CSS

1. Font property of CSS

Name	Function
font	Sets all the font properties in one declaration `font:15px arial, sans-serif;`
font-family	Specifies the font family for text `font-family: "Times New Roman", Times, serif;`
font-size	Specifies the font size of text `font-style: normal;`
font-style	Specifies the font style for text `font-size: 40px;`
font-variant	Specifies whether or not a text `font-variant: small-caps;`
font-weight	Specifies the weight of a font `font-weight: bold;`

2. Different Types of CSS

- Inline CSS
- Internal CSS
- External CSS

3. CSS Box Model

- All elements in HTML can be considered as boxes
- In CSS, `box model` is used when talking about design and layout
- Box model is a box that wraps around every HTML elements
- It consist of:
  - Margin
  - Border
  - Padding

- Content
  - Explanation of the different parts:
    - Content - The content of the box, where text and images appear
    - Padding - Clears an area around the content. The padding is transparent
    - Border - A border that goes around the padding and content
    - Margin - Clears an area outside the border. The margin is transparent
  - Example:

```css
div {
    width: 300px;
    border: 15px solid green;
    padding: 50px;
    margin: 20px;
}
```

4. CSS Background & Text Properties

Background

Name	Function
background	Shorthand property for all other property `background: coral;`
background-color	Specifies the background color to be used `background-color: coral;`
background-image	Specifies ONE or MORE background images to be use `background-image: url("paper.gif");`
background-position	Specifies the position of the background images `background-position: center;`
background-size	Specifies the size of the background images `background-size: 300px 100px;`
background-repeat	Specifies how to repeat the background images `background-repeat: repeat-y;`

Name	Function
	`repeat|repeat-x|repeat-y|no-repeat|initial|inh`
background-origin	Specifies the positioning area of the background image `background-origin: content-box;`
background-clip	Specifies the painting area of the background images `background-clip: padding-box;`
background-attachment	Specifies whether the background images are fixed or scrolls with the rest of the page `background-attachment: fixed;`

Text

Name	Function
color	Sets the color of text
direction	Specifies the text direction/writing direction `direction: rtl;  ltr`
letter-spacing	Increases or decreases the space between characters in a text `letter-spacing: 3px;`
line-height	Sets the line height `line-height: 1.6;`
text-align	Specifies the horizontal alignment of text `text-align:center`
text-decoration	Specifies the decoration added to text `text-decoration: underline;`
text-indent	Specifies the indentation of the text block `text-indent: 50px;`

6. CSS Navigation Bar

```
<!DOCTYPE html>
<html>
<head>
<style>
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
  background-color: #333;
}

li {
  float: left;
}

li a {
  display: block;
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}

li a:hover {
  background-color: #111;
}
</style>
</head>
<body>

<ul>
  <li><a class="active" href="#home">Home</a></li>
  <li><a href="#news">News</a></li>
  <li><a href="#contact">Contact</a></li>
  <li><a href="#about">About</a></li>
</ul>

</body>
</html>
```

7. Difference Between ID and Class

ID	Class
ID is used to select an individual Element	Class is used to select a group of element
An ID selector is a name preceded by a hash character ("#").	a class selector is a name preceded by a full stop (".") and
The HTML refers to the CSS by using the attribute `id`	he HTML refers to the CSS by using the attribute `class`
ID has higher specificity	Class has lower Specificity

8. Contextual Selector

- Contextual selector is used to match elements that appear in a certain context, such as "only those EM elements that are contained by an H1 element".
- In these cases, contextual selectors add specificity. Context is defined as an ancestor/descendent relationship between elements in the document tree.
- Exaple:

```
div p{
    color:red;
}
```