Centralized Meme Coin Trading & Meme Contest Ecosystem

1. Project Overview

This project aims to develop a **next-generation Centralized Meme Coin Trading & Social Engagement Platform** that combines:

A. Centralized Meme Coin Exchange

- High-performance centralized matching engine.

- Real-time order book with market, limit & stop-loss orders.

- Multi-chain wallet support (BTC, ETH, SOL, USDT).

- Fiat on/off ramp via secure escrow-based P2P system.

- Built-in token discovery, analytics, and trending dashboards.

B. Meme Coin Creation Engine

- No-code smart contract generator (ERC-20 / SPL / BEP-20).

- Admin-controlled fee slabs & execution speed tiers.

- Platform-tagged contract deployment for brand visibility.

- Adjustable fee simulator to mimic blockchain gas models.

C. Meme Contest & Gamified Engagement Module

- Dream11-style prize pool contests.

- Reddit-style voting with weighted actions (likes, shares, comments, tips).

- AI-supported virality scoring, spam removal & duplicate detection.

- Automated prize distribution & configurable reward slabs.

D. Community & Social Discovery Layer

- Leaderboards for coins, creators, and contest winners.

- Trending/newly launched coin dashboards.

- One-click sharing to WhatsApp, Telegram, X, Discord, Instagram.

- Revenue features: ads, featured coins, boosted visibility.

The final product will be a **secure, scalable, high-engagement ecosystem**, combining trading, entertainment, and creator monetization.

2. Project Goals

- Build a secure, scalable centralized trading platform with community-driven features.

- Provide users with a seamless meme coin creation and trading experience.

- Drive platform activity using contests, social sharing, and gamified participation.

- Enable multiple revenue channels:
  trading fees, coin creation fees, contests, ads, boosts, P2P escrows.

- Ensure strong compliance with tiered KYC, fraud detection, and audit logs.

- Develop a cloud-native infrastructure ready for mass adoption.

3. Project Features

A. User Features

Authentication & Security

- OAuth2.0, JWT sessions, WalletConnect login.

- SMS/Email TOTP 2FA.

- Encrypted tokens, device-level risk profiling.

Wallet System

- Multi-chain crypto wallets: BTC, ETH, SOL, USDT.

- Fiat escrow wallet for P2P payments (UPI, cards, bank transfer).

- Deposit/withdrawal logs, fraud checks.

Meme Coin Creation

- Auto-deployment smart contract engine.

- Custom coin parameters (supply, tax, renounce, burn).

- Execution tiers: Normal / Fast / Instant (fee-based).

Trading

- Real-time order book, charts, and price feed.

- Market, limit & stop-loss orders.

- Admin-controlled sell caps to prevent pump-and-dump.

- DexScreener-style chart UI.

Social Features

- Share coin/meme links to social platforms.

- Watchlists, alerts, trending sections.

Contest Engine

- Upload memes (image, video, GIF).

- Weighted voting & engagement.

- Viral scoring via AI.

- Contest leaderboards & prize distribution.

B. Admin Features

- **User Management:** KYC flows, banning, fraud monitoring.

- **Coin Moderation:** Approvals, fee controls, scam detection.

- **Contest Management:** Create, manage, judge panels, approvals.

- **Finance:** Fee setup, revenue analytics, tax/exportable reports.

- **Ads:** Banner scheduling, featured coin slots, performance tracking.

- **Fraud Detection:** IP fingerprinting, bot detection, anomaly alerts.

4. Platform Pages

User-Facing

- Home / Trending Dashboard

- Login / Signup / KYC

- Wallets (Crypto + Fiat)

- Trading Dashboard

- Coin Creation

- Contests (Active / Upcoming / Results)

- Meme Submission Page

- Profile (History, Watchlist, Alerts)

Admin Panel

- Admin Dashboard (KPIs, P&L)

- User Management (KYC, flags)

- Coin Management (approvals, fees)

- Contest Management

- Finance Reports

- Fraud Monitoring

- Ad Manager

5. Platform Journey

User Journey

1. Register/Login → KYC (optional tiers).

2. Deposit via crypto or fiat P2P.

3. Explore trending coins or contests.

4. Create a meme coin with customizable fees.

5. Trade using charts and order types.

6. Participate in contests → submit or vote.

7. Earn prizes & trading profits.

8. Withdraw crypto/fiat.

Admin Journey

1. Login with 2FA.

2. Manage KYC & suspicious users.

3. Approve coins & adjust fees.

4. Set up contests & prize pools.

5. Oversee financials & revenues.

6. Monitor fraud dashboards.

7. Run paid ads & promotions.

6. Scope of Work

- Centralized trading engine (high-performance).

- Meme coin creation engine (with admin controls).

- Multi-chain wallets + P2P fiat escrow.

- Contest engine with submissions, voting & rewards.

- Discovery, social sharing & analytics.

- Complete admin panel (users, coins, contests, finance).

- Fraud & compliance (KYC, 2FA, audit logs).

- Mobile-optimized web + native mobile apps (iOS/Android).

7. Technical Architecture

Frontend

- React.js (Web), React Native/Flutter (Mobile)

- TailwindCSS + ShadCN UI

- API integration via REST/GraphQL

Backend (Microservices)

- Node.js (NestJS) or Python (FastAPI/Django)

- Services:
  Auth · Wallet · Trading Engine · Contest Engine · Notification · Fraud Service

- Databases: PostgreSQL, Redis

Blockchain

- Ethereum, Solana, Bitcoin, USDT

- WalletConnect authentication

- Smart contract generator microservice

Trading Engine

- Built in Go/Node.js

- In-memory order books

- Redis failover backup

- FIFO execution

Security

- AES-256 encryption

- TOTP 2FA

- Device/IP fingerprinting

- Immutable logs

8. Deployment Architecture

- **Cloud:** AWS/GCP/Azure

- **Kubernetes Microservices**

- **Load Balancer:** Nginx/ELB

- **Database:** PostgreSQL master-replica cluster

- **Cache:** Redis

- **Storage:** S3/Cloud Storage

- **CDN:** Cloudflare

- **Monitoring:** Prometheus + Grafana

- **CI/CD:** GitHub Actions / Jenkins

9. Development Timeline & Milestones

Phase	Duration	Deliverables	Milestone
Phase 1		Auth, Wallets, Admin	Foundation Complete
Phase 2		Trading Engine, Coin Generator	Trading Live
Phase 3		Dashboards, Social, Ads	Community Layer Live
Phase 4		Contests, Voting, Leaderboards	Contest Engine Live
Phase 5		Fraud, Reporting, Mobile Apps	Production-Ready Platform

Total Duration: - Weeks

10. Estimated Costs & Payment Terms

Total Project Cost: ₹

Phase	Cost (₹)	Payment
Upfront		Project Start
Phase 1		Milestone 1
Phase 2		Milestone 2
Phase 3		Milestone 3
Phase 4		Milestone 4
Phase 5		Final Delivery