Strike Selection Logic

1. Overview

The Strike Selector evaluates nearby CE/PE strikes and identifies the option that best fits the current market structure, Greeks behavior, and volatility environment.
This module transforms real-time market data into a ranked list of candidate strikes and selects the highest-scoring one.

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2. Inputs Used by the Strike Selector

- **Delta** → directional sensitivity
- **Gamma** → curvature / risk of fast price changes
- **Implied Volatility (IV)** → stability vs. expansion
- **Underlying spot price distance**
- **Liquidity (bid–ask spread)**
- **Time-to-expiry** (only conceptual, no numeric rules)
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3. Selection Logic (High-Level Explanation Only)

The selector evaluates ATM and near-ATM strikes and assigns each a score based on:

a) Delta suitability

Strikes with stable, reasonable Delta values are favored.
(E.g., too low = weak signal; too high = risky/reactive)

b) Gamma control

Strikes with extremely high Gamma are avoided to reduce sudden SL hits.

c) IV behavior

Strikes with stable IV or favorable IV trend are prioritized.

d) Distance from underlying

Strikes too far OTM/ITM are filtered out.

e) Time-to-expiry safety

Very close-to-expiry and very far-from-expiry extremes are avoided.

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4. Final Strike Selection

The Strike Selector identifies the strike with the most favorable combination of:

- Sensible Delta
- Manageable Gamma
- Stable IV
- Good liquidity
- Appropriate expiry proximity

This becomes the trade candidate passed to the **Risk Engine**.

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5. Example (Illustrative Only — Not Actual Logic)

Example Rank Table (mock data):

Strike	Delta	Gamma	IV	Score
24600 CE	0.16	0.14	13.8	72
24650 CE	0.14	0.12	14.1	88(Selected)
24700 CE	0.11	0.09	15.2	61

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6. Important Note

This document describes the strike selection logic at a conceptual level.
All internal scoring formulas, thresholds, and proprietary rules are intentionally omitted.
