JUAJOBS 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

BELINDA BELANGE LAROSE

Security Designer

NANA KORAMAH ABEASI

API Architect

NAGASARO GHISLAINE

Documentation Specialist

DANIEL IRYIVUZE

Endpoint Designer & User Experience Analyst

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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

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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