

CAPSTONE PROJECT PROPOSAL

PART - A Final Project Proposal

Core Idea - The idea is to build a **decentralized soccer prediction market on Solana** using PDAs and AMM-style bonding curves. Each match will have a PDA managing a single SOL pool and two virtual outcome tokens Team A and Team B shares.

Users can buy any amount of shares, including fractional ones, with SOL, and prices adjust dynamically via the bonding curve. Share prices reflect the implied probability of each outcome. After the match, an oracle verifies the result, and holders of winning shares redeem SOL from the pool, while losing shares become worthless. This creates a fair, transparent, and trustless betting platform accessible to all users.

1) Core Value Proposition & Product-Market Fit (PMF)

The core value proposition is that the users can participate without trusting a centralized entity. A Bonding curve ensures fair market pricing and prevents manipulation. Moreover, the prices of outcome tokens serve as a live probability signal for matches. Fans gain a more engaging experience combining betting, strategy, and social proof. This product is designed for soccer enthusiasts seeking a trustworthy and transparent way to heighten their entertainment and excitement during matches.

2) Key Target Markets

The key target markets that would really benefit from this decentralized soccer prediction platform are:

Primary Segment – Hardcore Soccer Enthusiasts

- Fans who follow a specific league, tournament, or club (e.g., Premier League, La Liga, FIFA World Cup).
- Engage frequently with soccer content, stats, and match discussions.
- Likely to place informed bets or predictions and value a **trustless, fair, and transparent platform**.
- Motivation: Enhance match-day excitement, social interaction, and competitive fun within a dedicated fan community.

Secondary Segment – Fantasy Sports & Esports Gamers

- Users accustomed to strategic prediction, team management, and probability-based engagement.
- Already familiar with online platforms that reward predictive skill, making onboarding to fractional crypto bets easier.

- Motivation: Competitive gameplay, social proof, and leveraging analytical skills for profit or status.

Tertiary Segment – Crypto-Savvy Users in Restricted Betting Regions

- Residents of countries where traditional sports betting is restricted.
- Motivated by anonymity, trustless transactions, and global access to prediction markets.
- Likely already familiar with wallets, tokens, and decentralized apps, lowering adoption friction.

3) Competitor Landscape

The key competitors that A.I. could figure out in this space were as follows :

1. Polymarket / Kalshi (Prediction Markets, US-focused)

- **What they do:** Offer event-based markets where users can speculate on outcomes of sports, politics, and other events.
- **Weaknesses:**
 1. Often US or region-restricted due to regulations.
 2. Not fully decentralized; some rely on centralized entities for settlement or liquidity.
 3. Limited fractional betting or dynamic bonding curves for real-time probability adjustments.

2. Augur (Ethereum-based Prediction Market)

- **What they do:** Decentralized platform for prediction markets with crowdsourced outcome reporting.
- **Weaknesses:**
 1. Ethereum gas fees make micro-bets or fractional participation expensive.
 2. UX can be complicated for casual sports fans; onboarding is steep.

3. Liquidity fragmentation can lead to poor pricing and low engagement for niche markets like soccer matches.

3. Omen / Gnosis Protocol

- **What they do:** Decentralized prediction markets using automated market makers for pricing.
- **Weaknesses:**
 1. Mostly focused on general events rather than sports; soccer-specific engagement is low.
 2. User interface is more generic, less gamified, and may not appeal to casual fans seeking immersive experience.
 3. Requires users to understand AMM mechanics to engage optimally.

I've noticed some areas where the AI struggles, based on competitor analysis and my own findings. Below are some weaknesses I've identified that AI was unable to detect.

- 1) **Most of these prediction platforms are for EVERY EVENT which leads to a bad UX.** Platforms like polymarket, Kalshi offer predictions for any kind of global event. This may or may not be specifically related to soccer. What this does is, it creates a lot of confusion for soccer enthusiasts who are usually not familiar with such platforms by looking at all such different events, not specifically related to soccer.
On top of this, is the added complexity of web3 and relatively lesser trust of the mass in it.
- 2) **An overly broad target market diminishes community engagement.** Soccer enthusiasts thrive on connecting with like-minded fans, discussing matches, and sharing insights. Platforms that cater to every possible event—rather than focusing on soccer—dilute this sense of community. When predictions span unrelated topics, users don't feel they are part of a dedicated fan space, which reduces engagement, social interaction, and ultimately, the enjoyment of soccer-focused predictions.

Moreover, some of the competitors that A.I couldn't list are :

- 1) **Polyquest** - A decentralized, cross-chain prediction market platform built on the high-performance Solana blockchain. It enables users to create, participate in, and resolve crowdsourced predictions on a wide range of topics, leveraging the "wisdom of the crowds" to generate more accurate forecasts.
- 2) [Luck.io](#) - A trust-free degen platform for provably fair slots, wins instantly settled to your wallet.

4) Founder-Market Fit (FMF)

I have been passionate about soccer since grade 5, serving as captain of my school team and leading us to multiple victories, which gave me firsthand experience in strategy, teamwork, and competitive play. Alongside this, I developed strong technical skills, winning first place in the Wormhole Sidetrack at the Colosseum 2025 Hackathon for building **Accret**, a decentralized wallet. This demonstrates my ability to execute on blockchain projects and navigate complex technical challenges. I remain an avid football fan, frequently playing at local turfs, keeping me connected to the sport and its community. My network includes members of **SuperTeam India** who have previously built startups on Solana and understand the ecosystem deeply; they provide guidance on smart contract development, product design, and marketing strategy, helping me bridge my soccer expertise with blockchain execution. This combination of **soccer experience, technical execution, and ecosystem mentorship** uniquely positions me to build a decentralized, fan-focused prediction market on Solana.

Part B: Adversarial Analysis & Refinement

The full A.I. critique along with initial thoughts is as follows :

1. Core Value Proposition & PMF

Strengths:

- Clear focus on **trustlessness** and decentralization—directly addresses pain points of traditional betting platforms.
- **Bonding curve mechanism** differentiates it from static odds platforms and allows real-time market pricing.
- Emphasis on **soccer-specific engagement** makes it more targeted and potentially sticky for the right audience.
- Social engagement (strategy + probability + social proof) enhances the fan experience and encourages repeated use.

Weaknesses / Risks:

- The proposition may be **too technical for casual soccer fans**, especially if they are not crypto-savvy. Users may struggle with bonding curve mechanics, wallets, or SOL transactions.
- While “trustless” is appealing to crypto users, mainstream users may **not perceive centralized betting as a significant problem**, limiting the appeal outside Web3-native communities.
- PMF depends heavily on **active, frequent engagement during live matches**; casual fans may not participate often enough to sustain liquidity or social activity.

Opportunity:

- Layer **educational or simplified UX elements**, e.g., “buy shares like betting tickets” instead of explaining bonding curves, to make it accessible to a broader soccer audience.

INITIAL THOUGHTS:

While the points raised are somewhat valid, in true sense, these may not pose a big barrier in the real world. This is because, in the betting industry, the use of crypto has been widely accepted in the past few years. Big platforms like [Stake.com](https://stake.com) also accept crypto payments and have a very large user base. This has made the normal audience accept crypto as a means of payment for such platforms regardless of its technicality.

2. Target Market

Strengths:

- Well-defined segments:
 - **Global restricted markets:** Users frustrated with traditional betting.
 - **Fantasy sports & esports enthusiasts:** Already familiar with predictions and probability-based engagement.
 - **Soccer fans & enthusiasts:** Highly engaged and willing to spend time analyzing matches.
- Aligns with your product's social and gamified nature.

Weaknesses / Risks:

- Segmenting **too broadly may dilute engagement**, as you noted. For example, targeting all "soccer fans" without further segmentation (e.g., by league, region, or betting intensity) risks low retention.
- **Crypto adoption gaps:** Global audience in restricted markets may face barriers in acquiring SOL, understanding wallets, or trusting a Web3 system.
- Casual fans may find fractional bets and bonding curves intimidating, limiting growth beyond early adopters.

INITIAL THOUGHTS:

The concept of hyper-focusing on 1 segment of soccer, is truly commendable and will help in defining the achievable scope of v1. By being hyper focused, we can create a closely knit community of soccer enthusiasts.

3. Competitor Landscape

Strengths of Your Analysis:

- Identifies major players like Polymarket, Kalshi, Augur, and Omen.
- Recognizes weaknesses such as:
 - Broad event coverage diluting engagement.
 - UX complexity and high transaction costs.
 - Limited soccer-specific focus.

Weaknesses / Gaps in Analysis:

- **Traditional sports betting platforms** (even centralized ones) could compete indirectly by offering strong UX, brand trust, and fiat-onboarding ease.
- **Fantasy sports platforms with gamified elements** (like Sorare or DraftKings) may compete for attention, even if they aren't prediction markets per se.
- AI's competitor list may have missed **local/regional crypto sports betting dApps** or **social betting apps**, which could erode your niche.

2) Refining the project Definition:

The best revision that should be made based on critiques given by the A.I. were specifically in the Target Market section, by changing the target market from a broad soccer fanbase to a specific league related one for the v1 implementation :

Current Target Market Section:

The key target markets that would really benefit from this decentralized soccer prediction platform are:

- **Global Audience from Restricted Markets** - People living in regions where sports betting is prohibited, can anonymously use this decentralized platform to be a part of such events.

- **Fantasy Sports & Esports enthusiasts** - People familiar with making predictions or managing virtual teams who enjoy combining strategy, probability, and market-driven outcomes.
- **Soccer Fans & enthusiasts** - People who are very much involved in soccer and closely track matches and are confident in their skills to predict soccer scores based on their past research and observing trends.

Iterated Target Market Section :

Primary Segment – Hardcore Soccer Enthusiasts (Initial Launch Focus)

- Fans who follow a specific league, tournament, or club (e.g., Premier League, La Liga, FIFA World Cup).
- Engage frequently with soccer content, stats, and match discussions.
- Likely to place informed bets or predictions and value a **trustless, fair, and transparent platform**.
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Secondary Segment – Fantasy Sports & Esports Gamers

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Tertiary Segment – Crypto-Savvy Users in Restricted Betting Regions

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- Likely already familiar with wallets, tokens, and decentralized apps, lowering adoption friction.

This updated Target market is more specific to the type of football matches being supported.

3) Critique & Refine FMF:

The current FMF is as follows :

I have been passionate about soccer since grade 5 and was an active member of my school team, which instilled a deep appreciation for the sport. Alongside my love for football, I developed a strong interest in coding and blockchain development during my second year of college, and I continue to explore this space actively. I remain an avid football fan, frequently playing at local turfs to stay connected with the game. For this project, I am supported by a valuable network that includes members of SuperTeam India, who provide guidance on technical challenges, product feedback, and marketing strategies, helping me bridge my passion for soccer with my skills in blockchain development.

AI critiques:

Limited evidence of execution in crypto or product delivery:

Mentioning that you “explore” blockchain is weaker than demonstrating actual projects built, smart contracts deployed, or dApps tested. Investors and users may want proof that you can operationalize the idea, not just have the skills.

Network usage is vaguely described:

You mention guidance and feedback, but not specific achievements or mentorship impact. It’s unclear how this network materially strengthens your execution ability.

No quantified achievements in either domain:

“Active member of school team” and “developed interest in blockchain” are qualitative. Showing results—matches played, leagues participated in, blockchain projects shipped—adds credibility.

These insights are really helpful and it is definitely very important to include numbers and achievements to add credibility.

Revised Founder Market Fit:

I have been passionate about soccer since grade 5, serving as captain of my school team and leading us to multiple victories, which gave me firsthand experience in strategy, teamwork, and competitive play. Alongside this, I developed strong technical skills, winning first place in the Wormhole Sidetrack at the Colosseum 2025 Hackathon for building **Accret**, a decentralized wallet. This demonstrates my ability to execute on blockchain projects and navigate complex technical challenges. I remain an avid football fan, frequently playing at local turfs, keeping me connected to the sport and its community. My network includes members of **SuperTeam India** who have previously built startups on Solana and understand the ecosystem deeply; they provide guidance on smart contract development, product design, and marketing strategy, helping me bridge my soccer expertise with blockchain execution. This combination of **soccer experience, technical execution, and ecosystem mentorship** uniquely positions me to build a decentralized, fan-focused prediction market on Solana.