**TASK FOR UI DEVELOPER APPLICANTS – PERMANENT AND CONTRACTOR**

**1. Coding Responsively**

Please create a small responsive web site that contains the following elements: two forms of responsive navigation, and image grid gallery and some contextual content. Below are some further notes on what we are looking for.

**Header & Footer**

**Primary navigation bar with the following link titles;**

* Link 1
* Link 2
* Awkward Long link
* Link 3
* Link 4

1. The menu bar should be displayed in a unbroken horizontal line, unless the screen width is too narrow, in which case an expanding container should be used
2. Create a secondary navigation bar with 8 links (Item 1 to Item 8)
3. The navigation should remain fixed on page as user scrolls
4. One of the navigation bars should be displayed off-canvas in a vertical list when it doesn’t fit viewport width

**Content area with:**

* A grid of images (at least 8, no upper limit) with random ‘feature’ images that are larger than the standard images
* 3 columns of text (lorem ipsum is fine for this) when screen width allows, and a suitable display when the screen width is too narrow

**Do not use a full framework (Bootstrap, foundation etc) for this task, we expect the candidate to show they can create the task using sass and compile it to css. Sass plugins such as Bourbon, Compass, Susy etc are allowed.**

**2. Javascript Coding**

Included in the zip there is a file called menu.json. Use it to complete the following points.

* Create a blank web page and load this JSON with JavaScript
* Use the loaded JSON to create a tree menu taking into consideration this JSON structure description:
  + Id: id of the element
  + Leaf: If true, this is an end-node
  + Description: Text displayed in the menu
  + Link: Not applicable
  + Content Explained later
  + CssClass: CSS class of the menu element
  + Menu: If available contains the submenu nodes
* Include the following attributes in each menu element: id, cssClass. Also the description has to be displayed as the menu text.
* When you click on a menu it should display any nested sub navigation, displaying the content on the page.

**Requirements**

* Use Object Oriented JavaScript for the implementation; **do not use a framework for this task, it should be plain Javascript.**
* Make the code the most adaptable possible.

**We are looking for/at the following;**

* Adherence to Progressive Enhancement principles
* Use of Graceful Degradation
* Content, not device, driven responsiveness
* Vertical Rhythm
* How you structure your code so that it's easily extendable, complies with best practices, and easy to modify/understand by others.
* How efficient the coding you implement is.

**Browser compatibility;**

Chrome, IE 9 to 11, Firefox, Mobile Safari (iOS)

**Performance, particularly around Javascript and CSS**

Including how to make the page load as fast as is possible

Use of a JS framework

Use of SASS (SCSS Format)

HTML semantics

Lean code

Accessibility

Production-ready code and assets

Please provide all source code including JS libraries & plugins, SASS source files and

any other components used, this code should be commented where appropriate, and

the site must be production ready. Links to github or another repository are accepted.

We can check the build locally on our own servers however all submissions **MUST** be

hosted on an accessible URL.

Additionally, please detail any other methods you would use to improve performance, if

they were not presented in the code.