

# SYSTEM BLUEPRINT

**Platform Type:** AI-Powered Financial Marketplace, Wallet & Execution System

**Goal:** Enable zero-knowledge users to confidently invest from BDT 1,000 using AI

## SECTION 1 — DETAILED USER JOURNEY MAP

**Journey A: Zero-Knowledge User → First Investment**

**Step A1: Landing Page Entry**

- URL: /
- User intent: “I want to grow my money but don’t understand investing”

**System Behavior:**

- Show simplified hero CTA
- No jargon, no charts

**Primary CTA:** Get Started

**Step A2: Registration Flow**

**Screens:**

1. Phone / Email input
2. OTP verification
3. Password setup

**Backend:**

- Create user\_id
- Create empty wallet (status: inactive)

**Step A3: AI Investment Onboarding (Critical)**

**Form Pages:**

- Monthly income range
- Investment goal (Emergency / Growth / Future)
- Risk comfort (3-question slider)

**Backend:**

- Create user\_risk\_profile
- Lock high-risk instruments for beginners

**Step A4: KYC Flow**

**Forms:**

- NID upload
- Face verification
- Bank account linking

**Backend:**

- KYC status = pending → approved
- Wallet activated only after approval

**Step A5: Wallet Funding**

**Screen:** Wallet > Add Money

**Minimum:** BDT 1,000

**Backend Flow:**

- Payment API call
- Ledger entry: credit
- Wallet balance update (real-time)

**Step A6: First AI Recommendation**

Screen: Home Dashboard

**Components:**

- “Recommended for You” card
- Expected return range
- Risk label

**Step A7: Investment Execution****Flow:**

1. Enter amount
2. Risk acknowledgement modal
3. Confirm investment

**Backend:**

- Wallet debit
- Partner API execution
- Holding created

**Step A8: Post-Investment Confidence Loop****System Actions:**

- Push notification: “Your money is now working”
- Show holding status

**SECTION 2 — FRONTEND PAGE-BY-PAGE SPECIFICATION****2.1 Landing Page****Header:**

- Logo
- Login | Get Started

**Hero:**

- Headline
- CTA button

**Footer:**

- Legal links

**2.2 Dashboard****Widgets:**

- Wallet summary
- AI suggestion
- Portfolio snapshot

**2.3 Wallet Page****Fields:**

- Available balance
- Invested balance
- Pending

**Actions:**

- Add money
- Withdraw

**2.4 Instrument Listing Page****Each Card:**

- Name
- Risk label
- Min amount

**2.5 Instrument Detail Page**

**Tabs:** Overview | AI | Risk | Issuer

**SECTION 3 — WALLET & FUND FLOW (TECHNICAL)****3.1 Wallet Design**

- Custodial wallet per user
- Double-entry ledger

**Ledger Fields:**

- transaction\_id
- user\_id
- debit
- credit
- balance\_after

**3.2 Fund Flow**

1. User → Atlantis Wallet
2. Wallet → Partner Escrow
3. Partner → Instrument Issuer

**SECTION 4 — BACKEND SERVICE ARCHITECTURE****Core Microservices**

- Auth Service
- User Profile Service
- KYC Service
- Wallet Service
- Instrument Service
- AI Engine Service
- Order Execution Service
- Notification Service

**SECTION 5 — API CONTRACT****Wallet APIs**

POST /wallet/add-funds

POST /wallet/withdraw

GET /wallet/balance

**Investment APIs**

POST /invest  
POST /sell  
GET /portfolio

## **SECTION 6 — AI ENGINE SPECIFICATION**

### **AI Layers**

- Recommendation AI
- Risk AI
- Suitability AI

### **Outputs:**

- Recommendation
- Confidence score
- Explanation text

## **SECTION 7 — ADMIN & COMPLIANCE**

### **Admin Panel**

- User overview
- Transaction logs

### **Compliance Panel**

- KYC queue
- AML alerts