1. What is *doctype*?

It tells the browser which version of HTML we are using.

1. What is the difference between ***<div>*** and ***<span>***?

The <div> tag is a block-level element used to divide a page into sections. The <span> tag is used for inline elements: words or phrases inside a larger paragraph or heading.

1. What is the use of the different header tags (h1, h2..., h6)?

Reflects a hierarchy of information, being h1 the most important title and h6 the last relevant sub-heading.

1. How is whitespace handled by the browser and the various HTML elements?

When the browser comes across two or more spaces next to each other, it only displays one space, if it comes across a line break, it treats that as a single space too.

1. How does the video tag work?

You just have to provide the source of the video file inside this tag, the other attributes are added to control the appearance of the video and provide the user control over it. <video src="video/myvideo.mp4"

poster="images/myvid.jpg"

width="400" height="300"

preload

controls

loop>

</video>

1. What video formats are supported?

Mp4, H264 for IE and Safari and WebM for Android, Chrome, Firefox and Opera.

1. How does the audio tag work?

You just have to add the audio tag and provide the source just like with the video element, then add some parameters for controlling the playback.

<audio src="audio/test-audio.ogg" controls autoplay> </audio>

1. What audio formats are supported?

MP3 for Safari 5+, Chrome 6+, IE9 and Ogg Vorbis for Firefox 3.6, Chome 6, Opera 1.5, IE9.

1. What can be done with canvas?

You can use it to draw graphics, shapes or even text in a web page, it is useful when displaying real time events.

1. What is SVG?

SVG stands for Scalable Vector Graphics, it’s a format used to display vector images directly on the web but it doesn’t need to create bit maps of the images, is not widely used yet.

1. What is the difference between canvas and SVG? When should each be used?

Canvas is JavaScript dependent there’s no way to alter the image without redrawing it, SVG support text, which may be useful if the browser doesn’t support SVG it will display the text. You should use SVG for static content in a high quality and canvas for displaying animations or real time events.

1. Explain the use of the following tags:
   1. <article>

Is used to mark a section of a page that contains a complete composition or simply the page’s main body of text.

* 1. <aside>

The <aside> tag holds content that is related to content around it. An example could be a sidebar in an article.

* 1. <bdi>

This tag isolates a span of text that might be formatted in a different direction from other text outside it. This might be useful when working with different languages.

* 1. <menuitem> (experimental)

This element represents a command that a user is able to invoke through a popup menu. It can be displayed by using the right click of the mouse in order to display a different menu.

* 1. <details> (experimental)

This tag allows the user to retrieve additional information about the website.

* 1. <dialog> (experimental)

This element represents a dialog box or other interactive component, such as an inspector or window.

* 1. <summary> (experimental)

It is used as a summary, caption, or legend for the content of a <details> element.

* 1. <figure>

The <figure> tag is used for an illustrative image, it can be used for diagrams, illustrations or photos.

* 1. <footer>

This tag contains information you’d usually place in a page’s footer, like a copyright notice, legal information, some site navigation links, and so on. You can use more than one <footer> in one webpage.

* 1. <header>

The <header> tag indicates a header or banner: the top part of a page, usually containing a logo, page title…

* 1. <mark> (experimental)

The HTML Mark Element represents highlighted text. It can be used in a page showing search results to highlight every instance of the searched-for word.

* 1. <nav>

This tag is used to contain primary navigation links.

* 1. <meter>

The HTML <meter> Element represents either a scalar value within a known range or a fractional value.

* 1. <progress>

The <progress> Element is used to view the completion progress of a task. While the specifics of how it's displayed is left up to the browser developer, it's typically displayed as a progress bar.

* 1. <section>

The <section> tag contains a grouping of related content, such as the chapter of a book.

* 1. <time>

The <time> CSS data type denotes time dimensions expressed in seconds or milliseconds. They consist of a <number> immediately followed by the unit.

* 1. <wbr>

The HTML element word break opportunity <wbr> represents a position within text where the browser may optionally break a line, though its line-breaking rules would not otherwise create a break at that location.

* 1. <cite>

It puts the title in italics and tags it as a cited work for search engines’ benefit.

* 1. <em>

It is used for emphasize text that has more important relevance in a paragraph for example, this is displayed in italic as default for the browser.

* 1. <strong>

This tag will emphasize the text and the browser will display it in bold.

* 1. <blockquote>

This tag indicates that the enclosed text is an extended quotation. Usually, this is rendered visually by indentation.

* 1. <abbr>

This element represents an abbreviation and optionally provides a full description for it. If present, the title attribute must contain this full description and nothing else.

1. What is the DOM?

The Document Object Model is an application programming interface (API) for valid HTML and well-formed XML documents. It defines the logical structure of documents and the way a document is accessed and manipulated.

1. How can user input be obtained?

By using the <input> tag, you can choose between several options like images, text, password, etc.

1. How can user input be validated?

By using the required attribute inside the input tag.

<input type="password" name="password" required="required" />

1. Explain the different input types:
   1. URL

A URL input can be used when you are asking a user for a web page address. Browsers supporting this feature will check if the user provided the format of a URL.

* 1. date

If you are asking the user for a date, you can use an <input> element and give the type attribute a value of date.

* 1. email

If you ask a user for an email address, you can use the email input. Browser will check that the user is providing an email address in the right format.

* 1. datetime

This is a control for entering a date and time (hour, minute, second, and fraction of a second) based on the UTC time zone.

* 1. number

A control for entering a floating point number.

* 1. range

Control for entering a number whose exact value is not important.

* 1. color

A control for specifying a color. A color picker's UI has no required feature.

1. What is the difference between GET and POST?

With the get method, the values from the form are added to the end of the URL specified in the action attribute. The get method is ideal for: short forms and when you are just retrieving data from the web server.

With the post method the values are sent in what are known as HTTP headers. You should use the post method if your form: allows users to upload a file

that is very long, contains sensitive data, adds information to, or

deletes information from, database.

If the method attribute is not used, the form data will be sent using the get method.

1. What options are available for storing/retrieving user data?

By choosing the method a form is going to be sent, it depends what are you doing with the information you must decide between get or post.

1. What is the difference between ***localStorage*** and ***sessionStorage***?

Data stored in localStorage has no expiration time, data stored in sessionStorage gets cleared when the browsing session ends that is when you close the browser.

1. How can a web page respond to user interaction?

By adding elements that provide the user this interaction, for example adding button links, responsive forms, multimedia elements that can be played and controlled by the users visiting our website.

1. How can we dynamically change the appearance of a page’s elements?

When we are using CSS we can add some transitions and animations to our website, or even by using the :hover state we can make our website more interactive and less boring. The addition of Java Scripts can also be helpful in order to provide a less boring static website.

1. What is the difference between the ***id***and ***class*** attributes?

The id must be unique and cannot be used more than once, a class might be used in different tags, the intention of a class is applying the same style to different elements.

1. How can cross-browser compatibility be handled?

You can use a CSS reset so you delete preset values for each browser and start from a clean slate to apply your styles.

1. How can you troubleshoot issues with a web page?

By using the Web Developer Tools such as code inspector.