SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF

COMPUTER APPLICATIONS

23CAT605 – WEBSTACK DEVELOPMENT

I YEAR – II SEMESTER

UNIT – I OVERVIEW OF WEB TECHNOLOGIES AND HTML 5

HTML vs HTML 5 – EXPLORING EDITORS & BROWSERS SUPPORTED BY HTML5

HTML – HYPER TEXT MARK UP LANGUAGE

HTML is short for Hypertext Markup Language. It is used to create websites and web applications.

Hypertext: Hypertext refers to the "**text wrapped within a text**." It is very similar to a hyperlink and contains an underlying text that, when clicked, redirects to a new webpage.

Markup language: A markup language is not necessarily a programming language. Instead, it is used to apply formatting and layout to a simple text document. This leads to more interactive and dynamic text content.

FEATURES OF HTML

✓It allows the creation of hyperlinks with the <a> tag, connecting different web pages.

✓Uses tags to mark elements and content, such as headings (<h1> to <h6>).

✓It supports embedding images (<img>), videos (<video>), and audio (<audio>) for multimedia content.

✓It provides form elements like <form>, <input>, and <button> for user input and data submission.

✓Semantic tags like <article>, <section>, and <nav> for better document structure and accessibility.

HTML MILESTONES

1992

HTML 2.0
Developed by The IETF's HTML Working Group, which closed in 1996. It set the standard for core HTML features based upon current practice in 1994.

1997

HTML 3.2
W3C's first recommendation for HTML which represented the consensus on HTML features for 1996. HTML 3.2 added widely deployed features such as tables, applets, text-flow around images, superscripts & subscripts, while providing backwards compatibility with the existing HTML 2.0 standard.

2000

XHTML 1.0
With a wealth of new features, XHTML 1.0 was a reformulation of HTML 4.01 in XML, and combined the strength of HTML 4 with the power of XML.
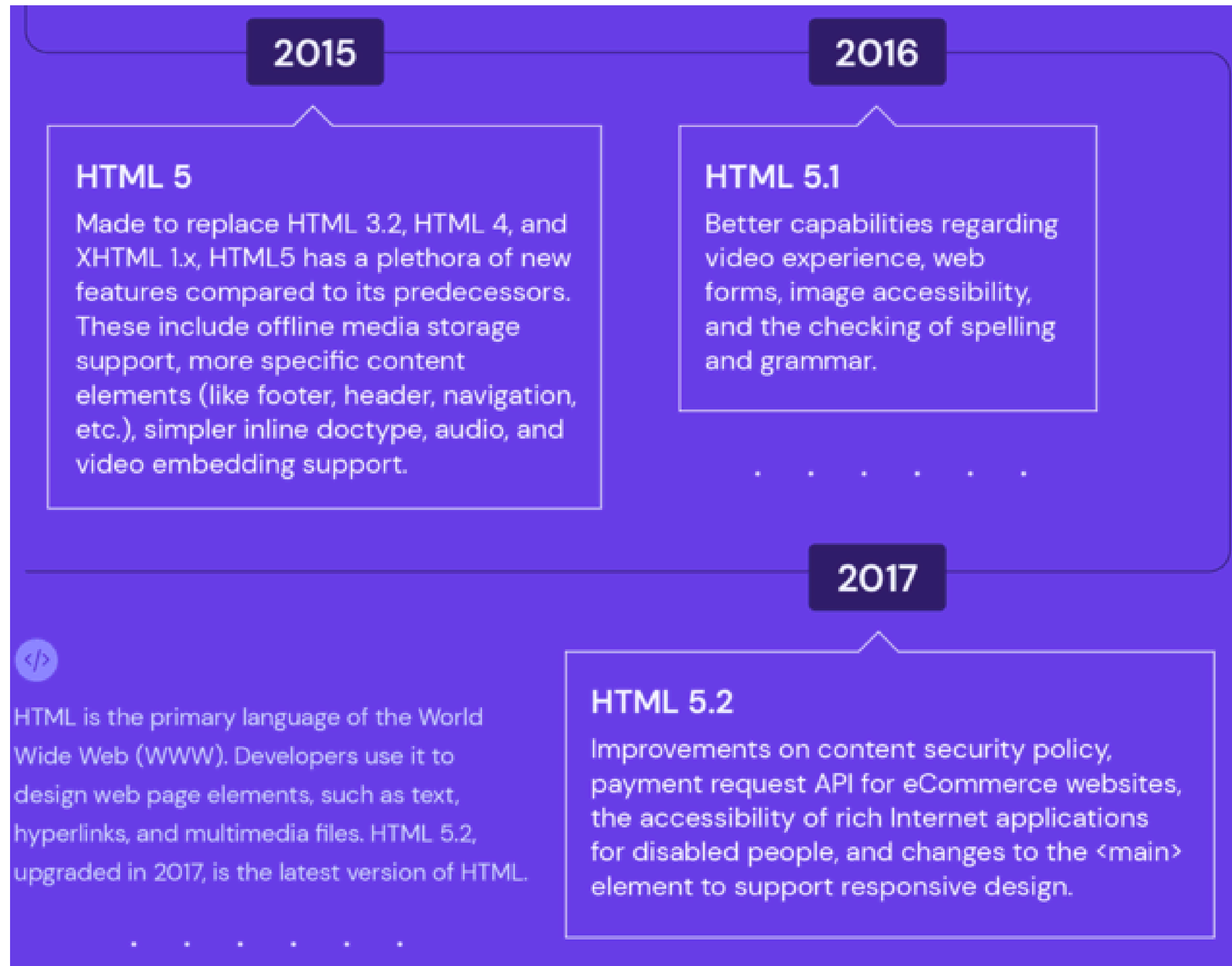
1999

HTML 4.01
Added support for more multimedia options, scripting languages, style sheets, better printing facilities, and documents that are more accessible to users with disabilities.

HTML MILESTONES

2015

HTML 5

Made to replace HTML 3.2, HTML 4, and XHTML 1.x, HTML5 has a plethora of new features compared to its predecessors. These include offline media storage support, more specific content elements (like footer, header, navigation, etc.), simpler inline doctype, audio, and video embedding support.

2016

HTML 5.1

Better capabilities regarding video experience, web forms, image accessibility, and the checking of spelling and grammar.

HTML is the primary language of the World Wide Web (WWW). Developers use it to design web page elements, such as text, hyperlinks, and multimedia files. HTML 5.2, upgraded in 2017, is the latest version of HTML.

2017

HTML 5.2

Improvements on content security policy, payment request API for eCommerce websites, the accessibility of rich Internet applications for disabled people, and changes to the <main> element to support responsive design.

HTML 5

- HTML 5 is the fifth and current version of HTML. It has improved the markup available for documents and has introduced application programming interfaces(API) and Document Object Model(DOM). It has introduced various new features like drag and drop, geo-location services

FEATURES OF HTML 5

- Introduced new semantic elements like <header>, <footer>, <section>, and <article> for improved structure.

- Enhances multimedia capabilities with native support for audio and video elements.

- Provides the local Storage API, allowing web applications to store data locally on the user's device.

- Enables websites to access a user's geographical location.

- Uses SQL database to store data offline.

HTML	HTML5
It didn't support audio and video without the use of flash player support.	It supports audio and video controls with the use of <audio> and <video> tags.
It uses cookies to store temporary data.	It uses SQL databases and application cache to store offline data.
Does not allow JavaScript to run in the browser.	Allows JavaScript to run in the background. This is possible due to JS Web worker API in HTML5.
Vector graphics are possible in HTML with the help of various technologies such as VML, Silver-light, Flash, etc.	Vector graphics are additionally an integral part of HTML5 like SVG and Canvas.
It does not allow drag and drop effects.	It allows drag and drop effects.
Not possible to draw shapes like circle, rectangle, triangle etc.	HTML5 allows to draw shapes like circle, rectangle, triangle etc.

HTML vs HTML 5

HTML	HTML5
It works with all old browsers.	It supported by all new browser like Firefox, Mozilla, Chrome, Safari, etc.
<HTML>,<Body> , and <Head> tags are mandatory while writing a HTML code.	These tags can be omitted while writing HTML code.
Older version of HTML are less mobile-friendly.	HTML5 language is more mobile-friendly.
Doctype declaration is too long and complicated.	Doctype declaration is quite simple and easy.
Elements like nav, header were not present.	New element for web structure like nav, header, footer etc.
Character encoding is long and complicated.	Character encoding is simple and easy.

HTML vs HTML 5

HTML	HTML5
It is almost impossible to get true GeoLocation of user with the help of browser.	One can track the GeoLocation of a user easily by using JS GeoLocation API.
It can not handle inaccurate syntax.	It is capable of handling inaccurate syntax.
Being an older version , it is not fast , flexible , and efficient as compared to HTML5.	It is efficient, flexible and more fast in comparison to HTML.
Attributes like charset, async and ping are absent in HTML.	Attributes of charset, async and ping are a part of HTML 5.

BROWSERS SUPPORTED BY HTML 5

	MAC					WIN						
	SAFARI	FIREFOX		OPERA	CHROME		SAFARI	IE				FIREFOX	CHROME
	5.1	8	9	11.1	15	17	5.1	6	7	8	9	8	15
Canvas	✔	✔	✔	✔	✔	✔	✔	✖	✖	✖	✔	✔	✔
Canvas Text	✔	✔	✔	✔	✔	✔	✔	✖	✖	✖	✔	✔	✔
SVG	✔	✔	✔	✔	✔	✔	✔	✖	✖	✖	✔	✔	✔
SVG Clipping Paths	✔	✔	✔	✔	✔	✔	✔	✖	✖	✖	✔	✔	✔
SVG Inline	✔	✔	✔	✖	✔	✔	✔	✖	✖	✖	✔	✔	✔
SMIL	✔	✔	✔	✔	✔	✔	✔	✖	✖	✖	✔	✔	✔
WebGL	✔	✔	✔	✔	✔	✔	✔	✖	✖	✖	✔	✔	✔
Audio	✔	✔	✔	✔	✔	✔	✔	✖	✖	✖	✔	✔	✔
Video	✔	✔	✔	✔	✔	✔	✔	✖	✖	✖	✔	✔	✔

HTML 5 EDITORS

01 Atom

02 Notepad++

03 Sublime Text

04 Adobe Dreamweaver CC

05 Visual Studio Code