasi

Notifikasi



THANKS.

ANY QUESTIONS?

