

CSS3–STYLING BASICS

BRIDGE
COURSE



GRADE-7

PRIMARY PREVIEW

- ⊙ Introducing CSS
- ⊙ Background Properties
- ⊙ Border Properties
- ⊙ Syntax of CSS
- ⊙ Text Properties
- ⊙ Margin Properties
- ⊙ Types of CSS
- ⊙ Font Properties



INTRODUCING CSS

CSS stands for Cascading Style Sheets. It can change the colour, font, size and layout of elements to make a web page more engaging. CSS makes a web page look more appealing.

ADVANTAGES OF CSS

The advantages of CSS are as follows:

- ❖ CSS improves performance by separating design, reducing code and speeding load times.
- ❖ The same style can be reused across pages, simplifying updates and management.
- ❖ CSS enables advanced styling like gradients, shadows and animations beyond plain HTML.
- ❖ CSS ensures consistent display across devices and operating systems.
- ❖ CSS eliminates the need to repeat code in every HTML tag, saving development time.



SYNTAX OF CSS

In CSS, you apply a rule or styling to an HTML element. It consists of the selector, property and value. The general syntax of CSS is:

```
SELECTOR {  
PROPERTY: VALUE;  
...  
}
```

SHORT SIGN

To view the source of
a web page: Ctrl + U

The components of the CSS syntax are as follows:

❖ **Selector:** This identifies the HTML element for CSS rules. Selectors can be grouped with commas to style multiple tags. For example:

```
H1, H2, P {  
  COLOR: GREEN;  
}
```

The above code snippet will change the text colour of all <H1>, <H2> and <P> elements to green.

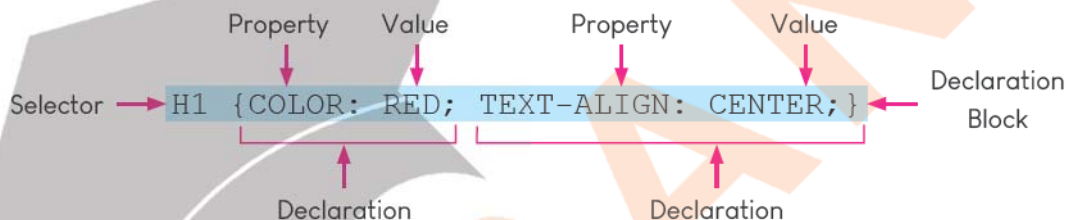
❖ **Property:** A property defines the style to apply, such as COLOR, FONT-SIZE or BACKGROUND-COLOR.

❖ **Value:** This is the setting or value assigned to the property. This could be a colour, size, position, etc. For example, RED, 16PX, CENTER. Each property has its own valid set of values.

❖ **Declaration:** This is a combination of a property and its value, written in the format property: value;. For example: {COLOR: BLUE;}

❖ **Declaration Block:** It is a set of one or more declarations enclosed in curly braces {}. Multiple declarations inside the block are separated by semicolons. For example: {COLOR: RED; FONT-SIZE: 16PX;}

For example:



So, when this code runs, all <H1> headings will appear red and centered on the page.



TYPES OF CSS

There are three main ways to add CSS to your web page:

- ❖ Inline CSS
- ❖ Internal CSS
- ❖ External CSS

INLINE CSS

An **Inline CSS** is used to apply a unique style for a single element. Inline styles are added directly to an HTML tag by using the STYLE attribute with the tag.

The syntax to define Inline CSS is as follows:

```
<TAG_NAME STYLE="PROPERTY:VALUE;">
```

Code
1

Write the HTML code to present the given web page using the STYLE attribute.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Inline CSS</TITLE>
</HEAD>
<BODY>
<H1 STYLE="COLOR: GREEN;">
The Role of Plants</H1>
<P STYLE="BACKGROUND-COLOR: YELLOW; COLOR: BLUE;">
Plants are essential for the survival of life on
Earth, as they provide oxygen, food and shelter.
</P>
</BODY>
</HTML>
```



SHORT SIGN

To refresh the web
page: Ctrl + R

INTERNAL CSS

Internal CSS is written inside the <STYLE> tag in the <HEAD> section. Styles apply to all elements of the same type.

For example, a style for <H1> affects all <H1> headings on the page.

The syntax to define internal CSS is as follows:

```
<HEAD>
<STYLE>
SELECTOR { PROPERTY: VALUE; }
</STYLE>
</HEAD>
```

CSS is like the colour and
texture of a flower or leaf,
which enhances the plant's
visual appeal.

NATURAL FACT

Code
2

Write the HTML code to present the given web page using internal CSS.

```
<!DOCTYPE HTML>
<HTML>
```

```

<HEAD>
<TITLE>Internal CSS</TITLE>
<STYLE>
BODY {
BACKGROUND-COLOR: LIGHTGREEN; }
H1 { COLOR: BROWN; TEXT-ALIGN: CENTER; }
P { COLOR: BLUE; }
</STYLE>
</HEAD>
<BODY>
<H1>Water Conservation</H1>
<P>We should conserve water to protect our planet. Every drop matters
and every effort creates an impact.
Together, we can safeguard our precious water resources. </P>
</BODY>
</HTML>

```



EXTERNAL CSS

External CSS is saved in a .css file and linked in the <HEAD> using <LINK>, allowing consistent styles across pages.

The syntax to include the reference of the external CSS is as follows:

```

<HEAD>
<LINK REL="STYLESHEET" TYPE="TEXT/CSS" HREF="PATH OF STYLE SHEET">
</HEAD>

```

Inline CSS has the highest priority, then internal and external has the lowest.

For example, if you have a file named style.css then the code will be:

```

<HEAD>
<LINK REL= "STYLESHEET" TYPE="TEXT/CSS" HREF="style.css">
</HEAD>

```

HINTS & HACKS

Professional websites mostly use external CSS.

Code
3

Write the HTML code to present the given web page using external CSS.

The first step is to create the stylesheet. Open Notepad and type the following code:

```
BODY {BACKGROUND-COLOR: LIGHTBLUE;}
H1 {COLOR: FORESTGREEN; BACKGROUND-COLOR: HONEYDEW; }
P {COLOR: BLUE; BACKGROUND-COLOR: LIGHTGREEN;}
```

Now, save the file with the name style.css in the same location as your HTML file. If the file is saved in a different location than the HTML file, you need to specify the complete or absolute path. Open a new Notepad window and type the following code:

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE>External CSS</TITLE>
<LINK REL="STYLESHEET" TYPE="TEXT/CSS"
  HREF="style.css">
</HEAD>
<BODY>
<H1>Importance of Recycling</H1>
<P>Recycling helps conserve natural resources, save energy and reduce
  pollution. It is essential for a sustainable future. </P>
</BODY>
</HTML>
```



You can use 6-digit hex codes for colours, e.g., #000000 for black and #FFFFFF for white.

In CSS, the priority order is: inline > internal > external. This means that if you specify inline, internal and external CSS for an element, the inline CSS will be applied first, followed by internal CSS and then external CSS.

HINTS & HACKS

You can easily find the colour codes by simply searching colour picker on Google. Then, select the appropriate colour according to your needs.

RAPID RECALL

Tick (✓) if you know this.

1. CSS eliminates the need to repeat code in every HTML tag.
2. A combination of a property and its value is called a Declaration.



Create an HTML document with the title **Gymnastics**. Add styling properties like colour, background colour, etc.

+ | Study



BACKGROUND PROPERTIES

CSS **background properties** style and control element backgrounds. The table shows properties, values and descriptions:

Property Name	Value	Description
BACKGROUND-COLOR	Any valid colour value (name, HEX, RGB, HSL, etc.)	This property sets the background colour of an element.
BACKGROUND-IMAGE	URL of image	This property sets an image as the background of an element.
BACKGROUND-REPEAT	REPEAT, NO-REPEAT, REPEAT-X, REPEAT-Y	This property determines how background images are repeated.
BACKGROUND-POSITION	LEFT, RIGHT, TOP, BOTTOM, CENTER or COORDINATES	This property sets the position of the background image.
BACKGROUND-SIZE	CONTAIN, COVER, AUTO, HEIGHT/WIDTH in PX or %	This property specifies the size of the background within an element.

Code
4

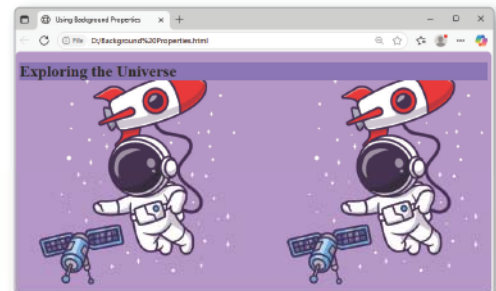
Write the HTML code to present the given web page using background properties.

```

<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE>Using Background Properties</TITLE>
</HEAD>
<BODY STYLE="BACKGROUND-IMAGE: URL('astronaut.jpg');
BACKGROUND-SIZE: 500px 500px;">
<H1 STYLE="
BACKGROUND-COLOR: MEDIUMPURPLE;">
Exploring the Universe</H1>
</BODY>
</HTML>
    
```

FACT File

In CSS, 1 inch is equal to 96 pixels.



Note: Ensure that the astronaut.jpg file is in the same folder as the HTML file.

In CSS, shorthand properties are special properties that let you set multiple related CSS properties in a single line, instead of writing each one separately.



TEXT PROPERTIES

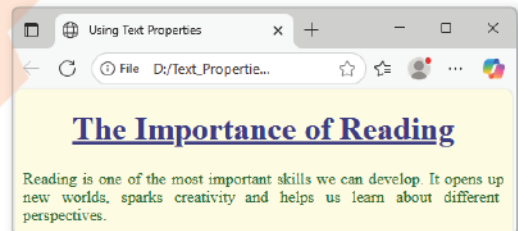
In CSS, **text properties** are used to style and control the appearance of text on a web page. The table below lists some text properties, their corresponding values and descriptions:

Property Name	Value	Description
COLOR	Any valid colour value (name, HEX, RGB and more)	This property sets the text colour.
TEXT-ALIGN	LEFT, RIGHT, CENTER and JUSTIFY	This property aligns the text horizontally.
TEXT-TRANSFORM	CAPITALIZE, UPPERCASE, LOWERCASE and NONE	This property transforms text to uppercase, lowercase or capitalises the first letter of each word.
TEXT-DECORATION	UNDERLINE, OVERLINE, LINE-THROUGH and NONE	This property adds a line below, above or through text.
TEXT-SHADOW	color, x-offset, y-offset, blur-radius	This property adds a shadow effect to the text.

Code
5

Write the HTML code to present the given web page using CSS text properties.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Using Text Properties </TITLE>
</HEAD>
<BODY STYLE="BACKGROUND-COLOR: LIGHTYELLOW;">
<H1 STYLE="COLOR: DARKBLUE; TEXT-ALIGN: CENTER; TEXT-DECORATION: UNDERLINE;">The Importance of Reading</H1>
<P STYLE="TEXT-ALIGN: JUSTIFY; COLOR: DARKGREEN;"> Reading is one of the most important skills we can develop. It opens up new worlds, sparks creativity and helps us learn about different perspectives.
</P>
</BODY>
</HTML>
```



Create a web page to display information about the sun.



FONT PROPERTIES

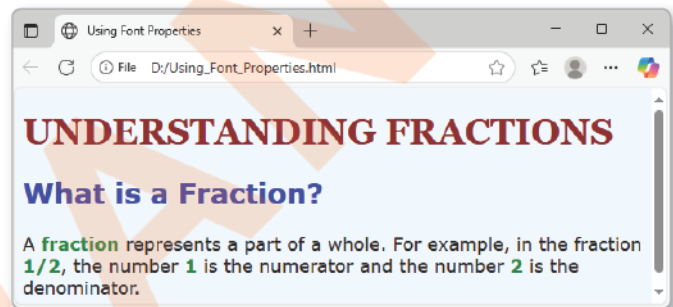
Font properties control text appearance, including family, size, style and weight. The table lists common properties, values and descriptions:

Property Name	Value	Description
FONT-FAMILY	Name of the font.	This property sets the font of the text.
FONT-SIZE	Size of the font as a number with units like px, pt, em, etc.	This property controls the size of the text.
FONT-WEIGHT	NORMAL, BOLD, BOLDER or LIGHTER	This property sets the weight of the text. It can be numeric values.
FONT-STYLE	NORMAL, ITALIC or OBLIQUE	This property defines the style of the font.

Code
6

Write the HTML code to present the given web page using CSS font properties.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE>Using Font Properties
</TITLE>
</HEAD>
<BODY STYLE="BACKGROUND-COLOR: #F0F8FF; FONT-FAMILY: 'VERDANA', SANS-SERIF;
COLOR: DARKSLATEGRAY;">
<H1 STYLE="COLOR: DARKRED; FONT-SIZE: 36PX; FONT-FAMILY: 'GEORGIA', SERIF;
FONT-WEIGHT: BOLD; TEXT-TRANSFORM: UPPERCASE;">
Understanding Fractions
</H1>
<H2 STYLE="COLOR: MEDIUMBLUE; FONT-SIZE: 28PX;">
What is a Fraction?
</H2>
```



```

<P STYLE="FONT-SIZE: 18PX; COLOR: BLACK;">A
<B STYLE="COLOR: GREEN;">fraction</B>
represents a part of a whole. For example,
in the fraction
<B STYLE="COLOR: GREEN;">1/2</B>, the
number <B STYLE="COLOR: GREEN;">1</B>
is the numerator and the number
<B STYLE="COLOR: GREEN;">2</B> is the
denominator.
</P>
</BODY>
</HTML>

```

FACT File

In CSS, the default font size is 16px for body text if no font-size value is specified.



QR QUEST

Visit the given link to learn CSS Fonts:
<https://www.youtube.com/watch?v=JvSoAAkcWyY>

Answer the given questions:

1. What are the key takeaways from the given video?
2. How can you make a font italic using CSS?



BORDER PROPERTIES

In CSS, **border properties** are used to control the appearance of the edges around elements. The table below lists some border properties, their corresponding values and descriptions:

Property Name	Value	Description
BORDER-STYLE	NONE, HIDDEN, DOTTED, DASHED, SOLID, DOUBLE, GROOVE, RIDGE, INSET or OUTSET	This property sets the border style for all four sides.
BORDER-WIDTH	THICK, THIN, MEDIUM, Numeric values with PX or EM	This property sets the width of an element's border.
BORDER-COLOR	Colour name, RGB values or hex code values	This property sets the colour of an element's border.

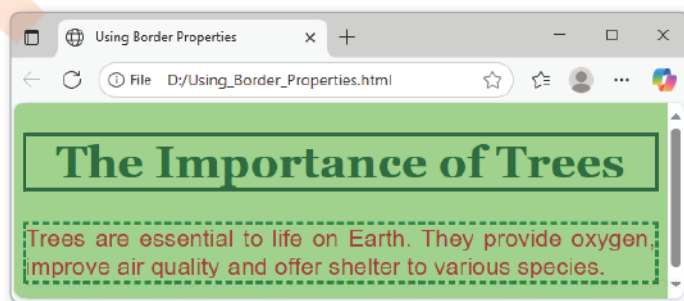
Code
7

Write the HTML code to present the given web page using CSS border properties.

```

<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE>Using Border Properties
</TITLE>
</HEAD>
<BODY STYLE="BACKGROUND-COLOR: LIGHTGREEN;
FONT-FAMILY: 'ARIAL', SANS-SERIF;">

```



```
<H1 STYLE="COLOR: DARKGREEN; TEXT-ALIGN: CENTER; FONT-SIZE: 40PX;
FONT-FAMILY: 'GEORGIA', SERIF; FONT-WEIGHT: BOLD; BORDER-WIDTH: 4PX;
BORDER-STYLE: SOLID; BORDER-COLOR: DARKGREEN;">The Importance of Trees</
H1>
<P STYLE="FONT-SIZE: 16PT; TEXT-ALIGN: JUSTIFY; COLOR: BROWN; BORDER-WIDTH:
3PX; BORDER-STYLE: DASHED; BORDER-COLOR: GREEN;">
Trees are essential to life on Earth. They provide oxygen, improve air
quality and offer shelter to various species.</P>
</BODY>
</HTML>
```



MARGIN PROPERTIES

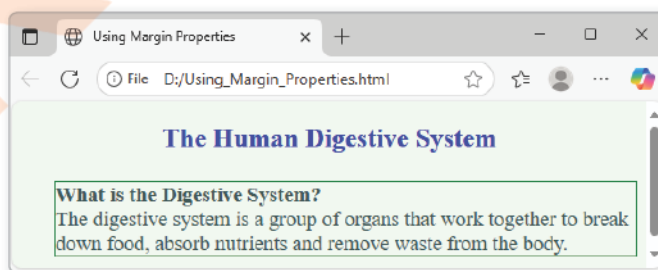
In CSS, **margin properties** are used to create space around elements, outside of their borders. The table below lists some margin properties, their corresponding values and descriptions:

Property Name	Value	Description
MARGIN-TOP	Value in pixels or percentage	It sets the margin space on the top side of an element.
MARGIN-RIGHT	Value in pixels or percentage	It sets the margin space on the right side of an element.
MARGIN-BOTTOM	Value in pixels or percentage	It sets the margin space on the bottom side of an element.
MARGIN-LEFT	Value in pixels or percentage	It sets the margin space on the left side of an element.
MARGIN	Value in pixels or percentage	It sets the margin for all four sides.

Code
8

Write the HTML code to present the given web page using CSS margin properties.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE>Using Margin Properties
</TITLE>
</HEAD>
<BODY STYLE="BACKGROUND-COLOR: #F0F8EF; COLOR: DARKSLATEGRAY;">
<H2 STYLE="COLOR: MEDIUMBLUE; TEXT-ALIGN: CENTER;">The Human Digestive
System</H2>
<P STYLE="BORDER: 1PX SOLID GREEN; FONT-SIZE: 14PT; MARGIN-TOP: 25PX;
MARGIN-LEFT: 30PX;">
```



What is the Digestive System?

The digestive system is a group of organs that work together to break down food, absorb nutrients and remove waste from the body.

</P>

</BODY>

</HTML>

INTERDISCIPLINARY LEARNING

21st
Century
Skills

#Collaboration
#Communication

Look at the web page and tick (✓) the CSS properties which are used to create it.



TEXT-ALIGN



COLOR



BORDER



BACKGROUND-COLOR

SOCIAL STUDIES | LAB ACTIVITY

TECH

TERMS

- **Syntax:** It refers to the set of rules that decide how you should write code properly.
- **Hexadecimal:** It is a number system using 16 symbols: 0-9 and A-F, often used in computers for colours and data.
- **Offset:** It is a value that indicates the distance or position of something from a starting point.

REWIND RUN

- CSS stands for Cascading Style Sheets that can change the colour, font, size and layout of elements to make a web page more engaging.
- A selector identifies the HTML element for CSS rules.
- A property defines the style to apply, such as COLOR, FONT-SIZE or BACKGROUND-COLOR.
- An inline CSS is used to apply a unique style for a single element.
- CSS background properties style and control element backgrounds.
- Font properties control text appearance, including family, size, style and weight.
- In CSS, border properties are used to control the appearance of the edges around elements.
- In CSS, margin properties are used to create space around elements, outside of their borders.