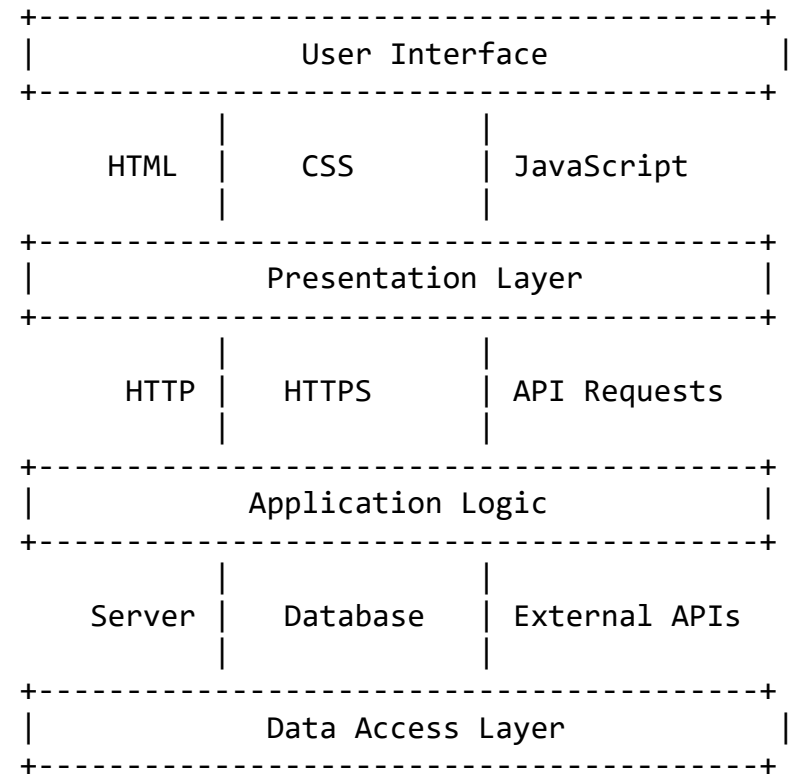
Frontend 3-Tier Architecture Overview:

Introduction:
Frontend 3-Tier Architecture,the structure of web-based software applications, emphasizing their scalability, reliability, security, and performance.




Application Types:

An application, or app, is a software program designed to assist users in accomplishing tasks. It can be categorized into Web, Mobile, and Desktop applications based on purpose, platform, and functionality.

Web Applications:
Web applications run in web browsers, providing access to complex functionality without the need for software installation. Popular examples include Chrome and Firefox.

Mobile Applications:
These apps are designed to run on mobile devices like smartphones or tablets, offering tailored experiences for on-the-go users. Examples include WhatsApp and Instagram.

Desktop Applications:
Designed for personal computers, these applications provide various functionalities such as calculation and image viewing. Examples include Calculator and Gallery.

SEO (Search Engine Optimization):
SEO enhances the visibility and ranking of a website or web page in search engine results, attracting organic traffic through techniques like keyword optimization and link building.

IP (Internet Protocol):
IP is a unique identifier assigned to Internet-connected devices, facilitating communication between them on internal or external networks.

URL (Uniform Resource Locator):
A URL is a web resource address used to access content via a web browser's address bar.

DNS (Domain Name System):
DNS translates domain names to numerical IP addresses, enabling users to access resources using easily memorable names.

Domain:
A domain is a unique identifier used to access a website, such as "www.amazon.com".

HTTP vs. HTTPS:
While both are web communication protocols, HTTPS provides encrypted data transmission, enhancing security compared to HTTP.

Client-Server-API:
This concept involves sets of rules allowing software applications to communicate and exchange data and functionality. Servers provide resources, data, or services to clients over a network.

HTML (HyperText Markup Language):
HTML is the standard markup language for creating web pages, defining their structure and content using elements like headings, paragraphs, and links.

CSS (Cascading Style Sheets):
CSS is used to style HTML documents, separating presentation and layout from structure and content, allowing for easier customization and maintenance.

JavaScript:
JavaScript is a dynamic programming language used to create interactive web pages, executed on the client's device or server-side environments with frameworks like Node.js.

Web Application Architecture:
This architecture comprises client-side components responsible for user interface rendering and server-side components handling business logic and data processing. Databases store and retrieve data for web applications, ensuring seamless user experiences.