# [Testing resources](https://validator.w3.org/)

1. The site has been tested by the tools listed below without any issues.

* https://tools.pingdom.com/
* [https://validator.w3.org](https://validator.w3.org/)/
* https://jigsaw.w3.org/css-validator/
* <https://search.google.com/test/mobile-friendly/>

# [Development resources](https://www.mydevice.io/)

1. Media query for screen size transition between desktop, tablet and mobile on this site is based on the information provided below.

* <https://www.mydevice.io/>

# Major page template

|  |  |
| --- | --- |
|  |  |
| Template elements generated by header.php for mobile screen | Template elements generated by header.php for tablet and desktop screen |
|  |  |
| Social sidebar above footer for mobile screen | Main sidebar for the BLOG page |

# CSS

I used Koala pre-processor to compile source scss files into a minimised css file. Scss is a super set of css. It allows nesting.

|  |  |
| --- | --- |
| **Name** | **Role** |
| styles.scss | The architecture file for importing all \_\*.scss  Responsive design uses the following CSS pixel threshold for small, medium and large screen sizes.   * 639px and below – small (mobile) * 640px - 1023px – medium (tablet) * 1024px and above – large (desktop) |
| \_normalize.scss | Source obtained from github |
| \_reset-local.scss | Source obtained from Medium |
| \_variables.scss | Constants for theme colours, font type/weight, gutter width and sidebar positioning |
| \_small-default.scss | All CSS styles for common styles and small screen |
| \_medium.scss | CSS styles for medium screen |
| \_large.scss | CSS styles for large screen |

### Two CSS tricks for responsive design

* Define base font size in body this way for a smooth transition when screen size changes.

body{

font-size: calc(11px + 0.3vw);

}

* The following top margin equation makes the top-sidebar position fairly constant when the screen size changes.

.top-sidebar {

margin-top: calc(-63px + 14.27vw);

}

### CSS versioning

During testing, we experienced browser caching css and prevented the new styles from showing. It was very difficult to force browsers to clear cache and impractical to ask users to do so. The solution is to add versioning to the style sheet. In functions.php, add the following code. The second last parameter is version for style.css. Make sure in each style.css release, the version number is incremented.

wp\_enqueue\_style( 'play2learn\_styles', get\_stylesheet\_uri(), array(), '0.90', 'all');

# Wordpress theme files

|  |  |  |
| --- | --- | --- |
| **Template file name** | **Role** | **Created pages** |
| header.php | Generate common HTML elements on top of the page | All |
| footer.php | Generate footer for each page | All |
| index.php |  | HOME, A DAY IN THE LIFE, ABOUT, PROGRAMS, RESOURCES, CONTACT |
| home.php |  | BLOG |
| single.php | Generate a single post page when a user clicks on a post in the BLOG page | Single post page |
| archive.php | Generate a category page when a user clicks on a category in the BLOG page | A category page |
| comments.php | Handle comments on a single post page |  |
| search.php | Handle search on the search form and retrieve all pages and posts with the search keyword |  |
| 404.php | Page not found template |  |
| sidebar.php | Template for the main sidebar in the BLOG page |  |
| sidebar-top.php | Template for positioning the search form and social sidebar on top of the page |  |
| searchform.php | Template for the custom search form using Font Awesome |  |
| functions.php |  |  |

# JS

|  |  |
| --- | --- |
| **Name** | **Role** |
| menuToggle.js | This function toggles a “closed” class variable to hide the Hamburger button in medium and large screen. |
| mobileScreen.js | The header image has a wide screen and narrow screen version. Because the file name is determined in the header.php, we cannot use media query (in css) to switch between the two modes. I query window.innerWidth to determine wide or narrow screen and append the right suffix for file name. Unfortunately 680 is hard-coded because the constant used in styles.scss cannot be passed. If the threshold for media query changes, make sure to change the value in this file too. |

# Plugins

The production site uses the following plugins.

* Font Awesome
* Sassy Social Share
* WPForms Lite
* WP Mail SMTP
* Elementor (on Contact page only)