Product Specification Document (PSD)

LEVR MVP

Version 1.0

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1. Document History

Version	Modification Date	Author	Summary of Changes
v1.0	26 January, 2023	Felix Peterson, Hansel Melo	Initial draft of PSD
v1.1	27 January, 2023	Felix Peterson	Added user personas and user stories.

2. Problems to be Solved

- Illiquidity: Traditional sportsbetting platforms do not offer liquid assets or positions that can be sold at any time. LEVR replaces bets with liquid assets and positions, allowing for a transparent exit from an initial position.
- Leverage: Traditional sportsbetting platforms do not allow for leverage on bets. LEVR allows for leverage up to 5x on all asset/token purchases, creating a truly liquid sports betting market.
- Single "vig" fee structure: Traditional sportsbetting platforms rely on a single "vig" fee to generate profit. LEVR replaces this with a threefold fee structure, composed of a smaller vig, transaction fees, and borrow fees (on leverage), which allows for more flexibility and profit drivers.

3. Project Vision

The project vision for LEVR is to build a decentralized sports betting platform that enables liquid positions and leverage to be taken out on those positions. This new technology, called a Leverage Event Decentralized Exchange (LEVDEX), serves as a generalization of a traditional sportsbook into the decentralized space and re-engineers the theory of sportsbooks in general. The platform aims to replace traditional concepts such as "bets" with liquid assets/positions, "odds'' with asset/token prices, and "house liability" with a liquidity pool vault. Additionally, the platform allows for leverage up to 5x on all asset/token purchases, and replaces the traditional "vig" with a threefold fee structure composed of a smaller vig, transaction fees, and borrow fees. This re-engineered platform aims to create a truly liquid sports betting market, with added benefits such as transparent exits for bettors.

4. Project Summary

The LEVR.bet platform is a decentralized sports betting platform that utilizes DeFi primitives to create a liquid market for sports betting. The platform replaces traditional sportsbook concepts with liquid assets/positions that can be sold at any time, replaces odds with asset/token prices, and replaces house liability with a liquidity pool vault. Additionally, the platform allows for leverage of up to 5x on all asset/token purchases, and replaces the traditional sportsbook vig with a threefold fee structure composed of a smaller vig, transaction fees, and borrow fees. The platform utilizes a liquidation engine and liquid positions to make leverage possible, and the added transaction-based fee incentivizes both transaction volume and frequency in the market to drive profits.

5. Project Goals

- To create a decentralized sports betting platform that utilizes the benefits of blockchain technology and smart contracts

- To provide a liquid marketplace for sports betting where positions can be traded and sold at any time

- To replace traditional sportsbook odds with asset/token prices

- To replace traditional house liability with a liquidity pool vault

- To offer leverage options on all asset/token purchases, up to 5x

- To create a threefold fee structure that includes a smaller vig, transaction fees, and borrow fees on leverage

- To increase profitability and profit margins on a sports betting platform through innovative fee structures and liquid positions

- To incentivize both transaction volume and frequency of the market

6. Project Schedule

Project start date: January 26, 2023

Project end date: Month DD, YYYY (use this date format only)

7. Project Guidelines

- Leverage on positions: allowing users to take out leverage on their positions up to 5x.

- Liquid positions: allowing users to easily sell their positions at any time.

- A liquidity pool vault: replacing the traditional concept of "house liability" to ensure a more transparent and secure system.

- Tokenized betting lines: replacing traditional odds with asset/token prices for a more transparent and liquid market.

- A threefold fee structure: composed of a smaller vig, transaction fees (1% of position size), and borrow fees (on leverage) to diversify revenue streams and incentivize market activity.

- Liquidation engines: to ensure that leveraged positions can be safely and efficiently liquidated in case of market fluctuations.

- A marketplace for trading assets: to facilitate the buying and selling of positions for a more liquid market.

- Smart contract-based system: to ensure transparency, security, and automation of all transactions and operations on the platform.
- To be built on either Arbitrum or Avax.
- Users should be able to connect to LEVR with any EVM wallet that is compatible with WalletConnect.

- Designs should differ from existing sports betting platforms. The user interface should look more like trading platforms like GMX or dYdX.
- (Any third-party platforms being used for a task with a link to the third-party platform in the footnote)
- Tech-stack details (ask the tech lead to provide these):
    a. Frontend
    b. Blockchain
    c. Backend
    d. Database
    e. DevOps

8. Personas

Persona #1: Bettor

Name and/or title	**Bettor**
1. Who are you (job, responsibilities, interests, focus, passions)?	I am an avid sports fan and enjoy placing bets on my favorite teams. I am always looking for new and exciting ways to engage with sports and make my betting experience more exciting.
2. What are your main goals and objectives? (Accountabilities, targets, goals, success criteria)?	A. My goal is to place accurate bets and win as much money as possible. B. I want to be able to place bets easily, quickly and securely. C. I want access to a wide variety of markets. D. I want to make sure I get fair odds. E. I want to have access to real-time information and updates to make informed decisions.
3. What are the main hurdles you face in achieving these goals or meeting these objectives (technology, process, finance, human resources)?	A. Limited access to a variety of betting options. B. Inefficient and slow processes for placing bets and receiving payouts. C. Limited access to real-time information and updates.
4. What are the consequences/outcomes of the	A. Limited access to betting options and inefficient processes can result in a lack of interest in the betting platform and a lack of trust in the platform's security and

challenges you face (problems to be solved)?	reliability. B. Loss of money due to inaccurate bets.

Persona #1: Liquidity Provider

Name and/or title	**Liquidity Provider**
3. Who are you (job, responsibilities, interests, focus, passions)?	I am a professional trader with a strong understanding of the crypto and DeFi markets. I am interested in providing liquidity to various platforms and earning a return on my investments.
4. What are your main goals and objectives? (Accountabilities, targets, goals, success criteria)?	A. I want to have access to a wide variety of liquidity pools and be able to easily provide liquidity to them. B. I want to provide liquidity in a pool with a high trading volume. C. I want to have a clear understanding of the risks and rewards associated with each pool. D. When I provide liquidity I want to interact with a platform with a user-friendly interface.
3. What are the main hurdles you face in achieving these goals or meeting these objectives (technology, process, finance, human resources)?	A. Limited access to a variety of liquidity pools. B. A lack of users on the platform, which can result in low trading volume. C. Complex and confusing processes for providing liquidity. D. Lack of transparency and information about the risks and rewards associated with each pool.
4. What are the consequences/outcomes of the challenges you face (problems to be solved)?	A. Limited access to liquidity pools and confusing processes can result in a lack of interest in providing liquidity and a lack of trust in the platform's transparency and reliability.

Persona #1: Platform Admin

Name and/or title	**Platform Admin**
5. Who are you (job, responsibilities, interests, focus, passions)?	I am responsible for managing and maintaining the LEVR platform, ensuring that it is secure and user-friendly for all

	users.
6. What are your main goals and objectives? (Accountabilities, targets, goals, success criteria)?	A. I want to ensure that the platform is operating smoothly and efficiently for all users. B. I want to ensure that the platform is stable and secure. C. I want to achieve high user engagement. D. I want to achieve low downtime on the platform.
3. What are the main hurdles you face in achieving these goals or meeting these objectives (technology, process, finance, human resources)?	A. The main hurdle I face is ensuring the security and stability of the platform. This requires constant monitoring and maintenance, which can be time-consuming and difficult to manage. B. Difficulty in maintaining and scaling the platform to meet the needs of an increasing number of users.
4. What are the consequences/outcomes of the challenges you face (problems to be solved)?	A. Low user engagement. B. Negative user experience. C. Security breaches.

9. User Stories and Functional Requirements

Persona #1: Bettor

1.1	User Story	As a bettor on LEVR, I want to be able to place bets on different events so that I can win money.
1.1.1	Functional Requirement	Allow users to select from a variety of events to place bets on
1.1.2	Functional Requirement	Allow users to select from different types of bets (moneyline, over-under, spread)
1.1.3	Functional Requirement	Allow users to view their current bets and the odds of winning
1.1.4	Functional Requirement	Allow users to make a bet with up to 5x leverage

1.1.5	Functional Requirement	Pay out winnings to users in a timely manner. For each game, tokens are minted for both teams. Tokens for the winning team will be bought back by LEVR at a rate of $1 per token.
1.2	User Story	As a bettor on the LEVR platform, I want to be able to trade my liquid betting positions on an orderbook style user interface so that I can quickly and easily manage my bets and make decisions based on real-time game conditions.
1.2.1	Functional Requirement	Allow user to place buy and sell orders for their bets
1.2.2	Functional Requirement	Allow user to view real-time market data for their bets, including current bid and ask prices and trading volume
1.2.3	Functional Requirement	Allow user to cancel or modify their existing orders
1.2.4	Functional Requirement	Allow user to set stop-loss and take-profit orders for their bets
1.3	User Story	As a bettor on LEVR, I want to be able to view my betting history so that I can track my progress.
1.3.1	Functional Requirement	Allow users to view their past bets and the outcomes
1.3.2	Functional Requirement	Allow users to view their winnings and losses over time
1.3.3	Functional Requirement	Allow users to filter their betting history by event, date, and type of bet
1.4	User Story	As a bettor on LEVR, I want to be able to know the status of my leveraged positions so that I can get a better understanding of potential liquidations.
1.4.1	Functional Requirement	Allow users to view their leveraged bet positions and see the liquidation price of those leveraged positions.
1.4.2	Functional Requirement	Give a warning notification if a user's position is within a certain threshold of liquidation (e.g. 10% away from being liquidated).

1.4.3	Functional Requirement	Give a notification in case a user's position has been liquidated.

Persona #1: Liquidity Provider

1.5	User Story	As a liquidity provider on LEVR, I want to be able to add liquidity to the platform so that I can earn a share of the platform's fees.
1.5.1	Functional Requirement	Allow users to add liquidity to the platform in the form of various supported tokens
1.5.2	Functional Requirement	Allow users to view the current liquidity pool and their share of it
1.5.3	Functional Requirement	Pay out a share of the platform's fees to liquidity providers on a regular basis
1.5.4	Functional Requirement	Allow users to withdraw their liquidity at any time
1.6	User Story	As a liquidity provider on LEVR, I want to be able to view my liquidity providing history so that I can track my earnings.
1.6.1	Functional Requirement	Allow users to view their past liquidity providing actions and the corresponding earnings
1.6.2	Functional Requirement	Allow users to view their total earnings from liquidity providing over time
1.6.3	Functional Requirement	Allow users to filter their liquidity providing history by date and token

Persona #1: Platform Admin

1.7	User Story	As an admin on LEVR, I want to be able to add new events to the platform so that users can place bets on them.

1.7.1	Functional Requirement	Allow admins to create new events and set the corresponding odds (odds provided by oracle/backend).
1.7.2	Functional Requirement	Allow admins to view the current events and the betting activity on them
1.7.3	Functional Requirement	Allow admins to monitor and prevent fraudulent activity on the platform
1.8	User Story	As an admin on LEVR, I want to be able to manage user accounts so that I can ensure the platform's security.
1.8.1	Functional Requirement	Allow admins to view user accounts and their activity
1.8.2	Functional Requirement	Allow admins to monitor and prevent fraudulent activity on user accounts
1.8.3	Functional Requirement	Allow admins to set user account limits and restrictions (on the frontend. Smart contracts are immutable).

10. Appendix A: Deliverables

- Logic/financial flow schematic: <<insert link here>>

- Query Log: <<insert link here>>

- Wireframes: <<insert link here>>

- Figma designs: <<insert link here>>

- Brand Guidelines: <<insert link here>>

11. Appendix B: Phase II Items

- This is a sample bullet for this section