**Introduction to WEB DEVELOPMENT**  
HTML, CSS, JavaScript

**Table of Contents**  
• Gain knowledge about Web Development.  
• Web Designer vs Web Developer.  
• Front-end and Back-end Development.  
• HTML, CSS and JavaScript – An Overview.

**What is Web Development?**  
Introduction to Web Development

**What is Web?**  
• Also known as World Wide Web (WWW/W3).  
• Invented by Tim Berners-Lee.  
• 1989.  
Refers to all the public websites or pages that users can access on their local computers and other devices through the internet.

**What is Website?**  
• Specific entity on the web.  
• Consist of a collection of web pages.  
• Presenting information  
• Providing services  
• Conducting activities  
• Subset of web.

**What is Web Development?**  
• Creating  
• Building  
• Maintaining  
websites and web applications for the internet, involving design, coding, optimization and functionality.

**Web Designer vs Developer**  
Difference between Web Designer and Web Developer

**Designer vs Developer**

Web Designer  
• Visual Design Focus  
• Layout, Fonts, Colors, Images and Overall Branding  
• Creates Visual Mock-up  
• User Friendliness  
• Creative Person

Web Developer  
• Technical Development Focus  
• Code the Design  
• Functionality and Interactivity  
• Database Integration  
• Turn Design Into Working Website/Application

**Front-end and Back-end Development**

What is Front-end and Back-end in Development?

**Front-end vs Back-end**

Front-end Developer  
• Defined components on the page with HTML  
• Make them look pleasing with CSS  
• Enable interactivity with JavaScript  
• Enhance productivity with use of frameworks

Back-end Developer  
• Focuses on the Server-Side  
• Manages Databases, Servers and Application logic  
• Handle Data-Storage, User Authentication, etc.  
• Aim to achieve fast response times to end users

**HTML, CSS and JavaScript**  
Overview of HTML, CSS and JavaScript

Hypertext Markup Language (HTML)  
• Structure of a Webpage  
• Organize and Outline the layout of the contents

Cascading Style Sheets (CSS)  
• Presentation/Styling of the contents  
• Makes the HTML visually appealing

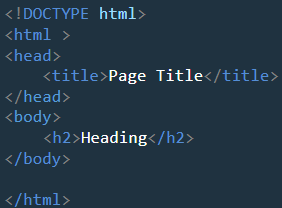
JavaScript (JS)  
• Interactivity and Behavior  
• Dynamic Updates

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**Introduction to HTML**  
Hypertext Markup Language

**Table of Contents**  
01 HTML Documents.  
02 HTML Tags.  
03 HTML Attributes.

**01 HTML Documents**  
HTML Structure



Website Document  
• Ends with ‘.html’.

Title

<title>Sample Page</title>  
Sample Page

**02 HTML Tags**  
Basic HTML tags

Element vs Tag

Element  
• Building blocks of HTML

• Complete set of tags

• Consists of opening tag

• Consists of content

• Consists of closing tag

Tag  
• Keyword or identifier  
• Marks the beginning and end  
• Enclosed in angle brackets  
• Comes in pairs

Basic Tags

* Html
* Head
* Title
* Body
* h1 - h6
* p
* a
* ul
* ol
* li
* img
* form
* input
* button
* strong
* em
* header
* footer
* section

**03 HTML Attributes**  
Basic HTML Attributes

Basic Attributes  
• style  
• src  
• href  
• alt  
• required  
• type

**Introduction to CSS**  
Cascading Style Sheets

**Table of Contents**  
01 Introduction to CSS.  
02 CSS Approach – Syntax.  
03 CSS Selectors.

04 CSS Properties.  
05 CSS Box Model.

**01 Introduction to CSS**  
Cascading Style Sheet

**What is CSS?**  
• Cascading Style Sheet (CSS).  
• Controls layout.  
• How information is displayed.  
CSS is used to define styles for your web pages, including the design, layout, and variations in display for different devices and screen sizes.

**02 CSS Approach**

Inline, Internal, External

**Syntax**  
selector {  
property: value;

}  
p{

Font-family: courier new;  
color: red;  
}

**Inline Approach**  
Style Attribute

HTML:  
< p style="font-family: courier new; color: red;">  
This is a paragraph tag</p>

Output:  
This is a paragraph tag

**Internal Approach**  
Embedded

<head>  
<style>  
p {  
 font-family: courier new;  
 color: red;  
}  
</style>  
</head>

**Deferred**

<!--Content of the Body -->

<style>  
p {  
 font-family: courier new;  
 color: red;  
}  
</style>

</body>

</html>

**External Approach**  
CSS File

/\*filename.css\*/  
p {  
font-family: courier new;  
color: red;  
}

Attaching  
<head>

…  
link rel="stylesheet" href="filename.css"  
</head>

**03 CSS Selectors**  
element, id, class, attribute

**Element Selector**  
Based on the element name  
p {  
font-family: courier new;  
color: red;  
}  
h2 {  
color: blue;  
}

**ID Selector**  
Selector

<p id="unique">  
Using ID Selector</p>

CSS  
#unique {  
font-family: courier new;  
color: red;  
}

**Class Selector**

CSS  
.reusable {  
background-color: yellow;  
font-weight: bold;  
}  
Selector

<p class="reusable">   
Using Class Selector </p>

**04 CSS Properties**  
Different CSS Properties

**Properties for Color**  
p {  
font-family: courier new;  
color: yellow;  
background-color: blue;  
}  
This paragraph uses the style above

**Specifying Color**

h4 {  
color: red;  
}  
Using Color Name

h5 {  
color: rgb(128, 0, 196);  
}  
Using RGB Code

h6 {  
color: #FF8800  
}  
Using Hex Code

**Properties for Font**  
p {  
font-family: courier new;  
font-size: 40px;  
font-weight: bold;  
font-style: italic;  
}  
***This paragraph uses the style above***

**Properties for Text**  
Title  
h4 {  
text-align: center;  
text-decoration: underline;  
}

p {  
text-align: right;  
}

**05 CSS Box Model**  
Components of the box model

