

Front-End Development

Introduction to Web Programming

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What is a Web Application?

- A set of linked webpage(s)
- Components of a Web Application:

Frontend



Backend



Database



Frontend  **Backend**  **Database**



Google offered in: हिन्दी काना खोजो यहाँ बहुत ही सस्ता और बेस्ट में



Types of Web Application

- **Static:** `https://cse.iitk.ac.in/users/isaha/`
- **Dynamic:** `https://www.google.com`
- **Embedded:** mostly APIs such as maps, etc.

Web programming is Website development

- Frontend:
 - Content - HTML: Hyper Text Markup Language
 - Design - CSS: Cascaded Style Sheets
 - Interactivity - Javascript
- Backend Languages such as Python, Java, PHP, C#, etc
- Database query languages such as SQL, NoSQL, etc

Architecture and Design Patterns

- Client Server Architecture¹
- Model View Controller (MVC)^{2 3}
- Model-View-ViewModel (MVVM)⁴

¹<https://www.geeksforgeeks.org/client-server-model/>

²<https://www.geeksforgeeks.org/mvc-design-pattern/>

³<https://www.w3schools.in/mvc-architecture>

⁴<https://learn.microsoft.com/en-us/dotnet/architecture/maui/mvvm>

- World Wide Web (WWW)
- Domain Name System (DNS)⁵
- Network Protocols (HTTP, HTTPS)
- Version Control (Git, SVN)

⁵[https:](https://www.hostinger.com/tutorials/what-is-a-domain-name)

[//www.hostinger.com/tutorials/what-is-a-domain-name](https://www.hostinger.com/tutorials/what-is-a-domain-name)

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