Aurum Project Overview & Roadmap

✔ Completed Tasks

- Set up project folder structure (Aurum_Solace).
- Created and activated a Python virtual environment.
- Installed FastAPI and Uvicorn.
- Built core server backend using FastAPI.
- Defined Pydantic models for mood and action logging.
- Implemented /ping endpoint for server health checks.
- Implemented /checkin/mood endpoint with suggestion logic.
- Implemented /action/log endpoint for behavioral tracking.
- Created temporary in-memory storage for entries.

■ Upcoming Tasks

- Implement persistent storage using SQLite or another database.
- Create /summary endpoint upgrades to support long-term tracking.
- Develop server-side emotion detection from text (initial model).
- Design and integrate user interface (terminal/web/mobile).
- Prepare device interaction logic for hardware-based check-ins.
- Research and select mini PC hardware (e.g., GMKtec G10).
- Set up Nginx as a reverse proxy/load balancer.
- Extend backend to support multiple worker nodes.
- Train or integrate neural network models for emotion detection from voice.
- Add authentication to secure device-server communication.
- Containerize backend using Docker (optional).
- Deploy backend on mini PC once hardware is available.

■ Long-Term Goals

- Build fully autonomous emotion & discipline assistant.
- Run neural models locally for privacy and reliability.
- Develop a physical device with wireless connectivity for daily interaction.
- Create a dashboard tracking habits, mood, and emotional trends.
- Deploy multi-node cluster for distributed services.