

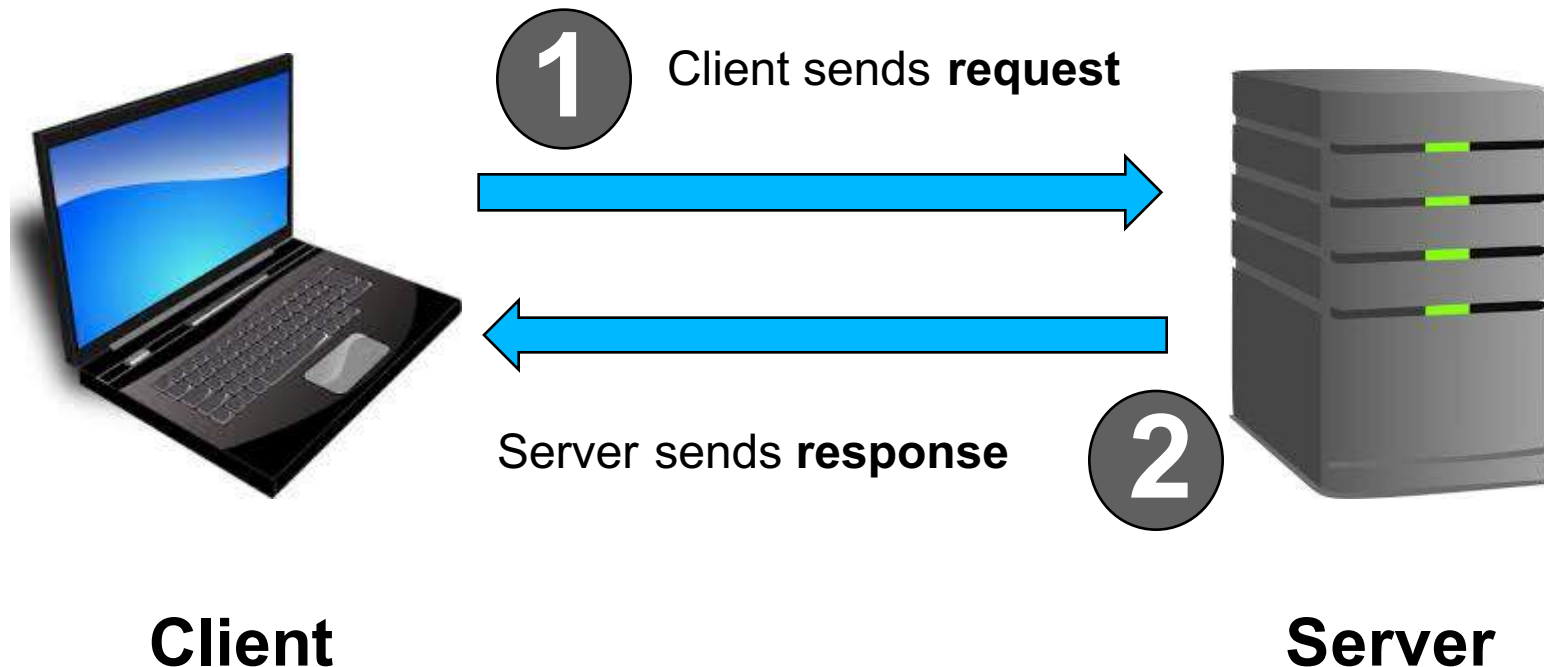


Video 1.3

Chris Murphy

Review

- Browser and the World Wide Web utilize **Hypertext Transfer Protocol (HTTP)** to transfer documents
- Uses the following structure:



HTML

- **Hypertext Markup Language (HTML)** – standard used to describe format and structure with which content should be displayed on a web page
- Document contains **elements**
- Each element generally includes a start **tag**, some content, and an end tag

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

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

Start Tag



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Content

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

The diagram shows the HTML code for a paragraph: `<p> This is a paragraph. </p>`. The entire code is underlined. Three arrows point to specific parts of the code: one from the text 'Start Tag' to the opening tag `<p>`, one from the text 'Content' to the text 'This is a paragraph.', and one from the text 'End Tag' to the closing tag `</p>`. The 'End Tag' text is colored red.

HTML

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

The diagram shows the HTML code for a paragraph: <p> This is a paragraph. </p>. Three arrows point to different parts of the code: one from the label 'Start Tag' to the opening tag '<p>', one from the label 'Content' to the text 'This is a paragraph.', and one from the label 'End Tag' to the closing tag '</p>'.

HTML

- HTML is a plain-text, human-readable language that is used for representing content on the Web
- HTML specifies how to **structure** the data but not (necessarily) how to **display** it
- The browser chooses how to display the content

HTML

- HTML structure is hierarchical
- Elements may be nested, i.e. content of an element can be another element

```
<!DOCTYPE html>

<html>
  <head>
    <title>
      My First Web Page
    </title>
  </head>

  <body>
    Hello, World!
  </body>
</html>
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Important HTML Tags: `<!DOCTYPE>`

- NOT actually a tag, rather a declaration to the web browser of what version of html the following document uses
- For HTML5, doctype declaration is as follows:
`<!DOCTYPE html>`
- This declaration must be the very first line of an html document

```
<!DOCTYPE html>
```

(all content of html document should go below this declaration)

Important HTML Tags: <html>

- After the declaration, HTML pages must start with the <html> tag
- Often referred to as the *root element* because it can be considered the root of the tree-like structure of elements in an HTML page

```
<!DOCTYPE html>
```

```
<html>
```

```
    (all other elements should go here)
```

```
</html>
```

Important HTML Tags: <head>

- Contains information about the document, not content

```
<!DOCTYPE>
<html>
<head>
  <title>My Web Page 2.0</title>
  <link rel="stylesheet" type="text/css" href="/style.css">
  <meta name="description" content="Learning about HTML.">
  <meta name="keywords" content="html, web development">
  <script src="code.js"></script>
</head>
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 - <title> - contains page title, displayed in browser's title bar

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Important HTML Tags: <body>

- Appears directly beneath the head element
- Contains all web page content (images, text, etc.)
- Most web pages have one single body element

```
<!DOCTYPE html>
<html>
<head>
  . . .
</head>

<body>
  Hello world!
</body>

</html>
```

HTML and HTTP

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HTTP/1.1 200 OK
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Server: Apache/1.4
Last-Modified: Wed, 04 Apr XXXX
Connection: close
Content-Type: text/html
Content-Length: 228

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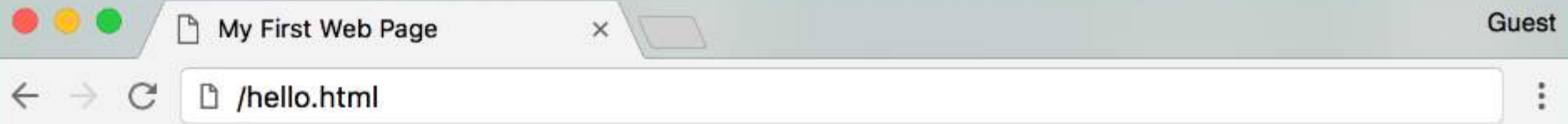
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Hello, World!

Environment Setup

- 1. Download a text editor**
- 2. Once installed, create new text file**
- 3. Write HTML in file**
- 4. Save document as “hello.html”**
- 5. Open local file (hello.html) in browser**
- 6. You can view the HTML source in the browser!**

Hello, World!

Hello, World!

Back

Forward

Reload

Save As...

Print...

Cast...

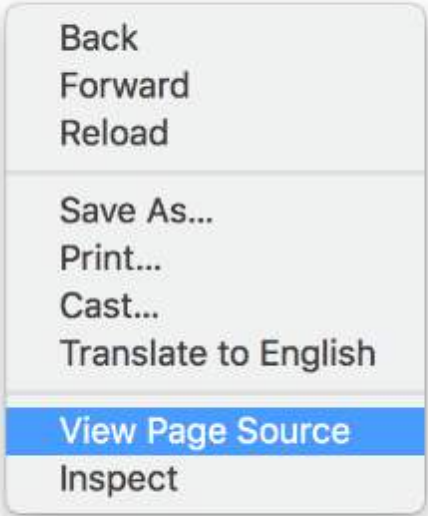
Translate to English

View Page Source

Inspect



Hello, World!



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2 <html>
3   <head>
4     <title> My First Web Page </title>
5   </head>
6
7   <body>
8     Hello, World!
9   </body>
10 </html>
11
```


Looking Ahead

- How else can we structure the content in HTML?
- How can we affect the appearance of the content?