Buy/Sell Signal System - Functional Overview

This document explains how the Buy/Sell signal system works based on client requirements. It does not execute trades, but instead visualizes and alerts based on trading strategies defined in TradingView.

Signal Flow Summary

- 1. Client configures a Buy/Sell strategy in TradingView using indicators (e.g., MACD, RSI).
- 2. TradingView sends alerts to a secure Webhook (your backend endpoint).
- 3. The backend validates and stores the alert data in Supabase (signals table).
- 4. The frontend TradingView Lightweight Chart fetches signals and overlays them as markers.
- 5. Users can enable alerts (via email, SMS, or push) for new signals.
- 6. Optional: A tracker calculates hypothetical performance (gain/loss) based on historical signals.

Example Webhook Payload from TradingView

```
{
   "symbol": "BTCUSDT",
   "price": 67000,
   "type": "buy",
   "time": "2025-06-28T10:35:00Z",
   "note": "MACD crossover"
}
```

Key Notes

- Signals are visual aids, not actual trades.
- Webhook uses a secret token for security.
- Signals stored in Supabase `signals` table.
- Alerts sent via Twilio, OneSignal, Email.
- Frontend overlays markers using TradingView chart.
- Optional: Show profit/loss from historical signals.