

Introduction to Software Systems (CS6.201)

Summer 2021, IIIT Hyderabad

08 June, Tuesday (Lecture 5)

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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. It shows a sequence of tags: `<!DOCTYPE html>`, `<html>`, `<head>`, `<title> My Home Page`, `</title>`, `</head>`, `<body>`, `<p>About myself.</p>`, `</body>`, and `</html>`. Red arrows point from each tag to its corresponding label on the right: `<!DOCTYPE html>` is the HTML declaration; `<html>` is the HTML opening tag; `<head>` is the Page header opening tag; `<title> My Home Page` is the Page title opening tag; `</title>` is the Page title closing tag; `</head>` is the Page header closing tag; `<body>` is the Body opening tag; `<p>About myself.</p>` is the Content (inside body); `</body>` is the Body closing tag; and `</html>` is the HTML closing 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](#).