Ride-Hailing App MVP Requirements Document

Project Title:
Ride-Hailing App MVP (Similar to Uber/Bolt)

Project Owner:
[Your Name / Company Name]

Target Market:
Nigeria (Starting with Port Harcourt, later expand to Lagos, Abuja, etc.)

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1. Project Overview

We are developing a mobile ride-hailing application that allows passengers (riders) to book rides from verified drivers (car owners or dispatch riders).

The app will have **three main components**:

1. Rider App (for passengers)
2. Driver App (for car owners)
3. Admin Dashboard (for company management)

All **payments** will be made **to the company** (via Paystack or Flutterwave).
The company will then **dispatch payments to drivers weekly or monthly** after deducting commission.

The goal of this MVP is to **launch a working version quickly**, test with a few users and drivers in one city (Port Harcourt), and later scale nationwide.

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2. Key Objectives

- Allow users to book rides in real time.
- Provide accurate driver location tracking via Google Maps.
- Accept secure online payments.
- Manage payouts to drivers automatically or manually.

- Include an admin panel for monitoring rides, drivers, and payments.

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3. Platform Requirements

Component	Platform	Technology Stack (Suggested)
Rider & Driver Apps	Android + iOS	Flutter (Cross-platform)
Backend API	Server-side	Node.js (Express/NestJS)
Database	Cloud-based	MongoDB / PostgreSQL
Admin Dashboard	Web App	React.js / Next.js
Hosting	Cloud	AWS / Google Cloud / Vercel
Payment Gateway	Nigeria	Paystack or Flutterwave
Maps & Navigation	Global	Google Maps API / Mapbox
Notifications	Push	Firebase Cloud Messaging (FCM)

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4. User Roles & Features

A. Rider App Features

Function	Description
Signup/Login	Via phone number, email, or Google
Profile Management	Edit personal info, upload photo
Book Ride	Enter pickup & destination
Ride Tracking	Real-time map showing driver location
Fare Estimate	Show estimated fare before booking
Payment Options	Paystack, Flutterwave, or Cash
Ride History	View past rides
Rate Driver	Leave 1–5 star feedback
Notifications	Push for driver arrival, trip status, etc.
Support	Contact or help center

B. Driver App Features

Function	Description
Signup/Login	Email/phone number
Document Upload	License, vehicle papers, photo ID
Driver Verification	Admin approval required before activation

Function	Description
Accept/Reject Rides	Notification for new ride requests
Navigation	Integrated map for pickup and destination
Earnings Dashboard	View daily/weekly earnings
Withdrawal Requests	Request payouts to bank account
Notifications	For ride requests, payments, etc.
Profile	Manage vehicle info & profile details

C. Admin Dashboard Features

Module	Description
Login Authentication	Admin access control
Dashboard Overview	Total rides, users, earnings summary
User Management	Add/view/suspend riders and drivers
Ride Management	View all rides, status, fare, driver, etc.
Payment Management	View completed payments & driver balances
Driver Verification	Approve or reject driver documents
Fare Settings	Manage price per km or city-based rates
Manual Payouts	Approve and send payments to drivers
Notifications Panel	Send messages or alerts to users/drivers
Reports	Export trips, payments, ratings, etc.

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5. Payment Workflow

1. Rider books ride and pays online (Paystack/Flutterwave).
2. Company wallet receives funds.
3. Admin dashboard updates driver earnings.
4. Payouts to drivers are done **weekly or monthly**, minus company commission (e.g., 15%).
5. Paystack's Payout API can be integrated for automated transfers.

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6. Design & Branding

- Clean, modern UI/UX similar to Uber/Bolt.
- App should use your brand logo and colors (freelancer will provide design mockups).
- UI screens to include:
    - Login / signup
    - Home (map view)

- Ride details
- Driver details
- Payment confirmation
- Trip summary
- Admin dashboard (desktop view)

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7. Notifications & Messaging

- **Push notifications** via Firebase.
- **In-app alerts** for trip status (driver accepted, arrived, completed).
- Optional: In-app chat between rider & driver (can be added in later phase).

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8. Security

- Secure HTTPS connections.
- JWT-based authentication.
- Encrypted passwords (bcrypt or similar).
- Role-based admin access.
- Email/SMS OTP verification (optional).

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9. Deliverables

1. Fully functional **Rider App** (Android + iOS build).
2. Fully functional **Driver App** (Android + iOS build).
3. **Admin Dashboard** (web-based).
4. **Backend APIs** (Node.js) with documentation.
5. **Database setup** (MongoDB/PostgreSQL).
6. Payment gateway integration (Paystack/Flutterwave).
7. Testing report and bug fixes.
8. Deployed version on your hosting/cloud server.
9. Source code + installation guide.

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10. Timeline (MVP Target 3 – 4 Months)

Phase	Duration	Deliverables
Phase 1	3 weeks	UI/UX Design & Requirements Finalization

Phase	Duration	Deliverables
Phase 2	5 weeks	Backend API + Database setup
Phase 3	6 weeks	Mobile App Development (Flutter)
Phase 4	2 weeks	Admin Dashboard
Phase 5	2 weeks	Testing, Bug Fixes, Deployment
Total	**18 weeks (~4 months)**	MVP Ready

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11. Budget (Estimated Range)

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12. Post-Launch Support

- 1–2 months of free bug fixing.
- Maintenance contract (optional, ~~₦~~300k–~~₦~~500k/month).
- Future feature expansion after MVP testing.

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13. Intellectual Property (IP)

- All **source code, design files, and backend access** belong to the project owner (you).
- Freelancers must agree to **transfer full IP rights** upon payment completion.

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14. Communication & Tools

Purpose	Tool
Team chat / updates	Slack / WhatsApp / Telegram
Code repository	GitHub / GitLab
Task management	Trello / Notion
Design review	Figma
Weekly meetings	Google Meet / Zoom

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15. Success Metrics

- Smooth booking and payment flow.
- Less than 5 seconds average booking response time.

- 100+ test users with successful rides in pilot launch.
- Driver verification working properly.
- 95% uptime for backend.