

Welcome students to the course

Web application development.

Today I'll be discussing on the topics,

fundamental text and font styling,

values, units, colors,

media queries in CSS. I am Liana da Costa
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The outline,

fundamental text and font styling values,

units, colors media queries.

Learning outcomes at the end of the session,

the student will be able to apply the rules

of fundamental text and font styling, values,

units, colors,

media queries to the content on the web page.

Fundamental text and font styling.

The CSS property is used to style text

generally falling into two categories,

that is font styles and text layout styles.

Font styles are properties that affect

the font that is applied to the
text affecting what font is applied,
how big the font is,
whether it is bold, italics,
and so on.

Text layout styles are properties
that affect the spacing and other
layout features of the text,
allowing manipulation of, for example,
space between lines, space between letters.

How the text is aligned within
the content of the box.

CSS provides some properties to
emphasize the text that is font style,
font weight, text transform,
text decoration and many more.

Let's look at font style.

It is used to turn the italics on and off.

Normally sets the text to the normal form.

Italics sets the text to the
Italic version of the font.

An oblique will be slanting

of the normal version.

Font weight sets how bold the text is,

we can have it as normal, bold,

bolder, lighter or as numeric values

starting from 100 up till 900.

The value 400 is a normal

weight whereas 700 is bold.

Text transform allows you to set

your font to be transformed.

You can prevent any transformation

by specifying the value as

none, uppercase.

It transforms all the text to capital.

Lowercase transforms all the text to

lowercase, and capitalize transforms all

words to have the 1st letter capitalized.

Text decoration it sets or un sets

text decorations on fonts,

so you can unset the text

decoration by giving the value

none you can underline the text,

or you can overline the text so

it gives a text an overline,

or you can strike through

the text by line through,

or you can also use blink.

So here is a demonstration of your

font and text layout styling.

As seen in the output.

There are some additional font,

an text layout styles like font family.

We can change the font family,

the font size.

We can increase or decrease the font as

smaller font size by making it small,

medium, large, extra, large,

smaller or larger. Font variant

We can have it

normal or small caps.

We can switch between the two.

Font kerning, font variant caps.

Then font stretch, text rendering

text underline position.

We can indent the text.

For example, the first line of the paragraph

can be indented or the entire

block of paragraph can be intended.

The text overflow, you could have a

word break specify whether to break

lines within the words, word spacing or

modify the spacing between each word.

Line break, text align last, text align.

We can align the text on the left,

right, center,

justified start and end, we can

do a vertical alignment as top,

Middle and bottom. Overflow wrap,

text orientation how the text should

be oriented then writing mode,

then the direction of the text.

This again depends on the language

ie whether from left or the right.

Text shadow, apply your shadow to the text.

By default the text has no shadow.

The tab size sets the width

of the tab character.

Hyphens switch on and off hyphenation

for the supported languages.

Letter spacing and word spacing,

then whitespace,

and we can also specify the line height.

CSS values CSS values are set against

CSS properties and reside within

CSS Declaration Block which is a

part of the CSS rule or statement.

CSS 2.1 allows the following types of

values like integers and real numbers,

lengths, percentages.

URLs in URIs, counters, colors,

strings, unsupported values.

Integers and real numbers.

They are preceded by plus or minus sign.

Decimal numbers are also allowed.

Used in the following

CSS properties like z-index, line-height,

counter-increment, can be

used as CSS color values as well.

Lengths can be used to specify

horizontal or vertical measurements.

Length is followed immediately by a unit.

There should not be any space

between the number and the unit.

For certain properties,

negative lengths are allowed,

but for certain properties using a

negative lengths will result in an error.

Lengths are used in the following

CSS properties like width, margin,

padding, font size, border width,

text shadow and so on.

Units there are two types of units in

CSS relative and absolute relative

units are relative to another length.

If used,

they can generate a flexible output

across various type of media,

like screen, print.

Absolute units are used to specify a

fixed width irrespective of the viewing area.

It is useful when the length

of the output medium is known.

So the relative units used in CSS,

the unit is pixel, em

the relevant font size and ex

x-height for the relevant point.

Absolute units are in inches,

centimeters, millimeters, points,

and picas.

Percentages can be used by specifying

a number followed by

% sign, so used in the CSS properties

width, margin top, font size, etc.

URLs and URIs. These are used as

CSS values to point to a resource.

For example, it could be an image.

It could be a file.

URI is an identifier of

a specific resource like a page,

book, could be a document.

URL is a special type of identifier that

also tells how to access that resource.

For example could be through file transfer protocol,

or Hypertext transfer protocol.

So if the protocol is being present,

then you call it URL even

though it's a URI.

You can also use relative URIs.

These are used in the following CSS

properties like background image,

cursor, list style etc.

Counters are denoted by

case sensitive identifiers.

CSS counters let you adjust

the appearance of content based

on its location in a document.

For example,

you could use counters to automatically number the headings in the web page, or maybe on index page the to number the chapters. Counters are in essence variables maintained by CSS whose values may be incremented by CSS rules to track how many times they are used, In can be used with most of the element selectors and pseudo selectors.

Manipulating a counter's value.

You can do it by counter reset property, zero is by default, and you can also increment the counter by counter increment.

Displaying a counter using the functions counter giving the parameters name or name, comma, style or counters function, giving the parameters, name and string or names string, style.

Here is an example for counters

wherein we have three headings

and we have numbered the headings.

A color is either a keyword or

or numerical RGB specification.

Or it could be a hexadecimal color value.

It is used to set the color of the

text written within an HTML document.

So used in color, background,

border, box shadow and so on.

Most of CSS properties

except color as values.

Units can be given as keywords, as a numerical

representation or the hexadecimal value.

Strings the format of writing

strings may be either with double

quotes or with single quotes.

Most of the CSS properties

except string as values,

unsupported values.

If a value is not supported by a user agent,

it ignores that value as an illegal value.

Media queries enable you to format your documents to be presented correctly on different size of output devices.

They allow you to customize the presentation of your web pages for a specific range of devices like cell phones, tablets, desktops without any change in markups.

A popular technique for delivering a tailored stylesheet for responsive web design to desktops, laptops, tablets, cell phones and so on.

Used to specify that certain styles are only for printer documents or for screen readers.

Specified using the media type like print, screen or speech.

Anatomy of a media query.

A media query consists of media type and zero or more expressions that match the type and conditions

of a particular media feature,
such as device width or screen resolution.

So, as an example,

we have the @ media rule followed

by the media type,

so you could give it as a screen

print and then the media features.

Media queries can be used to check the

width and height of the viewport,

width and height of the device,

the orientation,

whether it should be landscape or portrait,

the resolution.

@ Media Rule is used in media queries

to apply different styles for

different media types or devices.

The media type could be print, screen,

speech and media features

provide more specific details

to media queries by allowing to

test for the specific feature of

the user agent or display device.

For example,

you can apply styles to only

those screens that are greater or

smaller than a particular width.

So for the values all it is used

for all media types, print is

usually for printers,

screen for computer screens,

tablets, smartphones and so on.

Speech is used for screen readers

that reads the page out loud.

These are the different media features,

the value and the descriptions for

it like grid, height,hover, color.

Then we have Max color, Max width,

Max Height, Max resolution.

Min color, min resolution,

monochrome, orientation,

Scan, scripting, update, width.

Here is an example of the media

query we have specified that the

media type is screen and media

feature min width - specified

what the value should be.

If it is 480 pixels or larger then

the background color should be blue,

otherwise the background color

of the body should be red.

So when you resize the window

you see the effect as seen

as displayed in this output.

So when the window is maximized then

the background color changes to blue.

Otherwise, when it is minimized.

It is red in color.

These are the references

textbook references and online

references for further reading.

Thank you.