1. How is CSS markup defined?

Markup is an html thing, CSS is just a bunch of rules that provide to the html file a better appearance.

1. Is CSS case sensitive?

It is not in the syntax, but html classes are, so we have to be careful when working with classes in CSS.

1. How is a CSS style applied to a web page?

CSS can be added directly in an html file or you can use external sheets to tell your html where to find the rules. (More details q19 questionnaire 2)

1. What improvements have been made from CSS2 to CSS3?

In CSS 2 there were new properties added like z-index and the feature of precisely positioning elements in a webpage.

In CSS3 you can still accessing to CSS1 and CSS2 properties and also the addition of new properties such as border-radius, the alpha in rgb colors, new background features, text-shadows, web-fonts, there were also selectors added and also pseudo classes like :nth-child(n).

1. How do selectors work?

Selectors indicate which element the rule applies to. The same rule can apply to

more than one element if you separate the element names with commas.

1. How can you apply a style to:
   1. an element type

As it follows:

p {

color: red;

}

* 1. a child element type

body > h1{

color: blue;

}

* 1. several element types

h1, p, a {

color: green

}

* 1. a specific class of element

.class a {

color: blue;

}

* 1. a specific element

#uniqueid {

color: red;

}

* 1. a sibling of an element

h2 + p {

color: green;

}

* 1. an element with a specific attribute

a[target] {  
    background-color: yellow;  
}

* 1. elements in a specific state

a: hover {

background-color: yellow;

}

* 1. specific elements but exclude others based on a condition

:not(p) {

background: #ff0000;

}

1. Can comments be added to CSS files? If so, how?

Yes, just by adding slashes and stars as it follows: /\*Place your comments here\*/

1. Is it possible to assign multiple classes to a single element? If so, how?

Yes, just by separating each class with a space as it follows: <p class="class1 class2"> always paying attention to the fact that classes are case sensitive.

1. What are vendor prefixes? Why do they exist?

It’s a set of letters used to tell the browser that we’re using a property that still being developed. They exist to tell each browser that we’re using experimental features under construction, this prefixes are: -webkit- (Chrome, newer versions of Opera), -moz- (Firefox), -o- (Old versions of Opera), -ms- (Internet Explorer).

1. What is the difference between ***em*** and ***px***?

Ems are worth the width of a letter m for each letter this size is relative to the parent element, an em is equivalent to 16px. Pixels are relative to the resolution of the screen, and they are independent of any browser settings.

1. What is the difference between ***em*** and ***%***?

They work in the same way 1em is equivalent to 100%.

1. Describe the different types of units available in CSS3.

Pixels: These are the easiest to understand they don’t depend on any default browser settings.

Keywords: You can use large, medium, small, when working with fonts, since sizes are default and you only have 7 options, this is a limited choice.

Percentages: Every browser has a default font size, even if you modify this value, de default font size will be equivalent to 100%, so you get able to play with the size by comparing the percentage given with the default font size.

Ems: This works as percentages, em comes from the world of printed (as in paper) typography, where it refers to the size of a capital letter M for a particular font.

Rems: It stands for root em—meaning its value is based on the text size of the root element.

1. Is it possible to use percentages in margin widths?

Yes, it can be helpful when creating bars or sections.

1. How can text be capitalized using only CSS?

By using the text-transform: uppercase; property.

1. What is the difference between ***display: block*** and ***display: inline-block***?

Display: block, let you display inline elements as if they were block elements, this is instead of putting one next to the other it puts one under the other.

Display: inline-block, this is a hybrid combination it causes a block-level element to flow like an inline element, while retaining other features of a block-level element.

1. What is SASS?

SASS stands for Syntactically awesome style sheets, it is a CSS pre-processor that helps you to write less code and organize even better your stylesheets, and also organize your styles into smaller css files.

1. What is LESS?

LESS is a CSS pre-processor, it extends the CSS language, adding features that allow variables, mixins, functions and many other techniques that allow you to make CSS that is more maintainable, themable and extendable. Less runs inside Node, in the browser and inside Rhino.

1. What are transitions? How do they work?

Animations from one set of CSS properties to another set over a specific amount of time. You must provide two style, the initial state and the final one. You also need the transition property and a trigger which will be the one that starts the whole thing.

1. What are animations? How do they work?

They let you animate from one set of properties to another set to another

set, and so on. You must define the animation first by using key frames, after that you apply the animation to certain elements.

1. How can we add custom fonts to a web page?

By using the @font-face directive, you must specify the source of your font as it follows:

@font-face {

font-family: "League Gothic";

src: url('fonts/League\_Gothic-web font.woff');

}

1. What happens when we define CSS rules that are not supported by a browser?

The browser won’t show any format applied to the html element.

1. How do we center text?

By using the text-align property. text-align: center;

1. How do we center images?

When using background images, it’s enough background-position: center center or when it is inside a box using the margin: auto; property.

1. Is it possible to center elements horizontally and vertically? If so, how?

Yes, horizontally by using the margin: auto property.

Vertically requires a more steps:

position: relative;

top: 50%;

transform: translateY(-50%);

1. Describe how each positioning option works:
   1. fixed

This locks an element into the screen so it’ll be visible no matter if the user scrolls the page.

* 1. relative

An element is positioned relatively to its current position in the HTML flow, so we’re setting a reference for the next absolute elements nested inside a relative element. it takes a reference point and will depend on it.

* 1. absolute

This lets you determine an element’s position by using the words left, right, the thing with this type of positioning is that the other elements never notice that you have an absolute element.

* 1. static

The content just flows de top-down html flow, this is the default value, so you may not need to specify it.

* 1. inherit

This is just for the element follow the same rules as its parent.

1. What does the float property do? When should it be used?

Moves an element to the left or to the right edge of the containing element. It is helpful when you’re trying to move an image to one side of the page or even to create side bars.

1. What are pseudo-classes? Give examples.

They define a special state of an element; examples are:

a: link a: visited a: hover a: active : focus

1. What are pseudo-elements? Give examples.

Pseudo elements are used to style specified parts of an element.

: first-letter : first-line : before :: selection : first-child

1. How can an element be removed from view using CSS?

By using the visibility: hidden property.

1. How can we specify a color for an element?

The syntax is as it follows h1{color: red;}

You can add a color by using the name of the color (not recommended) color:blue;

Adding a hexadecimal value color: #F1CC12;

Using rgb, color: rgb(120,32,22);

Or the new rgba, color:rgba(12,13,15,.2);

There’s also hsl and hsla, hsl(0,0%,78%); hsla(0,100%,100%,0.5);

1. How can text be wrapped with CSS3?

By stablishing a width for the element that contains it and then maybe floating the text or setting a left or right value.

1. How does the CSS3 multi-column function work?

It lets you divide an element into several columns, by using the column-count property, you just need to add your text in a div and specify how many columns you want the info to be displayed.

1. Can elements be styled as partially transparent? If so, how?

Yes, if we are talking about color, you can use an rgba color and control the appearance by changing the alpha value. Or by using the opacity property and setting the desired value.

1. What is ***grouping***?

Putting related elements inside one tag in order to have a better layout, the use of divs can help you with this task or the new nav, header, section tags can also be helpful.

1. How does nesting work?

You put an element inside another element so you can set the wanted properties and start playing with inheritance and descendant selectors. By default a nested element will inherit its parent properties.

1. Is it possible to apply multiple backgrounds? If so, how?

Yes, you just have to separate each background with a comma as it follows:

background: url(scrollTop.jpg) center top no-repeat, url(scrollBottom.jpg) center bottom no-repeat, url(scrollMiddle.jpg) center top repeat-y;

1. What are the different ways of handling white-space with CSS?

By using margins and padding.

1. What does the following CSS do?
   1. *p {font-family: Verdana, Arial, Helvetica;}*

It applies Verdana font to the text in all paragraphs.

1. Name a few CSS libraries and frameworks. Explain their use.

Libraries: Help you to type less CSS and creating smaller CSS files.

-Bourbon: Adds vendor prefixes and performs animations and transitions.

-Breakpoint: Helps you to write media queries fast and simple.

-Compass: It offers many features it helps you to create CSS sprites.

Frameworks: Basically they let you create websites in an easier way because most of them contains rules and preset formats so you just have to add your information.

-Pure.css: It makes easier not only to create a grid but also format buttons.

-Bootstrap: it includes rules to style tables, buttons, labels and some other CSS elements it also contains JavaScript components.

-960.gs: It is a style sheet that allows you to create multiple columns websites.

1. What is an ***at-rule***? What can it be used for?

Are the rules that start with @, to add animations, import files or even media queries to change the webpage appearance.

1. What are the naming rules for CSS?

Classes should start with a .class1, id’s must start with #exclusive.

1. What does the ***important*** declaration mean?

It allows you to override specificity over all other rules.

1. What is a contextual selector?

The one that points to an element that lives inside another element and has a class applied to it. Basically an element that follows some rules it is usually made of two or more selectors separated by a space.

1. What is a child selector?

It is a specific selector that allows you to choose a specific element (child of a parent) and not all the children.

1. How can a shadow be applied to an element? To what elements can it be applied?

By using the box-shadow or the text-shadow properties. To elements living inside divs and text.

1. What types of fonts can be chosen for a web page?

Serif, sans-serif, monospace.

1. What happens if a specified font is not found on the client’s computer?

The browser will display the information in its default font family.

1. What are font stacks?

The list of fonts you want to use in each element of your website.

1. What is a font family?

A collection of characters in a certain format.

1. What does ***font-family*** do?

It provides a style for each word in a webpage.

1. What does ***@font-face*** do?

It is a rule that tells the browser to download the specified font-family to display the website.

1. Is there any merit to creating separate web pages for desktop and mobile? Explain.

You can do that, but it takes more time and also resources, it might be better creating a Responsive Web Design instead of creating two different websites one for each case. You get to create just one layout and adapt it to the different size of screens it will be displayed.

1. What is Progressive Enhancement? Explain.

It is a strategy for web design that emphasizes accessibility, semantic HTML markup, and external stylesheet and scripting technologies. It starts by establishing a basic level of user experience that all browsers will be able to provide when rendering your web site, but you also build in more advanced functionality that will automatically be available to browsers that can use it.

1. What is Graceful Degradation? Explain.

It is the practice of building your web functionality so that it provides a certain level of user experience in more modern browsers, but it will also degrade gracefully to a lower level of user in experience in older browsers.

1. What happens with text that exceeds its boundary limits? What can be done about it?

You can use the overflow property, in order to hide the exceeding text or to add a scroll bar and navigate all over it.

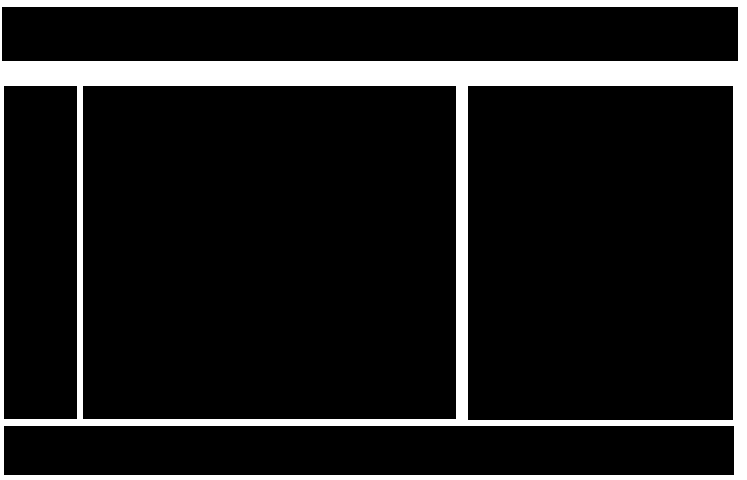
p.one {

overflow: hidden;}

p.two {

overflow: scroll;}

**Exercises**

1. Place two paragraphs side-by-side.
2. Center a square div on the screen, both horizontally and vertically.
3. Define a special color for links that have an image beside them, keep the default style otherwise.
4. Create a page with multiple backgrounds.
5. Create an element that will wobble when hovered over.
6. Show visual feedback when a user inputs invalid information in a form.
7. Create the following layout:
   1. 
8. Change the style of selected text
9. Make the first letter of every paragraph 3x bigger.
10. Have each letter of a word pop up when hovered over.
11. Remove the spacing between header elements and a paragraph.
12. Create a layout displaying a navigation menu with at least 5 options.
    1. Provide a way to:
       1. display the menu on the left
       2. display the menu on the right
       3. display the menu on top
       4. hide/show submenus (drop-down)
       5. allow the user to switch between all the options