

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.

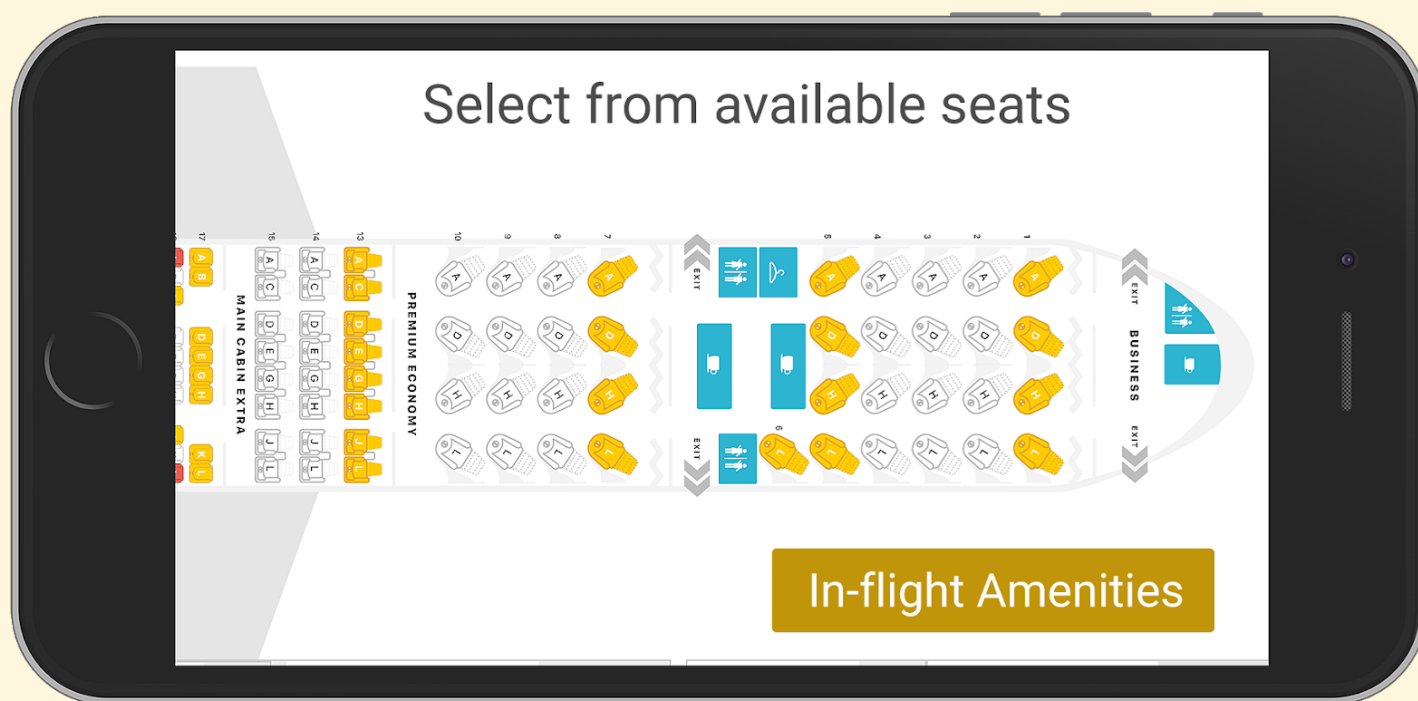
While [Vue.js](#) is mentioned explicitly, any modern framework(s) may be implemented (Micro Frontend).

#### 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

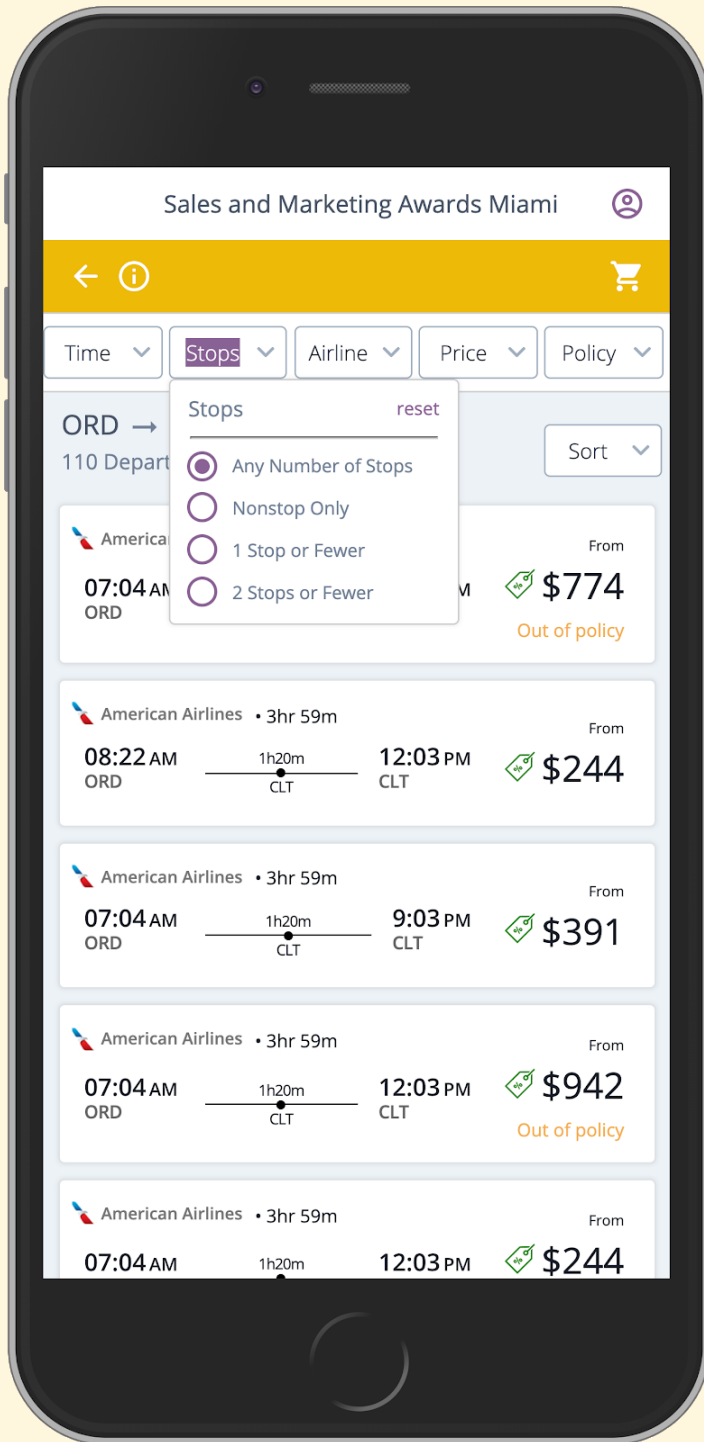
I know how to get from point A to point B. I need an easy app that lets me save my preferences and find/filter based on what is important to me.

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

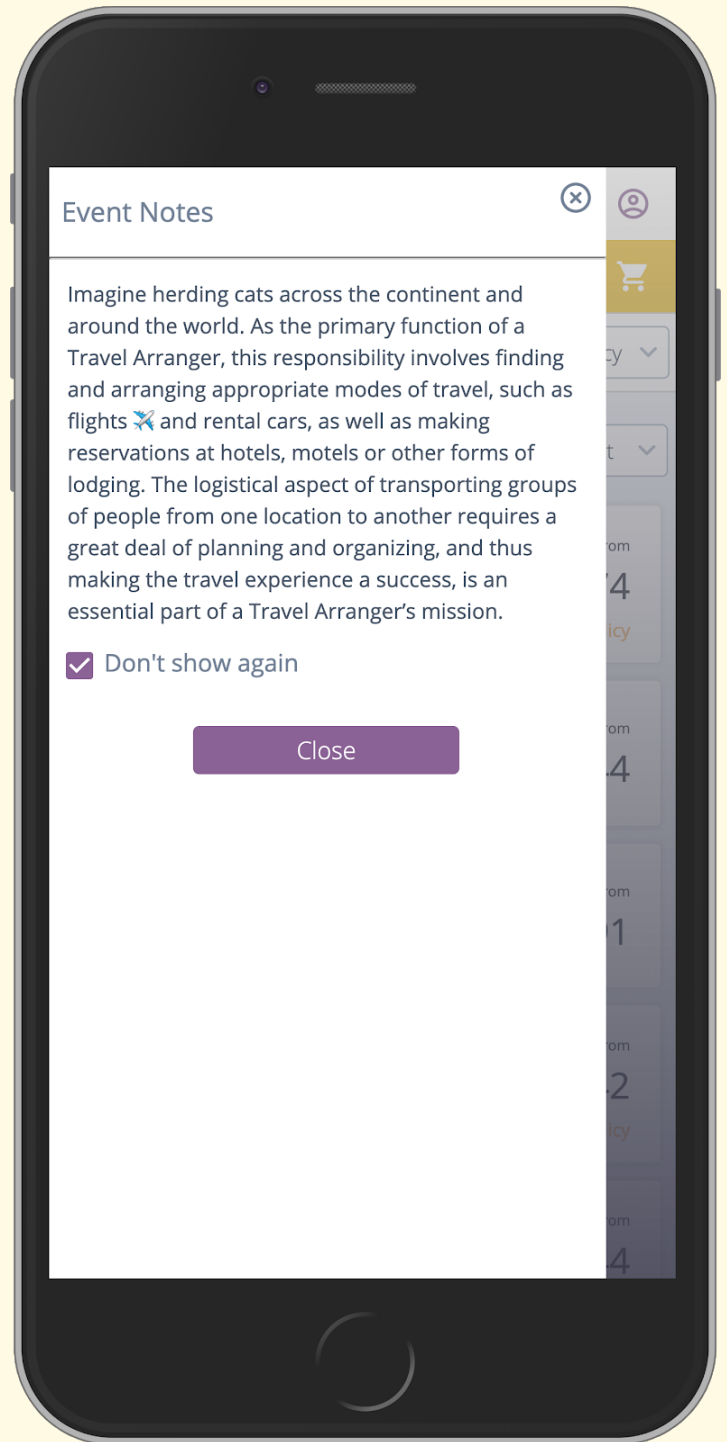
*Primary Device:* Smartphone

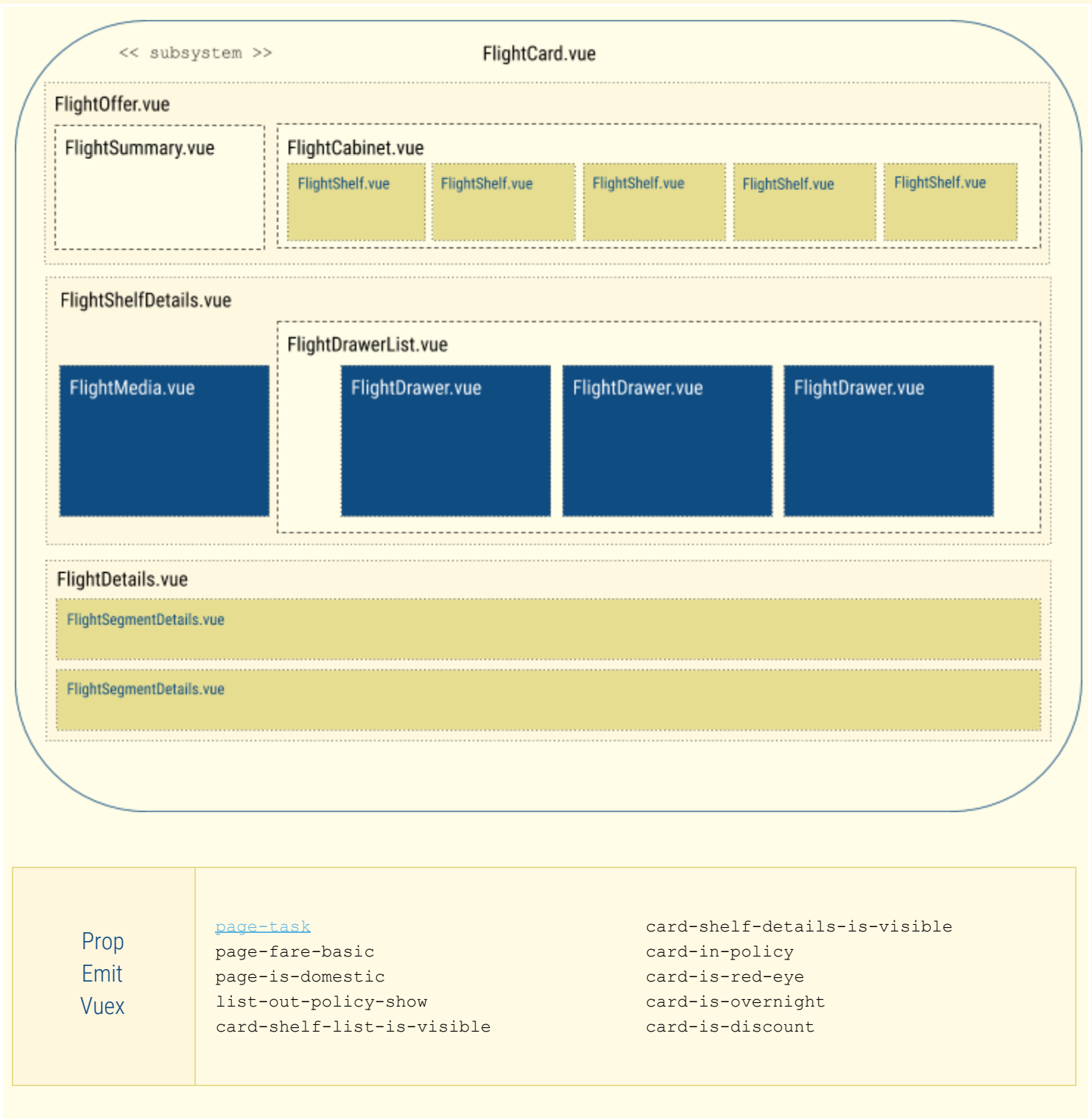
*Advocacy:* Influencer NPS 7

## Mobile Product Selection



## Contextual Notes



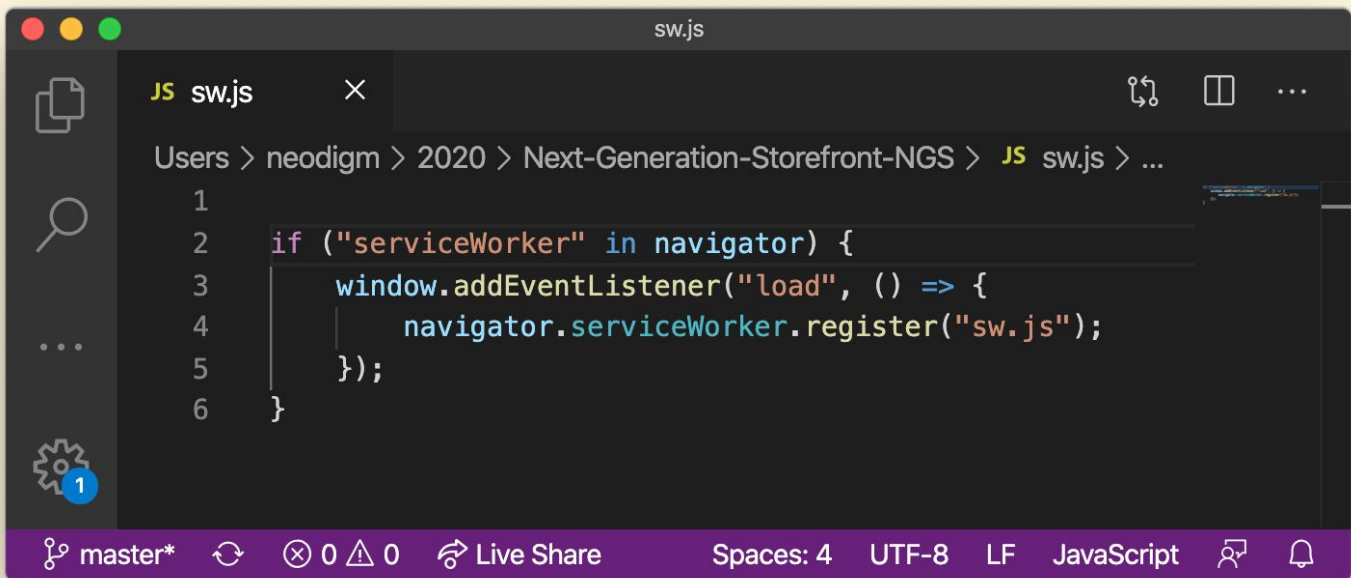


Prop  
Emit  
Vuex

`page-task`  
`page-fare-basic`  
`page-is-domestic`  
`list-out-policy-show`  
`card-shelf-list-is-visible`

`card-shelf-details-is-visible`  
`card-in-policy`  
`card-is-red-eye`  
`card-is-overnight`  
`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 it's service.



```
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

