

The Next Generation Storefront™ is a UX & data standard that empowers consumers to make informed flight reservation decisions. NGS presents *like* options from different airlines taking the guesswork out of the customer journey. It allows travelers to compare apples to apples when shopping online.

This document presents artifacts depicting an [NGS implemented design](#) for constructing an accessible, responsive, and progressive single-page booking app. This design is a startup travel, expense, and itinerary concierge platform that manages flight, car, and hotel reservations for corporate events.

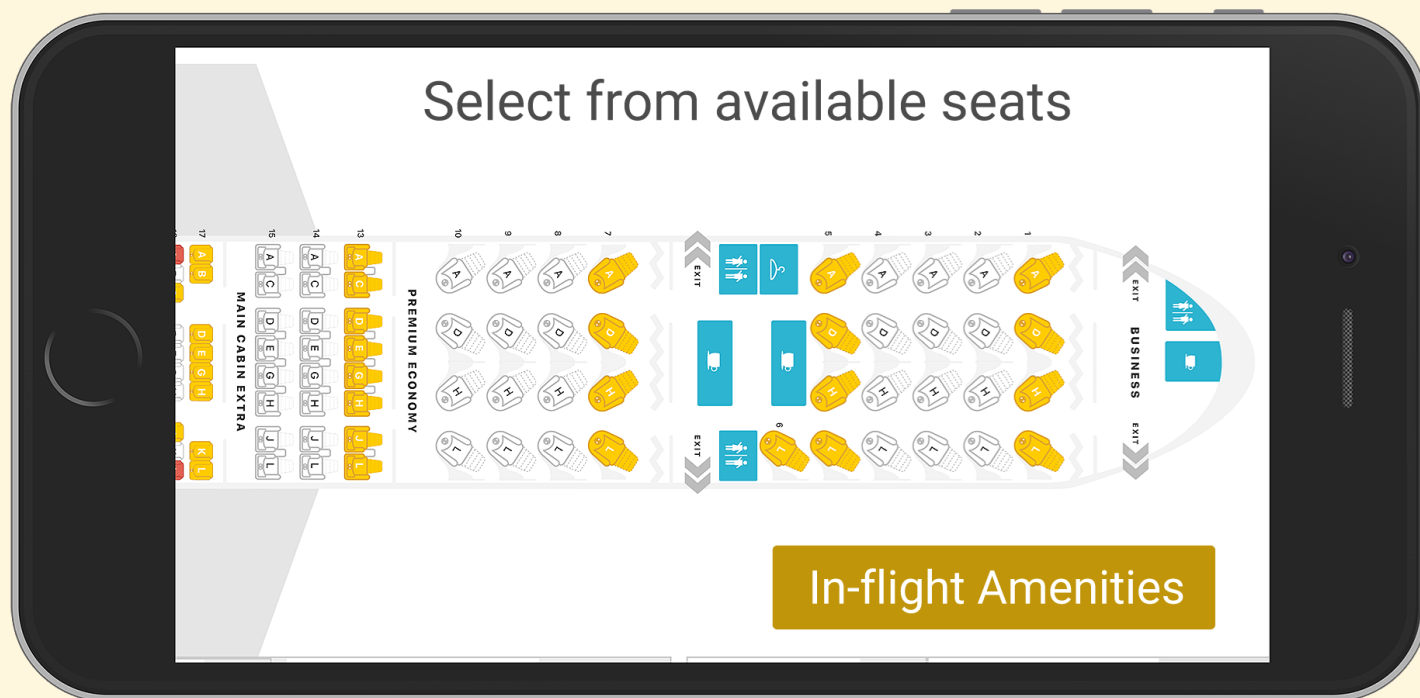
While [Vue.js](#) is mentioned explicitly, any modern framework(s) may be implemented (Micro Frontend).

Design Principles:

- Web APIs are preferred over native apps. For example, [web audio and vibration](#) are used to immerse the end user, making the experience [feel like a native app](#) without the install inertia.
- Data visualization charts and contextual infographics are made interactive and seamlessly integrated into the experience to support visual decision making.
- Tasks are made accessible and satisfy WCAG 2.0 AA success criteria.
- Predictive workflow that encourages a favorable “look to book” ratio.

The resulting UX has been prototyped and thoroughly vetted via multiple rounds of [heuristic evaluation](#) by frequent travelers, travel arrangers, and other industry stakeholders.

DataVis Example: Interactive Seat Selection



Admin Persona



Travel Arranger

My travelers need *easy to understand* booking options with passive validation checks. I need smart communications so that I can avoid costly delays.

Pain point: Reluctant travelers who book at the last minute

Primary Device: Laptop two monitors

Advocacy: Influencer NPS 8

Novice Use Persona



Infrequent Traveler

I just want to make sure that I've reserved my flights properly and that I am getting the best value without sacrificing comfort and convenience.

Pain point: [Navigating the unknown](#)

Primary Device: Desktop

Advocacy: Passive NPS 4

Expert Use Persona



Business Traveler

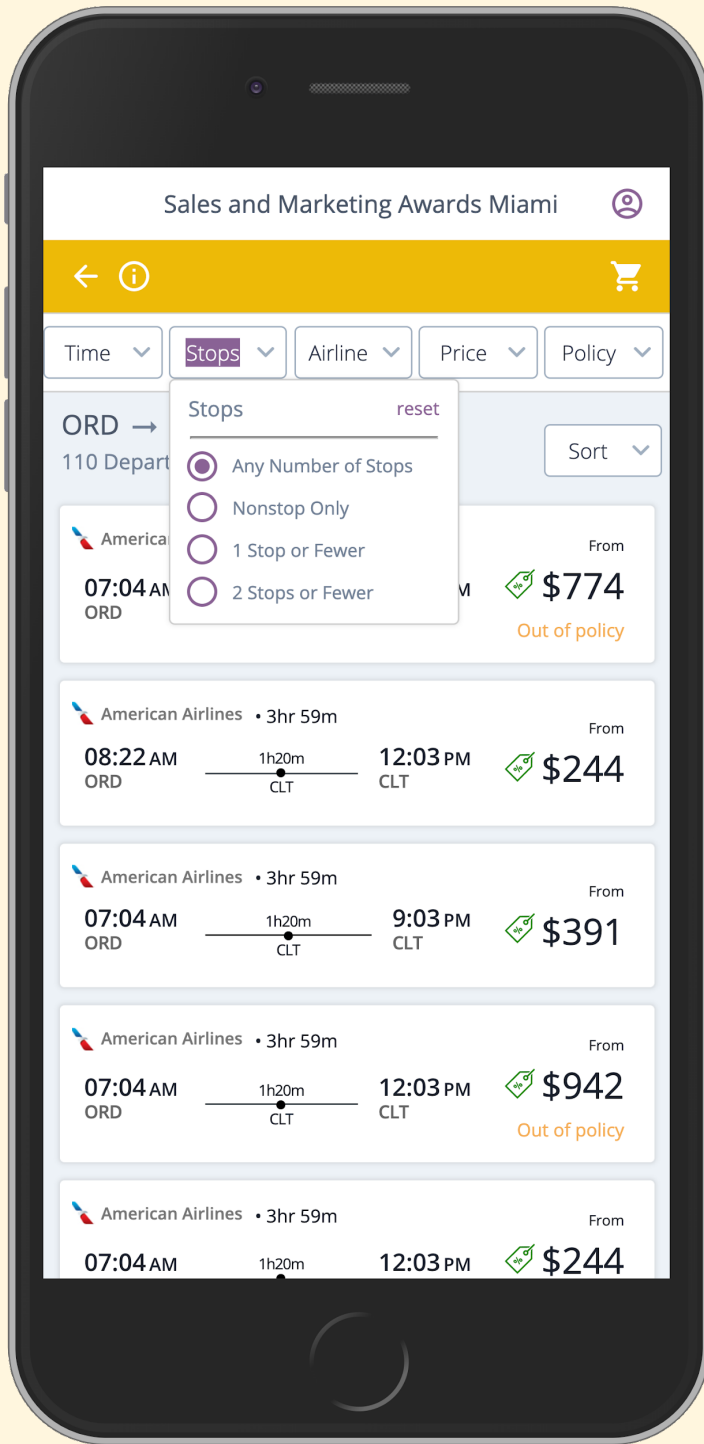
I know how to get from point A to point B. I need an easy app that lets me save my preferences and find/filter based on what is important to me.

Pain point: Arbitrary rules that stop me from optimizing my travel

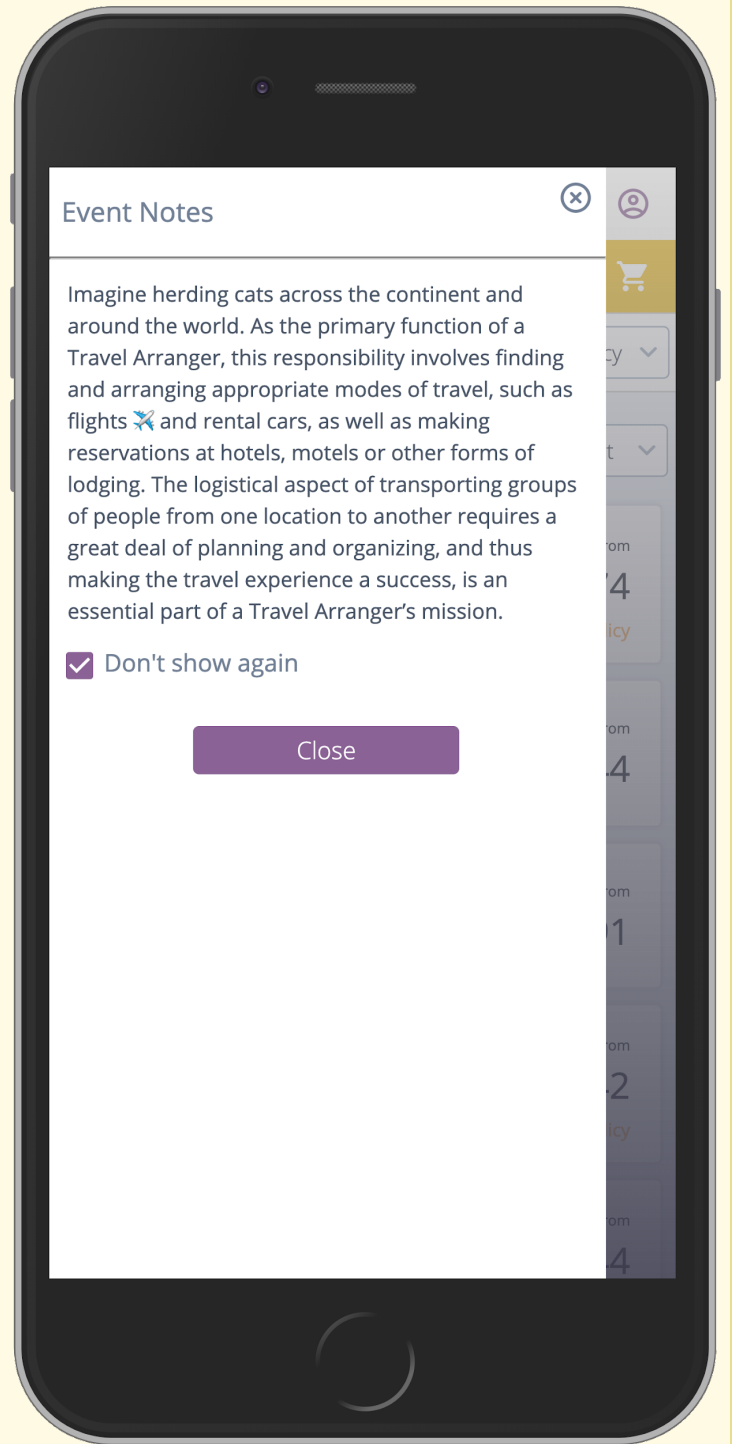
Primary Device: Smartphone

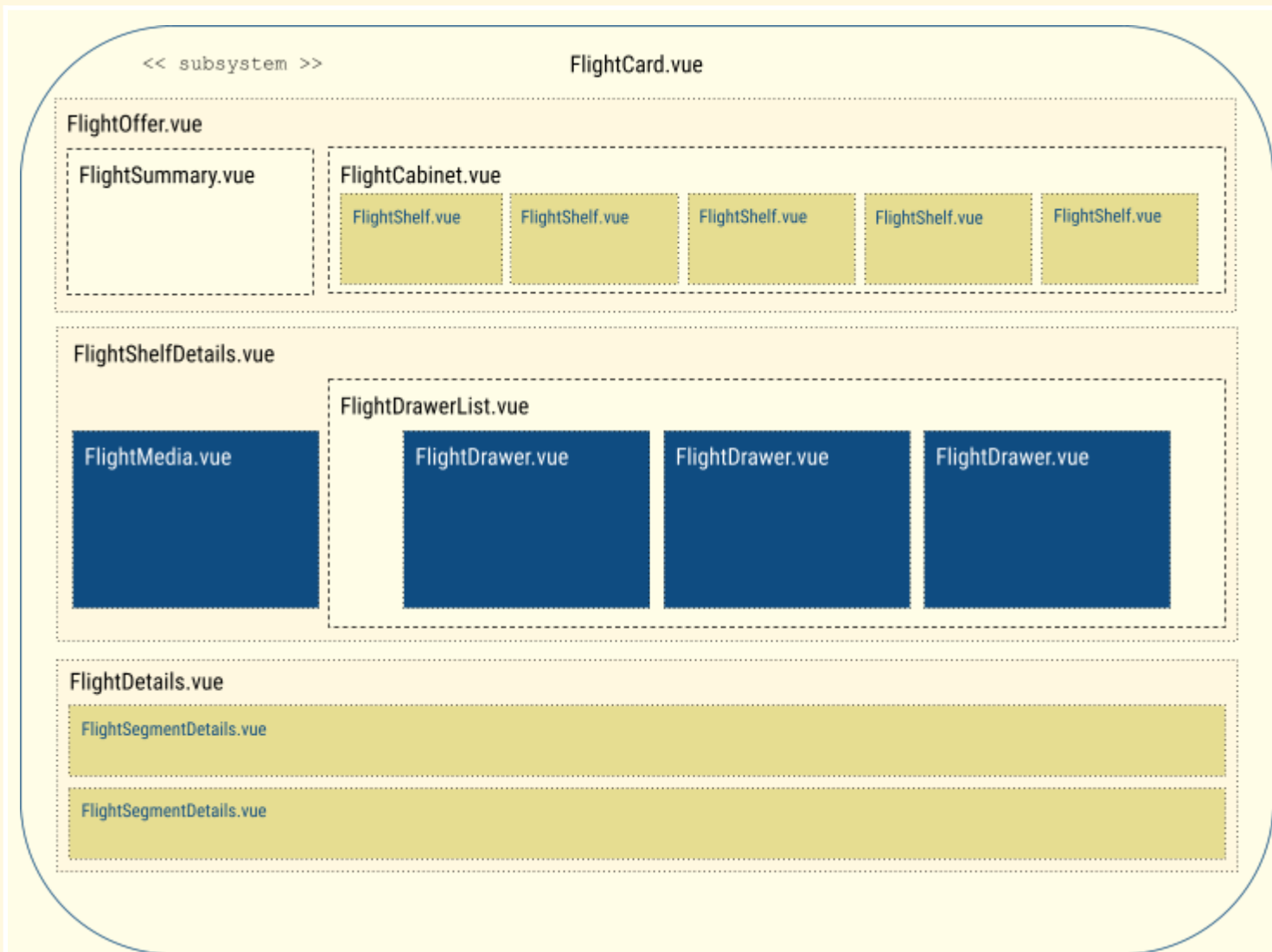
Advocacy: Influencer NPS 7

Mobile Product Selection



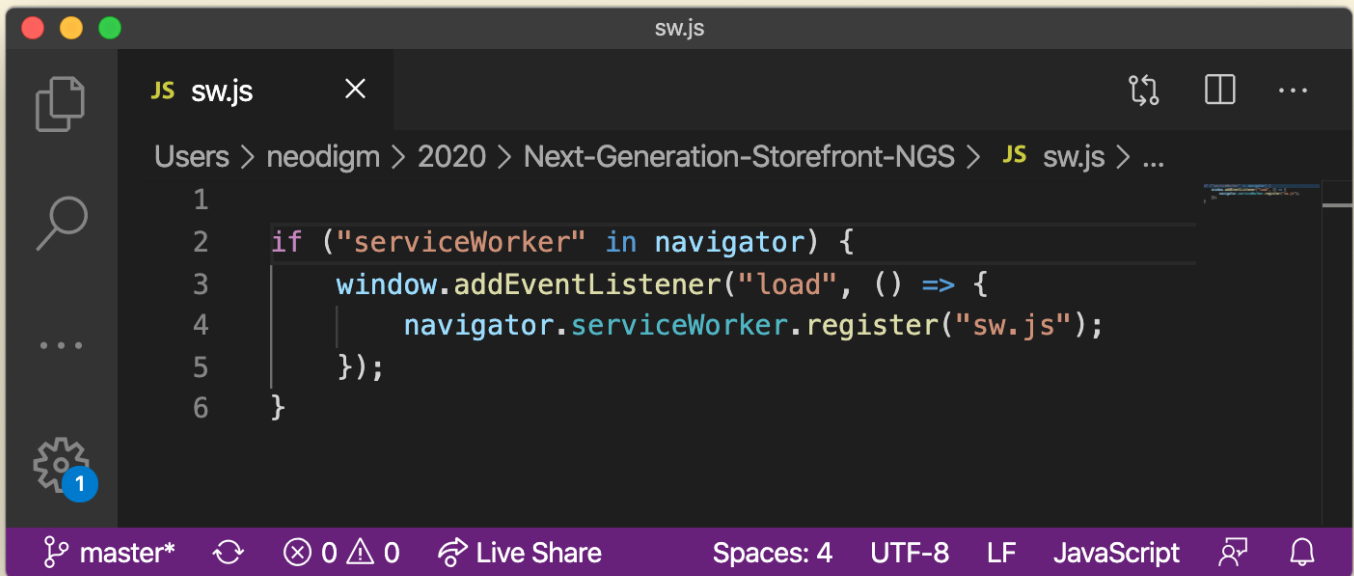
Contextual Notes





Prop	page-task	card-shelf-details-is-visible
Emit	page-fare-basic	card-in-policy
	page-is-domestic	card-is-red-eye
Vuex	list-out-policy-show	card-is-overnight
	card-shelf-list-is-visible	card-is-discount

A copy of the user's itinerary is stored in cache so that It can be accessed when the mobile device is in [Airplane Mode](#). This can become a very important feature when trying to catch a connecting flight while the app is unable to connect to its service.



```
sw.js
1
2  if ("serviceWorker" in navigator) {
3      window.addEventListener("load", () => {
4          navigator.serviceWorker.register("sw.js");
5      });
6  }
```

Strategic Competencies

Offline-first design, [PWA](#) | Progressive Web App, Workbox, SQLite, WASM

Architectural Proficiencies

Fetch, JavaScript, Service Workers

