

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.

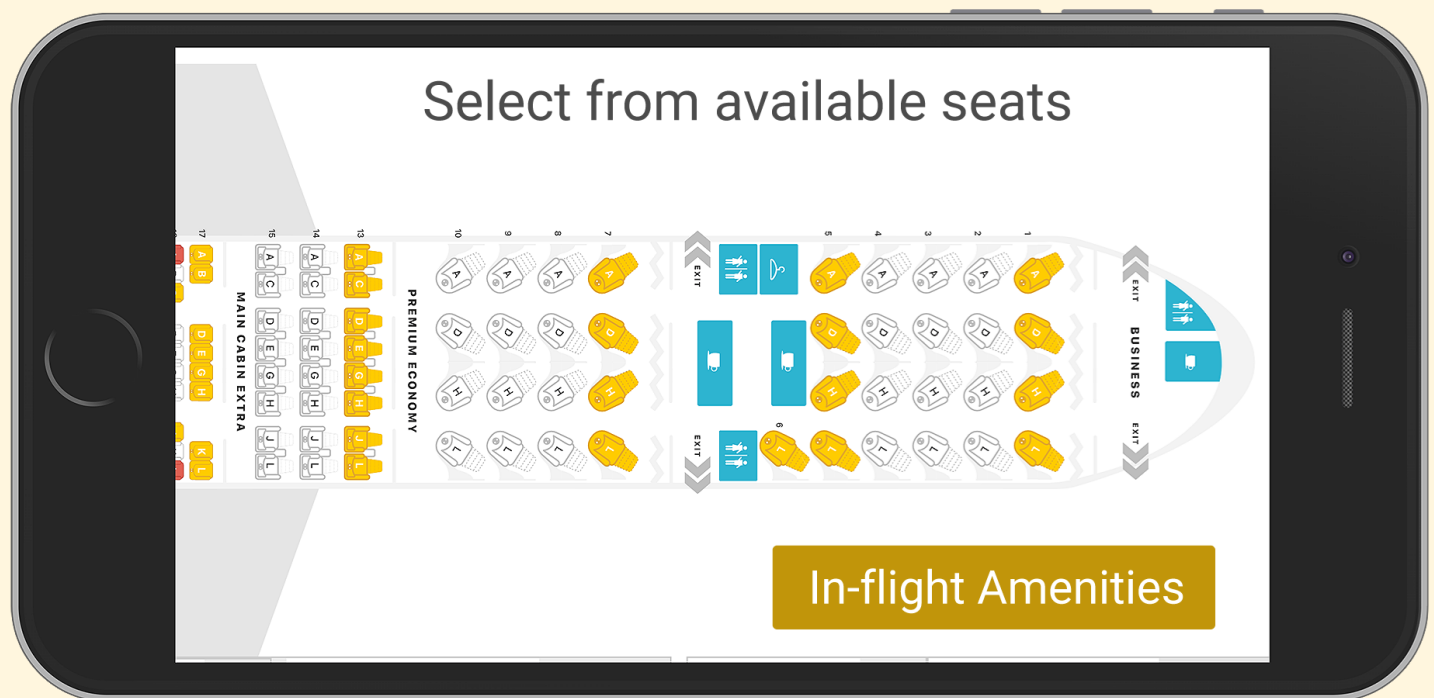
While [Vue.js](#) is mentioned explicitly, any modern framework(s) may be implemented (Micro Frontend).

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

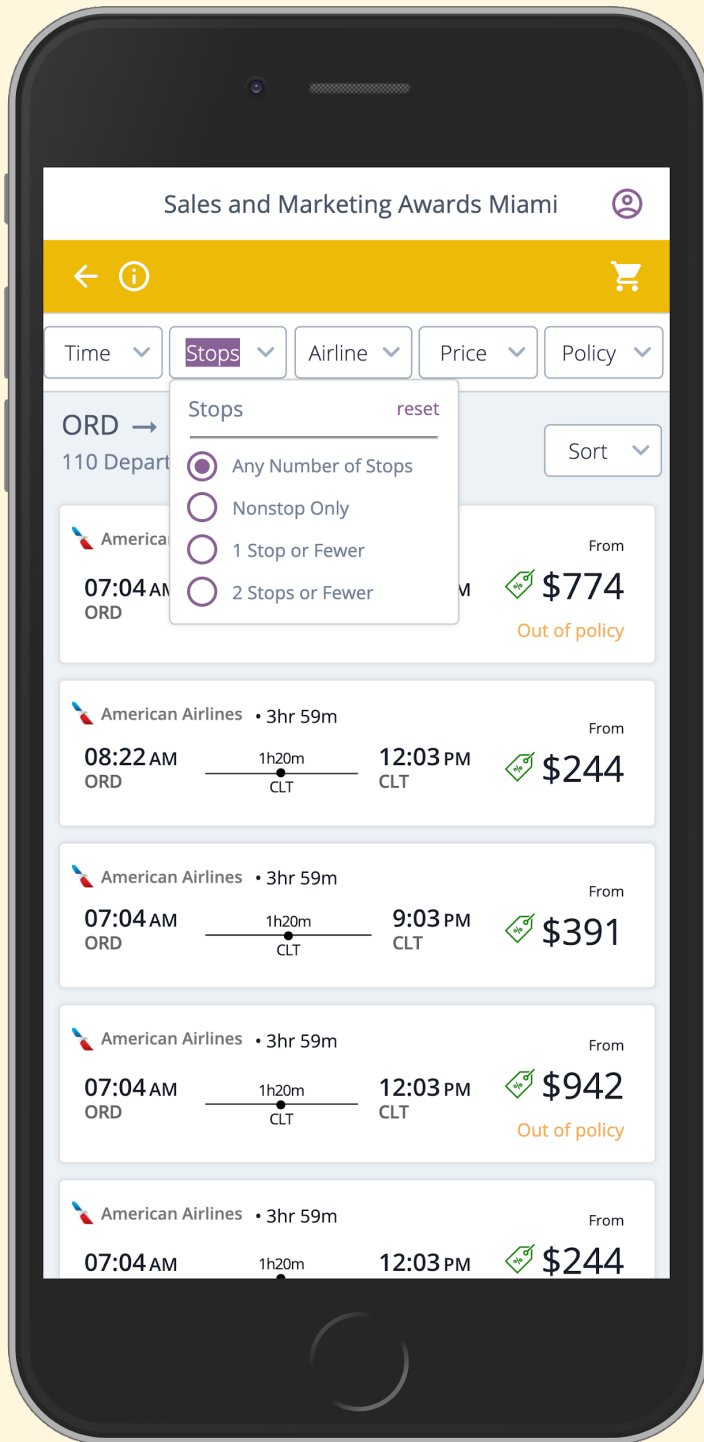
I know how to get from point A to point B. I need an easy app that lets me save my preferences and find/filter based on what is important to me.

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

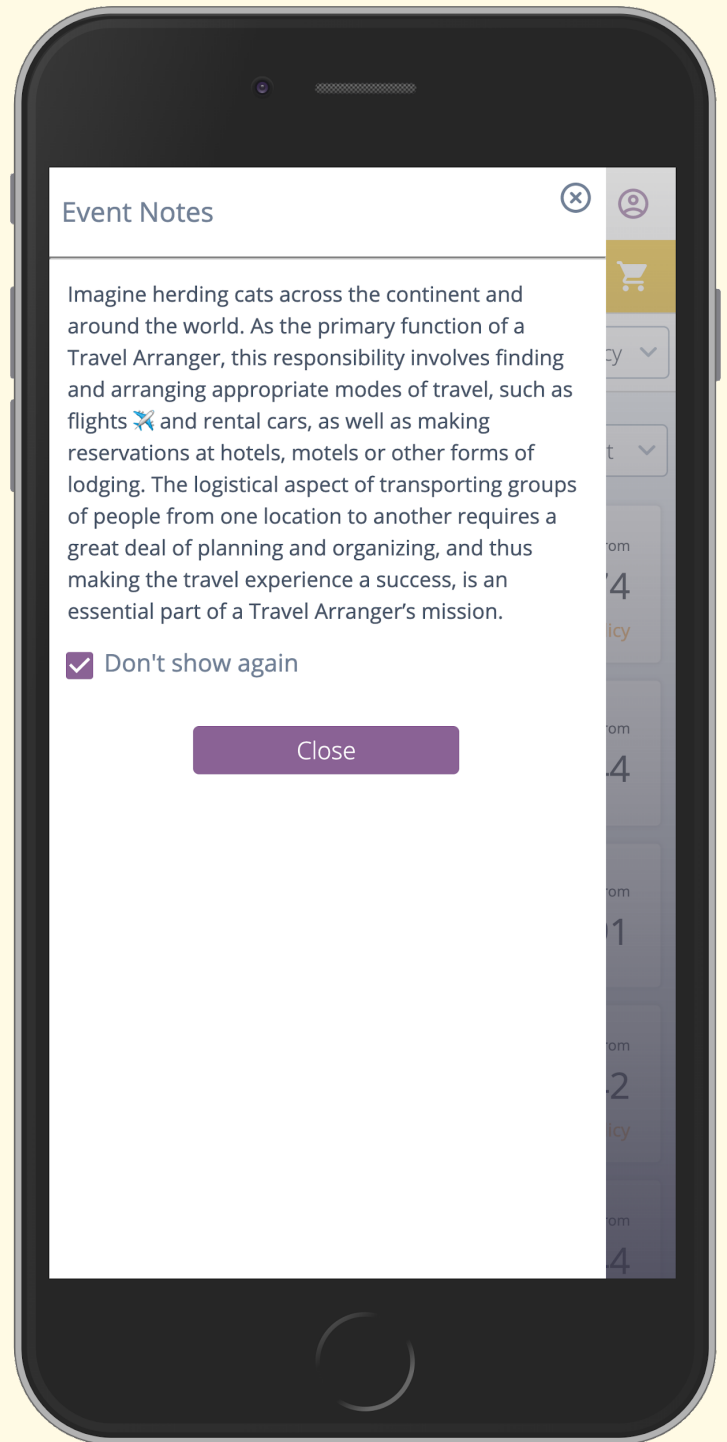
Primary Device: Smartphone

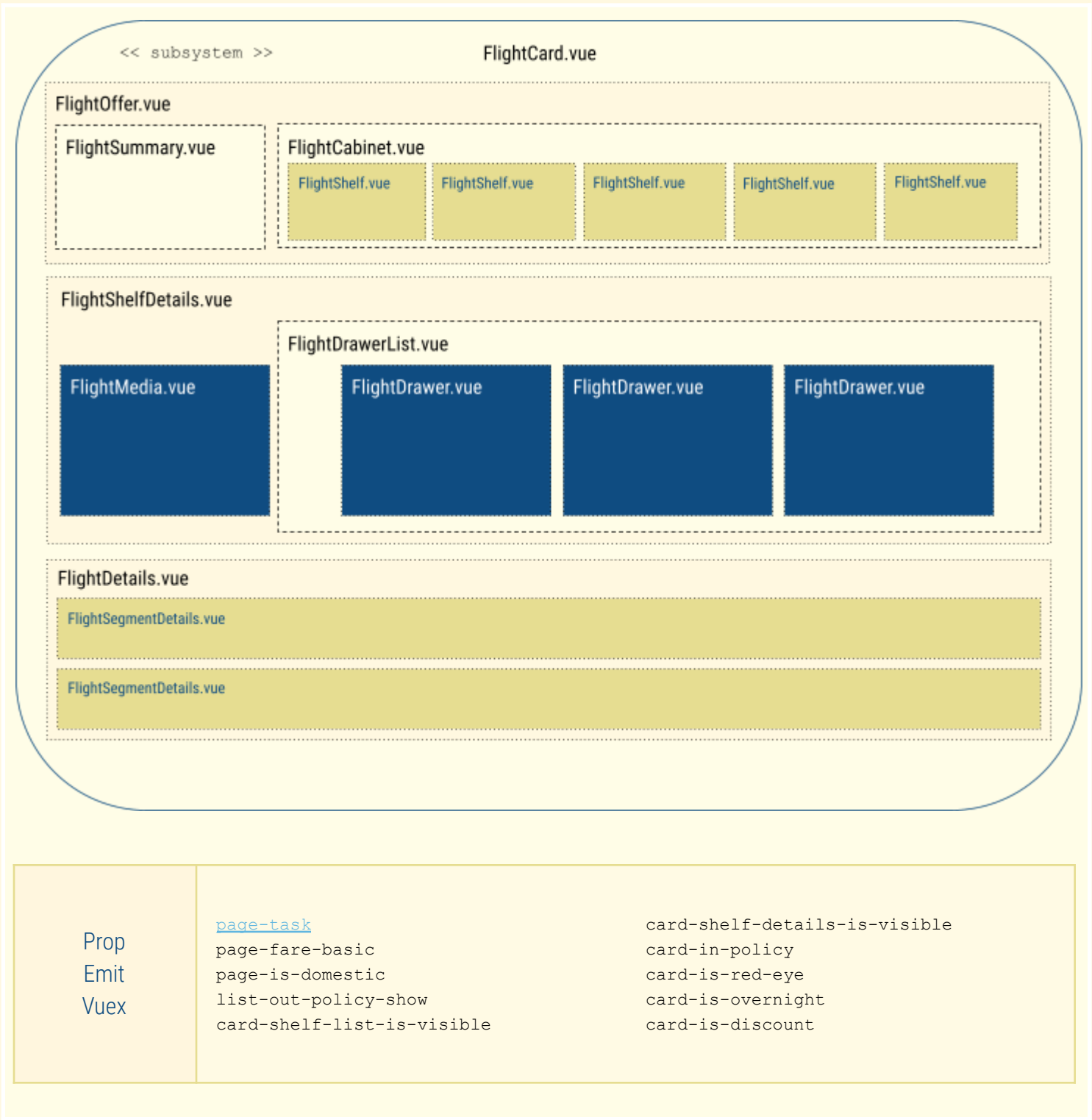
Advocacy: Influencer NPS 7

Mobile Product Selection

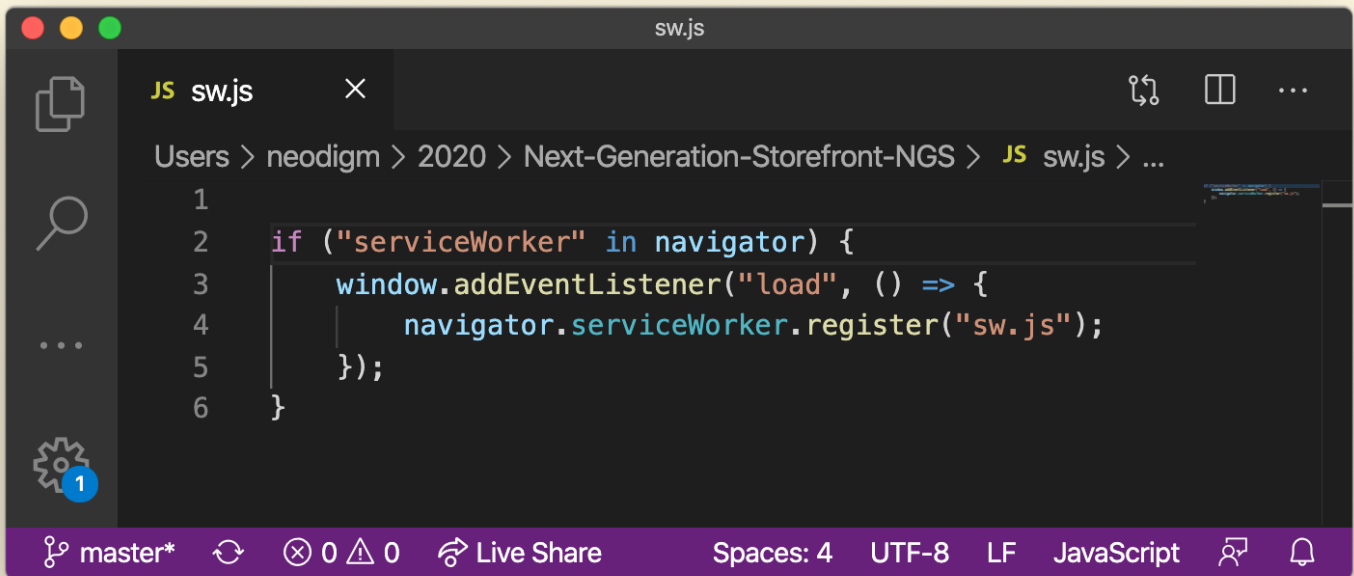


Contextual Notes





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 }
```

The screenshot shows a code editor window titled 'sw.js'. The breadcrumb path is 'Users > neodigm > 2020 > Next-Generation-Storefront-NGS > JS sw.js > ...'. The code is a JavaScript Service Worker script that registers itself when the page loads. The editor has a dark theme, a sidebar with icons, and a status bar at the bottom showing 'master*', '0' errors, '0' warnings, 'Live Share', 'Spaces: 4', 'UTF-8', 'LF', 'JavaScript', and user avatars.

Strategic Competencies

Offline-first design, Progressive Web App, Workbox

Architectural Proficiencies

Fetch, JavaScript, Service Workers

