

WEB ESSENTIALS AND STYLE SHEETS

Module - 1 (Part 1)

Presentation By

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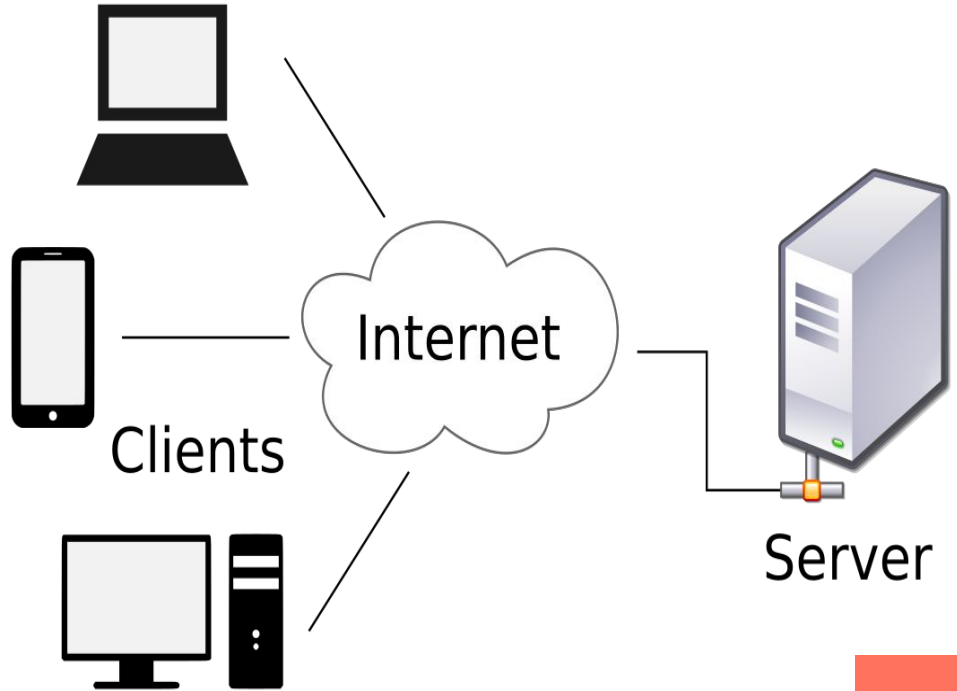
(Slack: @Tahir Mirji)

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Clients - Servers Communication

- Clients and **servers** exchange **messages** in a **request-response** messaging pattern.
- The **client** sends a **request**, and the **server** returns a **response**.
- Examples of **servers** include **web servers**, **mail servers**, and **file servers**



The Internet

Definition :

Internet is a global communication system that links together thousands of individual networks.

Basic Internet Protocols:

- Transmission Control Protocol (TCP)
- Internet Protocol (IP)
- User Datagram Protocol (UDP)
- Hyper Text Transfer Protocol (HTTP)
- File Transfer Protocol (FTP)

Internet Protocols

Transmission Control Protocol (TCP)

TCP is a connection oriented protocol and offers end-to-end packet delivery. It acts as back bone for connection.

Internet Protocol (IP)

Internet Protocol is connectionless and unreliable protocol. It ensures no guarantee of successfully transmission of data.

User Datagram Protocol (UDP)

Like IP, UDP is connectionless and unreliable protocol. It doesn't require making a connection with the host to exchange data. Since UDP is unreliable protocol, there is no mechanism for ensuring that data sent is received.

Hyper Text Transfer Protocol (HTTP)

HTTP is a communication protocol. It defines mechanism for communication between browser and the web server. It is also called request and response protocol because the communication between browser and server takes place in request and response pairs.

File Transfer Protocol (FTP)

FTP creates two processes such as Control Process and Data Transfer Process at both ends i.e. at client as well as at server. FTP establishes two different connections: one is for data transfer and other is for control information.

The World Wide Web (1/2)

Web inventor **Tim Berners-Lee** helped found, the World Wide Web Consortium (W3C). The World Wide Web Consortium is the main international standards organization for the World Wide Web. Founded in 1994.

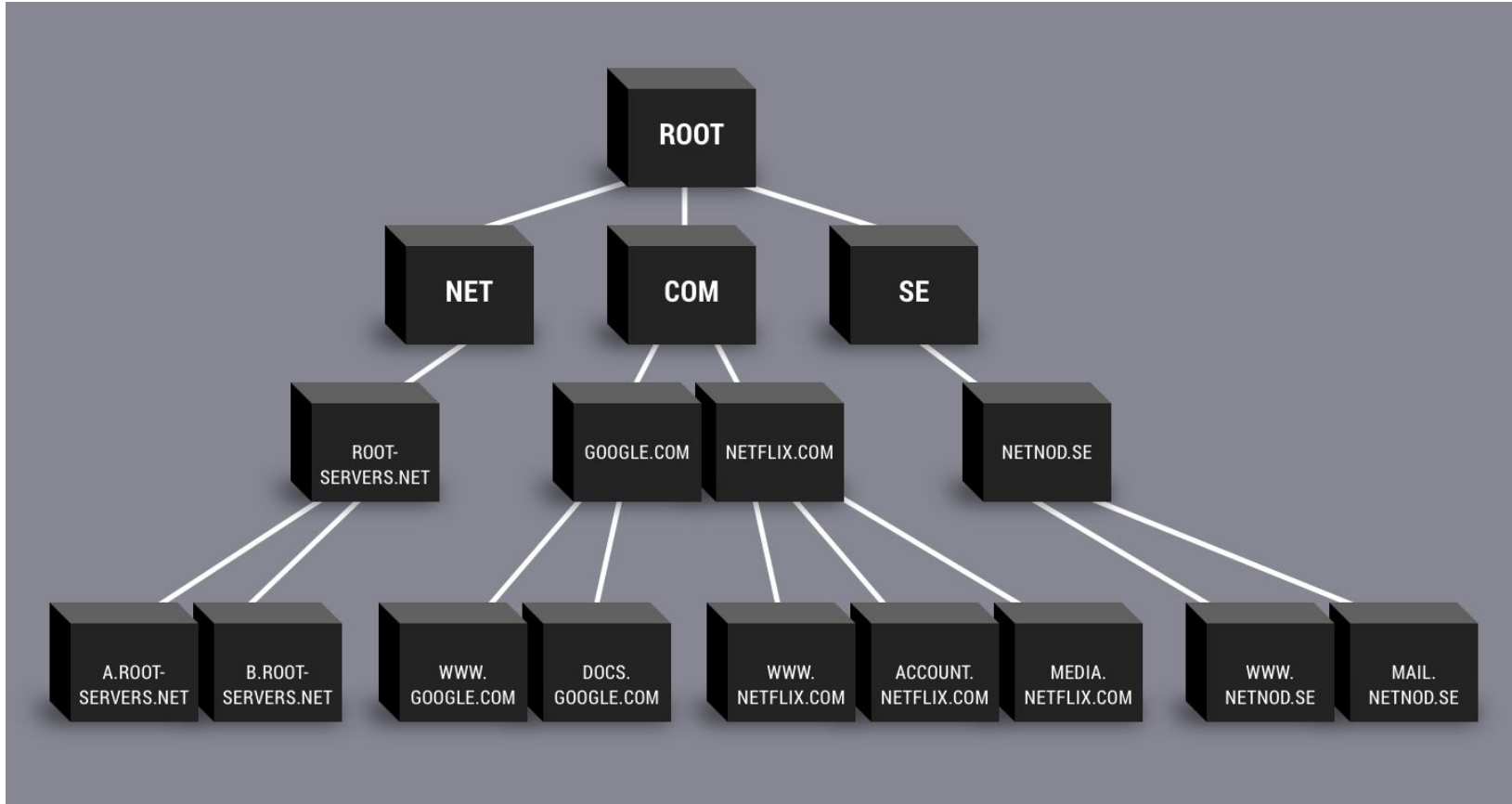
WWW stands for World Wide Web.

A technical definition of the World Wide Web is : all the resources and users on the Internet that are using the Hypertext Transfer Protocol (HTTP).

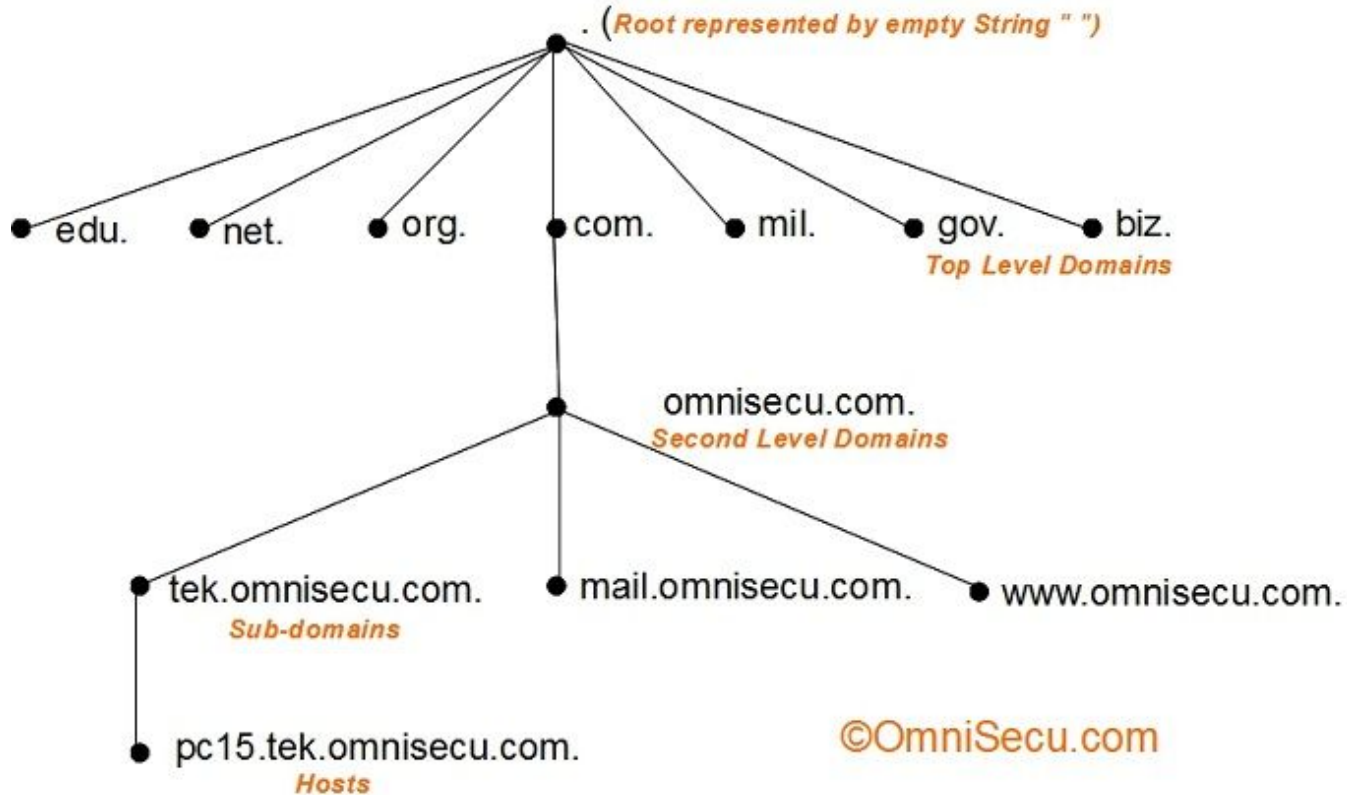
The World Wide Web is a way of **exchanging information** between **computers on the Internet**, tying them together into a vast **collection of interactive multimedia resources**.

“Internet and Web is not the same thing: Web uses internet to pass over the information.”

The World Wide Web(2/2)



Domain Levels



Domain Registrars

- A company that provides domain name registration services for a fee.
- Maintain database which maps domain names to IP's.
- Propagate new domain name/IP address information across the internet.

Example:

www.godaddy.com

www.bigrock.com

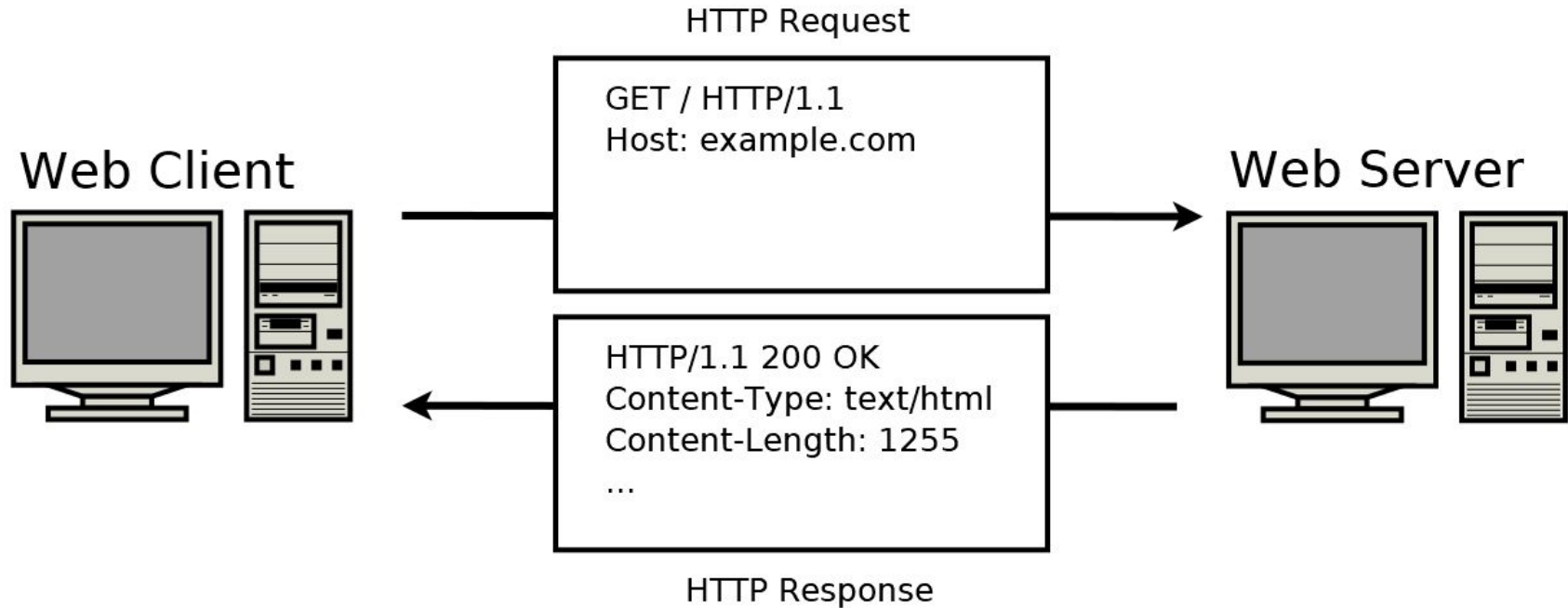
www.namecheap.com

How To Creating a Web Site?

1. Choose a domain name (uiuxyard.com)
2. Register with a Registrar (www.godaddy.com)
3. Choose a hosting service (www.godaddy.com)
4. Tell Registrar the IP address (Updating DNS of hosting)
5. Create web content
6. Store (publish) onto hosting server (FTP)
7. Submit new site to search engines (SEO and Indexing)

HTTP Messages

Web inventor **Tim Berners-Lee** helped found, the World Wide Web Consortium (W3C). The World Wide Web



Web Clients

A Web client typically refers to **the Web browser in the user's machine or mobile device.**

- The popular web browsers such as Google Chrome, Internet Explorer, Opera, Firefox and Safari are examples that allow users to access any website through the Internet.



HTTP Status Codes

The **client requests** some service and the server performs it (or returns an error message if there is a problem).

1XX	100	101	102	Hardware and software knowledge	
Informational	Continue	Switching protocols	Processing		
2XX	200	201	202	204	205
Success	OK	Created	Accepted	No Content	Reset Content
3XX	300	302	303	304	305
Redirection	Multiple Choices	Found	See Other	Not Modified	Use Proxy
4XX	400	401	402	403	404
Client-Error	Bad Request	Unauthorized	Payment Required	Forbidden	Not Found
5XX	501	502	503	507	508
Server-Error	Not Implemented	Bad Gateway	Service Unavailable	Insufficient Storage	Loop Detected

Web Servers

A **web server** is software and hardware that uses HTTP (Hypertext Transfer Protocol) and other protocols to respond to client requests made over the World Wide Web.

What they do for us?

- The main job of a web server is to display website content through storing, processing and delivering webpages to users.
- Besides HTTP, web servers also support SMTP (Simple Mail Transfer Protocol) and FTP (File Transfer Protocol), used for email, file transfer and storage.

How do web servers work?

Web server software is accessed through the domain names of websites and ensures the delivery of the site's content to the requesting user.



Markup Languages: XHTML

What Does Extensible Hypertext Markup Language (XHTML) Mean?

Extensible hypertext markup language (XHTML) is **a hybrid language between XML and HTML** and is also an accepted standard in the coding world.

Extensible HyperText Markup Language (XHTML) is **part of the family of XML markup languages**. It mirrors or extends versions of the widely used HyperText Markup Language (HTML), the language in which Web pages are formulated.

Basic XHTML Syntax and Semantics

The following example shows you a minimum content of an XHTML 1.0 document

```
<?xml version="1.0" encoding="UTF-8"?> <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<html xmlns="http://www.w3.org/TR/xhtml1" xml:lang="en" lang="en">
```

```
<head> <title>Every document must have a title</title>
```

```
</head>
```

```
<body> ...your content goes here... </body>
```

```
</html>
```


An Introduction to HTML

What Does Extensible Hypertext Markup Language (XHTML) Mean?

HTML stands for Hyper Text Markup Language, which is the most widely used language on Web to develop web pages.

- HTML was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995.
- HTML 4.01 was a major version of HTML and it was published in late 1999.
- Though HTML 4.01 version is widely used but currently we are having HTML5 version which is an extension to HTML 4.01, and this version was published in 2012.

Why to Learn HTML?

For Create Web site Become a web designer, Understand web, Learn other languages.

How does it look?

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>This is document title</title>
```

```
</head>
```

```
<body>
```

```
<h1>This is a heading</h1>
```

```
<p>Hello World!</p>
```

```
</body>
```

```
</html>
```

Demo Link:

<https://bit.ly/3FxWVjp>

Overview before we dive in to HTML,CSS,JS



HTML



HTML + CSS



HTML + CSS
+ JAVASCRIPT

**THANK
YOU!!!!!!**

For Patiently listing

**Open for
Queries**