Full Stack Development

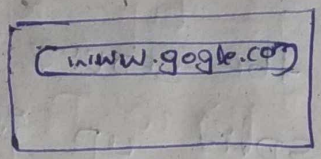
Front End = { "HTML" : "For structuring of sheets",
"CSS" : "For styling of sheets",
"Javascript" : "For Interactivity" }

Back End = { "Python" : "Language for Backend",
"Django" : "Framework for Backend",
"SQLite" : "Database" }

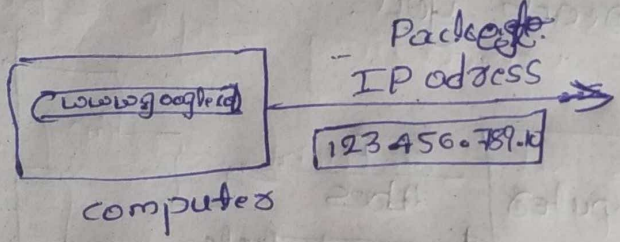
Basics for How Website works

* What happends when you open browser & visit website

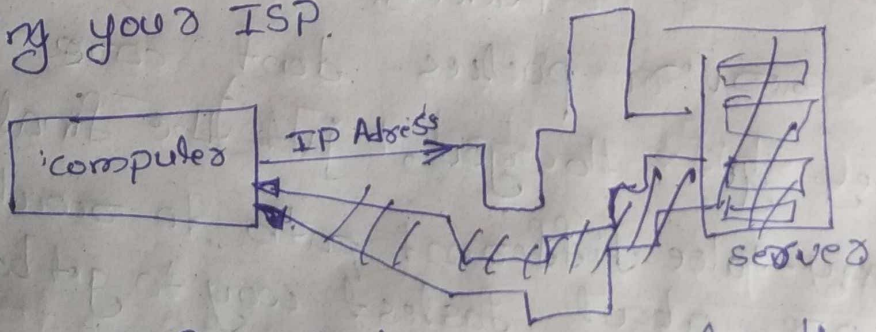
1) You start off by typying url into your browser



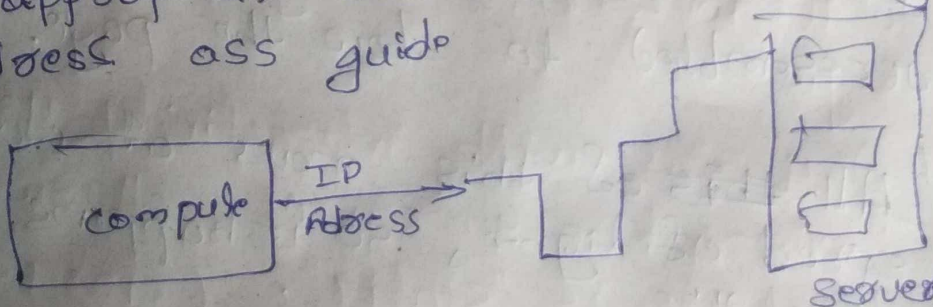
2) Your computer then sends this request as a packet, which include the IP address of the website you want



3) It sends this Request through wires, or a satellite which eventually links to wires using your ISP



4) Your ISP will then re-route the request to appropriate server location, using IP adress ass guide

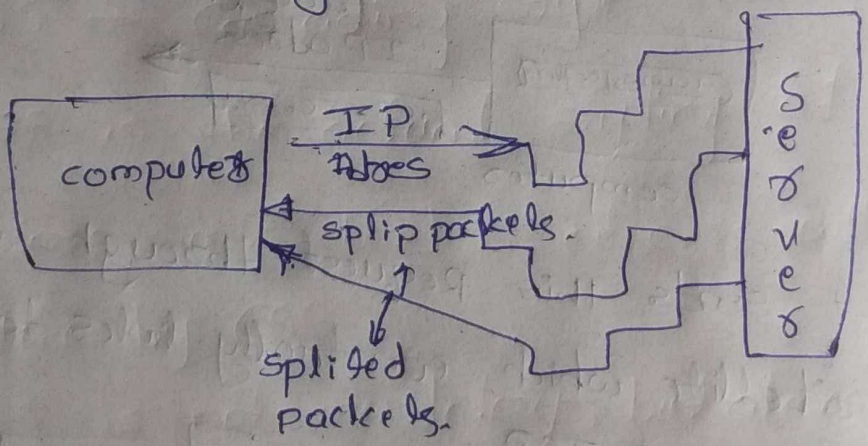


5) Once your request reaches the server the server, it can send back the website you asked for.

However a full website with content is to big to send as single packet of data

To solve this, the server sends back the website split up into many packets

The packets come with instructions on How to get back to you and reassemble once the reach you.



The server packes dont care how they get to you, jut the final location (may take different path to reach) care about fastest way to get back.

6) Once the packet reach you, they also reassembled to show the page.

"All ~~this~~ of this moves at close to the speed of light, so it happens very fast"

What is Full stack ?

There are two main components of a website.

1) The Front - End
2) The Back - End

→ "Front End" is what we see as a user on the website

→ The "Back End" is the technology used to actually decide what to show you on the "Front End".

The Front End revolves around three technologies.

- 1. HTML
- 2. CSS
- 3. Javascript

} Core Front End Technologies.

→ Front end technologies such as JQuery and Bootstrap, but they all built using the HTML, CSS & Javascript.

Front End Core Technologies

1) HTML

→ HTML → Hyper Text Markup language.

→ Every website will have HTML, it is the structure of a page

→ We can view it by "Right click" and selecting "View Page - Source". (cntrl + U)

2) CSS

→ CSS → Cascading style sheets

→ CSS is the actual styling of website.

→ Colors, fonts, borders, etc. is all define by CSS.

→ CSS is not mandatory, but almost all sites have it. (Shift + Ctrl + I)

3) Javascript

→ Javascript allows you to interactivity to the website, including programming logic

→ Any site with interactivity uses Javascript in some way, otherwise the site is "static". (ctrl + shift + J)

→ The Back-End of the site has three components.

1) The language
2) The Framework
3) The Data Base.

Our Course - Back End

1) Python as the Language
2) Django as the Frame work.
3) SQLite as the Database.

→ "Python" is a great language to learn, it's simple, powerfull, and has many libraries

→ "Django" is the most popular frame-work for python. It's fast, secure, and scalable

→ "SQLite" comes with Django and Python. making it easy choice.