

# Unit 1

## Introduction to Web

# Internet



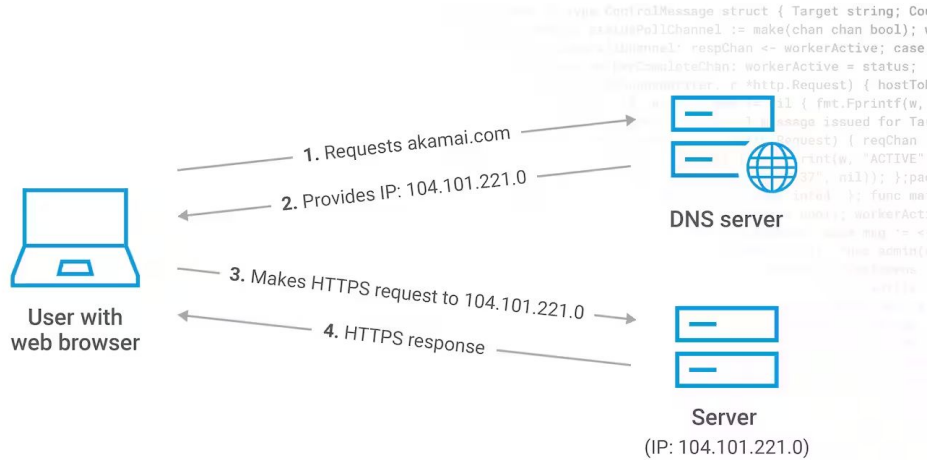
Internet is a global network that connects billions of computers across the world with each other and to the World Wide Web. It uses standard internet protocol suite (TCP/IP) to connect billions of computer users worldwide. It is set up by using cables such as optical fibers and other wireless and networking technologies. At present, internet is the fastest mean of sending or exchanging information and data between computers across the world.

# World Wide Web(WWW)



World Wide Web, which is also known as a Web, is a collection of websites or web pages stored in web servers and connected to local computers through the internet. These websites contain text pages, digital images, audios, videos, etc. Users can access the content of these sites from any part of the world over the internet using their devices such as computers, laptops, cell phones, etc. The WWW, along with internet, enables the retrieval and display of text and media to your device.

# Domain Name System (DNS)



Domain Name System (DNS) servers translate the readable domain hostnames used by humans — such as `www.companywebsite.com` — into IP addresses that can be read by machines. DNS servers are essential to ensuring a positive browsing experience as well as fast and reliable internet connections to websites, APIs, and enterprise application software hosted in the cloud.

# Protocols

A network protocol is an accepted set of rules that govern data communication between different devices in the network. It determines what is being communicated, how it is being communicated, and when it is being communicated.

HTTP : It is a layer 7 protocol that is designed for transferring a hypertext between two or more systems. HTTP works on a client-server model, most of the data sharing over the web is done through using HTTP.

FTP: FTP is a Client/server protocol that is used for moving files to or from a host computer, it allows users to download files, programs, web pages, and other things that are available on other services

SMTP (Simple Mail Transfer Protocol) is a TCP/IP protocol used in sending and receiving email. SMTP is used most commonly by email clients, including Gmail, Outlook, Apple Mail and Yahoo Mail. SMTP can send and receive email, but email clients typically use a program with SMTP for sending email.

# Basic Terminology we should know

- HTML
- CSS
- JS
- Client
- Server
- Sevlet
- JSP
- PHP
- IP
- DHCP
- Frontend
- Web Browser
- XML
- URL
- SSL
- Static Webpage
- Dynamic Webpage
- Backend
- Fullstack
- Webpage
- Website

# HTML

- Basic Structure
- Doctype
- head
- Title
- Body
- Element
- Headings
- Paragraph
- Division
- Break
- Center
- Horizontal line
- Pre
- Non breaking space
- italic

- Bold
- Underline
- Strike/del
- Attributes
  - Id
  - Style
  - Class
  - Title
  - Align
  - Bgcolor
  - Background
  - Width
  - Height
- Sup
- sub

- Meta tag
- Comments
- Img
  - Src
  - Alt
  - Height
  - Width
  - Border
  - Align
- Table
  - Tr
  - Th
  - Td
  - Padding
  - Spacing

# HTML

- Table
  - Colspan
  - Rowspan
- List
  - ul
    - type
  - ol
    - Type
    - start
  - dl
    - dt
    - dd
- Links
  - Target
  - Section

- Links
  - Mailto
- Frames
  - Frameset
  - Frame
  - Iframe
- Form
  - Action
  - Target
  - Method
- Input type
  - Text field
    - Name
    - Value
    - size

- Text field
  - Maxlength
- Password
- Textarea
  - Rows
  - Cols
- Checkbox
  - Checked
- Radio
- Select
  - Size
  - Option
- File
  - accept



# HTML

- Form (contd..)
    - Button
      - Submit
      - Reset
      - Button
      - Image
    - Hidden
  - Marquee
-

# HTML5

- **Audio, Video**
- **Header, footer**
- **Article, Section, Aside**
- **Drag and Drop**
- **Geolocation**
- **Drawing**
- **Socket**
- **Storage and querying of data**
- **Type removal**
- **New tags in HTML5**
  - **Article**
  - **Section**
  - **Aside**
  - **Header**
  - **Footer**
  - **Audio**
    - **Mp3**
    - **Wav**
    - **Ogg**
    - **Attributes**
      - **Autoplay**
      - **Controls**
      - **Muted**
      - **loop**

# HTML5

- **Video**

- **Mp4**
- **webM**
- **Ogg**
- **Attributes**
  - **Controls**
  - **Muted**
  - **Autoplay**
  - **Height**
  - **Width**

- **Datalist**

- **Data**

- **Canvas**

- **Empty canvas**
- **getContext**
- **stroke**
- **Line**
  - **moveTo**
  - **lineTo**
- **Circle**
  - **beginPath**
  - **arc**

# CSS3

- **Border-radius**
  - **Border-top-left-radius**
- **Border-image**
  - **Source**
  - **Height**
  - **Width**
- **Multiimage background**
- **Colors**
  - **RGBA**
  - **HSL**
  - **HSLA**
- **Opacity**
- **Textshadow**
- **Boxshadow**
- **Multi columns**
  - **Column-count**
  - **Column-gap**

# XML

- Data Transfer
- Prolog
- Custom tags
- Extensible
- Tree structure
- Elements
- Closing tag
- Case sensitive
- Nested
- Attributes must be quoted
- Naming convention
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