

PokerEscrow Product Requirements Document

1. Overview

Product Name: PokerEscrow

Objective: Simplify poker night payouts with a blockchain-based escrow account, allowing players to deposit funds, submit chip counts when cashing out, and receive automatic payouts after approval.

Target Audience: Casual poker players (18-45) hosting home games, tech-savvy users familiar with crypto wallets.

2. Problem Statement

- Manual payment apps (Venmo/Zelle) are cumbersome for poker payouts.
- Cashing out during games is error-prone and disrupts play.
- Players want secure, transparent fund management without a banker.

3. Key Features

3.1 Mobile App (iOS/Android)

- **User Authentication:** Sign up with email or wallet (MetaMask). Basic KYC for compliance.
- **Game Setup:** Host creates game, players join and deposit USDC into escrow.
- **Chip Count Submission:** Players submit chip count (monetary value) when cashing out.
- **Approval Process:** Other players and banker approve/dispute submitted amount via app.
- **Payout:** Smart contract releases funds to player's wallet upon approval.
- **Game History:** View past games and payouts (premium feature).

3.2 Blockchain and Smart Contracts

- **Blockchain:** Base network (low fees, Ethereum-compatible).
- **Smart Contract:**
 - Holds funds in escrow.
 - Accepts chip count submissions and approvals.

- Distributes payouts when approved by players and banker.
- **Security:** Immutable records for transparency.

3.3 User Flow

1. Host creates game in app, players join and deposit USDC.
2. Funds locked in smart contract; players use physical chips for gameplay.
3. To cash out, player submits chip count in app.
4. Other players and banker approve/dispute via app.
5. Upon approval, smart contract sends funds to player's wallet.
6. At game end, repeat for remaining players.

4. Technical Requirements

- **Frontend:** React Native, Web3.js for blockchain interaction.
- **Backend:** Node.js, MongoDB for user/game data.
- **Blockchain:** Solidity for smart contracts, Base network.
- **Integrations:** Persona for KYC, MetaMask for wallet.

5. Monetization

- Transaction fee: 0.75% per deposit/payout.
- Premium subscription: \$2.99/month for game history, analytics, themes.

6. Success Metrics

- 1,000 downloads in 3 months.
- 500 games hosted in 6 months.
- 60% retention rate after 6 months.

7. Regulatory Considerations

- KYC/AML compliance via Persona.
- Focus on private games to minimize gambling law issues.
- Consult legal expert for U.S. compliance.

8. Development Timeline

- **Month 1-2:** App MVP (deposit, submission, approval, payout).
- **Month 3:** Beta testing with 50 users.
- **Month 4:** Launch on app stores.

