→ Full Stack – LLD – MERN

⇒ Web Fundamentals & Intro to HTML–1

⇒ Overview of Full Stack

{ front end + back end

    = full Stack

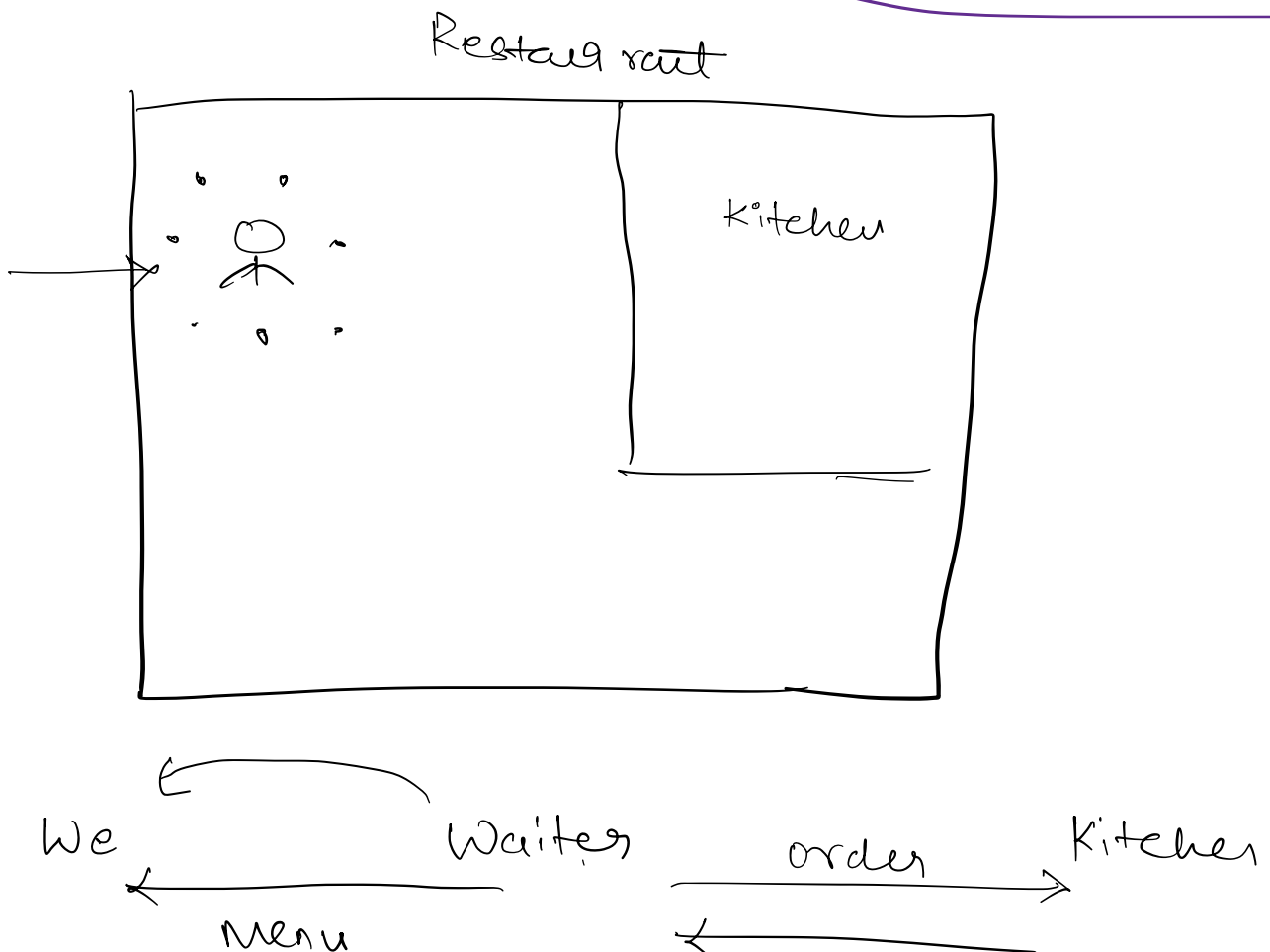Uttam Sharma
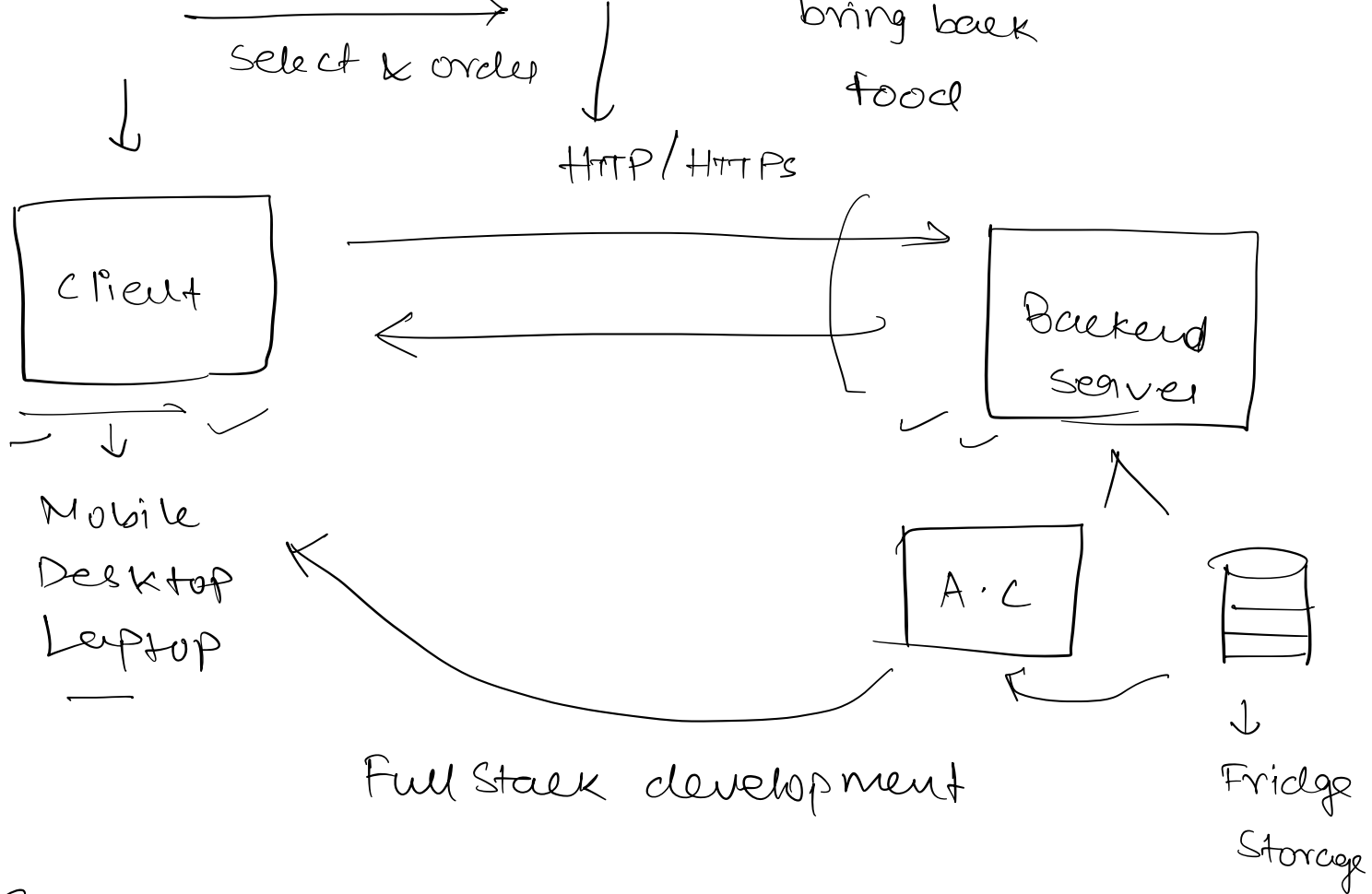4.7 years
1.5 years PayPal
SDE–2

UHG, HCL
_____

frontend / Node
    ⌄   Java

Restaurant

We   Waiter   order   Kitchen

Menu

Select & order → | bring back food ↗

HTTP/HTTPS ↓

Client ← → Backend Server

Mobile
Desktop
Laptop

A·C

Fridge
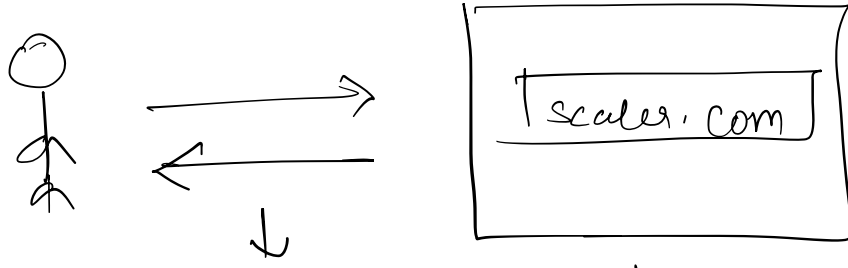Storage ↓

Full Stack development

{ Front-end → Client Side ←
{ backend → Server Side → Business logic

→ What happens when you enter URL in browser?

→ It load the web Page

→ request goes to DNS
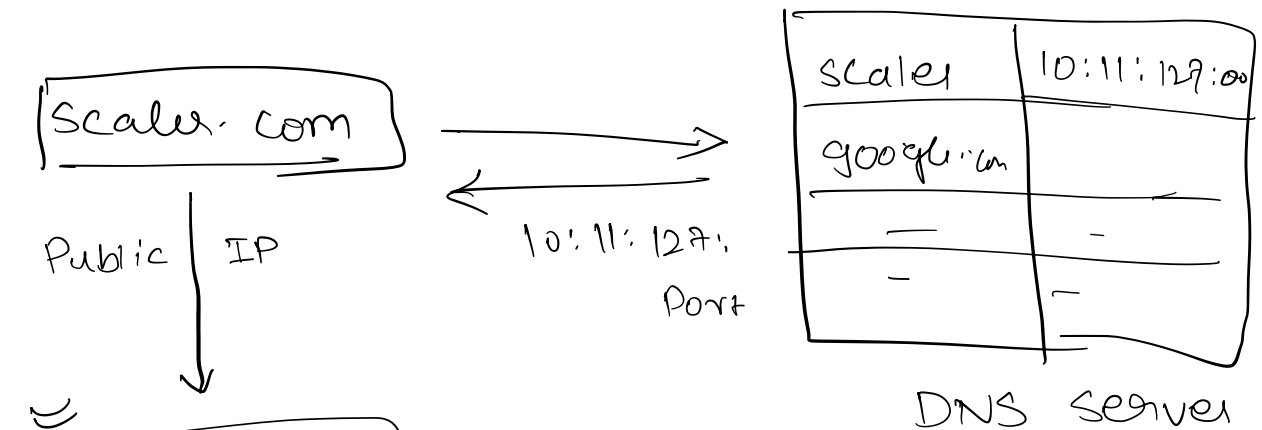
→ DOM

→ scaler servers

Teja

scaler.com

browser

Dashboard

IP

DNS Server

scaler.com

Phone book

Map < String, String/Number >

→ Uttam, xxx

scaler.com → → DNS Server

scaler	10:11:129:00
googl.com	
—	—
—	—

Public | IP

10:11:127:
Port

DNS Server

Domaine Name System Server

Backend
Server

First time visiting → Scaler.com → 10 sec

2nd & nth time → Scaler.com → 2 sec/
Visiting

3 sec

Cache

Scaler. com

Key, value

Browser cache

temporary Memory

OS cache

Router

ISP

DNS

Client

Browser
↓
OS
↓
Router → Wifi
↓
ISP
↓
DNS

IP

Interaction

HTML

Server

Black box

Network
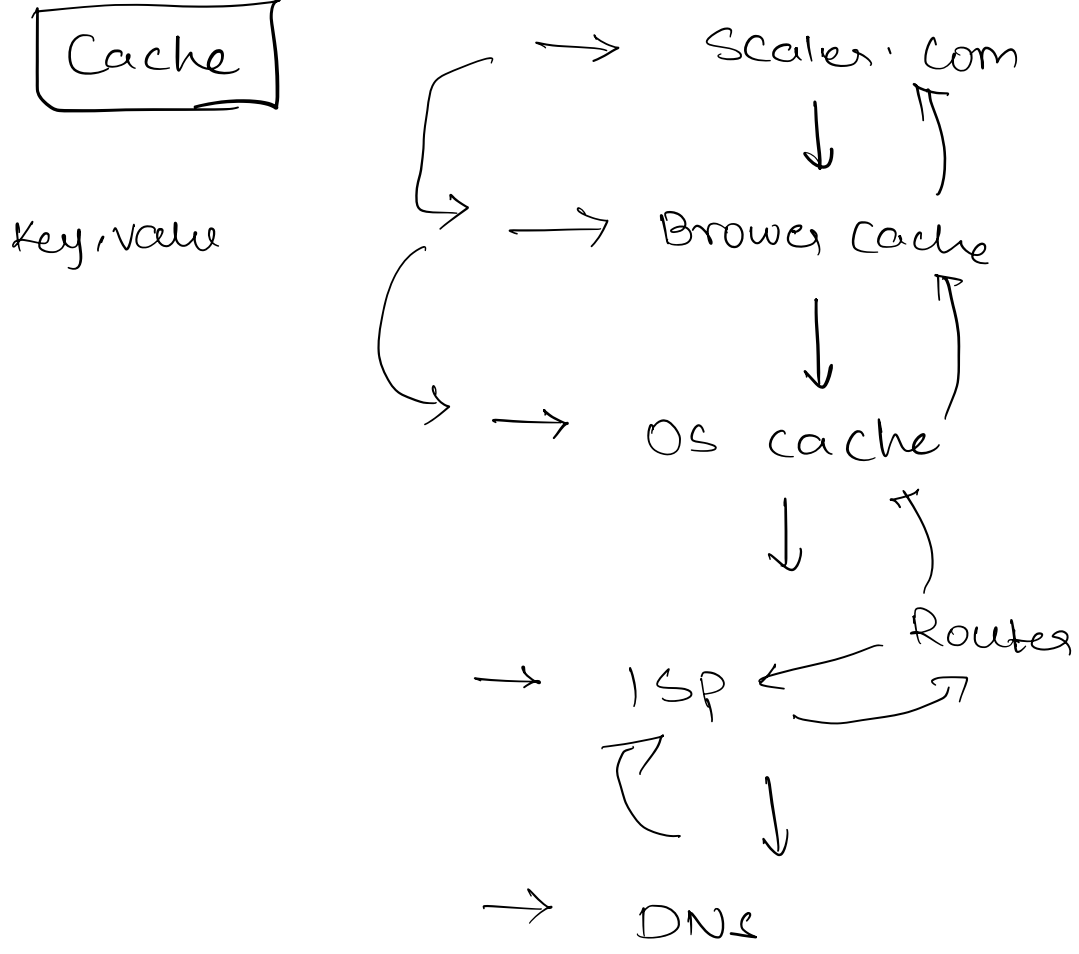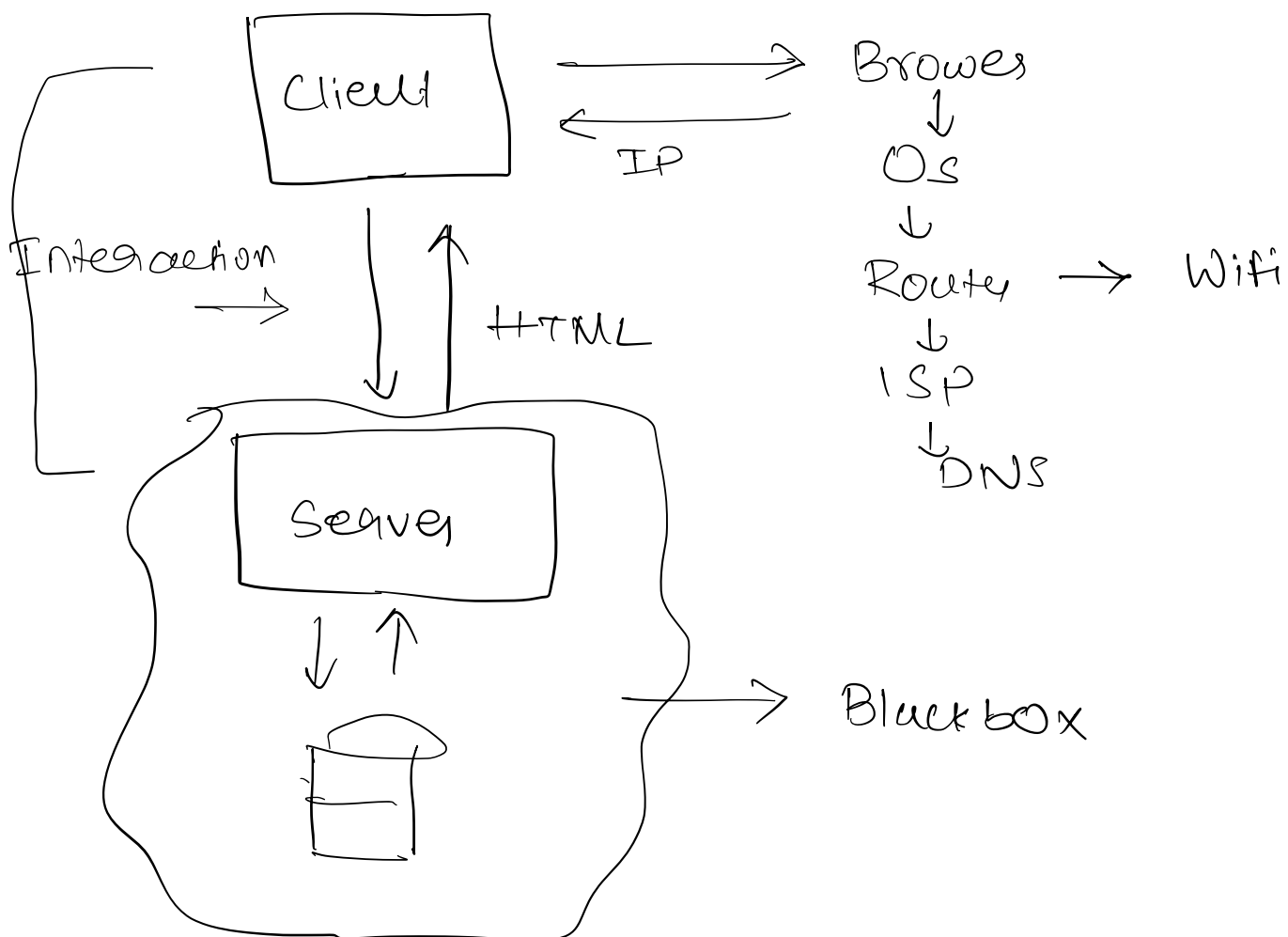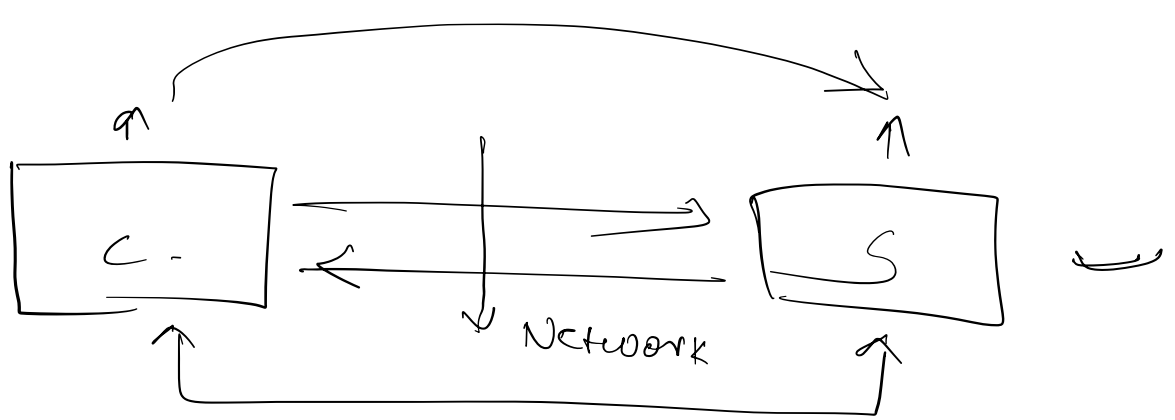
TCP connection → Transmission Control Protocol

ack

sync

ack

sync
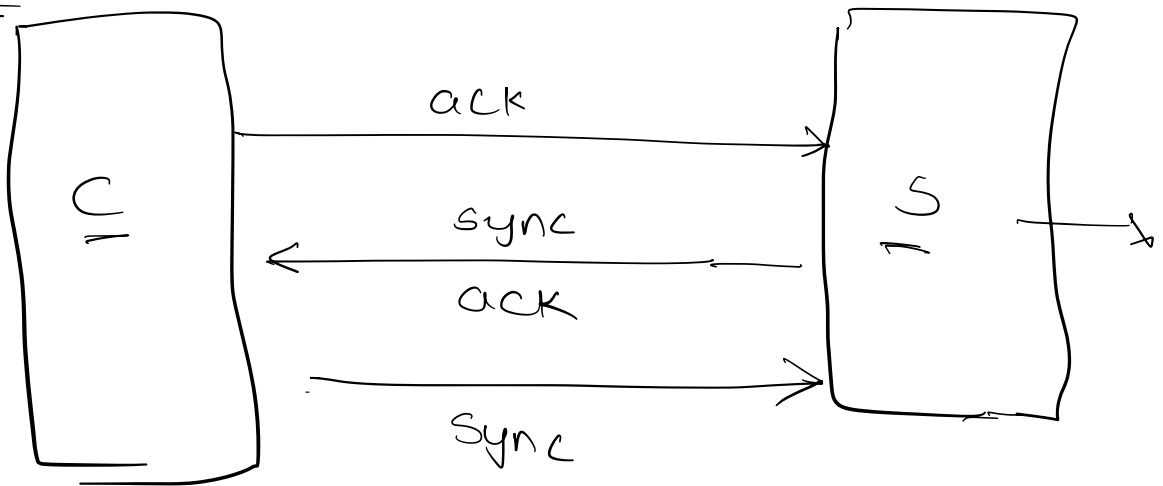
→ 3-way handshake
HTTP

HTTP / HTTPS

$\left\{\begin{array}{l}\text{GET} \rightarrow \text{get a resource}\\ \text{POST} \rightarrow \text{create a resource}\\ \text{PUT} \rightarrow \text{update a resource}\\ \text{DELETE} \rightarrow \text{delete a resource}\end{array}\right\}$ Client request

Server response → Status code

1xx → information about resource

✓ — 2xx → success code

3xx → something related to redirection

✓ 4xx → client had made a mistake

✓ 5x8 → problem with server

C → series of steps to fetch IP address of servo

S

TCP < ack, syn+ack, sync
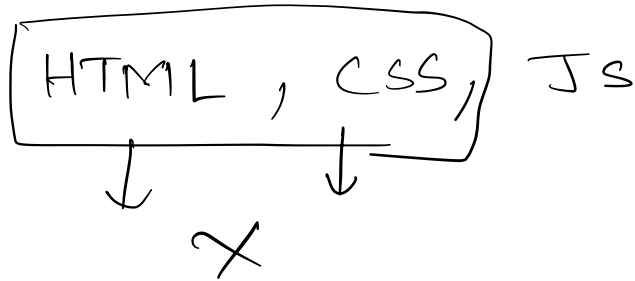
HTTP Protocol
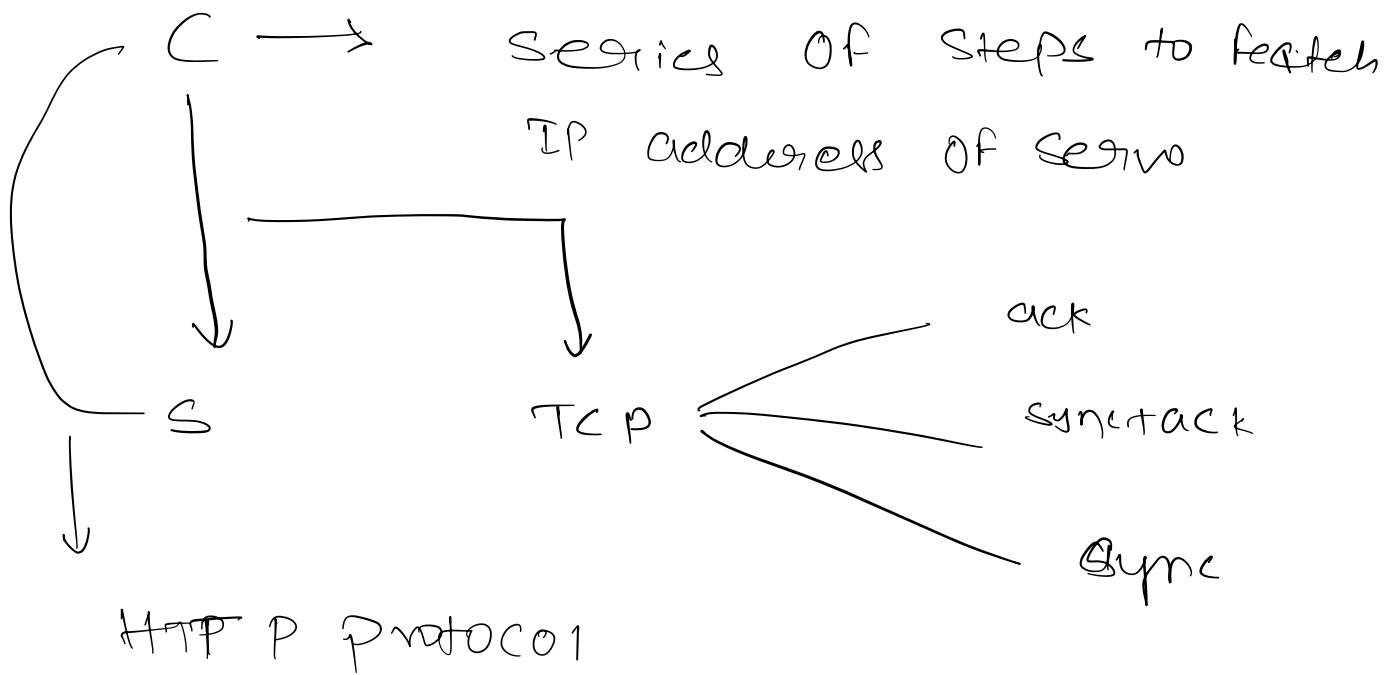
Example → building a house

2 Storey house → roof foundation, colums, beams (structure)

→ paint / interior

→ plumbing / electricity

i) roor, basement, walls, floor → structure

2) Painting, interior → beautifying the structure of building

3) plumbing | electricity → click, interaction
Fan, lights

HTML , CSS, Js

Js
Java
Python
Ruby
Golang
Nodejs

×

for, while
arithmatic operation

HTML : Hyper text Markup language
↓

i) Element/tag → button, img, a, p, heading

2) Attributes | properties

↳ src, href, id, class, style

`<button>` click `</button>`

→ which is used enhance
property of element applied on it

Markup language
  └→ Structure a website   } bookish ↓

Hyper text
  └→ Hyper linking of text

HTML is mother tongue to browser

Delhi ——→ Hyderabad
  ↓
Hindi ———→ Telugu

Browser ←——— (HTML)

I x x ——→ Ongoing state

Req ———→
      ←——— Req

  ——→ Continue
  ——→ Switching protocol

2024 → job → Resolution

(6)

1) Attend classes

2) Complete Assingnuents

3) Self Study — Utilize them and read through them

4) Contest →

Bonus → incentive