

Comprehensive Action Plan: Auto Trading Bot & Memecoin Launchpad Platform

Based on your requirements and the technical research, here's a detailed action plan to build your AI-powered auto trading bot platform with integrated memecoin launchpad on SEI blockchain, expanding to Solana and Base in Phase 2.

Phase 1: Core Platform Development (12 Days)

Day 1-2: Foundation & Architecture

Data Scientist & AI Engineer:

- Set up Mastra framework using TypeScript with GROK/Gemini 2.5 Pro integration^{[1] [2]}
- Design AI signal generation algorithms using pattern recognition and predictive analytics^{[3] [4]}
- Implement core trading strategies: trend following, mean reversion, momentum trading^{[4] [5]}
- Create data pipeline for Bitcoin, Ethereum, Solana, SEI, and Hyperliquid price feeds

Blockchain Engineer:

- Set up SEI blockchain development environment (SEI V2 EVM compatibility)^{[6] [7]}
- Research and integrate with major SEI DEXes (DragonSwap, Yei Finance)^[6]
- Design smart contract architecture for trading bot execution and fee collection (1-2% PnL)^[6]
- Create initial token contracts for memecoin launchpad with bonding curve mechanics^[6] up Next.js/React frontend with TypeScript
- Design responsive UI/UX for trading dashboard and memecoin launchpad
- Implement wallet integration (MetaMask, Keplr for Cosmos ecosystem)^[6]
- Create user authentication and portfolio management system

Day 3-5: Core Trading Bot Development

AI Engineer:

- Implement Mastra MCP agents for real-time market data analysis^{[8] [9]}
- Create signal generation algorithms using technical indicators (RSI, MACD, Bollinger Bands)^{[10] [11]}
- Develop risk management system with stop-loss and position sizing^{[12] [13]}

- Set up backtesting framework using historical data^[13] ^[14]

Blockchain Engineer:

- Deploy trading execution smart contracts on SEI testnet
- Implement automated market making integration with SEI's built-in CLOB^[6]
- Create fee collection mechanism (1-2% of PnL) with secure treasury management
- Set up cross-DEX liquidity aggregation for optimal trade execution

Data Engineer:

- Build real-time data ingestion pipeline for crypto market data
- Set up time-series database for storing price history and trading signals
- Create API endpoints for trading bot performance metrics
- Implement data validation and error handling systems

Day 6-8: Memecoin Launchpad Development

Blockchain Engineer:

- Implement bonding curve smart contracts with exponential pricing models^[15]
- Create token factory contracts for easy memecoin deployment
- Set up liquidity pool management and automatic DEX listing functionality^[15]
- Implement governance features for community voting on launches^[15]

Fullstack Developer:

- Build memecoin creation interface with no-code token deployment^[16]
- Create project showcase pages with tokenomics visualization
- Implement user-friendly token purchase interface with real-time pricing
- Develop community features: comments, voting, social sharing

Social Media Marketer:

- Design viral distribution mechanisms and referral systems^[15]
- Create templates for memecoin marketing campaigns
- Set up social media integration points within the platform
- Develop community guidelines and moderation framework

Day 9-10: AI-Powered Community Features

AI Engineer:

- Integrate Twitter/X API for automated social media posting^[17] ^[18]
- Implement AI image generation for memecoin artwork using latest models^[19] ^[20]
- Create Mastra workflows for automated community engagement^[8]

- Set up sentiment analysis for market trend prediction

Fullstack Developer:

- Build Twitter page automation tools for memecoin projects
- Create image generation interface with customizable meme templates
- Implement real-time community chat and updates system
- Develop notification system for trading signals and launches

Social Media Marketer:

- Design community building playbooks and best practices^[21] ^[22]
- Create content templates for different memecoin categories
- Set up influencer collaboration framework
- Develop metrics tracking for community engagement

Day 11-12: Testing & Deployment

All Team Members:

- Conduct comprehensive testing on SEI testnet
- Perform security audits of smart contracts
- Load test the platform with simulated trading scenarios
- Deploy to SEI mainnet with initial liquidity
- Launch MVP with basic trading bot and memecoin launchpad functionality

Phase 2: Multi-Chain Expansion (20 Days)

Week 1 (Days 1-7): Solana Integration

Blockchain Engineer:

- Set up Solana development environment using Anchor framework^[23] ^[24]
- Port trading bot smart contracts to Solana using Rust^[24] ^[25]
- Integrate with major Solana DEXes (Jupiter, Orca, Raydium)^[25]
- Implement cross-chain bridge functionality for asset transfers^[26] ^[27]

AI Engineer:

- Optimize trading algorithms for Solana's high-speed environment (50K-70K TPS)^[23] ^[25]
- Implement Solana-specific market making strategies
- Create multi-chain portfolio rebalancing algorithms
- Set up cross-chain arbitrage detection systems

Data Engineer:

- Extend data pipeline to include Solana market data
- Implement cross-chain analytics and reporting
- Create unified API layer for multi-chain operations
- Set up real-time synchronization between chains

Week 2 (Days 8-14): Base Chain Integration

Blockchain Engineer:

- Set up Base development environment using OP Stack^[28] ^[29]
- Deploy contracts on Base using existing Ethereum tooling^[28] ^[30]
- Integrate with Base ecosystem DEXes and DeFi protocols^[28]
- Implement Layer 2 specific optimizations for gas efficiency

Fullstack Developer:

- Create multi-chain wallet management interface
- Implement chain switching functionality in the UI
- Build cross-chain portfolio visualization tools
- Add support for Base-specific tokens and protocols

AI Engineer:

- Adapt trading strategies for Base's lower fees and faster finality^[28] ^[29]
- Implement Ethereum L1/Base L2 arbitrage opportunities
- Create cross-chain yield farming optimization algorithms
- Set up multi-chain risk management systems

Week 3 (Days 15-20): Advanced Features & Optimization

All Team Members:

- Implement advanced cross-chain DEX aggregation^[26] ^[31]
- Create sophisticated portfolio analytics and reporting
- Add institutional-grade API for high-volume traders
- Implement advanced memecoin launch mechanisms (Dutch auctions, fair launches)
- Conduct comprehensive security audits across all chains
- Optimize performance and gas efficiency
- Launch full multi-chain platform

Team Coordination Strategy

Daily Standups (15 minutes)

- Progress updates from each team member
- Blocker identification and resolution
- Daily goal setting and task prioritization

Weekly Sprint Planning

- Feature prioritization based on user feedback
- Technical debt management
- Performance optimization goals
- Security review checkpoints

Communication Tools

- **Slack/Discord:** Real-time team communication [\[32\]](#) [\[33\]](#)
- **GitHub:** Code collaboration and version control [\[34\]](#) [\[33\]](#)
- **Notion:** Documentation and project management [\[33\]](#)
- **Figma:** Design collaboration and UI/UX reviews

Development Methodology

- **Agile Sprints:** 3-4 day sprints for rapid iteration [\[33\]](#)
- **Continuous Integration:** Automated testing and deployment
- **Code Reviews:** Mandatory peer review for all changes
- **Security First:** Regular smart contract audits and penetration testing

Technical Stack Recommendations

Frontend

- **Framework:** Next.js 14 with TypeScript
- **UI Library:** Tailwind CSS + Headless UI
- **State Management:** Zustand + React Query
- **Wallet Integration:** RainbowKit + Wagmi

Backend

- **AI Framework:** Mastra with TypeScript^[1] ^[2]
- **Database:** PostgreSQL + Redis for caching
- **API:** tRPC for type-safe APIs
- **Message Queue:** BullMQ for job processing

Blockchain

- **SEI:** CosmWasm smart contracts^[6]
- **Solana:** Anchor framework with Rust^[24] ^[25]
- **Base:** Solidity smart contracts^[28] ^[29]
- **Cross-chain:** Axelar or LayerZero protocols^[26]

Infrastructure

- **Hosting:** Vercel for frontend, Railway for backend
- **Monitoring:** Sentry for error tracking
- **Analytics:** Mixpanel for user behavior
- **Security:** Forta for smart contract monitoring

Risk Management & Mitigation

Technical Risks

- **Smart Contract Vulnerabilities:** Implement comprehensive testing and audits
- **Cross-chain Bridge Risks:** Use established protocols like Axelar
- **API Dependencies:** Implement fallback data providers
- **Scalability:** Design for horizontal scaling from day one

Market Risks

- **Regulatory Compliance:** Implement KYC/AML where required
- **Market Volatility:** Set conservative position sizing limits
- **Liquidity Risks:** Integrate multiple DEX sources
- **User Fund Safety:** Implement non-custodial architecture

Timeline Risks

- **Scope Creep:** Strict feature prioritization
- **Technical Blockers:** Daily standup early identification
- **Integration Delays:** Parallel development where possible

- **Testing Time:** Allocate 20% of time for comprehensive testing

Success Metrics

Phase 1 KPIs

- **Trading Volume:** Target \$100K+ daily volume
- **User Acquisition:** 100+ active traders
- **Memecoin Launches:** 5+ successful launches
- **Platform Uptime:** 99.9% availability

Phase 2 KPIs

- **Multi-chain Volume:** \$1M+ combined daily volume
- **Cross-chain Transactions:** 1000+ daily bridging
- **User Retention:** 70%+ monthly active users
- **Revenue:** \$10K+ monthly fees from trading and launches

This comprehensive plan leverages the latest technologies and frameworks while maintaining a realistic timeline for your 5-person team. The modular approach allows for parallel development and reduces dependencies between team members.

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