



JUAJOB API – CONNECTING AFRICA'S WORKFORCE DIGITALLY

A RESTFUL API DESIGN FOR THE GIG ECONOMY

Team Presentation - Group 1
Advanced Python Programming

01 MEET THE TEAM & ROLES

Designing with Purpose: Our Team Structure



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Security Designer



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API Architect



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**Documentation
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**Endpoint Designer &
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RESOURCE MODELING

The Building Blocks of JuaJobs

01

Core Resources: Users, Jobs, Worker Profiles, Applications, Reviews

02

Added Resources: Payments, Notifications, Categories

03

ENDPOINT DESIGN

RESTful Endpoints – Designed for Clarity & Scale

Code Samples:

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POST /jobs

GET /workers/{id}

PATCH /applications/{id}/status

Principles:

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RESTful structure, naming conventions, hierarchy

04

SMART QUERYING & FILTERING

Powerful Querying: Find What You Need Fast

FILTERS:

- # • ?search=driver&city=Kigali
- # • ?sort=-rating&limit=10
- # • ?lat=1.9&lng=30.1&radius=15km

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ERROR HANDLING & VERSIONING

Stability & Feedback Built In

Components:

- Unified error format
- Versioning via /v1
- Deprecation policy

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DEVELOPER DOCUMENTATION

Complete API Docs: Clear, Helpful, Developer-Ready

Content:

- OpenAPI Spec
- Swagger UI preview
- Onboarding guides, use cases

07

SECURE BY DESIGN

Security Tailored for Mobile Markets

MECHANISMS:

- ▶ • JWT auth with refresh tokens
- ▶ • HTTPS mandatory
- ▶ • Role-based access (Admin, Worker, Client)

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MARKET ADAPTATION

Made for Africa: Languages, Payments, Connectivity

ADAPTATIONS:

- Multi-language (EN, SW, FR, Kiny)
 - Mobile money integration (M-Pesa, MoMo)
 - Low-bandwidth strategies (batch ops, caching)
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WHAT WE DELIVERED

Robust API Assets Ready for Deployment

- API Design Doc
- Swagger/OpenAPI Spec
- Entity Relationship Diagram
- Developer Guides
- Github Repo

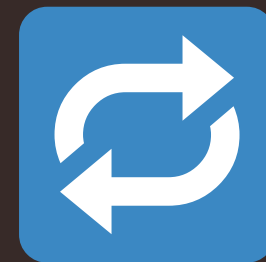
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KEY INNOVATION HIGHLIGHTS

Highlights of Innovation



Localization-aware API
behavior



Smart auth flow for
unstable networks



Interactive developer
onboarding tools

LET'S BUILD THE FUTURE OF WORK TOGETHER

JuaJobs API – Ready to Connect Africa's Talent

THANK YOU

[Github link](#)