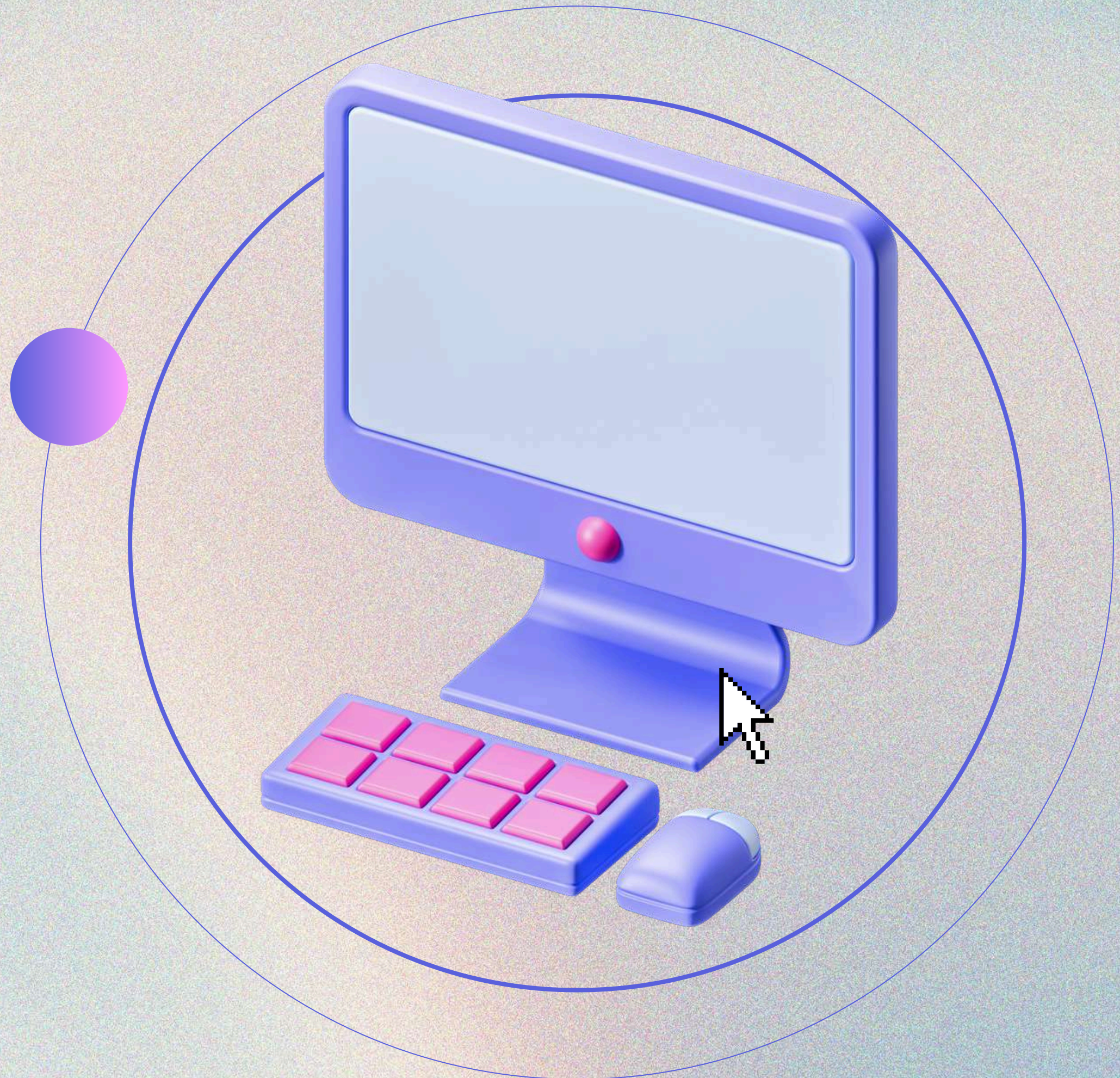# JUAJOBS API DESIGN

DOCUMENTATION

juajobsapidesign.documentation

OVERWIEW

- Platform: JuaJobs – Gig economy platform
- Goal: Connect skilled African workers (plumbers, artisans, etc.) with clients
- API Focus:
  - Job Postings
  - Worker Profiles
  - Applications
  - Reviews & Payments

BUSINESS CONTEXT

Challenges:
- Workers: Inconsistent work
- Clients: Hard to find reliable professionals

JuaJobs Offers:
- Digital presence
- Verified workers
- Location-based matching
- Mobile-first & secure payments

CORE RESOURCES

- Users (Clients & Workers)
- Job Postings
- Worker Profiles
- Applications
- Reviews
- Job Filters
- Messages
- Payments

API ARCHITECTURE – RESOURCE IDENTIFICATIONGRATED CIRCUITS

Resource	Description
Users	Clients + Workers
Worker Profiles	Skills, location, bio
Job Postings	Work listings from clients
Applications	Job interest & hiring workflows
Admins	Verify jobs & manage safety/payments
Messages	Worker-client chats
Payments	Job transaction tracking

RESOURCE RELATIONSHIPS
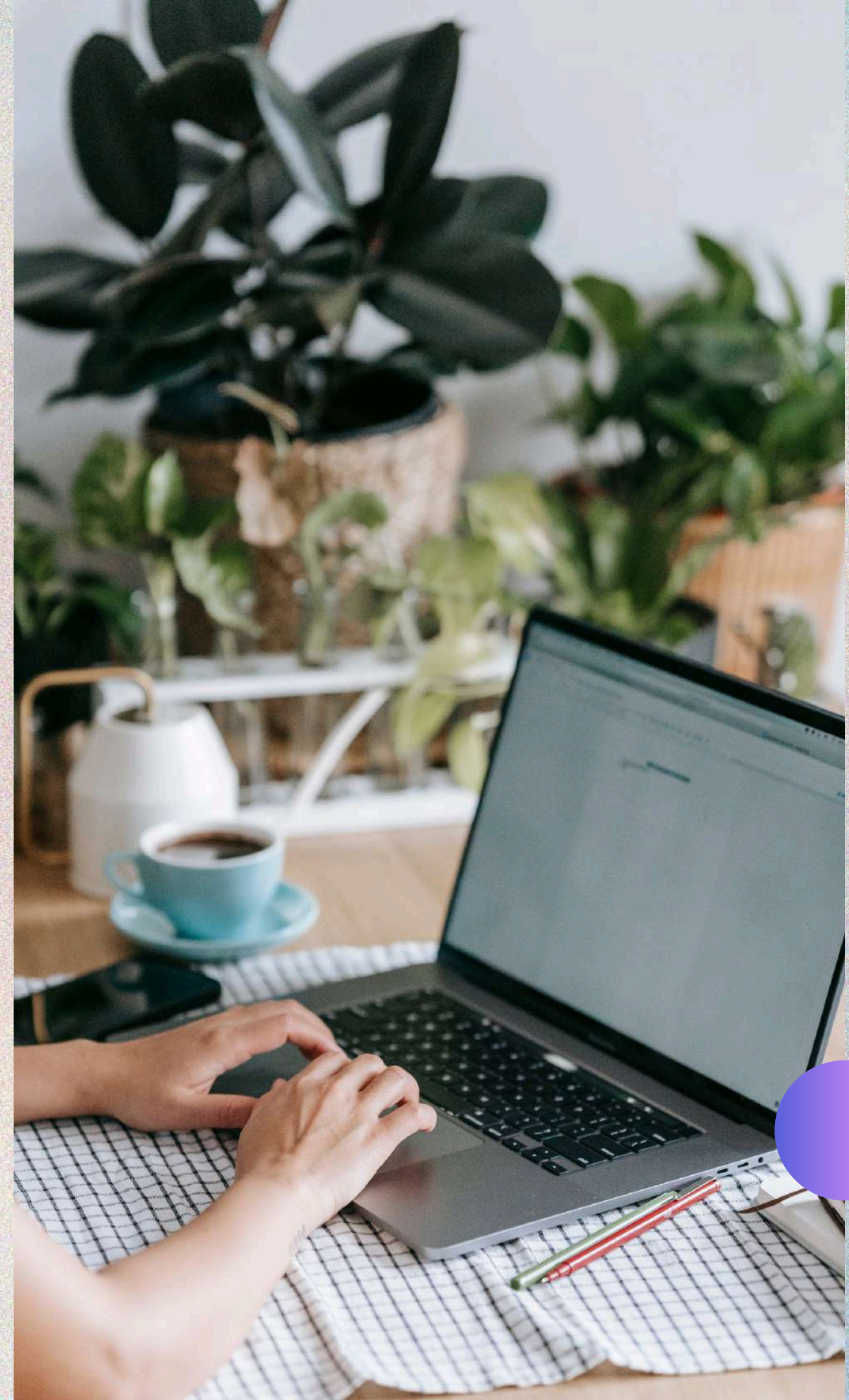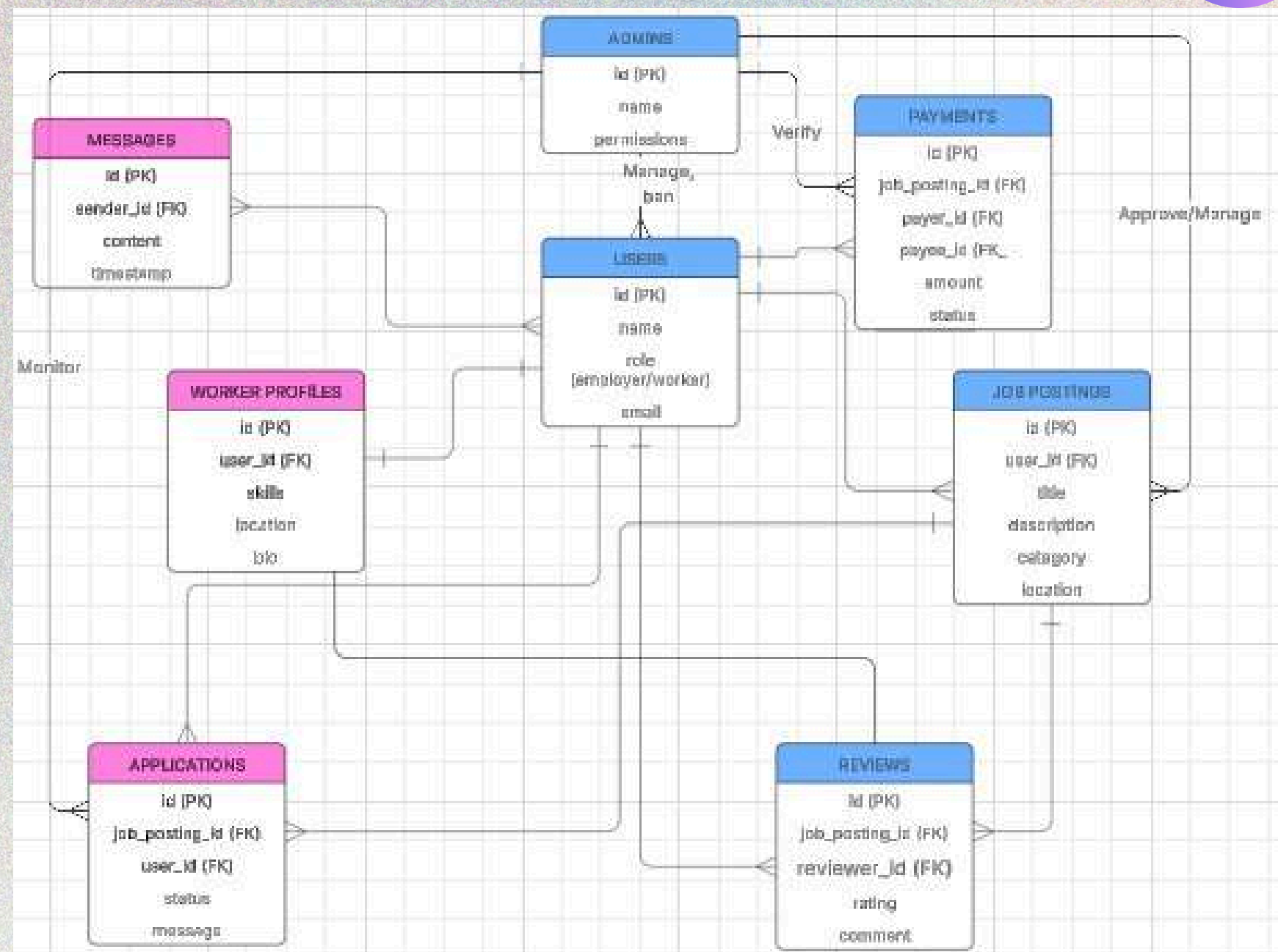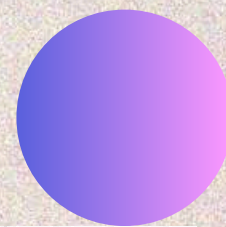
STATUS CODES & ERROR HANDLING

| Code	Meaning	Use Case Example
200	OK	GET /api/jobs
201	Created	POST /api/users/register
400	Bad Request	Missing required fields
401	Unauthorized	Token missing/invalid
403	Forbidden	Lack of permissions
404	Not Found	Invalid ID used
422	Unprocessable Entity	Wrong field type (e.g., invalid email)

API VERSIONING & CHANGE MANAGEMENT

- **URL-BASED VERSIONING: /V1/**
- **E-COMMERCE REVOLUTION**
  - Non-breaking: Same version
  - Breaking: New version
- **DEPRECATION NOTICE: 6 MONTHS**
- **CHANGE PROCESS: PROPOSAL → REVIEW → TEST → RELEASE**

USER & AUTH ENDPOINTS

Endpoint	Method	Access
/users/register	POST	Public
/users/login	POST	Public
/users/me	GET	Authenticated
/users/me	PUT	Authenticated
/users/me	DELETE	Authenticated

JOBS, WORKERS, APPLICATIONS

- Jobs
  - POST /api/jobs → Post job (Client)
  - GET /api/jobs → List jobs (All)
- Worker Profiles
  - GET /api/workers → Public access
  - PATCH /api/workers/{id} → Worker only
- Applications
  - POST /api/jobs/{id}/applications
  - GET /api/users/me/applications
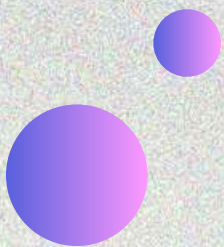
MESSAGING, REVIEWS, FILTERS

Messages:
- POST /api/conversations
- GET /api/conversations/{id}/messages

Reviews:
- POST /api/reviews
- GET /api/workers/{id}/reviews

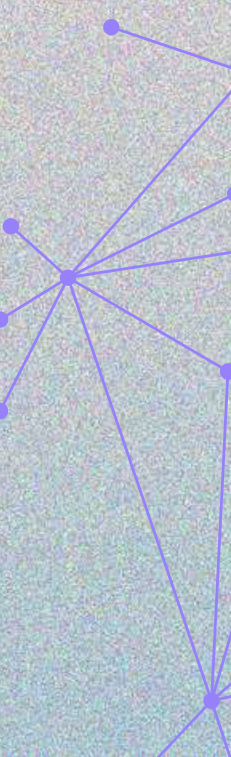Job Filters:
- Save / Delete custom filters

PAYMENTS & WALLETS

Payments
- Initiate: POST /api/payments/initiate
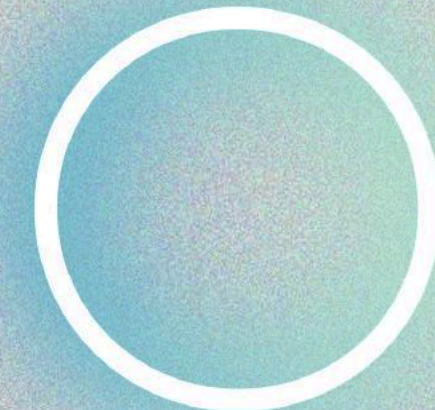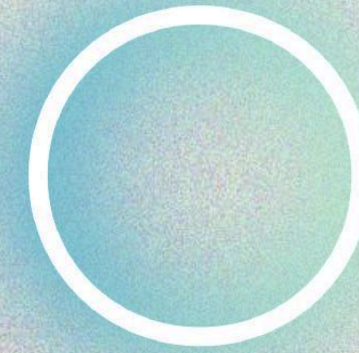- Confirm: POST /api/payments/{id}/confirm

Wallets
- GET /api/users/me/wallet

AUTHENTICATION & SECURITY

- OAuth2 + JWT
  - Stateless, mobile-first
- Token Flow:
  - Login → Access & Refresh Tokens
- Security:
  - HTTPS only
  - Rotate signing keys
  - Rate-limit login attempts

RBAC + AUTHORIZATION

Roles:

- Client – Post & manage jobs
- Worker – Apply & update profile
- Admin – Full access

Ownership checks:

- Users access only their own data

PRIVACY & COMPLIANCE

PII Handling:

- Encrypt data at rest
- No PII in logs
- Data minimization

Local Laws:

- Kenya: DPA (2019)
- Nigeria: NDPR

THANK
YOU!