Lab 3.3 — API Fan-Out

- Parallel API requests
- Timeouts, retries, backoff
- Summaries and logs

Objectives

- Use ThreadPool to query many endpoints
- Handle failures per-host cleanly
- Collect structured results

Steps

- 1. Implement worker with timeout + retry
- 2. Submit tasks for each host
- 3. Aggregate results; write JSON

Validation

- Logs show request IDs per host
- Summary: success/fail counts and timings

Stretch

- Add rate-limit handling (429)
- Record per-host latency histogram