

Case Study : Advanced Seat Selection System

Role	Senior Product Designer
Product	Event & show ticketing platform
Users	Live event audiences & event promoters

After the pandemic, demand for offline seated events surged, introducing new complexity in high-traffic ticket sales and seat management.

The Problem

For seated indoor venues, buyers could not choose or compare seat positions and price categories. Seats were assigned randomly after purchase, causing uncertainty and dissatisfaction.

From a business perspective, promoters required flexible seat selling to maximize sales and ensure buyer satisfaction. Without this capability, TipTip risked losing promoters to other platforms and limiting transaction growth.

This was both a UX and system problem: buyers needed confidence when purchasing seats, while the platform needed to support complex seating logic.

Constraints & Reality

- Very tight deadlines to support upcoming large events
- High traffic requirements with thousands of concurrent users during peak sales
- Backend and performance limitations

- No similar advanced seating solution available locally at the time
- These constraints required shipping a reliable solution quickly without risking system stability during peak traffic, making a fully ideal solution unrealistic within the timeframe.

My Role & Ownership

I owned the end-to-end UX strategy for seat selection, including user flows, interaction design, and UI logic. I worked closely with the product team, researchers, and engineers to define scope, validate assumptions, and make trade-off decisions between usability, performance, and delivery speed.

Exploration & Trade-offs

I evaluated building a fully realistic venue seating map from the start, but determined it was too heavy for peak traffic conditions and risky to deliver under tight deadlines.

Instead, I proposed a two-phase rollout:

Phase 1 (MVP)

- Buyers select a ticket category first, then choose seats within that category
- Seating displayed as a simplified grid (not venue-accurate)
- Enabled buyers to select exact seat numbers and ensure adjacent seating when buying multiple tickets

Phase 2 (Final)

- Buyers can view and compare all seat categories in a single view
- Venue-accurate, dynamic seating map matching real layouts
- Supports complex pricing and seating structures in one interaction

The Solution

Promoters provide seating layout assets, which are recreated into a structured canvas system. The system generates a JSON-based seat map consumed by the frontend to render interactive seating layouts, including seat availability, categories, and pricing.

Buyers can visually select seats based on real venue positioning and price, improving confidence and decision-making.

Impact & Outcome

- Enabled partnerships with major promoters
- Supported large-scale seated events with thousands of concurrent users
- Improved buyer confidence and satisfaction
- Reduced operational effort
- Increased promoter confidence to host seated indoor events on TipTip

What I Learned

Building new system-level features under real-world constraints requires close collaboration with engineering from the start. Phased delivery allowed us to de-risk performance issues while still delivering immediate value.

Final Takeaway

This project demonstrates my ability to design scalable, high-traffic systems by balancing user needs, business goals, and technical constraints—without compromising delivery timelines.