

Week 3 Progress Documentation

PW26_MG_02

Building on the feasibility analysis and system-level planning completed in Week 1 and Week 2, Week 3 marked the transition from abstraction to visibility. With the problem formulation, high-level architecture, and implementation roadmap already established, the focus shifted to making the system tangible—something that could be seen, interacted with, and reasoned about. This phase emphasized understanding how the system should behave in practice, rather than questioning its viability.

Why We Began with a Frontend Representation

To enable this transition, we began developing the frontend as an early, exploratory representation of the system. This was a deliberate design decision. Instead of treating the interface as an end-stage deliverable, we used it as a working canvas to visualize workflows, interactions, and decision boundaries. By externalizing these elements, the implementation roadmap could be actively tested against realistic usage scenarios, strengthening confidence in the overall design.

In this sense, the frontend functions as a discovery tool—one that sharpens backend requirements rather than constraining them prematurely.

Structuring the System Through Interface Design

The interface was structured to clearly delineate market visualization, execution flow, portfolio intelligence, and system trust components. Each section represents a distinct functional responsibility, making architectural intent immediately visible and reproducible. This modular structure also supports scalability and ease of future extension.

Market Views, Indicators, and Execution Flow

Time-based market views and technical indicators were implemented with explicit behavior and clear labeling. Indicators were kept independent to preserve interpretability, revealing data dependencies, update frequencies, and historical depth requirements. The execution panel was designed as a staged, intentional process, culminating in a swipe-based confirmation that encodes deliberate action and informs backend validation and risk-check logic.

Refinement as a Path to Reproducibility

As the system becomes more visible, refinement accelerates. We continue to fine-tune the frontend to deepen clarity around backend logic, data contracts, and edge cases. At this stage, the interface serves as a living specification—one that supports reproducibility and clearly maps the system's forward trajectory.