

Part 1

Questions:

1. `` - an inline container that is used to markup specific parts of a text or document. It works like a `<div>` element, but what makes the `` tag so special is that it is an inline element unlike the `<div>` which is a block level element.
2. The “placeholder” would specify a certain hint that would describe the value that is supposed to be in the input field (eg. “Email”). The type specifies the type of value that you need to input into the input field (eg. “text” or “password-text is hidden in asterix”).
3. CSS vs SCSS
 - SCSS has all the features of CSS but with even more features that would not be present in CSS, making it a better choice for developers.
 - Code can be shortened through the use of variables, a feature used in SCSS, which is a major advantage.
 - You are able to use nested syntax, meaning you are able to style specific elements within certain folders (eg. A paragraph within a div that is in a footer).
 - SCSS is also very well documented.
4. PX, EM, VH comparison
 - PX – is an absolute unit (pixels).
 - EM- is a relative unit (which is relative to the parent element).
 - VH – although a relative unit, it deals with the padding and margins (also considered as viewport height and works most with height. VH is also seen as the ‘viewable screens height’).
5. Code snippet:
 - Width – the width of the elements content would be specified when using this property. The width in this case is set to 100%
 - Margin – the space that is around an HTML element would be defined by the margin. A shorthand property is specified for setting the margin properties in a single declaration. The margin being auto 0 means that the object will sit centrally within its parent container.
 - Text-align – the inner content of a block element would be aligned using the text align properly, in this case, the text has been aligned to the center.
 - Margin-top – the top margin of an element would be specified by this property. The margin has been set to 2em at the top of the page.
 - Border-radius – the border radius rounds out the corners of an elements outer border edge. You can either set one radius to make corners more circular or you can set two radii to make corners more elliptical. The corners have been smoothed out at 50%.
6. Code snippet
 - Width - the width of the elements content would be specified when using this property. Calc() is used to perform simple math within the CSS as a means to replace the length value.
 - Margin - the space that is around an HTML element would be defined by the margin. A shorthand property is specified for setting the margin properties in a single declaration. The margin has been set to 0 at the top as well as the bottom.

- Background – a shorthand property for:
 - Background-colour
 - Background-image
 - Background-size
 - Background-repeat
 - Background-origin
 - Background-clip
 - Background-attachment.
 - ✓ In this case, the background has been set to the colour purple (violet/lavender).
 - Border- you are able to specify the style, width and colour of an elements border. In this case, there is no specification as it is set to none.
 - Colour – the colour refers to the colour of an element defined in most cases as a hexadecimal. In this example, it is not, and the colour has been set to white.
 - Cursor- the css is able to set your cursor when you hover over a certain item. In this case, the cursor has been set to a pointer, which is used to show that certain items are being clicked eg buttons or links.
7. When you need to modify your website or web app according to your devices usual type like print vs screen or certain parameters or characteristics like the screen resolution/viewport width.
- Media queries are used to:
 - Apply styles conditionally with the CSS @media as well as @import at-rules.
 - Targeting certain media for the <style>, <link>, <source> as well as other HTML elements that are in the media attribute.
 - Testing and monitoring the states of media by using the Window.matchMedia() as well as MediaQueryList.addListener() JavaScript methods.
8. Code snippet media query:
- The media feature is targeted (min-width: 768px) – media features would describe certain characteristics of a given user agent, output device or environment.
 - Within the media query, the body of the document has further specifications once the screen has been set to the specified width (768px).
 - The body outlines the font size of the screen when it is set to the min width of 768px.
 - The button is also specified in the media query.
 - The button is set to a width of 60% and takes that shape when the screen is set to that min width, overriding the button width that was set outside the media query (!important).
 - The text input has also been specified in the media query
 - Making use of the calc() property, the width has been set in the media query and takes precedence(overrides) over the width that has been set outside the media query (!important).
9. Z-index – the specifies the stack order of an element. So an element that has a larger stack order is always in front of an element that has a lower stack order.

- It is important to note that z-index can only work on elements that are positioned (position: absolute, position: relative, position: fixed, or position: sticky).
10. Bootstrap is an extremely popular front end framework in web development, containing multiple pre built components as well as design elements when styling content in HTML.
- Bootstrap makes use of a responsive grid system for multiple varying layouts. It is an amazing starting point when building websites that are mobile friendly.