

User Story 1: Regular gambler/Speculator

Project Name: wScout

Date: 5-11-2024

User Story ID: 1

1. User Persona

- **Name:** Jeff
- **Role:** Regular gambler/Speculator
- **Goal:** Identify attractive odds for small to moderate bets to improve returns on betting by making more informed decisions.

2. User Story

- As a regular gambler (Jeff), I want to view a consolidated list of betting odds across multiple prediction markets so I can select the most favorable options and maximize my returns without manually comparing platforms.

3. Acceptance Criteria

- **Functionality:** The platform should allow Jeff to view and compare odds from various markets in an intuitive format.
- **Odds Aggregation:** The odds display must be accurate, aggregating data from multiple markets to provide real-time updates.
- **User Interaction:** Jeff should have the ability to filter or sort odds by sport, bet type, or expected return to identify the best options.
- **Highlights:** Jeff should receive notifications when there is a significantly favorable betting opportunity within his selected preferences.
- **Security:** Jeff's stored preferences should be securely protected.

4. Priority

- **High** – Essential for attracting casual gamblers looking for simple ways to optimize their bets. The freemium version will appeal to a broad user base while encouraging upgrades.

5. Technical Notes (for Developers)

- **Dependencies:** Stable integrations with data APIs from betting and prediction markets, along with accurate odds scraping for sites without API access. This user type does not need to interact directly with backend code.
- **Considerations:** Design a UI that is intuitive for non-professional gamblers, focusing on a streamlined layout that highlights key metrics. Ensure backend reliability for consistent real-time data refreshes.

User Story 2: Professional Bettor/Arbitrageur

Project Name: wScout

Date: 5-11-2024

User Story ID: 2

1. User Persona

- **Name:** Nate
- **Role:** Professional bettor/Arbitrageur
- **Goal:** Identify and capitalize on arbitrage and value betting opportunities consistently to secure reliable profits. With the ability to hedge bets across multiple platforms.

2. User Story

As a professional bettor (Nate), I want to use wScout to identify arbitrage or mispriced betting opportunities across platforms, allowing me to place advantageous and hedged bets with minimal risk and maximize my ROI.

3. Acceptance Criteria

- **Functionality:** The platform should identify arbitrage opportunities by cross-referencing odds data from multiple sources.
- **Arbitrage Detection:** Backend algorithms detect arbitrage gaps and notify Nate when ROI thresholds are met.
- **User Interaction:** Nate should be able to set thresholds for ROI, sports categories, and risk levels, customizing his view to show only relevant opportunities.
- **Hedging option:** Nate should have the option to hedge bets using integrations with Polymarket and exchanges that allow API betting. This allows him to lock in profit or minimize risk on bets found through the wScout aggregator. If he chooses to hedge with Polymarket, wScout should handle the swap/bridge from Solana to the required chain (e.g., using Wormhole), connect to the Polymarket API, and place the hedge.
- **Security:** Implement secure fund management protocols for Nate's betting actions, including cross-chain fund handling for hedged transactions. Manage risks associated with multiple platform integrations.

4. Priority

- **High** – Professional bettors will likely be among the platform's most active and high-value users, benefiting from advanced arbitrage and hedging features, along with automation.

5. Technical Notes (for Developers)

- **Dependencies:** Stable API integrations with live odds data sources, Polymarket, and other betting exchanges to facilitate hedging, automated transactions, and cross-chain swaps

○ **Considerations:**

1. Advanced filtering capabilities for setting ROI, risk levels, and hedging conditions.
2. Design backend logic to detect arbitrage opportunities that could benefit from hedging. When arbitrage conditions are met, the system should suggest hedging options on Polymarket or other connected exchanges based on Nate's preferences.
3. **Automated Hedging Process:** Nate spots a favorable bet and, if desired, uses the platform to set up an automatic hedge. The flow is as follows:
 - Check if Nate has funds in his wScout wallet.
 - He inputs the hedging criteria.
 - wScout performs an automatic swap/bridge (e.g., using Wormhole) to convert funds to the appropriate chain for Polymarket.
 - wScout connects to the Polymarket API and executes the hedge based on Nate's criteria.

(AFTER MVP, PURELY AN INTERESTING CONCEPT)

User Story 3: Investor in wScout arbitrage vault

Project Name: wScout

Date: 5-11-2024

User Story ID: 3

1. User Persona

- **Name:** Andre
- **Role:** Vault Investor
- **Goal:** Earn passive returns by depositing funds into wScout's managed vault, which uses automated arbitrage betting.

2. User Story

- As an investor (Andre), I want to deposit funds into a managed escrow on wScout so that the platform can place automated arbitrage bets on my behalf, allowing me to earn passive income without active involvement.

3. Acceptance Criteria

- **Functionality:** The platform should provide Andre with a managed escrow/vault, allowing him to securely deposit funds that wScout will use exclusively for automated arbitrage betting.
- **Automated Bets:** The platform detects arbitrage opportunities and places bets from the vault fund based on preset criteria.
- **Performance Reporting:** Andre has access to a dashboard showing his balance, ROI, history, and fees deducted transparently.
- **Management Fee Structure:** wScout deducts a percentage of winnings as a management fee, clearly reflected in performance reports.
- **Security:** Vault funds are secured on-chain and accessible only for authorized automated betting actions.

4. Priority

- **Low** – A concept for a wScout-managed arbitrage fund to explore post-MVP, appealing to users interested in a passive, automated betting investment.

5. Technical Notes (for Developers)

- **Dependencies:**
 1. Integration with Solana for secure on-chain fund management.
 2. API connections with betting markets (e.g., Polymarket) for real-time odds and automated bets.
 3. Development of a vault program for managing user deposits, ensuring funds are restricted to platform-approved betting actions.
- **Considerations:**
 1. **Vault Structure:** Program to manage individual user vaults, ensuring only authorized transactions (triggered by arbitrage

algorithms) can access funds. Andre can deposit and withdraw from the vault but has no manual control over betting actions.

2. **Automated Logic:** Backend processes that scan odds data, detect arbitrage opportunities, and execute bets in real time based on betting criteria.
3. **Fees and Transactions:** Optimize fees and transaction handling to keep smaller arbitrage bets profitable.
4. **Audit:** Regularly audit the vault smart contract and platform API connections.