

1) Describe in detail the “box model” in CSS, which CSS properties are a part of it and how it can impact frontend development.

This is how the browser represents each element (as a rectangle box).

Each box has a content area (real content area), padding, border and margin, and each box is defined by the edges of these areas.

These four components are the ones that determine how this box is actually going to look like in terms of size, how the content is going to be displayed, how a layout is going to look like, or how the items are going to be aligning respecting its parent or other items.

The content area is given by a width and a height, which usually depend on the content itself, but it can also depend on if it contains text, other boxes, if the box is a table, etc.

The padding, border and margin can be broken down into top, right, left or bottom. If there is only one component value, it applies to all sides. If there are two values, the top and bottom are set to the first value and the right and left are set to the second. If there are three values, the top is set to the first value, the left and right are set to the second, and the bottom is set to the third. If there are four values, they apply to the top, right, bottom, and left, respectively.

Ex:

- if top and bottom margin are the same but the div has different left and right values:

```
div{  
  margin: 20px 13px 20px 40px;  
}
```

The order is top, right, bottom, left

- If all values are equal ('global value'):

```
div{  
  margin: 20px;  
}
```

In this case top, right, bottom and left margin have the same value, so there is no need to break it down into 4.

The background style of the content, padding, and border areas of a box is specified by the 'background' property of the element.

Margin backgrounds are always transparent.

2) Explain the difference between coding a responsive and a mobile-first strategy.

The main difference is where the design starts, meaning if the design is going to start at the maximum resolution (responsive) or if it's going to start as if it were a mobile-app.

This starting point can make a difference in terms of speed, navigation and content.

In mobile-first the design process is different because the thinking process is as if it was a mobile app, based on the mobile user-experience (some of the characteristics are less text, larger fonts, fast download speed, short forms), and the layout once finished on the smallest resolution possible is adapt to desktop and tablet, without too many modifications.

In a responsive strategy it could be possible that more code is needed to modify the content.

3) If you could add or remove a feature from CSS or SCSS, what would it be?

As I have been working with it for a while, I think I might have a 'trick' to solve pretty much every problem so I don't have too many complaints, though I do think it could improve some vertical alignment features.