

Objective: Implement a robust WhatsApp webhook & reply handler in FastAPI.

Tasks:

1. Create endpoint: POST /webhook/whatsapp
2. Verify signature from Meta Cloud API (X-Hub-Signature-256)
3. Parse user messages & forward to NLP Service
4. Manage conversation state in Redis
5. Send reply via Meta Graph API using templates and quick replies

Deliverables:

- backend/app/routes/whatsapp_webhook.py
- backend/app/services/whatsapp_service.py
- backend/tests/test_webhook.py
- Updated .env.example with META_VERIFY_TOKEN, META_ACCESS_TOKEN