

Introduction to Web Design

Hypertext Markup Language

**HTML**



# Introduction to Web Design

## HTML

## Hypertext Markup Language

A language for describing Web pages

HTML is not a programming language, it is a *markup* language

A markup language is a set of markup tags

HTML uses markup tags to describe web pages

“Hypertext” is the ability to link one page to another

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## Early History

## Hypertext Markup Language

1990: Original HTML specification written by physicist, Tim Berners-Lee for cross-referencing documents

1993: First text-based browser, Lynx, released

1993: Mosaic browser released, adding images, nested lists, forms

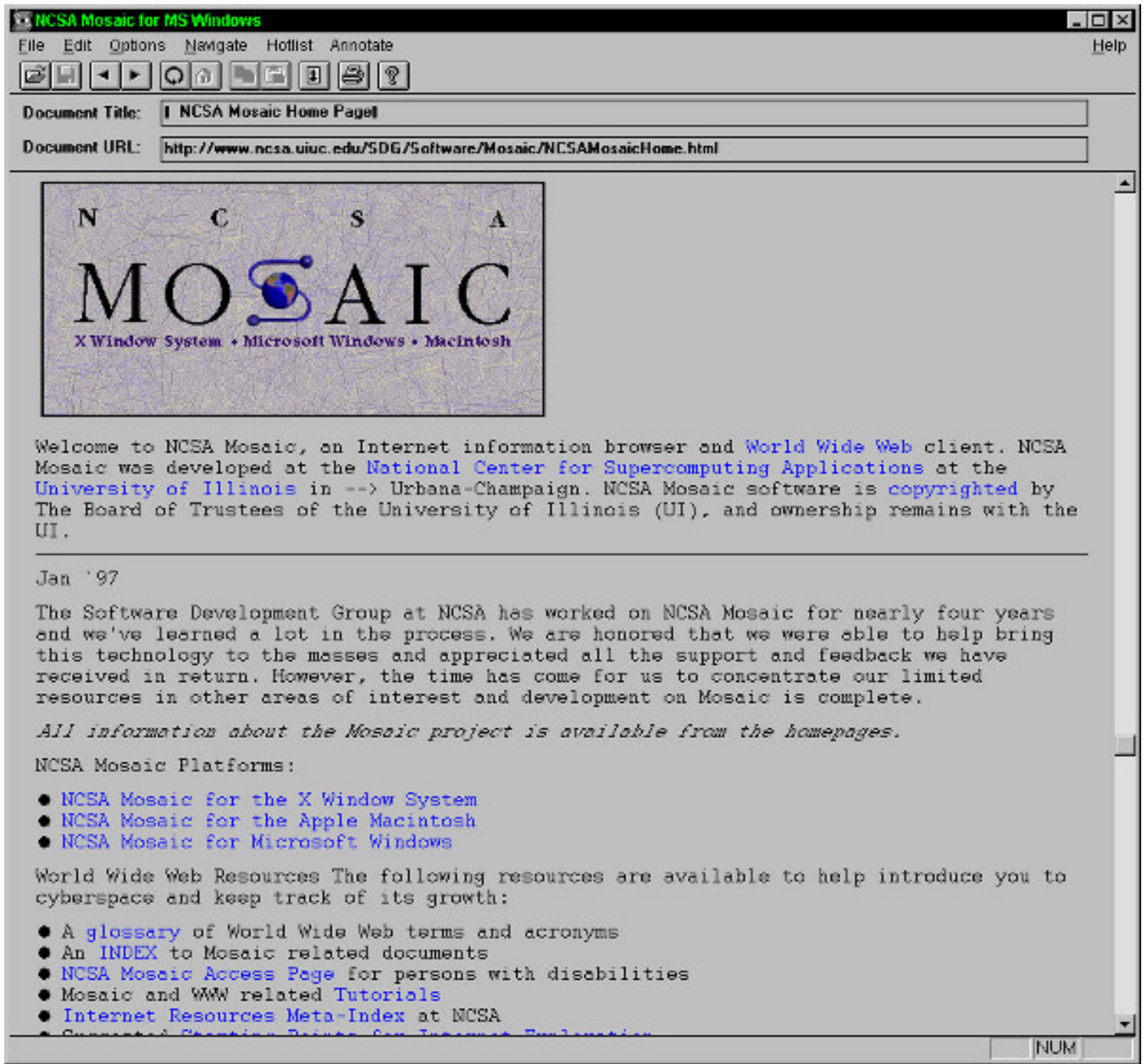
1994: First World Wide Web conference held in Geneva

1994: Netscape is formed

1994: The World Wide Web Consortium is formed, w3.org

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1993, NCSA Mosaic web browser

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## HTML Tag

## Hypertext Markup Language

Keywords surrounded by angle brackets, for example:

`<html>`

HTML tags normally come in pairs, like `<h1>` and `</h1>`

The first tag in a pair is the “start tag,” the second tag is the “end tag”

Start and end tags are also called “opening” and “closing” tags

Some tags, such as `<img>`, are self-closing

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## HTML Element

## Hypertext Markup Language

An HTML element is everything from the start tag to the end tag.

For example:

```
<p>This is a paragraph.</p>
```

Start tag:

```
<p>
```

Element content:

```
This is a paragraph.
```

End tag:

```
</p>
```

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## HTML Documents

## Hypertext Markup Language

HTML documents describe web pages

All they consist of is HTML tags in plain text

Networked HTML documents are web pages

Recommended plain text editors:

Sublime Text, Brackets, and Visual Studio Code

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## Web Browsers

## Hypertext Markup Language

Web browsers read HTML documents and display them as web pages

Web browsers do not display HTML tags, but use them to interpret the content of the page

Current browsers include:

- Firefox
- Safari
- Chrome
- Edge
- Opera
- Tor
- Brave



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## HTML Document Essentials

# Hypertext Markup Language

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Page Title</title>
  </head>
  <body>
    </body>
</html>
```

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## HTML Document Essentials

## Hypertext Markup Language

`<!DOCTYPE html>` tells browsers that they are interpreting an HTML document

Text between `<html>` and `</html>` describes the web page

Text between `<title>` and `</title>` is displayed as the page title (usually at the top of the browser window)

Text between `<body>` and `</body>` is the visible page content

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## SFTP: SSH (Secure) File Transfer Protocol

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Web pages are usually created “locally” on a personal computer, then uploaded to a web server

A web page is not publicly accessible until it’s published to a web server

An FTP client is used to transfer files from a personal computer to a server

Cyberduck, Fetch, WinSCP, Transmit, and FileZilla are a few FTP clients to choose from

“Local” files are those on a personal computer, “remote” files are those on a web server—“live”

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### HTML5

First version published in 2008, HTML5 is the latest HTML standard.

It became an official W3C recommendation as of October 2014.

- New elements
- New attributes
- Full CSS3 support
- Video and audio
- 2D and 3D graphics
- Web applications
- Smartphone apps