# **Backend Development Contract Kumele**

Client: George B. Baku

Developer:

### Date of project start:

Under the Fiverr Platform Seller refers to Developer Buyer refers to Client

- Project

Project temporary website: www.kumele.com A Backend Admin Template will be provided.

Payment & duration: Phase 1 (21 days) 200 USD. Phase 2 (21 days) 200 USD

- Phase 1 Phase 1: All frontend APIs and database foundation (15 days). All frontend APIs should be completed in 15 days. Support AI/ML developers to integrate frontend APIs. (Once completed, a 200 USD down payment will be paid to Fiverr for phase 1, and then you can complete any pending tasks.)
- Phase 2 Completing any pending task, Admin panel customisation, testing & documentation/ deployment (30 days) 300 USD. Admin panel customisation should be completed in 10-15 days. (Once completed, a 200 USD down payment will be paid to Fiverr for phase 2, and then you can complete the rest of the task.)

### **Back-End Developer:**

- Skills: Node.js, NestJS, PostgreSQL, Redis, Stripe, Firebase, Docker.
- Building and maintaining server-side logic, databases, APIs, algorithms and infrastructure.
- Collaborate with the AI/ML developer, iOS, Flutter, and Next.js developers to integrate APIs and algorithms/ML.
- Use AI for code creation and debugging.

### **Backend Developer Tech Stack (Non-ML Tasks)**

# Core Backend

- Language & Framework
- Node.js + TypeScript
- Framework: NestJS (preferred for scalable structure) or Express.js
- Authentication & Security
- Google Signup/ogin/Google Passkey login
- WebAuthn Passkey support
- TOTP/Authy 2FA implementation
- JWT or OAuth 2.0 Session management

- bcrypt or argon2 Password hashing
- Database
- PostgreSQL Primary relational database
- Redis For session caching, real-time features (chat, notifications)
- Real-Time Communication
- Socket.IO (Node.js)
- Redis Pub/Sub adapter (for scale)
- Payments
- Stripe API
- PayPal SDK
- Crypto payments
- Notifications
- Firebase Admin SDK Push notifications
- SMTP Transactional emails
- CMS & Content Handling
- Admin panel
- Multer or Cloudinary SDK File/image uploads
- Infrastructure / DevOps
- Docker Containerisation
- Nginx Reverse proxy & load balancing
- GitHub Actions CI/CD
- PM2 Node.js process manager
- Hosting: AWS, DigitalOcean, or GCP
- Monitoring: Prometheus + Grafana

Role	Stack Highlights
Backend Dev	Node.js, NestJS, PostgreSQL, Redis, Stripe, Firebase, Docker

# Backend Developer High-level Requirements: Phase 1 All frontend APIs, and database foundation (21 days)

Please review the Figma prototyping for the actual APIs required. The APIs below are a rough estimate based on the project requirements generated by AI.

### **Project Infrastructure**

• Design, manage, and optimise the server infrastructure.

## **User Authentication & Profile Management**

- 1. **User Signup API** (email, Google OAuth, referral code support)
- 2. **User Login API** (email/password & Google OAuth)
- 3. **2FA Verification API** (OTP or TOTP code validation)
- 4. **Passkey Authentication API** (WebAuthn-based login)

- 5. User Logout API
- 6. User Profile Fetch API
- 7. User Profile Update API
- 8. **User QR Code Generation API** (for login or event check-in)
- 9. User Referral Code Generation & Validation API
- 10. User Medal/Reward Data Fetch API

## Payments & Purchases

- 11. **In-App Purchase Initiation API** (Stripe + Crypto)
- 12. PayPal Payment Link Generation API (for event tickets)
- 13. Payment Confirmation Webhook Endpoint
- 14. User Purchase History API
- 15. **Discount Code Validation API**
- 16. Subscription Status API

## **Events & Hobby Management**

- 17. **Event List API** (by hobby, location, popularity, time)
- 18. Event Details API
- 19. **Event Creation API** (for organisers)
- 20. Event RSVP/Join API
- 21. Event Check-In API (via QR or manual)
- 22. Event Attendance History API
- 23. User Hobby Preferences API (fetch/update)
- 24. Hobby Categories List API

# Blogs & Content

- 25. Blog Feed API (Most Liked, Most Recent, Most Commented)
- 26. Blog Details API
- 27. Create Blog Post API
- 28. Like Blog API
- 29. Comment on Blog API
- 30. Fetch Comments on Blog API

# Messaging & Notifications

- 31. Comment Chat Thread API (e.g., Facebook-style chat per blog or event)
- 32. Live Chat Room API (for events or groups Socket connection auth)
- 33. Notification Feed API
- 34. Mark Notification as Read API
- 35. Push Notification Token Registration API (for device push)

## Ads & Marketing

- 36. Create Ad Campaign API
- 37. Fetch Ads API (based on hobby/age/location filters)
- 38. Ad Engagement Tracking API
- 39. Custom Ad Targeting Options API

# **Utility & App Experience**

- 40. App Localisation Strings API
- 41. Share Event/Blog Token Generator API
- 42. **Get App Configuration Settings API** (version, maintenance mode, etc.)
- 43. Send Feedback or Support Request API
- 44. **Upload Media API** (profile pic, blog image, etc.)

Work with iOS, Android, Nexxt.js and AI/ML developers to integrate all APIs.

# Backend Developer High-level Requirements: Phase 2 Admin Template customisation, testing and deployment (30 days)

- Template complete customisation.
- Seo integration.
- SMTP integration.
- Short-code integration.
- User Analytics/tracking within the APP
- Testing.
- Deploy to an AWS server.

Complete all open tasks needed to launch this project-testing and AWS deployment.

1. The backend development must reflect the Figma prototyping designs, functionalities, rules, and automation documents provided by the client.

### 2. Developer Obligations

- The backend developer is expected to create a project plan with weekly milestones or use the plan set by the client. He/She should develop a fast-loading backend according to the client's Figma designs, functionality and prototyping. This contract is for phases 1 and 2.
- **Testing**: The developer is expected to develop and test the application after each API/ endpoint is created.
- **Communication**: The developer must provide weekly updates on each development phase, as outlined in the project plan. Communication may be by text or video calls, depending on the need.
- **Codes**: The developer must follow the latest coding practices agreed upon in our correspondence and communications. Coding should be clean, organised, and appropriately documented, such as **KT (knowledge transfer) regarding the API responses**.

- **Deployment**: This occurs in Phase 2 after all frontend functionalities have been implemented and tested to be bug-free.
- **Non-disclosure**: The design and development are confidential and should not be disclosed to a third party without a written request or confirmation. The seller cannot use the codes or assets from this project for a different seller. Non-disclosure is binding even after the contract is executed or cancelled.
- **Source code**: All source codes and relevant assets should be returned to the client upon completion or deleted.
- Frontend Integration: The seller/developer agrees to work with the client's frontend developer to integrate application functionalities for Android, iOS, and Next.js. The backend will provide the resources the frontend developer needs to complete the project, such as login, chat, and payment functionality, amongst other things specified by the client and Figma design.

## 3. Seller Obligations

Make payments as agreed. Assist in testing the application and give regular, valuable feedback. It is optional but welcomed for proper delivery.

## 4. Project Testing

Alpha & Beta Testing: 7 days after each phase completion.

#### 5. Guarantee

The guarantee period starts after phase 2 of the project is completed. The backend guarantee period is three months. If there are problems with the backend, the developer(seller) will fix all concerns, bug errors, or application issues at no extra cost.

### 6. Project completion

The developer is expected to complete the backend development for Phases 1 and 2 within 21 days per phase, unless affected by force majeure or dispute.

### 7. Payment

The total payment for the backend development is 400 USD.

### 8. **Disagreement**

- Fiverr will settle all disagreements, but either party can consult a lawyer if they feel the settlement is unfair.
- Court: Court proceedings, if necessary, in Berlin.
- Both parties can choose to cancel this contract by mutual agreement.

### Signature and name of the client.

George B. Baku

#### Location:

Berlin, Germany.

### Signature and name of developer.

### Location:

## Notice:

Attention to detail is critical in this project. Project tasks and technologies are flexible based on our agreement and best practices. Before this contract, the developer was aware of the project's general requirements through a Google Meet video call. If anything is unclear, don't hesitate to contact the client for a call before signing.