

UNIT 9

WEB BROWSING

Objectives: at the end of the lesson, students will be able to:

1. differentiate the types of web browsers;
2. extend the terms related to the topic;
3. use past simple to describe the process.

Lead-in: Introduce popular web browsers (e.g., Google Chrome, Mozilla Firefox, Microsoft Edge, Safari) and discuss their features and differences.

A brief history of web browsers

The first browsers ever created are either no longer in use or have undergone major changes. Browser history began in 1990 when Tim Berners-Lee created the first browser called The World Wide Web — it was the only browser and the only way to access the web.

Next came Lynx, the text-based browser that couldn't display any graphic content, followed by Mosaic, which already allowed images embedded in text. In 1994, Netscape Navigator was released, capitalizing on Mosaic's capabilities. Soon after, in 1995, Microsoft introduced its first web browser, Internet Explorer, making web surfing even easier. Two years later, the so-called browser wars began, with the newly released Opera going head-to-head with Internet Explorer and Navigator.

The year 2003 saw the release of Apple Safari, the default browser for macOS and iOS, followed by Mozilla Firefox in 2004. In 2008, Google launched Chrome, which took the browser market by storm. Seven years later, Microsoft replaced Internet Explorer with Edge to counter Google Chrome's popularity. However, Google Chrome is still the most popular browser worldwide.

How do web browsers work?

A web browser works by retrieving resources from a web server and displaying them on your computer screen. These resources, mostly web pages, are identified by URLs and include text, images, videos, and other content. Web browsers use the Hypertext Transfer Protocol (HTTP) to request these web pages and display them to you.

Web browsers function by translating Hypertext markup language (HTML) and Extensible Markup Language (XML) code into a viewable web page. The browser fetches this code from a web server, interprets it, and creates a visible web page on the screen of your device.

Activity: Use this link to find out more information about the variety of web browsers and fill in the table.

Name of web browser	Pros	Cons
Google Chrome		
Microsoft Edge		
Vivaldi		
Safari		
Mozilla Firefox		
Opera		

Vocabulary Building

Key Terms

Hyperlink – is a word or image on a web page that you can click on to go to a different web page

***Example:** Also called “links” or “hot links,” hyperlinks are analogous to hypertext. Hyperlinks are commonly used on the Web to provide navigation, reference and depth where published text cannot.*

Website – is a collection of related pages on the Internet that contains information, pictures, etc. and is usually published by a person, group, or company

***Example:** A website is a collection of many web pages, and web pages are digital files that are written using HTML(HyperText Markup Language).*

HTML – (Hypertext Markup Language) is a computer language that is used to construct websites on the Internet

***Example:** HyperText Markup Language (HTML) is the basic scripting language used by web browsers to render pages on the World Wide Web. HyperText allows a user to click a link and be redirected to a new page referenced by that link.*

Web host – is a company that provides the space for a website on the Internet

***Example:** Web hosting is a service that provides storage for the files that make up your website and the software, physical hardware, and network infrastructure that makes your website available to others on the internet.*

Web browser – is a computer program that allows people to look at web pages on the Internet

***Example:** A web browser is an application for accessing websites.*

URL – (Uniform Resource Locator) is the text and symbols that form a web address

***Example:** A URL is the address of a unique resource on the internet. It is one of the key mechanisms used by browsers to retrieve published resources, such as HTML pages, CSS documents, images, and so on.*

Meta tag – is the text that is used in the codes of a web page to provide information about the site to search engines

***Example:** A meta tag is a piece of HTML code that provides information about a web page, such as its title, description, and keywords.*

Search engine – is a computer program that allows people to search for particular information, products, etc. on the Internet

***Example:** A search engine is a software program that helps people find the information they are looking for online using keywords or phrases.*

http – is a part of an Internet address that allows a computer to connect to the site

***Example:** HTTP (Hypertext Transfer Protocol) is the set of rules for transferring files -- such as text, images, sound, video and other multimedia files -- over the web.*

Activity: Choose the word that is closest in meaning to the underlined part.

1. The text used in webpage codes that provide information to search engines gives us high search rankings.
A. hyperlink B. meta tag C. web host

2. Type a word into the computer program that allows people to look for particular information to find a website.
A. search engine B. http C. website
3. Our website is very popular on the system of information that is available on the Internet.
A. Meta tag B. hyperlink C. www
4. The company's text and symbols that form a web address is <http://tbbrownincorp.com>
A. URL B. search engine C. web host
5. Please begin the web address with the part of the web address that allows the computer to connect to the site.
A. HTML B. web browser C. http

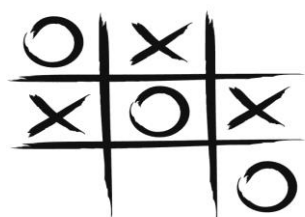
Activity: Boost your vocabulary

Ask one of the students to be a volunteer to find out the term that will be written on the board by staying back to the board. The other students need to provide definitions of the written word so that the volunteer can find it.

Activity: Watch the video below to learn more about browser tracking

<https://www.youtube.com/watch?v=6EHSIhnE6Ck&t=138s>

Play tic and toe. Divide the class into 2 groups: tick and toe. Ask them to watch a video and make up some questions based on it. After watching the video, turn by turn they will give questions to each other related to the topic of the video. For each correct answer to the question, the group will choose one of the grids to put tic or toe. After finding three questions horizontally or vertically, that group will be the winner.



Grammar Focus: Past Simple in the active and passive voice

The past simple tense is used to talk about actions or events that happened and were completed in the past.

When to Use the Past Simple Tense:

- Completed Actions;
- Past Habits;
- Series of Completed Actions.

For regular verbs, you usually add "-ed" to the base form of the verb.

Example: Walk → Walked, Play → Played

Irregular verbs have their own unique past simple forms. They don't follow the "-ed" rule.

Example: Go → Went, Eat → Ate

Active Voice:

Affirmative (+)	Negative (-)	Question (?)
I <u>searched</u> for information about web browsers yesterday.	I <u>didn't search</u> for information about web browsers yesterday	<u>Did</u> you <u>search</u> for information about web browsers yesterday?

Passive Voice:

In passive voice, the subject of the sentence receives the action.

S+ was/were + Past Participle

Positive (+)	Negative (-)	Question (?)
The new browser version <u>was released</u> last month.	The new browser version <u>was not released</u> last month.	<u>Was</u> the new browser version <u>released</u> last month?

Explanation: In this sentence, "The new browser version" (the subject) is receiving the action of being released. "Was released" is the passive voice past simple form, indicating that someone released the browser version (though the doer of the action is not explicitly mentioned).

Keywords: yesterday, last (day, week, month, year), a day (week, month, year) ago.

Activity: Put the verbs in brackets into the correct past tense form active or passive.

1. While the experiment with a new computer _____ (carry out) nobody left the laboratory. 2. A new type of computing equipment _____ (produce) at our university last year. 3. At that time scientific work _____ (do) mostly by large groups of researchers. 4. The business letter _____ (receive) before you came. 5. Interesting research in the field of communication _____ (do) at our University two years ago. 6. We _____ (look) for a simpler method of solution but could not find it. 7. Prospects of using smiles _____ (understand) already by everybody by the end of the previous millennium. 8. Our engineers _____ (develop) a new type of electronic device.

Activity: Transform the following sentences from the active voice to the passive voice. Use the past simple tense in your passive voice constructions.

1. The developer created the new website layout last month.
2. The team designed the user interface for the mobile application.
3. The client approved the final design after several revisions.
4. The designers updated the website to improve its responsiveness.
5. The company launched the new online store last week.

Home assignment

Assign students to research and write a timeline or infographic illustrating the evolution of web browsers from the early days to the present. They should include key milestones, technological advancements, and the impact of major browser wars.