

2. Package Tracker (GraphQL + REST + Chatbot UI)

Client Perspective:

A chatbot-style interface allows users to track their package status using tracking numbers. Backend intelligently provides updates.

Core Features:

- Chat UI for interaction
- Accept tracking number and return status
- REST and GraphQL API endpoints for data fetch
- Optional geolocation map view

API & Security:

- **GraphQL endpoint** (Apollo or Graphene)
- Simulated **OAuth login** for users (mock tokens)
- **Input validation** to prevent malformed queries
- CORS policy handling
- Rate limiting (optional)

Tools:

- Frontend: React or HTML + JS
- Backend: Node/Express or Python Flask
- DB: JSON/SQLite
- APIs: GraphQL, REST

Concepts:

REST vs GraphQL, OAuth, chatbot UX, API security, client-server model

README File (Mandatory)

- Project Title and Summary
- Key Features
- Technologies Used
- How to Run (local setup instructions)
- API Overview (sample endpoints)
- Security Features Implemented
- Analytics Setup (tool used and what is tracked)
- Roles of Group Members

API Documentation

- Include:
 - List of endpoints (GET, POST, PUT, DELETE)
 - Sample input/output
 - Auth requirements
- Optional: Postman collection or Swagger YAML file