



JÖNKÖPING UNIVERSITY

School of Engineering

WEB APPLICATIONS AND HTTP

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WORLD WIDE WEB

Invented by Tim Berners-Lee at CERN 1989.

- <http://home.cern/topics/birth-web>

Developed by W3, World Wide Web Consortium.

- <https://www.w3.org/Consortium>

Initially consisted of HTTP and HTML.

Source:

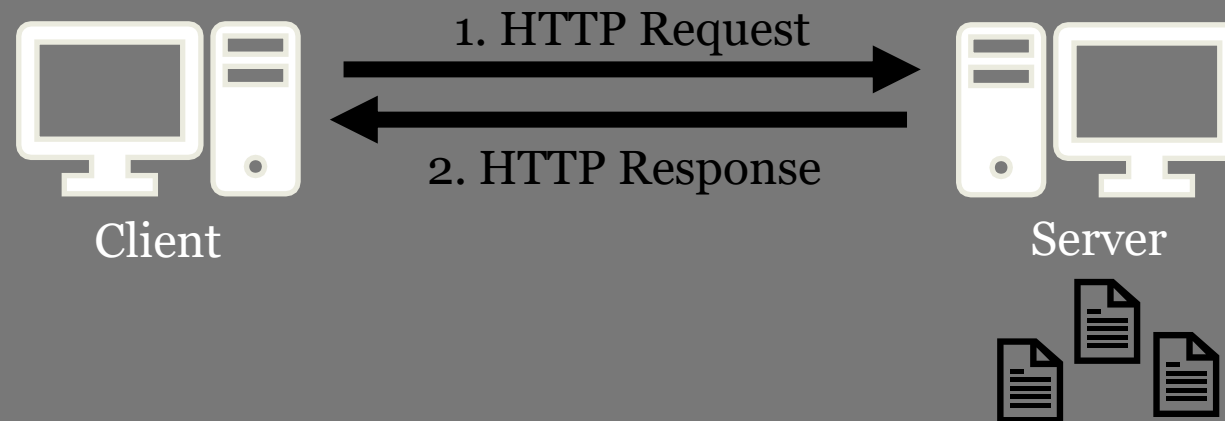
https://commons.wikimedia.org/wiki/File:Tim_Berners-Lee_April_2009.jpg



HYPertext TRAnSFER PROTOCOl

Specification: <https://tools.ietf.org/html/rfc2616>

- Built on the client-server model.



HTTP REQUEST

Method

Uniform
Resource
Identifier

HTTP
version

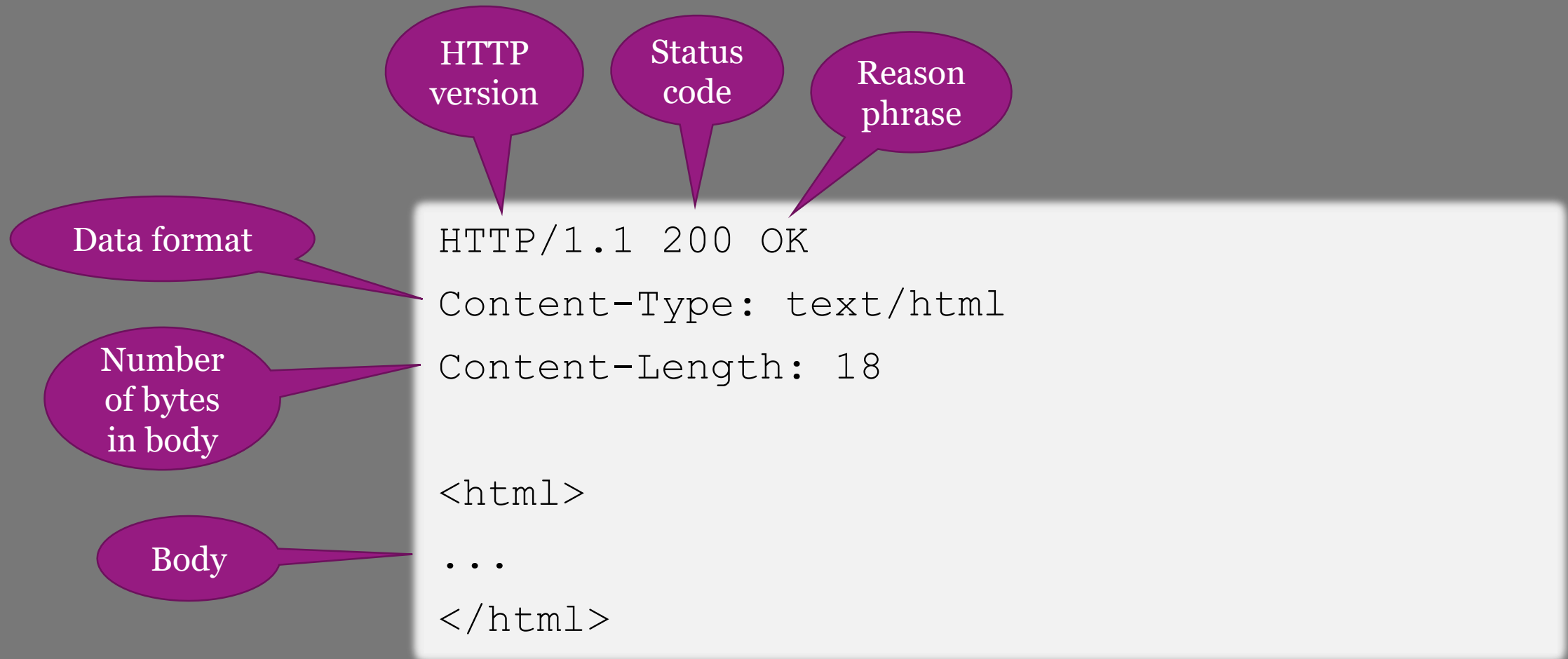
Server

Response
desired
data
format

Response
desired
language

```
GET /path/to/the-page.html HTTP/1.1
Host: www.the-website.com
Accept: text/html
Accept-Language: en-US
optional-body
```

HTTP RESPONSE



HTTP EXAMPLE

<https://www.iis.se/domaner/>

HTTP METHODS

Method

```
GET /path/to/the-page.html HTTP/1.1
Host: www.the-website.com
Accept: text/html
Accept-Language: en-US
```

GET

- Should not result in changes on the server.

POST

- Data can be passed in the body of the request.
- May result in changes on the server.

DELETE, PATCH, ...

HTTP STATUS CODES

```
HTTP/1.1 200 OK
Content-Type: text/html
Content-Length: 18

<html>
...
</html>
```

Status
code

<http://www.restapitutorial.com/httpstatuscodes.html>

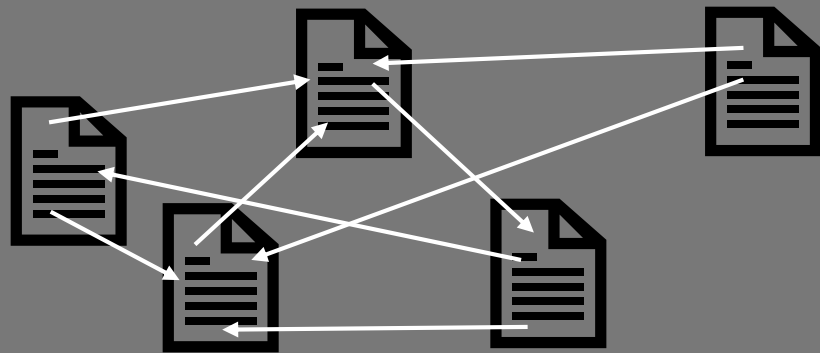
WORLD WIDE WEB

Where does the name come from?

HTTP: **HyperText** Transfer Protocol

HTML: **HyperText** Markup Language

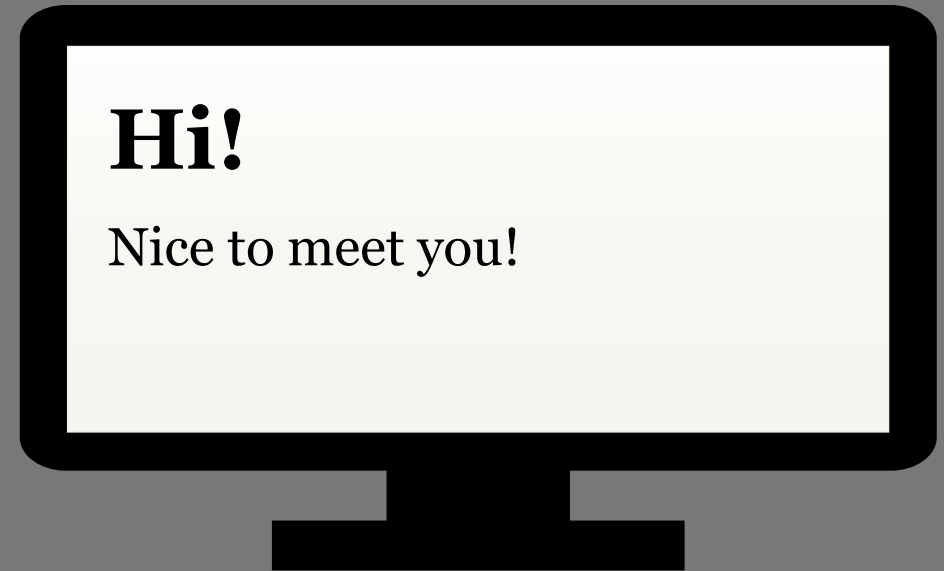
HyperText = a link to another webpage (forms a web!).



A WEBPAGE

Clients primarily requests HTML files.

```
<!DOCTYPE html>
<html>
  <head>
    <title>Hello</title>
  </head>
  <body>
    <h1>Hi!</h1>
    <p>Nice to meet you!</p>
  </body>
</html>
```



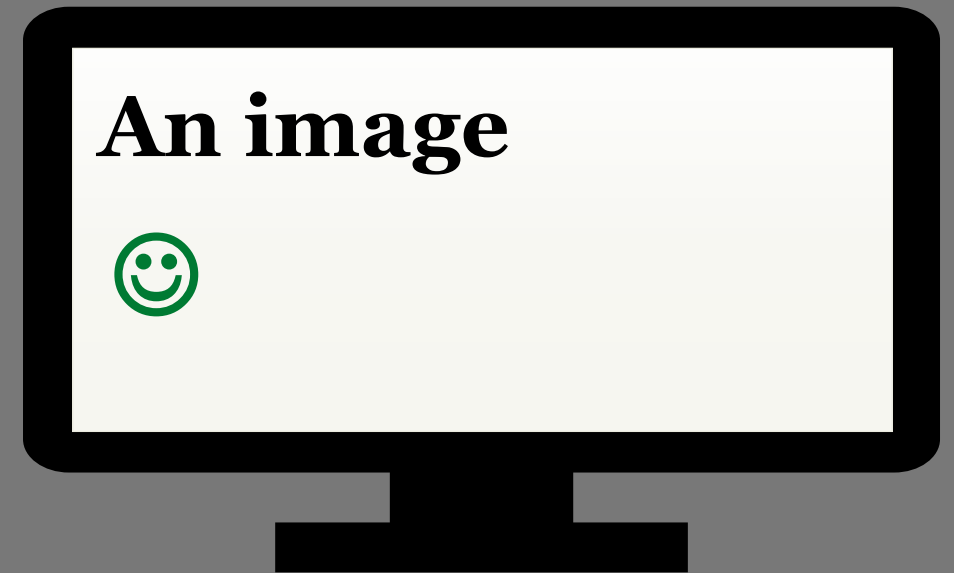
A WEBPAGE

Clients primarily requests HTML files.

- But an HTML file usually depends on other files.

```
<!DOCTYPE html>
<html>
  ...
  <body>
    <h1>An image</h1>
    
  </body>
</html>
```

A new GET
request!



LEARN MORE

- HTTP specification:
 - <https://tools.ietf.org/html/rfc2616>