



# Module Presenter's Manual *for* **Building Modern Websites**

***Effective from: August 2021  
Ver. 1.0***



## Amendment Record

Version No.	Effective Date	Change	Replaced Pages
1.0	August 2021	New	-

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## 1. Introduction

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At the end of this course, students will be able to:

- Explain the evolution of HTML
- Explain the page structure used by HTML
- List the drawbacks in HTML 4 and XHTML
- List the new features of HTML5
- Explain CSS and JavaScript
- Explain jQuery
- Explain browser support for HTML5
- Explain the elements constituting an HTML tag
- Describe doctype
- Explain the basic tags in HTML
- Describe container and standalone tags
- Explain the role of HTML5 in Mobile devices
- Explain the Heading tag
- Explain the different tags related to formatting
- Explain monospaced font, preformatted text, and block quotation
- Describe the different types of lists
- Explain the procedure to change the background color and image
- Describe hyperlinks
- Explain how to hyperlink to a Web page and e-mail address
- Explain how to hyperlink to anchors and other content
- Identify the new functions of CSS3
- Explain the different types of selectors
- Explain nested tags
- Define Classes and IDs for applying styles
- Explain the process to apply styles to hyperlink
- List and explain text and font styles
- Explain paragraph indentation and application of border
- Explain horizontal paragraph alignment
- Explain vertical spacing within a paragraph
- Explain graphic formatting in Web pages
- Explain graphic insertion, sizing, and padding
- Explain CSS3 Animation
- Describe the use of CSS3 on Mobile devices
- Describe flexbox and grid layouts
- Describe different flexbox properties
- Explain different grid properties
- Explain HTML5 semantic tags
- Explain HTML5 semantic tag layouts
- Explain the usage of navigation bar
- Describe a text-based and graphical navigation bar
- Explain image mapping
- Explain divisions in HTML5
- Describe HTML5 forms
- Explain the working of new input types in HTML5
- Explain the new Form attributes
- Explain the new Form elements
- Define hidden fields
- Describe how to create and format tables

- Explain the table size and the width of a column
- Explain the process of merging table cells
- Explain the page layout for tables
- Describe the need for multimedia in HTML5
- List the supported media types in HTML5
- Explain the audio elements in HTML5
- Explain the video elements in HTML5
- Explain the accessibility of audio and video elements
- Describe how to deal with non-supporting browsers
- Explain scripting
- Explain the JavaScript language
- Explain the client-side and server-side JavaScript
- List the variables and data types in JavaScript
- Describe the JavaScript methods to display information
- Explain escape sequences and built in functions in JavaScript
- Explain events and event handling
- Explain jQuery
- Describe how to use the jQuery Mobile
- Explain operators and their types in JavaScript
- Explain regular expressions in JavaScript
- Explain decision-making statements in JavaScript
- Explain break and continue statement
- Explain single-dimensional arrays
- Explain multi-dimensional arrays
- Explain for..in loop
- Explain JSON
- Describe Canvas in HTML5
- Explain the procedure to draw lines
- Explain the procedure to use color and transparency
- Explain the procedure to work with various drawing objects, images, and text
- Describe the procedure to create Web page events with JavaScript and jQuery
- Describe the process of including external content in Web pages
- Explain Web storage in HTML5
- Explain session storage and local storage
- Explain Indexed DB API
- Describe a native app
- Explain difference between native apps and HTML5 apps
- Describe advantages of native and HTML5 apps
- List steps to convert HTML5 apps to native apps
- Explain geolocation and its use in HTML5
- Explain the Google Maps API
- Explain the drag-and-drop operations in HTML5
- Explain the concept of Application Cache
- Describe features of different mobile devices
- List different types of platforms available for mobile devices
- Explain design and architectural aspects of a mobile Website
- Explain the requirements for developing and testing of a mobile Website
- Explain HTML5 support for a mobile Website
- List the best practices for optimizing a mobile Website
- Explain the use of HTML5, CSS, and JavaScript in a real-world application

## 2. Information on Session Allocation

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Module	Online (No. of Hours)	Self Study (No. of Hours)
HTML5	40	10

Throughout this Presenter's Manual, the module **Building Modern Websites** will be referred to as **HTML5**.

### 3. Week-wise Session Schedule

- A Session is of 2 hours duration.










#### ➤ Week-Wise Schedule

Week	Day 1		Day 2		Day 3
1	Session 1 HTML5 – TL1		Session 2 HTML5 – TL2	S1	Session 3 HTML5 – TL3
2	Session 4 HTML5 – TL4	S2	Session 5 HTML5 – TL5		Session 6 HTML5 – TL6
3	Session 7 HTML5 – TL7		Session 8 HTML5 – TL8		Session 9 HTML5 – TL9
4	Session 10 HTML5 – TL10	S3	Session 11 HTML5 – TL11		Session 12 HTML5 – TL12
5	Session 13 HTML5 – TL13		Session 14 HTML5 – TL14	S4	Session 15 HTML5 – TL15
6	Session 16 HTML5 – TL16		Session 17 HTML5 – TL17		Session 18 HTML5 – TL18
7	Session 19 HTML5 – TL19		Session 20 HTML5 – TL20	S5	

**TL:** Online Session

**S:** Self Study (over and above the module duration)

Resources available on OnlineVarsity for Students:

Icons	Feature - Description/Functionality
	<b>Download Book</b> - Student has the option to download the subject related e-book and read offline.
	<b>Glossary</b> - Student can access a list of subject related specialized words with their definitions.
	<b>FAQ</b> - Student can access frequently asked questions and their answers.
	<b>Show Me How</b> - Student can view a step-wise simulation/demonstration of the module related topics.
	<b>Practice 4 Me</b> - Student can test and evaluate their understanding of module related topics.
	<b>Work Assignments</b> - Student can solve scenario based lab assignments (Hands-on). The faculty will evaluate and give their feedbacks.
	<b>References</b> - Student can access additional subject related material for reading.
	<b>Feedback</b> - Student can provide feedback on the course material.
	<b>Ask to Learn</b> – Student can submit subject related technical queries. Queries submitted will be directed to the particular course coordinator/head.



#### 4. Session Coverage

Session No.	Session Title	Session Details	Deliverables' Mapping
1	HTML5 – TL1	<p>All the topics as listed below from Session 1 and Session 2 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 1 – Introduction to the Web</u></b></p> <ul style="list-style-type: none"> <li>➤ Explain the evolution of HTML</li> <li>➤ Explain the page structure used by HTML</li> <li>➤ List the drawbacks in HTML 4 and XHTML</li> <li>➤ List the new features of HTML5</li> <li>➤ Explain CSS</li> <li>➤ Explain JavaScript</li> <li>➤ Explain jQuery</li> <li>➤ Explain browser support for HTML5</li> </ul> <p><b><u>Session 2 – Introduction to HTML5</u></b></p> <ul style="list-style-type: none"> <li>➤ Explain the elements constituting an HTML tag</li> <li>➤ Describe doctype</li> <li>➤ Explain the basic tags in HTML</li> <li>➤ List the different data types, attributes, and entities of HTML5</li> <li>➤ Describe container and standalone tags</li> <li>➤ Explain the role of HTML5 in Mobile devices</li> </ul>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 1 &amp; 2 XP – Session 1 &amp; 2 TG – Session 1 &amp; 2</p>
2	HTML5 – TL2	<p>All the Workshop topics from Session 1 and Session 2 of <i>Designing Modernistic Websites</i> course should be covered in this session.</p>	<p><b>Designing Modernistic Websites (OnlineVarsity)</b></p> <p>Session 1 &amp; 2</p>
	S1	<p>All the Assignment topics from Session 1 and Session 2 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p>	<p><b>Designing Modernistic Websites (OnlineVarsity)</b></p> <p>Session 1 &amp; 2</p>

Session No.	Session Title	Session Details	Deliverables' Mapping
3	HTML5 – TL3	<p>All the topics as listed below from Session 3 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 3 – Formatting Text Using Tags</u></b></p> <ul style="list-style-type: none"> <li>➤ Explain the Heading tag</li> <li>➤ Explain the different tags related to formatting</li> <li>➤ Explain monospaced font, preformatted text, and block quotation</li> <li>➤ Describe the different types of lists</li> <li>➤ Explain the procedure to change the background color and image</li> </ul>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 3 XP – Session 3 TG – Session 3</p>
4	HTML5 – TL4	<p>All the Workshop topics from Session 3 of <i>Designing Modernistic Websites</i> course should be covered in this session.</p>	<p><b>Designing Modernistic Websites (OnlineVarsity)</b></p> <p>Session 3</p>
	S2	<p>All the Assignment topics from Session 3 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p>	<p><b>Designing Modernistic Websites (OnlineVarsity)</b></p> <p>Session 3</p>
5	HTML5 – TL5	<p>All the topics as listed below from Session 4 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 4 – Creating Hyperlinks and Anchors</u></b></p> <ul style="list-style-type: none"> <li>➤ Describe hyperlinks</li> <li>➤ Explain absolute and relative paths</li> <li>➤ Explain how to hyperlink to a Web page and e-mail address</li> <li>➤ Explain how to hyperlink to anchors and other content</li> </ul>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 4 XP – Session 4 TG – Session 4</p>
6	HTML5 – TL6	<p>All the topics as listed below from Session 5 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 5 – INTRODUCTION TO CSS3</u></b></p>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 5 XP – Session 5 TG – Session 5</p>

Session No.	Session Title	Session Details	Deliverables' Mapping
		<ul style="list-style-type: none"> <li>➤ Identify the new functions of CSS3</li> <li>➤ Explain the different types of selectors</li> <li>➤ Explain nested tags</li> <li>➤ Define Classes and IDs for applying styles</li> <li>➤ Explain the process to apply styles to hyperlink</li> </ul>	
7	HTML5 – TL7	<p>All the topics as listed below from Session 6 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 6 – Formatting Using Style Sheets</u></b></p> <ul style="list-style-type: none"> <li>➤ List and explain text and font styles</li> <li>➤ Describe inline spans</li> <li>➤ Explain paragraph indentation and application of border</li> <li>➤ Explain horizontal paragraph alignment</li> <li>➤ Explain vertical spacing within a paragraph</li> </ul>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 6 XP – Session 6 TG – Session 6</p>
8	HTML5 – TL8	<p>All the topics as listed below from Session 7 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 7 – DISPLAYING GRAPHICS AND CSS3 ANIMATION</u></b></p> <ul style="list-style-type: none"> <li>➤ Explain graphic formatting in Web pages</li> <li>➤ Explain graphic insertion, sizing, and padding</li> <li>➤ Explain CSS3 Animation</li> <li>➤ Describe the use of CSS3 on Mobile devices</li> </ul>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 7 XP – Session 7 TG – Session 7</p>
9	HTML5 – TL9	<p>All the topics as listed below from Session 8 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 8 – UNDERSTANDING LAYOUTS IN CSS3</u></b></p>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 8 XP – Session 8 TG – Session 8</p>

Session No.	Session Title	Session Details	Deliverables' Mapping
		<ul style="list-style-type: none"> <li>➤ Describe flexbox and grid layouts</li> <li>➤ Describe different flexbox properties</li> <li>➤ Explain different grid properties</li> </ul>	
10	HTML5 – TL10	All the Workshop topics from Session 4 to Session 8 of <i>Designing Modernistic Websites</i> course should be covered in this session.	<b>Designing Modernistic Websites (OnlineVarsity)</b>  Session 4-8
	S3	All the Assignment topics from Session 4 to Session 8 of <i>Designing Modernistic Websites</i> book should be covered in this session.	<b>Designing Modernistic Websites (OnlineVarsity)</b>  Session 4-8
11	HTML5 – TL11	<p>All the topics as listed below from Session 9 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 9 – HTML Layout, Forms, and Elements</u></b></p> <ul style="list-style-type: none"> <li>➤ Explain HTML5 semantic tags</li> <li>➤ Explain HTML5 semantic tag layouts</li> <li>➤ Explain the usage of navigation bar</li> <li>➤ Describe a text-based and graphical navigation bar</li> <li>➤ Explain image mapping</li> <li>➤ Explain divisions in HTML5</li> <li>➤ Describe HTML5 forms</li> <li>➤ Explain the working of new input types in HTML5</li> <li>➤ Explain the new Form attributes</li> <li>➤ Explain the new Form elements</li> <li>➤ Define hidden fields</li> </ul>	<b>Designing Modernistic Websites</b>  SG – Session 9 XP – Session 9 TG – Session 9
12	HTML5 – TL12	<p>All the topics as listed below from Session 10 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 10 – HTML5 Tables, Audio, and Video</u></b></p> <ul style="list-style-type: none"> <li>➤ Describe how to create and format tables</li> <li>➤ Explain the table size and the</li> </ul>	<b>Designing Modernistic Websites</b>  SG – Session 10 XP – Session 10 TG – Session 10

Session No.	Session Title	Session Details	Deliverables' Mapping
		<p>width of a column</p> <ul style="list-style-type: none"> <li>➤ Explain the process of merging table cells</li> <li>➤ Explain the page layout for tables</li> <li>➤ Describe the need for multimedia in HTML5</li> <li>➤ List the supported media types in HTML5</li> <li>➤ Explain the audio elements in HTML5</li> <li>➤ Explain the video elements in HTML5</li> <li>➤ Explain the accessibility of audio and video elements</li> <li>➤ Describe how to deal with non-supporting browsers</li> </ul>	
13	HTML5 – TL13	<p>All the topics as listed below from Session 11 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 11 – JavaScript – I</u></b></p> <ul style="list-style-type: none"> <li>➤ Explain scripting</li> <li>➤ Explain the JavaScript language</li> <li>➤ Explain the client-side and server-side JavaScript</li> <li>➤ List the variables and data types in JavaScript</li> <li>➤ Describe the JavaScript methods to display information</li> <li>➤ Explain escape sequences and built in functions in JavaScript</li> <li>➤ Explain events and event handling</li> <li>➤ Explain jQuery</li> <li>➤ Describe how to use the jQuery Mobile</li> <li>➤ Explain operators and their types in JavaScript</li> <li>➤ Explain regular expressions in JavaScript</li> <li>➤ Explain decision-making statements in JavaScript</li> <li>➤ Explain while loop</li> <li>➤ Explain for loop</li> <li>➤ Explain do..while loop</li> <li>➤ Explain break and continue statement</li> </ul>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 11 XP – Session 11 TG – Session 11</p>

Session No.	Session Title	Session Details	Deliverables' Mapping
		<ul style="list-style-type: none"> <li>➤ Explain single-dimensional arrays</li> <li>➤ Explain multi-dimensional arrays</li> <li>➤ Explain for..in loop</li> </ul>	
14	HTML5 – TL14	All the Workshop topics from Session 9 to Session 11 of <i>Designing Modernistic Websites</i> course should be covered in this session.	<b>Designing Modernistic Websites (OnlineVarsity)</b>  Session 9-11
	S4	All the Assignment topics from Session 9 to Session 11 of <i>Designing Modernistic Websites</i> book should be covered in this session.	<b>Designing Modernistic Websites (OnlineVarsity)</b>  Session 9-11
15	HTML5 – TL15	<p>All the topics as listed below from Session 12 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 12 – JavaScript – II</u></b></p> <ul style="list-style-type: none"> <li>➤ Explain functions</li> <li>➤ Explain parameterized functions</li> <li>➤ Explain return statement</li> <li>➤ Describe objects</li> <li>➤ Explain different browser objects</li> <li>➤ Describe DOM and its objects</li> <li>➤ Identify the use of Promise.any</li> <li>➤ Explain Private class methods</li> <li>➤ Explain JSON</li> </ul>	<b>Designing Modernistic Websites</b>  SG – Session 12 XP – Session 12 TG – Session 12
16		<p>All the topics as listed below from Session 13 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 13 – Canvas and Web Storage in HTML5</u></b></p> <ul style="list-style-type: none"> <li>➤ Describe Canvas in HTML5</li> <li>➤ Explain the procedure to draw lines</li> <li>➤ Explain the procedure to use color and transparency</li> <li>➤ Explain the procedure to work with various drawing objects, images, and text</li> <li>➤ Describe the procedure to create Web page events with</li> </ul>	<b>Designing Modernistic Websites</b>  SG – Session 13 XP – Session 13 TG – Session 13

Session No.	Session Title	Session Details	Deliverables' Mapping
		<ul style="list-style-type: none"> <li>➤ JavaScript and jQuery</li> <li>➤ Describe the process of including external content in Web pages</li> <li>➤ Explain Web storage in HTML5</li> <li>➤ Explain session storage and local storage</li> <li>➤ Explain Indexed DB API</li> <li>➤ Describe a native app</li> <li>➤ Explain difference between native apps and HTML5 apps</li> <li>➤ Describe advantages of native and HTML5 apps</li> <li>➤ List steps to convert HTML5 apps to native apps</li> </ul>	
17		<p>All the topics as listed below from Session 14 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 14 – HTML5 Geolocation and APIs</u></b></p> <ul style="list-style-type: none"> <li>➤ Explain geolocation and its use in HTML5</li> <li>➤ Explain the Google Maps API</li> <li>➤ Explain the drag-and-drop operations in HTML5</li> <li>➤ Explain the concept of Application Cache</li> </ul>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 14 XP – Session 14 TG – Session 14</p>
18		<p>All the topics as listed below from Session 15 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 15 – Building Mobile Web Applications</u></b></p> <ul style="list-style-type: none"> <li>➤ Describe features of different mobile devices</li> <li>➤ List different types of platforms available for mobile devices</li> <li>➤ Explain design and architectural aspects of a mobile Website</li> <li>➤ Explain the requirements for developing and testing of a mobile Website</li> <li>➤ Explain HTML5 support for a mobile Website</li> <li>➤ List the best practices for optimizing a mobile Website</li> </ul>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 15 XP – Session 15 TG – Session 15</p>

Session No.	Session Title	Session Details	Deliverables' Mapping
19	HTML5 – TL19	<p>All the topics as listed below from Session 16 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p> <p><b><u>Session 16 – Mini Project</u></b></p> <p>➤ Explain the use of HTML5, CSS, and JavaScript in a real-world application</p>	<p><b>Designing Modernistic Websites</b></p> <p>SG – Session 16 XP – Session 16 TG – Session 16</p>
20	HTML5 – TL20	<p>All the Workshop topics from Session 12 to Session 15 of <i>Designing Modernistic Websites</i> course should be covered in this session.</p>	<p><b>Designing Modernistic Websites</b></p> <p>Session 12-15</p>
	S5	<p>All the Assignment topics from Session 12 to Session 15 of <i>Designing Modernistic Websites</i> book should be covered in this session.</p>	<p><b>Designing Modernistic Websites (OnlineVarsity)</b></p> <p>Session 12-15</p>



## 5. Library References

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➤	<b>HTML5: Up and Running</b> by Mark Pilgrim
➤	<b>Introducing HTML5 (Voices That Matter)</b> by Bruce Lawson
➤	<b>Head First HTML5 Programming: Building Web Apps with JavaScript</b> by Eric Freeman, Elisabeth Robson

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