

## 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.