What is a web browser?
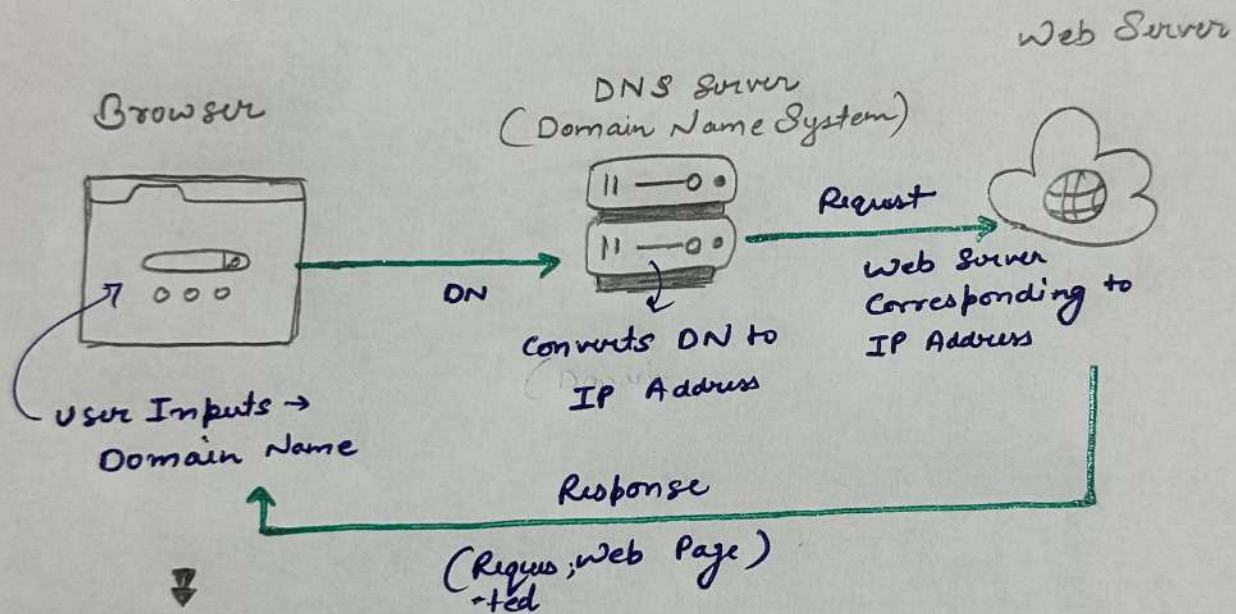
➔ An application software used to explore the world wide web (www)

➔ Interface between the client (user) and the server

Browser

DNS Server (Domain Name System)

Web Server

Request

Web Server Corresponding to IP Address

ON

Converts DN to IP Address

User Inputs → Domain Name

Response

(Requested Web Page)

⇩

~~The~~ Browser uses this responsed content (HTML, CSS, images & scripts), to display the webpage to the user.

My Interpretion → It is just an application (Program) designed to fetch, interpret & display other web applications or websites.

Website Cookies –

➔ When we visit any website over the internet our web browser stores information about us in small files called cookies.

Architecture of Web Browser
Mini Operating System

User Interface

The browser we see
Search bar, bookmarks etc

Browser Engine

"MANAGER" → Decide what to
do when a page is requested,
fetch data, handle JS, handle
events, coordinate btw modules

Two
different
engines
cause
sepration of
concerns.

Rendering Engine

"PAINTER" → It only take
HTML + CSS + DOM + computed
styles and actually draw
the page on your screen !!

Data Persistence
(cookie storage)

Networking

Retrieves URLS using protocols
like HTTP. "Security &
Communication"

JS Interpreter

Interprets JS code.
Then sends it to
rendering engine for
displaying

UI Backend

Mainly used
for drawing
widgets like
windows.