Danielo Jean-Louis – Proposed Questions for Front-End candidate:

1. HTML:

☐ **On an element, when would you use a CLASS? when would you use an ID?**

I use class for elements that could be multiple times in the page especially for design. I use ID for unique item in the page like a wrapper.

☐ **Where would you put your SCRIPT tags.**

To get best performance I put script tag at the bottom of the page.

☐ **What's the difference between <script> , <script async> and <script defer>**

<script> : Loads a script in a synchronous way so depending where you put the script tag it could slow HTML page display

<script async> : Loads a script in a asynchronous way. So If we have multiple <script async> on the page the order will not be respected

<script defer> : Loads a script in a specific thread but the browser will keep the order of the script

☐ **Where would you put your LINK (Stylesheet) tags.**

I put my link tags in the head of the page.

☐ **When would you use Localstorage over Cookies.**

I use localstorage over cookies when I don’t want datas to be blocked by any browser extension like Ghostery or need to store more content. Furthermore LocalStorage don’t have any expiration time.

2. CSS:

☐ **When would you use a Class and When would you use an ID for styling.**

I almost never use an ID for styling I think it’s a bad idea to have a kind of unique style for a element. The is way I would lost the modularity of my CSS. So I use class mainly to allow reusability because I can have multiple elements with same style in the same page.

☐ **What happens to an element when it's children are floated.**

If an element has children which floating this element lost his height.

☐ **What are Sprites and how do you implement them?**

CSS Sprites are a board of little images often used as icons to get good performances when it is loaded. Because browser has to load it once and after all icons (in the CSS Sprite) is in the browser’s cache. After I use background-position to get the right icon.

☐ **How would you fix browser-specific styling issues?**

Depending which browser as issue I can use some prefix for CSS attribute like -webkit-\_\_CSS\_Attribute\_\_ to target webkit/blink browsers. I can also use some suffix for CSS attribute’s value like \9 for IE8 and below.

☐ **Have you used media queries?**

Yes. Media queries allow me to update display of my html page for defined screens properties (height, width, dpi...)

☐ **What's the difference between adaptive and responsive design?**

Adaptative design leads to adapt correctly a webpage layout for each defined screen. It display appropriate feature or information for a specific screen.  
Responsive design manages to display correctly a website for any size. So a desktop computer with a wide screen and a smartphone will have the content and both will have their content readable.

☐ **Should you use naming conventions for ID and Class names.**

Yes. It allow to create code unified and make a better team working.

☐ **If so, What is your naming convention of choice for ID and Class names?**

I always try to give the most and the simpliest name to my classes and IDs.

☐ **Are you familiar with the BEM convention?**

Yes.

☐ **If so, describe it.**

The idea it’s to create for each class a kind of root (a Block) and adds some modifier (Modifier) to change its behaviour. A element (Element) has to change its behaviour depending of where it’s is.

☐ **What CSS preprocessors do you know?**

I know the following CSS preprocessors : Stylus, SCSS, SASS, LESS

☐ **If so, have you used any CSS preprocessor?**

I currently use SCSS in py professional project. Before I used LESS, Stylus and SASS.   
Now for my side projects I use postcss.

☐ **Name as many values as you remember for the "display" property.**

The CSS “display” can take the following values : flex, inline-flex, block, inline, table, table-cell, list-item, initial, inline-block.

☐ **What's the difference between block-level elements and inline elements.**

Block elements are displayed in “columns” by default, they take all width available. Futhermore they can have margin for top, bottom, left and right. Instead of inline elements that can only manage margin-left and margin-right. For the display inline elements are displayed side by side and only take needed space.

☐ **What does the C in CSS stand for?**

The letter C in CSS means Cascading. This mean that a rule can be apply to several html elements.

☐ **How does specificity work in CSS?**

Specificity in CSS it’s the fact that some CSS properties are more relevant for a item. The most relevant it’s an ID after it’s class. But I can tweak this behaviour with ‘!important’ at the end of a css attribute. For example :

#myClass {

width: 1000px;

}

.myClass {

width: 200px!important; /\* Browser will take this width even an html tag has id myClass and class myClass \*/

}

☐ **How would you make a retina version of an image?**

To make a retina version of an image a would use this image two or three times bigger than the original image. In my html code the img tag will have width attribute of the original image. So if my image for non-retina screen is 50px width, it will be 100px width for iPhone 4. But in my code I would write :

<img width=’50’ src=’myimage.jpg’ />

3. Javascript:

☐ **What does the keyword "this" refer to.**

Keyword “this” refers to the current context.

☐ **What is an IIFE**

IIFE means Immediately Invoked Function Expression. This type of function is executed just after it’s declaration. For example :  
const myIIFEFunc = (function test(nb) { console.log(nb); })(42);

☐ **How would you check if a variables value is undefined?**

if (myVar) {} or if (typeof myVar === “undefined”) {}

☐ **How do you organize your Javascript code?**

I organize my javascript code with folder each of them manage a kind of logic: deals the we server, utility methods, templates, vendors…

☐ **How would you implement a Class in Javascript.**

I can implement a class in javascript by create an Object and add new methods or, with ESNext, keyword Class. Example :

class MyClass {

constructor() {

}

helloword() {

console.log(“hello world”)

}

}

I can also create a function and use prototype to add it new methods and attributes.

☐ **What design patterns do you know?**

I know MVC pattern, observer pattern and Singleton pattern.  
MVC pattern stands for Model-View-Controller. It means that with with pattern the code is splitted into three part. This way the code is more modulable and we improve its reusability.

Observer pattern allows to watch a object for example and trigger an action each time it’s value change. This pattern is used by the KnockoutJS library.

☐ **When would you use the observer pattern?**

I need this pattern when I want to update some part of my code/HTML page when a value change.

☐ **What is hoisting?**

It’s the fact that browser, at javascript compilation, will set every variable declaration at the top (hoist) of the javascript file.

☐ **Explain AJAX.**

AJAX technology allows to do some queries to the server without reload the current page, queries are asynchronous. I can be handle with jQuery’ajax, XMLHTTPRequest or, with ESNext, fetch method.

☐ **What does "JSON" stand for?**

JSON means JavaScript Object Notation. It’s a file format to store datas.

☐ **What's the difference between "===" and "=="**

"===" compares two items value and type instead of "==" only compares value.

42 === “42” will be false, because === compares a number to a string even if both part can be read as forty-two.

42 == “42” will be true, because == only compares value without look for each part type. It’s a bad practice.

☐ **What does the "use strict" directive do?**

The "use strict" directive change the way of javascript management for the browser. It will show some errors not enabled on non “use strict” mode. For example in strict mode I can’t define a variable without var/let/const keyword.

☐ **Why should you avoid declaring variables and functions in the global scope?**

I should avoid this because it can provokes a lot of side effects in the code and very hard to debug.

☐ **How would you avoid declaring your variables and functions in the global scope?**

To avoid declaring variables and functions in the global scope I can use closures.

☐ **What's the difference between the "document load" and "document ready" events?**

Document load indicates that all assets of the page are loaded (images…). Document ready only indicates that the DOM is loaded.

☐ **How do you debug your Javascript code?**

I debug my javascript code with console.log function or putting breakpoints in browser’s console

☐ **Why would you use a code linting tool?**

Using a linting tools allows to make a standardization in the code and prevent bad practices in the code.

☐ **What is jQuery, a framework or a library?**

Jquery is a javacript library to handle the DOM easily between browsers. I consider jQuery as a library because it only provide functions and method not a standard to develop.

☐ **What Javascript frameworks do you know?**

I know AngularJS/Angular2, EmberJS and VueJS.

☐ **Have you used a Javascript framework?**

I’ve never use a javascript framework. I use ReactJS, it’s more like a javascript library because ReactJS only provide view no Model and no Controller.

☐ **If so, why did you choose this framework over others?**

I chosed ReactJS because according to me it’s easy to learn and very powerful.

4. Workflow:

☐ **What is a build tool?**

A build tool is a tool to handle some front-end tasks like optimize assets (js, images, css…), make compilation (transforms .scss into .css, .coffee into .js). With a watcher plugin some tasks can be run after each file’s saving.

☐ **Have you used a front-end build tool?**

Yes.

☐ **If so, why did you choose this tool over others?**

I currently use webpack, I use this one because it has some handful plugins like one to manage i18n by creating a script for each localisation speficied. I can also use gulpjs with webpack to manage some task not handled by webpack like execute shell commands.

☐ **What tasks/plugins would you run on your code/assets before deploying to production?**

Before production I would use a task special for production. This one will obfuscate and minify my scripts to reduce their size. A plugin to compress static images and an another one to minify my CSS files.

☐ **From 1 to 10 how experienced are you with Photoshop in terms of website integration processes?**

I think my experience with Photoshop is good. So I would say 8.

☐ **How would you optmize your images?**

I can use the node module imagemin.

☐ **What is your IDE/Text-editor of choice?**

I use Sublime Text as Text Editor. It has a lot of great plugin and handy shortcuts.

5. Debugging:

☐ **Your server is running good but your website is slow, what steps would you take to make it fix this?**

If I have this type of problem I would check the following :

- Images : They have a good size ? Every img tag has a width and/or height attribute.  
- Script tag : Are they at the bottom of the page ? They can be async or defer ?  
- Script/CSS files : Are they minified ?

☐ **Javascript doesn't seem to be running in your website, where should you start?**

Open the browser’s console and try to see if there is some error in it.

☐ **What IE8 issues are you familiar with?**

I’m not familiar with some issues with IE8. But I know it can’t handle indexOf() javascript’s function or adds a undefined item in a array with a trailling comma.

☐ **Chrome dev tools OR Firebug?**

Chrome dev tools.

6 General:

☐ **Which is your go-to website for technical questions?**

I use especially stackoverflow.com and it’s subdomains.

☐ **Which is your go-to website for tutorials?**

I often use official documentation for tutorial. For CSS, I often use css-tricks, codrops, smashing magazine.

☐ **Do you contribute to open-source projects?**

No.

☐ **Do you dislike any browser? If so, which version of IE do you dislike the most?**

I really don’t like Microsoft’s Internet Explorer especially IE8 because I had to managed it during almost two years for a website. And the compability with this browser didn’t allow me to use some handy CSS attribute.