**Repo URL: https://github.com/sweekriti544/SweekritiCS554P1**

CS554 Project 1 Sweekriti Gautam

Tech & spec

* Stack: Node.js + Express.
* Endpoint: GET /convert?lbs=<number> → JSON with 3-decimal rounding.
* Errors: 400 (missing / not a number), 422 (negative / non-finite).
* Runs as a systemd service under ec2-user; logs via morgan → journald.
* NGINX on :80 (and HTTPS via Let’s Encrypt using sslip.io).
* Instance has been cleaned up to avoid ongoing cost (details below).

Where to find things in the repo (root of the repo):

* README.md - Full Install → Run → Test steps (WSL), curl examples, Postman URLs for :8080, :80, and HTTPS, systemd reliability checks (status/logs/reboot), Security Group summary, and a cleanup section (what was closed/terminated/deleted).
* DESIGN.md - Architecture, API contract, numeric handling, logging, systemd service mgmt, Security Group design, NGINX/TLS decisions, and the Cleanup Note.
* server.js - Conversion logic + validation (lbs → kg, 3 decimals; returns 400/422 on bad input).
* package.json - Dependencies (express, morgan) and npm start.
* screenshots/ - Evidences:
  + API correctness: Postman 200/400/422 for :8080, :80, and HTTPS.
  + Reliability: systemctl status p1 (active/enabled) and journalctl request logs.
  + EC2 & Security: Instance Summary; Security Group inbound rules (before cleanup).
  + Cleanup: updated SG (ports closed), terminated instance, key pair deleted, no orphaned volumes.

Public test URLs (when live)

* http://13.222.58.121:8080/convert?lbs=150 (direct app)
* http://13.222.58.121/convert?lbs=150 (via NGINX :80)
* https://13-222-58-121.sslip.io/convert?lbs=150 (HTTPS; sslip.io maps IP→hostname)

Service was stopped after cleanup; URLs are for reference only.

Reproduce  
Follow README.md (“Install → Run → Test”) to rebuild on a fresh t3.micro.