

WEB COMMITTEE

Session (1)

- Who am I ?
- Who are you?

Topics of day

- The difference between frontend and backend
- Basics of any website (URL , HTTP&HTTPS , WWW)
- Client to server model (Request/ Response , IP , DNS)
- HTML definition and structure page
- Meta elements
- VS code installation
- HTML Basic vocabulary : headings , paragraph , Break , horizontal line

Frontend vs Backend



User interface

What human / user interact directly with

- Buttons
- Programs
- Websites

VS



Program code

Logic of program (how program works)

- Functions
- Storage
- Authentication

Frontend vs Backend



Components

- Html
- CSS
- JavaScript

VS



handles

- Database interactions
- Server configurations
- Server-side languages

Frontend vs Backend



Runs

on browsers

VS



Runs

On servers

Basics of any website

URL (Uniform Resource Locator) :

Web address of a given unique resource on the web , each URL points to unique components as HTML pages , CSS document , img ...etc

What does URL Formed of :

<https://www.google.com>

1. **http** (**H**ypertext **T**ransfer **P**rotocol) :

Standard language used to communicate between web browser and website servers

NOTE : **https** : provides more security

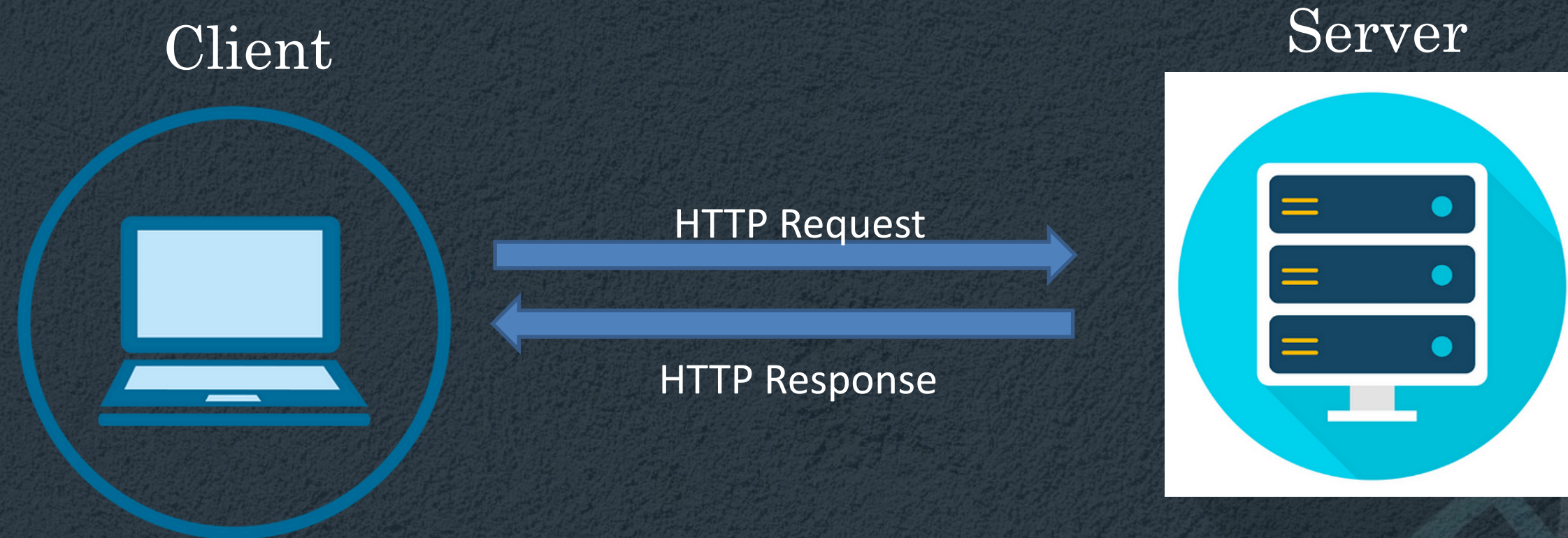
2. **www** (**W**orld **W**ide **W**eb) :

Used mostly as prefix , indicates that a given website users HTTP to communicate

3. **.com** (stands for **C**ommercial) :

Doesn't need necessarily have to have commercial purpose , can use other domains instead like (**.org** , **.edu** , **.gov**)

Client to server model



What is the **Request / Response**?

- **Request** : message that arrives to server for request something
- **Response** : message that sends from server to client for request something

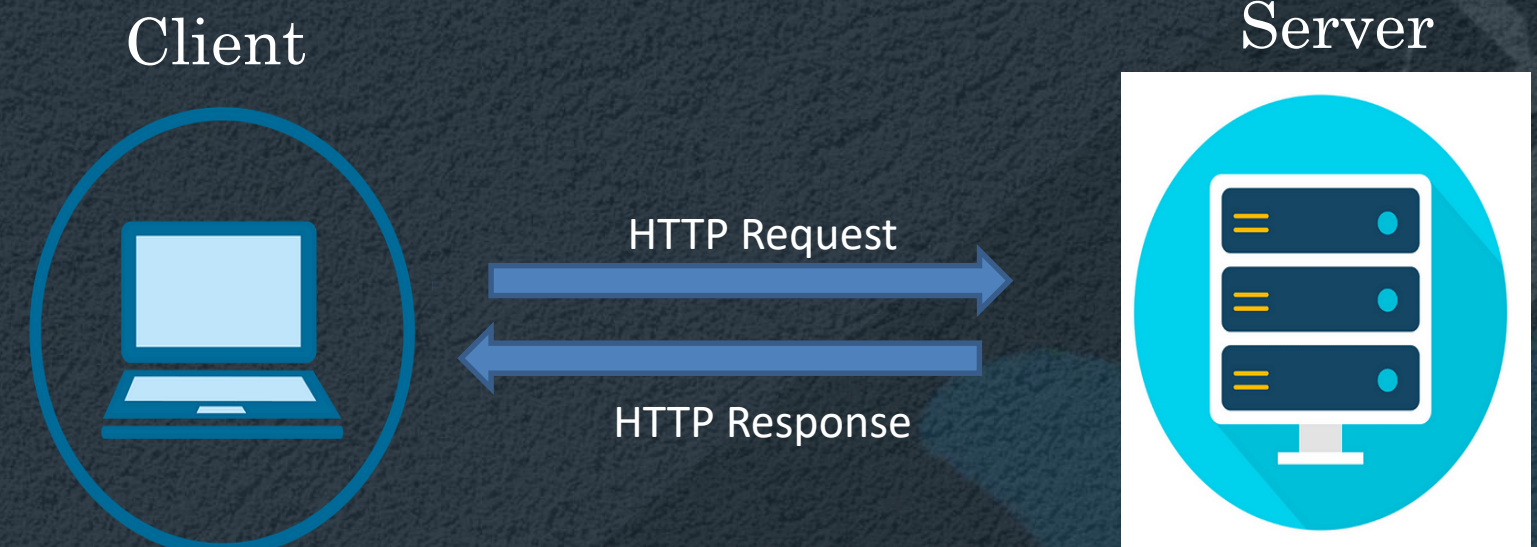
Client to server model

IP (Internet Protocol) address :

- set of **rules for communication** over internet (**streaming , send mails**)
- IP address **identifies a network or device** that connected to internet

DNS (Domain Name System) :

Internet system for **converting alphabetical address** (URL) **to numerical IP address**



Activity Time



What is **HTML**?

- **HTML** stands for **H**yper **T**ext **M**arkup **L**anguage
- **Standard markup** language for web pages
- HTML elements represented by **tags** `<>`

What is **HTML element** ?

- each HTML element has an **start tag** and an **end tag** with **content between**

`<start> content </end>`

Essential HTML page structure :

- `<!DOCTYPE html>` : defines this document for **hTML5**
- `<html lang="en">`: the **root element** of an HTML page and **lang attribute** stands for the language of the document
- `<head>`: define head section in html contains **meta tags** , **links files** , **title of web page**
- `<title>` : the **name of web page**
- `<body>` : define body section in html which carry the **visible content** in web page

Meta element `<meta>` :

- defines **metadata** (“ information about data”) about an HTML document
- Metadata is not displayed on web page but **machine parsable**

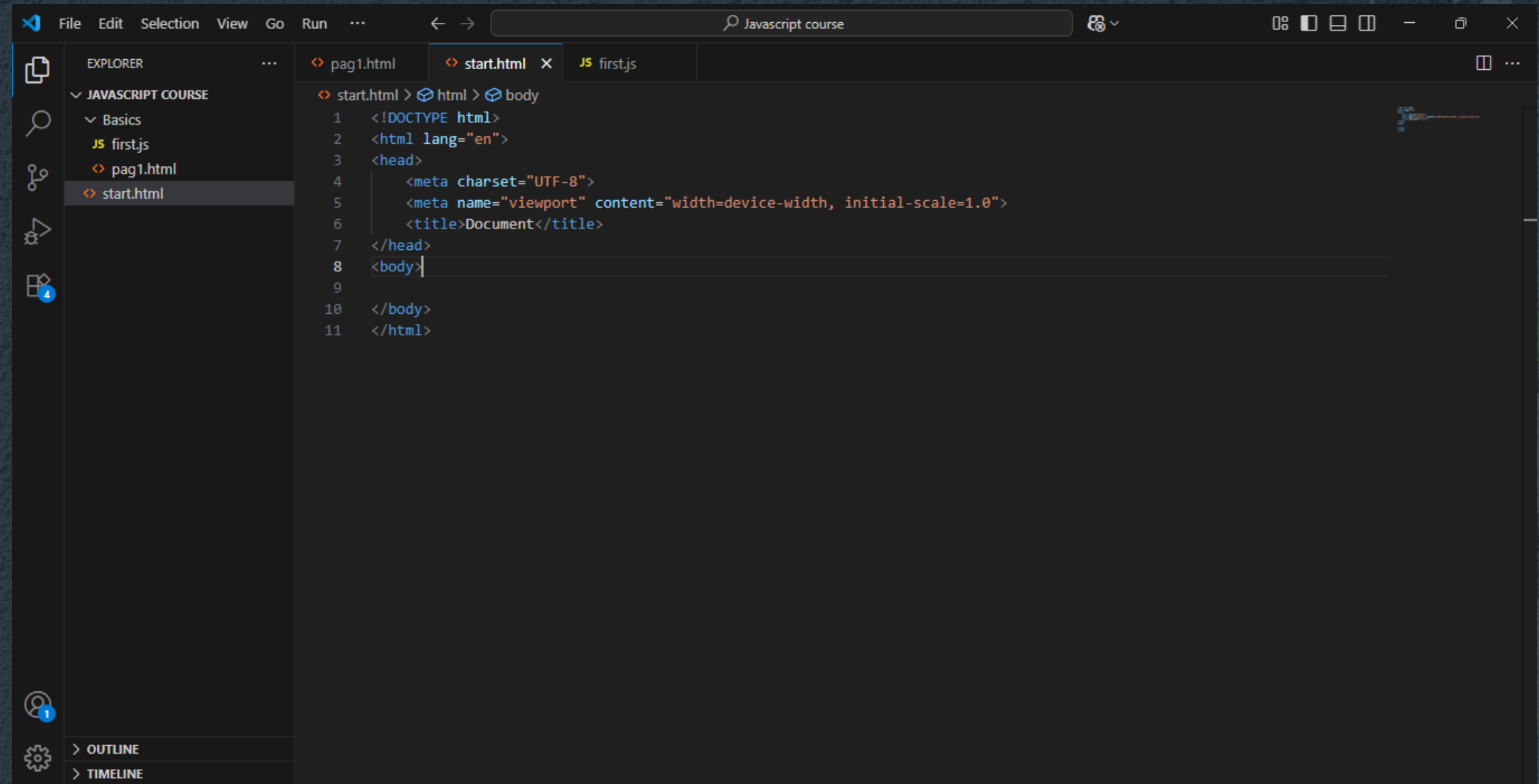
Meta element attributes:

- `charset="UTF-8"` : Specifies the **character encoding** for the HTML document
- `name="viewport"` : Specifies a **name for the metadata** and **Viewport** is to make website look good in all devices
- `content="width=device-width"` : Specifies **the value** associated with the **http-equiv** or **name attribute**

Vs installation



Visual studio code



HTML Headings:

- From `<h1>` to `<h6>` tags

```
<h1>This is heading 1</h1>  
<h2>This is heading 2</h2>  
<h3>This is heading 3</h3>
```

HTML Paragraph , Break & Horizontal

```
<p> Hello </p><hr>  
<p> Welcome to SCCI'23 <br> </p>
```