

# Introduction to Software Systems (CS6.201)

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## History of Web Technologies

It was understood that in matters of communication, the shell had limited capabilities. Therefore a new type of shell was created for this, named ARPANet. This was the predecessor of the internet.

HTML was a technology created to help broadcast a page of information to various nodes in the connected network. Rather than actually sending the information, it only sent the *location* of the folder (in a shared server), which is the URL of the page.

Computers are connected to the internet through submarine cables across the world.

## HTML – Hypertext Markup Language

It is not based on the command-line; it is a tag-based language for publishing hypertext. Its standard is decided by an W3C, an open source organisation. A web browser is an application to find and display the file retrieved from the internet servers through HTML.

The basic structure of an HTML document is as follows.

```
<!DOCTYPE html>
<html>
  <head>
    <title> My Home Page
  </title>
</head>
<body>
  <p>About myself.</p>
</body>
</html>
```

The diagram illustrates the basic structure of an HTML document. Each line of code is followed by a red arrow pointing to a descriptive label on the right. The labels are: 'HTML declaration' for `<!DOCTYPE html>`, 'HTML opening tag' for `<html>`, 'Page header opening tag' for `<head>`, 'Page title opening tag' for `<title>`, 'Page title closing tag' for `</title>`, 'Page header closing tag' for `</head>`, 'Body opening tag' for `<body>`, 'Content (inside body)' for `<p>About myself.</p>`, 'Body closing tag' for `</body>`, and 'HTML closing tag' for `</html>`. A mouse cursor is shown pointing at the `</body>` tag.

Figure 1: Basic Structure

The text between an opening tag and its corresponding closing tag is called its

*scope*. There are tags for headings, paragraphs, *emphasis* (italics), **strong text** (boldface), lists (unordered and ordered), media (images, audio, video), tables, etc. A complete list of tags can be found [here](#).