

Small Business Website (Revisited)

Comparative Report

The following section briefly describes the structure and limitations of the original static site for fictional alcohol retailer *Independent Spirit*, which does business only through a shop on the street. After determining the information architecture and content strategy, the aim was to produce a layout with visual balance and colour strategy suitable to the products and services offered.

Original Site

The first iteration of this website was limited to using only HTML and CSS in its construction. While the design focussed on composition and typography, it also opted to extend the brief with a responsive approach to minimise the burden of the later revision effort.

Information Architecture and Content Strategy

Given that this was an example site, a limited amount of fictional content was created. A production site of this type would have far more information available than a prototype, so this was factored in to the number of major navigation options that were presented in the design. Only the *Home* link was actionable, leading to the same landing page, which was the only page created since it was the most important in capturing visitor interest.

The remaining links for *About*, *Stock*, *Offer* and *Events* were all place holders, provided to account for a subsequent elaboration indicative of content that a site of this type would be expected to provide. A minor menu provided quick links to parts of the site that are usual to modern web content strategies and instantly recognisable merely by the use of common icons. These include the interactive map, opening hours, contact methods, all of which are found on the home page, and links to fictional social media accounts.

The primary content of the home page was planned to scroll through a logically devised sequence stages, progressing the virtual visitor on a journey intended to convert them into a physical visitor of the actual retail premises. The alternate pages hinted at by the defunct place holder links would then provide secondary content providing the visitor with a more personal rationale to advance the relationship, or convince the undecided to commit to it.

Layout and Composition

The arrangement of elements and features on the site follows an established format, rather than attempting to be ground breaking. The typical masthead and menu positions allow the visitor to guide themselves through a predictable and practised routine of exploring the options using left-to-right eye movements; and absorb the content using a top-to-bottom reading habit, while incorporating a modern paradigm of developing interest in discrete and digestible sections as the pages flows down.

Colour and Typography

The colours for the site were chosen to be relevant to those found naturally in grains, hops and derived beverage products; for example, creams, beiges, browns, oranges and golds. The palette was kept deliberately limited to avoid over emphasis and distraction, following the modern trend of simplicity and contrast.

The adaptive dove logo uses the *Italiana* and *Pinyon Script* typefaces, and the content uses *Raleway* for the titles and menus, and *Montserrat* for the body. The plainer contemporary typeface selection for the content was chosen deliberately to contrast against the more striking classic poster styles used by the logo.

Responsiveness and Accessibility

The site was conceived from the initial sketches to 'progressively enhance' out of the narrow portrait aspects found on mobile devices onto the wider landscape aspects found on desktop computers. The limited size of smartphone screens limited creativity in this regard, which would otherwise come at the expense of user experience. This necessitated the use of a typical collapsible menu, which is implemented using the familiar 'burger' button and slide-out panel, now ubiquitous on mobile and even many desktop scale sites.

To facilitate effective use of screen space for the header, an adaptable logo was designed for different space constraints while still remaining instantly recognisable in any configuration. The use of the flex box property was used almost exclusively for expanding content from vertical columns to fill out horizontal space in a way that ensures most content at any width appears reasonably well arranged. This allows the site to be compatible more widely than if a grid layout was used solely, while conveniently avoiding the provision of reversionary code for browsers without support for grid.

For mobile screens held close to the eyes, sizes of 12-14px were deemed acceptable for body text at the default browser scale; but all text is adjusted to larger 14-16px font sizes at the transition to desktop and tablet screen resolutions beyond 640px. The only exception is the rarely used footer information, which follows the modern trend of relatively small text signifying its subordinate place in the visual hierarchy.

Revised Site

The second iteration uses most assets of the first site to reconstruct the revised version. It utilises the advances afforded by the addition of PHP, JavaScript and other technologies to improve on the original prototype. Most notable are the additional pages that are presented through a single access point, allowing many new pages to be created virtually by altering the content only.

Resource Modularity

The HTML generated for each page requires that a different version of supporting files are used: a PHP file containing the HTML mark-up for content specific to the page requested, and an associated secondary CSS file. The decision of which files to include relies on a PHP script that is executed before the HTML mark-up from the landing page is parsed:

```
initialise.inc.php
```

This file sets several variables depending on the URL query parameter provided, which informs the server which version of the page has been requested:

```
$data_page (sets a custom attribute to determine file names)
$page_name (provides the page prefix to the title element)
$page_desc (provides unique text for the description metatag)
```

The first is used in concatenating the file names required to request the appropriate CSS and content files; and the rest are used to tailor the page naming and meta descriptions appropriately as indicated.

Structural Modularity

To expand the original site using just HTML, each new page would have to have its own HTML document, which would duplicate mark-up common to all pages, and make maintenance extremely laborious and inconsistent. Using PHP generated pages offers two main approaches to mitigate these problems: first, there can be an HTML document for each page with the required content, which inserts modularised headers, footers and other repeated elements; or second, a universal landing page describing those standard elements, which inserts variable content elements based on user requests.

The second approach was favoured here because a series of sections can be isolated for all content, and so there is only ever one resource requested by the user followed by a URL query parameter to determine the content required:

```
index.php?page=about
```

The PHP script discussed previously selects which one of the several files containing content mark-up is then requested:

```
home.inc.php
about.inc.php
stock.inc.php
```

A further two content documents are included for a custom error page and a generic warning message for pages not yet constructed, such as the *Offers* and *Events* pages:

```
error.inc.php
empty.inc.php
```

If the program logic determines a recognised page is requested but not yet constructed, then the empty version is selected, else the error page is used. The content is then inserted by the server into the *main* element of the HTML page as required to generate the final page sent to the user.

Presentation Modularity

The modular approach to the HTML content also required better management of the associated CSS. The single global file was separated into a two files: the first has all necessary declarations for common page elements and generic content sections as previously; but the second now contains CSS declarations and overrides for the specific content sections of the page it relates to.

Behavioural Aspects

A simple JavaScript routine is used for demonstration purposes. It senses time of day and applies an appropriate text message and colour change to a slim bar beneath the value proposition banner common to all pages. The script uses some simple code to ensure the local time of the user's browser is not used, instead converting to the local time of the shop. It then computes which boundaries of opening hours to apply depending on the day it is accessed.

Responsive Features

The media queries responsible for the transitions to different viewport sizes remain generally the same. The only change of significance was the alteration of the landscape aspects. The first iteration retained the 'burger' menu mechanic to minimise the header space in this aspect. Following criticism, it was modified to allow the menu options to appear with a marginal increase in height.

Accessibility and SEO

The proper use of HTML semantic markup is used and therefore the need for WIA-ARIA attributes is redundant as the *div* elements used do not require explanation by accessibility software. The use of Apache directives in a *.htaccess* file allowed the implementation of a 'clean URL' strategy by converting simple paths to a URL query format:

```
.../index.php?page=about
```

simply becomes:

```
.../about
```

This file also adds a directive to redirect to a custom error page if a path that is not recognised is requested. Both a *sitemap.xml* and *robots.txt* are also provided to aid search engines and indexing spiders. A favicon is utilised to aid quick visual identification in browser tabs.