

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.

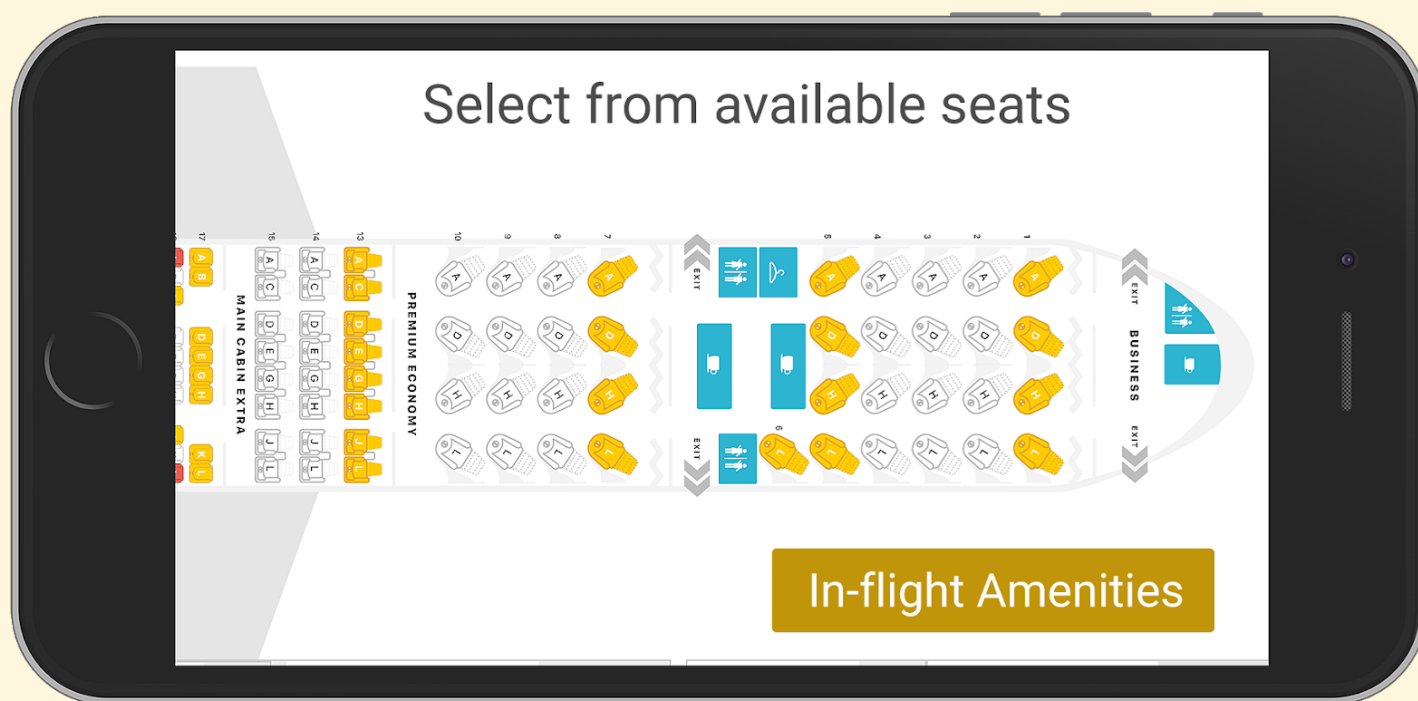
While Vue.js is mentioned explicitly, any modern framework(s) may be implemented (Micro Frontend).

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 visualisation 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

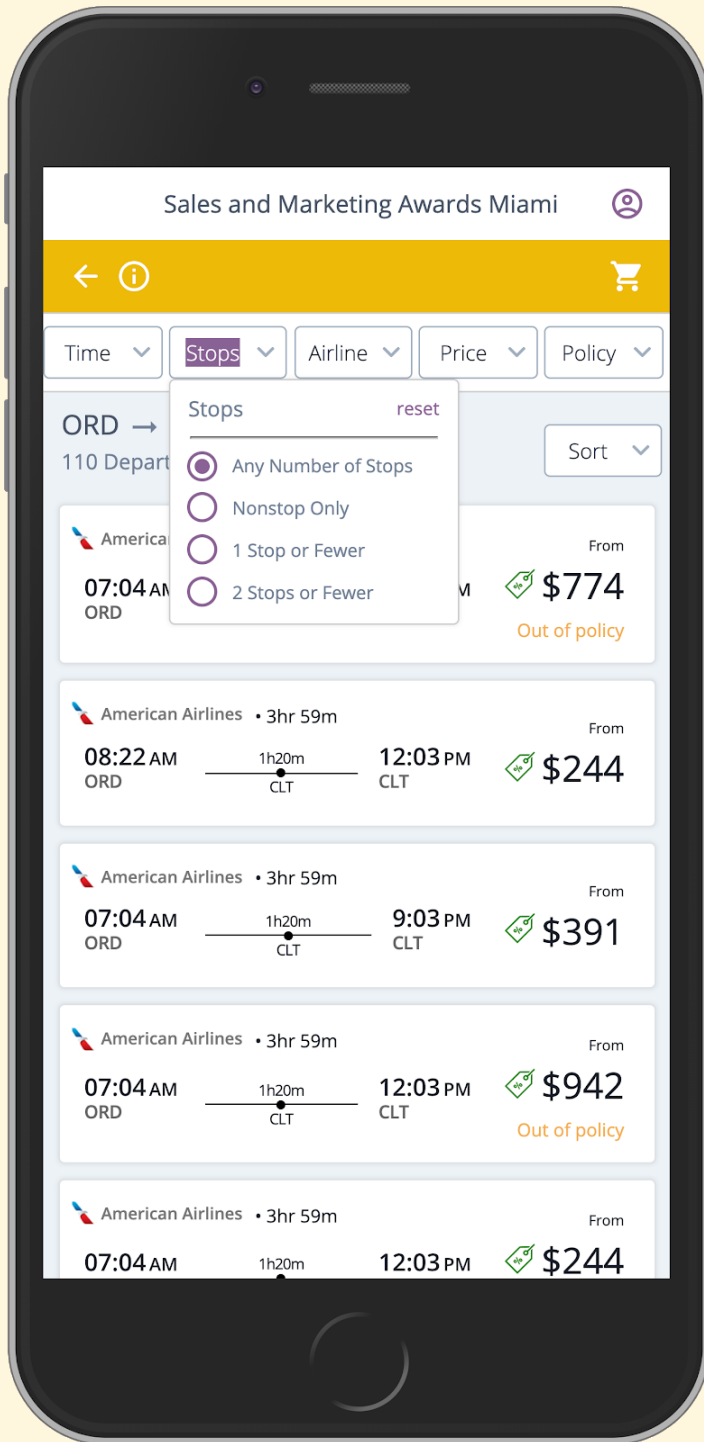
I know how to get from point A to point B. I need an easy app that lets me save my preferences and find/filter based on what is important to me.

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

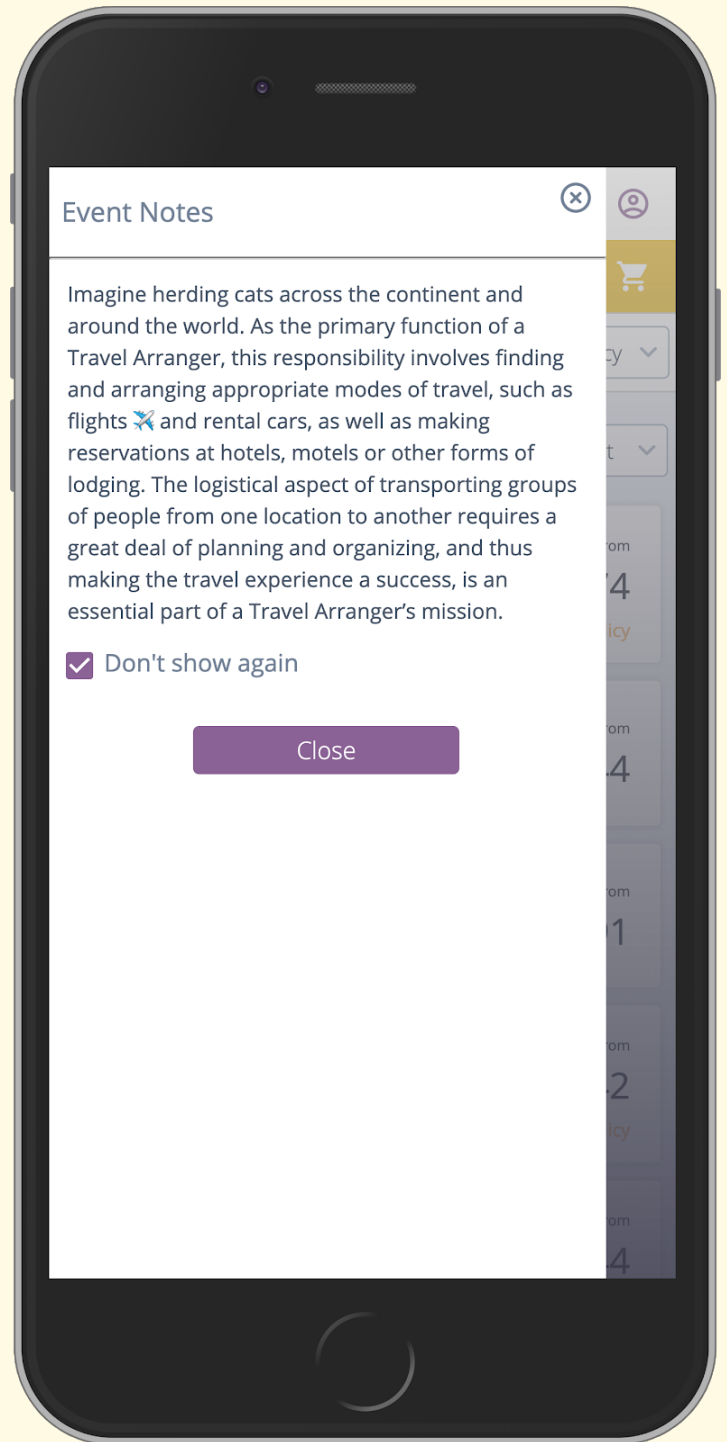
Primary Device: Smartphone

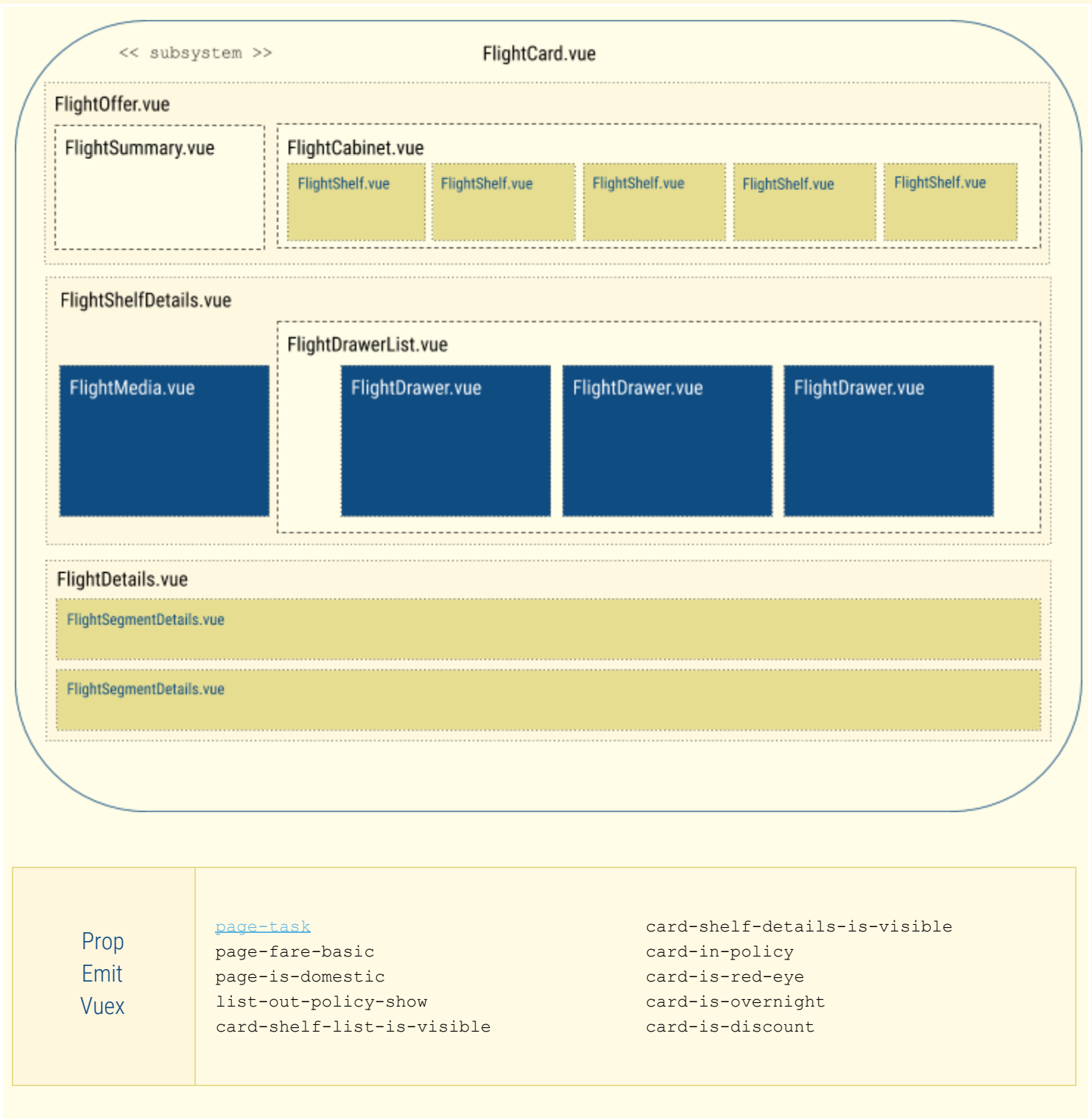
Advocacy: Influencer NPS 7

Mobile Product Selection

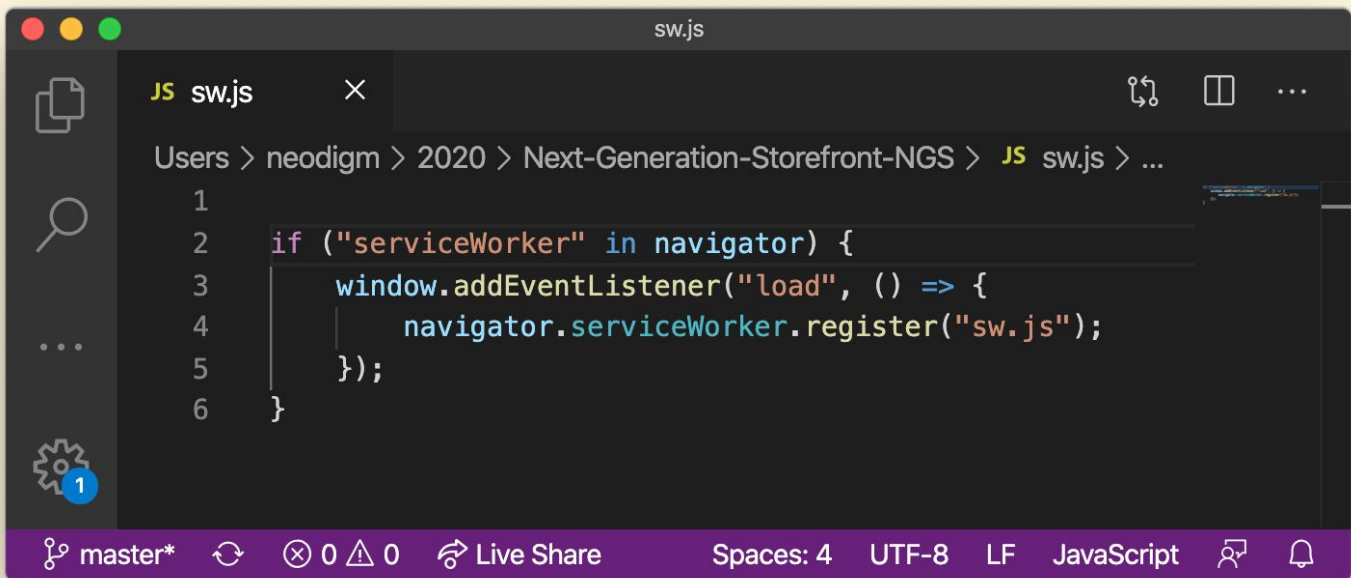


Contextual Notes





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 it's 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, Progressive Web App, Workbox

Architectural Proficiencies

Fetch, JavaScript, Service Workers

